

Serial Number: WTC00210

Product Family: WHEEL TRACTOR SCRAPER

Model: 627K

SMU / Hours:

Year: 2015

SERVICE HISTORY (1635 Records)

Invoice Date	Invoice Type	SMU / Hours	Description	Notes
Nov 03, 2024	Service	12,204	Troubleshoot Engine	Availability. will notify customer and return when complaint: emissions codes, low def quality/nox removed and replaced both the rear engine nox machine up to operating temp and performed a nox sensor test. it passed. performed an downloaded psr and returned machine to service. 3804 resultant damage: n/a aftertreatment system function test and it passed. complications: n/a quality low. ran function test, failed. tested def parts come in. conversion returned reman cores to shop. customer and ordered sensors. sensors have low sensors with reman. cleared the codes warmed cause: nox sensors correction: arrived on site and downloaded psr, machine has active codes for rear engine def recommend nox sensors and retesting. notified test, quantity and spray pattern are good. 10-30-24 quality, good. pulled injector and ran accuracy
Nov 03, 2024	Service	12,204	Troubleshoot Aftertreatment System	Correction: arrived to machine and downloaded psr. machine and ran manual regen, regen completed resultant damage: n/a other codes active or recent. visually inspected exhaust and dpf system, no issues seen. warmed up cause: no fault found complications: n/a machine has active events for high soot load, no successfully with no issues, test ran machine, complaint: regen lockout, high soot load good. released machine to customer.
Nov 03, 2024	Service	12,204	Travel To/from Work Area	10750 wild trail lonetree
Oct 07, 2024	Parts			
Aug 15, 2024	Parts			
Jul 17, 2024	Parts			
Jul 15, 2024	Parts			
Sep 14, 2023	Service	9,606	Additional Charges 500 Service Hour Maint	

Sep 14, 2023	Service	9,606	Perform 500 Service Hour Maint	
Aug 01, 2023	Parts			
Aug 01, 2023	Parts			
Jun 15, 2023	Service	9,497	Travel To/from Work Area	
Jun 15, 2023	Service	9,497	Repair For Warranty Software	Tech id: 5791 -- wednesday, june 14, 2023 7:09 am - software out of date repair comments perform pip letter pi33483 flash transmission, implement and display ecm with new software. calibrate transmission and pull psr.
Jun 15, 2023	Service	9,497	Repair For Warranty Software	Tech id: 5791 -- wednesday, june 14, 2023 7:09 am - software out of date repair comments perform pip letter pi33483 flash transmission, implement and display ecm with new software. calibrate transmission and pull psr.
Jun 15, 2023	Service	9,497	Travel To/from Work Area	
May 22, 2023	Service	9,416	Troubleshoot Engine	Customer concern tech id: 6246 -- tuesday, may 2, 2023 5:42 pm - drove to machine, plugged into machine. found that machine was throwing the ecm fault again. attempted to communicate with rear engine. et would not power up. tested batteries found only 4 volts. tested batteries. batteries tested bad and were swollen. advised customer. wanted me to order new batteries. removed the 4 batteries from scraper. loaded up. drove to shop returned 4 batteries for core. and loaded up new batteries. will return to install.tech id: 6246 -- wednesday, may 3, 2023 12:40 pm - tech id: 6246 -- friday, may 5, 2023 5:42 pm - tech id: 6246 -- tuesday, may 9, 2023 7:51 am - tech id: 6246 -- tuesday, may 9, 2023 5:16 pm - tech id: 6246 -- wednesday, may 10, 2023 12:12 pm - tech id: 6246 - - wednesday, may 10, 2023 12:15 pm - cause of failure tech id: 6246 -- wednesday, may 10, 2023 12:15 pm - cause of failure was leaking def manifold gasket and def fluid leaking on dcu unit and wiring harness.
May 22, 2023	Service	9,416	Travel To/from Work Area	
Apr 30, 2023	Service	9,416	Travel To/from Work Area	

Apr 30, 2023	Service	9,416	Troubleshoot Engine	Customer concern tech id: 6246 -- thursday, april 27, 2023 5:59 pm - repair comments tech id: 6246 -- thursday, april 27, 2023 5:59 pm - drove to machine, downloaded psp report. found 9 active codes for data link issues. researched code. found that there is a software update for an issue like this for implement ecm, scraper ecm, and display ecm. compared software for these with whats in machine and latest software in sis. found scraper transmission had outdated software. updated with latest software. active codes went away after this update. advised customer.
Mar 08, 2023	Parts			
Feb 27, 2023	Parts			
Nov 13, 2022	Service	9,050	Perform Pm 1	
Nov 13, 2022	Service	9,050	Additional Charges Pm 1	
Oct 28, 2022	Parts			
Sep 08, 2022	Service	8,821	Troubleshoot Diesel Exh (def) Module	Trouble shoot engine code
Sep 08, 2022	Service	8,821	Travel To/from Work Area	
Jul 28, 2022	Service	8,786	Travel To/from Work Area	
Jul 28, 2022	Service	8,786	Troubleshoot Clean Emissions Module	T/s def injector code
Jul 20, 2022	Service	8,787	Additional Charges Pm 3	
Jul 20, 2022	Service	8,787	Perform Pm 3	
Mar 15, 2022	Parts			

Dec 15, 2021	Service	7,964	Troubleshoot Engine	CUSTOMER COMPLAINT- INTERMITANT #3 INJECTOR MISS. OPEN IN HARNESS. RESULTANT DAMAGE: ON MANUAL CUT OUT,I COULD SEE # 3 WAS SOME TIMES NOT CHANGING. SUSPECT BAD INJECTOR HARNESS. REMOVED HARNESS. INSTALLED NEW INJECTOR HARNESS AND PERFORMED SEVERAL SOLENOID TEST AND THEY ALL PASSED. #3 injector intermitant miss #3 INJECTOR INTERMITANT MISS
Dec 15, 2021	Service	7,964	Repair For Warranty Unit Injector	CUSTOMER COMPLAINT: UNIT HAS ENG MISS CAUSE OF FAILURE: BAD INJECTORS/ INJECTOR HARNESS RESULTANT DAMAGE: REPAIR PROCESS COMMENTS: TALKED WITH CUSTOMER AND DROVE TO LOCATION. HOOKED UP E.T. AND CHECKED FOR CODES. FOUND LOGGED CODES FOR INJECTORS 1 & 3 ON REAR ENG. PERFORMED SOLENOID TEST AND IT SHOWED # 3 WAS OPEN ON THE FIRST 2 TEST AND THEN GOOD ON NEXT 2 TEST. STARTED UNIT AND LET WARM UP ENG SOUNDED LIKE A MISS WAS PRESENT. RAN CYLINDER CUT OUT TEST SEVERAL TIMES AND FOUND THAT INJECTORS 1&2 WERE NOT OKAY. ON MANUAL CUT OUT,I COULD SEE # 3 WAS SOME TIMES NOT CHANGING. SUSPECT BAD INJECTOR HARNESS. TALKED WITH CUSTOMER AND ORDERED PARTS. WHEN PARTS CAME IN I RETURNED TO UNIT. REMOVED HOOD AND HAND RAILS TO ACCESS AFTER TREATMENT PACKAGE REMOVAL. REMOVED AFTER TREATMENT ASSY AND ALL BRACKETS TO ACCESS VALVE COVER .REMOVED VALVE COVER AND ROCKER SHAFT TO ACCESS INJECTORS. REMOVED QUILL TUBES AND INJECTORS 1 & 2 AND CLEAN BORES. INSTALLED RE MAN INJECTORS WITH NEW BOLTS AND QUILL TUBES. INSTALLED ROCKER SHAFT AND REMOVED HARNESS. INSTALLED NEW INJECTOR HARNESS AND PERFORMED SEVERAL SOLENOID TEST AND THEY ALL PASSED. INSTALLED VALVE COVER AND BRACKETS FOR AFTER TREATMENT ASSY. INSTALLED ASSY AND CONNECTED. INSTALLED HOOD AND HAD RAILS. PROGRAMMED TRIM FILES AND STARTED UNIT ,LET UNIT WARM UP AND RAN CUT OUT TEST ALL INJECTORS CHECKED OKAY AND ENG HAD NO MISS. HAD CUSTOMER CALLED BACK NEXT DAY AND SAID IT WAS LEAKING. RETURNED TO UNIT AND FOUND # 1 FUEL LINE LEAKING. ORDERED NEW FUEL LINE AND WENT TO PICK UP. RETURNED TO UNIT AND REMOVED AFTER TREATMENT BRACKET TO ACCESS FUEL LINE. REMOVED AND REPLACED # 1 FUEL LINE. HAD CUSTOMER RUN UNIT FOR 2 HOURS NO LEAKS NOTED. T/s rear engine codes for #'s 1 & 2 injector -- T/S REAR ENGINE CODES FOR #'S 1 & 2 INJECTOR -- CURRENT BELOW NORMAL
Dec 15, 2021	Service	7,964	Rework Repair Fuel System	CUSTOMER CALLED BACK NEXT DAY AND SAID IT WAS LEAKING. RETURNED TO UNIT AND FOUND # 1 FUEL LINE LEAKING. ORDERED NEW FUEL LINE AND WENT TO PICK UP. RETURNED TO UNIT AND REMOVED AFTER TREATMENT BRACKET TO ACCESS FUEL LINE. REMOVED AND REPLACED # 1 FUEL LINE. HAD CUSTOMER RUN UNIT FOR 2 HOURS Repair fuel leak. REPAIR FUEL LEAK.

Dec 15, 2021	Service	7,964	Rework Repair Fuel System	CUSTOMER CALLED BACK NEXT DAY AND SAID IT WAS LEAKING. RETURNED TO UNIT AND FOUND # 1 FUEL LINE LEAKING. ORDERED NEW FUEL LINE AND WENT TO PICK UP. RETURNED TO UNIT AND REMOVED AFTER TREATMENT BRACKET TO ACCESS FUEL LINE. REMOVED AND REPLACED # 1 FUEL LINE. HAD CUSTOMER RUN UNIT FOR 2 HOURS Repair fuel leak. REPAIR FUEL LEAK.
Dec 15, 2021	Service	7,964	Troubleshoot Engine	CUSTOMER COMPLAINT- INTERMITANT #3 INJECTOR MISS. OPEN IN HARNESS. RESULTANT DAMAGE: ON MANUAL CUT OUT,I COULD SEE # 3 WAS SOME TIMES NOT CHANGING. SUSPECT BAD INJECTOR HARNESS. REMOVED HARNESS. INSTALLED NEW INJECTOR HARNESS AND PERFORMED SEVERAL SOLENOID TEST AND THEY ALL PASSED. #3 injector intermitant miss #3 INJECTOR INTERMITANT MISS
Dec 15, 2021	Service	7,964	Travel To/from Work Area	

Dec 15, 2021	Service	7,964	Repair For Warranty Unit Injector	<p>CUSTOMER COMPLAINT: UNIT HAS ENG MISS CAUSE OF FAILURE: BAD INJECTORS/ INJECTOR HARNESS RESULTANT DAMAGE: REPAIR PROCESS COMMENTS: TALKED WITH CUSTOMER AND DROVE TO LOCATION. HOOKED UP E.T. AND CHECKED FOR CODES. FOUND LOGGED CODES FOR INJECTORS 1 & 3 ON REAR ENG. PERFORMED SOLENOID TEST AND IT SHOWED # 3 WAS OPEN ON THE FIRST 2 TEST AND THEN GOOD ON NEXT 2 TEST. STARTED UNIT AND LET WARM UP ENG SOUNDED LIKE A MISS WAS PRESENT. RAN CYLINDER CUT OUT TEST SEVERAL TIMES AND FOUND THAT INJECTORS 1&2 WERE NOT OKAY. ON MANUAL CUT OUT,I COULD SEE # 3 WAS SOME TIMES NOT CHANGING. SUSPECT BAD INJECTOR HARNESS. TALKED WITH CUSTOMER AND ORDERED PARTS. WHEN PARTS CAME IN I RETURNED TO UNIT. REMOVED HOOD AND HAND RAILS TO ACCESS AFTER TREATMENT PACKAGE REMOVAL. REMOVED AFTER TREATMENT ASSY AND ALL BRACKETS TO ACCESS VALVE COVER .REMOVED VALVE COVER AND ROCKER SHAFT TO ACCESS INJECTORS. REMOVED QUILL TUBES AND INJECTORS 1 & 2 AND CLEAN BORES. INSTALLED RE MAN INJECTORS WITH NEW BOLTS AND QUILL TUBES. INSTALLED ROCKER SHAFT AND REMOVED HARNESS. INSTALLED NEW INJECTOR HARNESS AND PERFORMED SEVERAL SOLENOID TEST AND THEY ALL PASSED. INSTALLED VALVE COVER AND BRACKETS FOR AFTER TREATMENT ASSY. INSTALLED ASSY AND CONNECTED. INSTALLED HOOD AND HAD RAILS. PROGRAMMED TRIM FILES AND STARTED UNIT ,LET UNIT WARM UP AND RAN CUT OUT TEST ALL INJECTORS CHECKED OKAY AND ENG HAD NO MISS. HAD CUSTOMER CALLED BACK NEXT DAY AND SAID IT WAS LEAKING. RETURNED TO UNIT AND FOUND # 1 FUEL LINE LEAKING. ORDERED NEW FUEL LINE AND WENT TO PICK UP. RETURNED TO UNIT AND REMOVED AFTER TREATMENT BRACKET TO ACCESS FUEL LINE. REMOVED AND REPLACED # 1 FUEL LINE. HAD CUSTOMER RUN UNIT FOR 2 HOURS NO LEAKS NOTED. T/s rear engine codes for #'s 1 & 2 injector -- T/S REAR ENGINE CODES FOR #'S 1 & 2 INJECTOR -- CURRENT BELOW NORMAL</p>
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Nov 10, 2021	Service	7,964	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING: WHEN REQUIRED ITEMS, 10 HOUR OR DAILY, 50 HOUR OR WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. TO INCLUDE ALL PARTS (I.E. ENGINE AND CAB AIR FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p>
			Additional Charges Pm 4	
Nov 10, 2021	Service	7,964	4	
Oct 28, 2021	Service	7,915	Troubleshoot Parking Brake	<p>PARKING BRAKE WILL NOT RELEASE CAUSE OF FAILURE: OPEN CIRCUIT IN PARK BRAKE COIL RESULTANT DAMAGE: PARKING BRAKE WILL NOT RELEASE REPAIR PROCESS COMMENTS: TALKED WITH CUSTOMER AND THEY HAD UNIT WITH ACTIVE CODE FOR PARKING BRAKE. DROVE TO LOCATION AND CHECKED UNIT FOUND THAT PARKING BRAKE COIL WAS BAD. ORDERED PART AND DROVE TO WAGNER TO PICK UP. RETURNED WITH PART AND LOWERED BELL PAN TO REMOVE AND REPLACE COIL ON PARK BRAKE SOLENOID. CODE IS BRAKE NOW RELEASES AND UNIT GOES INTO GEAR. HAD CUSTOMER TEST UNIT OP'S CHECK GOOD AT THIS TIME. T/s code for parking brake solenoid current below T/S CODE FOR PARKING BRAKE SOLENOID CURRENT BELOW --NORMAL & PARKING BRAKE WONT RELEASE</p>
			Travel To/from Work Area	
Oct 28, 2021	Service	7,915		

Oct 28, 2021	Service	7,915	Troubleshoot Parking Brake	PARKING BRAKE WILL NOT RELEASE CAUSE OF FAILURE: OPEN CIRCUIT IN PARK BRAKE COIL RESULTANT DAMAGE: PARKING BRAKE WILL NOT RELEASE REPAIR PROCESS COMMENTS: TALKED WITH CUSTOMER AND THEY HAD UNIT WITH ACTIVE CODE FOR PARKING BRAKE. DROVE TO LOCATION AND CHECKED UNIT FOUND THAT PARKING BRAKE COIL WAS BAD. ORDERED PART AND DROVE TO WAGNER TO PICK UP. RETURNED WITH PART AND LOWERED BELL PAN TO REMOVE AND REPLACE COIL ON PARK BRAKE SOLENOID. CODE IS BRAKE NOW RELEASES AND UNIT GOES INTO GEAR. HAD CUSTOMER TEST UNIT OP'S CHECK GOOD AT THIS TIME. T/s code for parking brake solenoid current below T/S CODE FOR PARKING BRAKE SOLENOID CURRENT BELOW --NORMAL & PARKING BRAKE WONT RELEASE
Sep 13, 2021	Service	0	Troubleshoot Cushion Hitch	CUSTOMER CONCERN TECH ID: 5140 -- FRIDAY, SEPTEMBER 10, 2021 10:43 AM - GOT TO MACHINE TALKED TO THE CUSTOOMER AND VERIFIED THE COMPLAINT -CHECKED THE ACCUMULATORS PRESSURE AND FOUND THEY WERE BOTH OVER FULL - DRAINED THEM AND CHARGED THEM TO SPEC FOR THE AMBIENT TEMPURATURE -HAD CUSTOMER TEST MACHINE NO OTHER ISSESS AFTER CHARGE Troubleshoot cushion hitch TROUBLESHOOT CUSHION HITCH
Sep 13, 2021	Service	0	Travel To/from Work Area	
Sep 13, 2021	Service	0	Travel To/from Work Area	
Sep 13, 2021	Service	0	Troubleshoot Cushion Hitch	CUSTOMER CONCERN TECH ID: 5140 -- FRIDAY, SEPTEMBER 10, 2021 10:43 AM - GOT TO MACHINE TALKED TO THE CUSTOOMER AND VERIFIED THE COMPLAINT -CHECKED THE ACCUMULATORS PRESSURE AND FOUND THEY WERE BOTH OVER FULL - DRAINED THEM AND CHARGED THEM TO SPEC FOR THE AMBIENT TEMPURATURE -HAD CUSTOMER TEST MACHINE NO OTHER ISSESS AFTER CHARGE Troubleshoot cushion hitch TROUBLESHOOT CUSHION HITCH
Aug 24, 2021	Service	7,567	Travel To/from Work Area	

Aug 24, 2021	Service	7,567	Troubleshoot Engine	<p>REPAIR PROCESS COMMENTS: 8-16-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND PULLED PRODUCT STATUS REPORT. USED ET AND CHECKED FOR CODES. MACHINE HAS ACTIVE CODE E1092-1, E1092-2, E361-1, E361-2, E361-3. LOOKED UP TROUBLESHOOTING PROCEDURE ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE NRS EXHAUST GAS TEMPERATURE IS HIGH (M0091957). 1. CHECK FOR ASSOCIATED DIAGNOSTIC TROUBLE CODES TECHNICIAN (ET) AND THE ELECTRONIC CONTROL MODULE (ECM) . REFER TO TROUBLESHOOTING, "ELECTRONIC SERVICE TOOLS", IF NECESSARY. B. DOWNLOAD THE "WARRANTY REPORT" FROM THE ENGINE ECM BEFORE PERFORMING ANY TROUBLESHOOTING OR CLEARING DIAGNOSTIC TROUBLE CODES. C. DETERMINE IF AN ASSOCIATED CODE IS ACTIVE OR CODES. RESULT: THERE ARE ASSOCIATED CODES. REPAIR: REFER TO TROUBLESHOOTING, "DIAGNOSTIC TROUBLE CODES" IN ORDER TO TROUBLESHOOT THE ASSOCIATED DIAGNOSTIC CODE. LOOKED UP TROUBLESHOOTING PROCEDURE FOR ASSOCIATED CODES ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE COOLANT TEMPERATURE IS HIGH (M0091957). 1. COOLANT A. INSPECT THE COOLANT LEVEL. RESULT: THE ENGINE COOLANT LEVEL IS OK. PROCEED TO TEST STEP 2. 2. COOLANT TEMPERATURE SENSOR AND/OR THE CIRCUIT A. CHECK THE READING OF THE COOLANT TEMPERATURE ON CAT ET. THE TEMPERATURE SHOULD RISE STEADILY AS THE ENGINE IS WARMED. ENSURE THAT THE TEMPERATURE IS REASONABLE. RESULT: THE TEMPERATURE SENSOR IS WORKING PROPERLY. PROCEED TO TEST STEP 3. 3. WATER TEMPERATURE REGULATOR AND/OR PRESSURE RELIEF VALVE A. PRESSURE-TEST THE COOLING SYSTEM. REFER TO SYSTEMS OPERATION/TESTING AND ADJUSTING FOR THE CORRECT PROCEDURE. B. CHECK THAT THE SEATING SURFACES OF THE PRESSURE RELIEF VALVE AND THE RADIATOR CAP ARE CLEAN AND UNDAMAGED. RESULT: DURING INSPECTION OF REGULATOR, FOUND BELT 569-2751 THAT RUNS THE WATER PUMP AND ALTERNATOR BROKEN. LOOKED UP PARTS AND ORDER. PARTS BACK ORDER. INFORMED CUSTOMER THAT PARTS BACK ORDER. WILL RETURN TO MACHINE WHEN PARTS COME IN. CLEANED UP WORK AREA. REPAIR PROCESS COMMENTS: 8-17-21 4829 LOCATED MACHINE. REMOVED FAN SHROUD FROM REAR ENGINE. REMOVED ALTERNATOR SAFETY GAURD FROM ALTERNATOR. REMOVED FAN BELT FROM MACHINE. ROUTED IN NEW ALTERNATOR/WATER PUMP BELT ONTO ENGINE. INSTALLED FAN BELT BACK ONTO ENGINE. INSTALLED ALTERNATOR GUARD. INSTALLED FAN SHROUD. STARTED MACHINE AND CHECKED FOR ACTIVE CODES. NO ACTIVE CODES. HAD OPERATOR RUN MACHINE TO CONFIRM REPAIRS. OPERATOR RETURN WITH MACHINE AND CONFIRM THAT ENGINE IS RUNNING PROPERLY. CLEANED UP WORK AREA. JOB COMPLETED. T/s egr faults codes on rear engine</p>
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Aug 24, 2021	Service	7,567	Travel To/from Work Area
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Aug 24, 2021	Service	7,567	Troubleshoot Engine	<p>REPAIR PROCESS COMMENTS: 8-16-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND PULLED PRODUCT STATUS REPORT. USED ET AND CHECKED FOR CODES. MACHINE HAS ACTIVE CODE E1092-1, E1092-2, E361-1, E361-2, E361-3. LOOKED UP TROUBLESHOOTING PROCEDURE ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE NRS EXHAUST GAS TEMPERATURE IS HIGH (M0091957). 1. CHECK FOR ASSOCIATED DIAGNOSTIC TROUBLE CODES TECHNICIAN (ET) AND THE ELECTRONIC CONTROL MODULE (ECM) . REFER TO TROUBLESHOOTING, "ELECTRONIC SERVICE TOOLS", IF NECESSARY. B. DOWNLOAD THE "WARRANTY REPORT" FROM THE ENGINE ECM BEFORE PERFORMING ANY TROUBLESHOOTING OR CLEARING DIAGNOSTIC TROUBLE CODES. C. DETERMINE IF AN ASSOCIATED CODE IS ACTIVE OR CODES. RESULT: THERE ARE ASSOCIATED CODES. REPAIR: REFER TO TROUBLESHOOTING, "DIAGNOSTIC TROUBLE CODES" IN ORDER TO TROUBLESHOOT THE ASSOCIATED DIAGNOSTIC CODE. LOOKED UP TROUBLESHOOTING PROCEDURE FOR ASSOCIATED CODES ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE COOLANT TEMPERATURE IS HIGH (M0091957). 1. COOLANT A. INSPECT THE COOLANT LEVEL. RESULT: THE ENGINE COOLANT LEVEL IS OK. PROCEED TO TEST STEP 2. 2. COOLANT TEMPERATURE SENSOR AND/OR THE CIRCUIT A. CHECK THE READING OF THE COOLANT TEMPERATURE ON CAT ET. THE TEMPERATURE SHOULD RISE STEADILY AS THE ENGINE IS WARMED. ENSURE THAT THE TEMPERATURE IS REASONABLE. RESULT: THE TEMPERATURE SENSOR IS WORKING PROPERLY. PROCEED TO TEST STEP 3. 3. WATER TEMPERATURE REGULATOR AND/OR PRESSURE RELIEF VALVE A. PRESSURE-TEST THE COOLING SYSTEM. REFER TO SYSTEMS OPERATION/TESTING AND ADJUSTING FOR THE CORRECT PROCEDURE. B. CHECK THAT THE SEATING SURFACES OF THE PRESSURE RELIEF VALVE AND THE RADIATOR CAP ARE CLEAN AND UNDAMAGED. RESULT: DURING INSPECTION OF REGULATOR, FOUND BELT 569-2751 THAT RUNS THE WATER PUMP AND ALTERNATOR BROKEN. LOOKED UP PARTS AND ORDER. PARTS BACK ORDER. INFORMED CUSTOMER THAT PARTS BACK ORDER. WILL RETURN TO MACHINE WHEN PARTS COME IN. CLEANED UP WORK AREA. REPAIR PROCESS COMMENTS: 8-17-21 4829 LOCATED MACHINE. REMOVED FAN SHROUD FROM REAR ENGINE. REMOVED ALTERNATOR SAFETY GAURD FROM ALTERNATOR. REMOVED FAN BELT FROM MACHINE. ROUTED IN NEW ALTERNATOR/WATER PUMP BELT ONTO ENGINE. INSTALLED FAN BELT BACK ONTO ENGINE. INSTALLED ALTERNATOR GUARD. INSTALLED FAN SHROUD. STARTED MACHINE AND CHECKED FOR ACTIVE CODES. NO ACTIVE CODES. HAD OPERATOR RUN MACHINE TO CONFIRM REPAIRS. OPERATOR RETURN WITH MACHINE AND CONFIRM THAT ENGINE IS RUNNING PROPERLY. CLEANED UP WORK AREA. JOB COMPLETED. T/s egr faults codes on rear engine</p>
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Aug 11, 2021	Service	7,421	Troubleshoot Engine	CUSTOMER COMPLAINT: CHECK ENG LIGHT ON BAD DEF RESULTANT DAMAGE: NO RE GEN REPAIR PROCESS COMMENTS: CHECKED UNIT AND FOUND 4 ACTIVE EVENTS 1389-1, CONCENTRATION. CHECKED DEF TANK AND IT WAS FULL TESTED DEF AND IT WAS GOOD AT 32.5 %. USED E.T. TO RUN NOX TEST AND IT PASSED, PERFORMED RE GEN SYSTEM TEST AND IT PASSED USED E.T. TO RUN MANUAL RE GEN AND IT COMPLETED FINE AND ALL ACTIVE EVENTS WENT TO LOGGED. HAD CUSTOMER RUN UNIT AND NO CODES RETURNED. RETURNED UNIT TO SERVICE. Ard rated load low.emission codes ARD RATED LOAD LOW.EMISSION CODES
Aug 11, 2021	Service	7,421	Travel To/from Work Area	
Aug 11, 2021	Service	7,421	Travel To/from Work Area	
Aug 11, 2021	Service	7,421	Troubleshoot Engine	CUSTOMER COMPLAINT: CHECK ENG LIGHT ON BAD DEF RESULTANT DAMAGE: NO RE GEN REPAIR PROCESS COMMENTS: CHECKED UNIT AND FOUND 4 ACTIVE EVENTS 1389-1, CONCENTRATION. CHECKED DEF TANK AND IT WAS FULL TESTED DEF AND IT WAS GOOD AT 32.5 %. USED E.T. TO RUN NOX TEST AND IT PASSED, PERFORMED RE GEN SYSTEM TEST AND IT PASSED USED E.T. TO RUN MANUAL RE GEN AND IT COMPLETED FINE AND ALL ACTIVE EVENTS WENT TO LOGGED. HAD CUSTOMER RUN UNIT AND NO CODES RETURNED. RETURNED UNIT TO SERVICE. Ard rated load low.emission codes ARD RATED LOAD LOW.EMISSION CODES

Jul 12, 2021	Service	7,277	Troubleshoot Air Conditioner	6-10-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. STARTED MACHINE AND TESTED AIR CONDITIONER. VERIFY CUSTOMER COMPLAINT. BLOWER MOTOR WILL ONLY WORK ON LOW SPEED. REMOVED LEFT CAB STEP. REMOVED ALL PANELS ON LEFT SIDE OF MACHINE TO GAIN ACCESS REMOVED AIR BOX FROM UNDER CAB. REMOVED COVER TO AIR BOX. TESTED RESISTOR FOR BLOWER MOTOR. RESISTOR TESTED OPEN. LOOKED UP PARTS AND ORDER. HAD PARTS TODD RUSH TO SITE. REMOVED AND REPLACED BLOWER RESISTOR. INSTALLED COVER BACK ONTO AIR BOX. LIFTED AIR BOX UNDER CAB AND MOUNTED BACK INTO PLACE. POWER UP CAB AND TESTED BLOWER MOTOR FOR PROPER OPERATIONS. BLOWER MOTOR IS WORKING IN ALL SPEEDS. INSTALLED ALL PANELS THAT WAS REMOVED FOR REPAIR PROCESS. INSTALLED CAB STEP BACK ONTO MACHINE. STARTED MACHINE AND TESTED AIR CONDINTIONER FOR PROPER OPERATIONS. BLOWER MOTOR IS WORKING PROPERLY AND AIR IS BLOWING OUT COLD. CALLED AND HAD OPERATOR RUN MACHINE TO CONFIRM REPAIRS. OPERATOR RETURN BACK WITH MACHINE AND CONFIRM THAT AIR CONDITIONER IS WORKING PROPERLY. CLEANED UP WORK AREA. JOB COMPLETED. A/c fan motor works on low speed only A/C FAN MOTOR WORKS ON LOW SPEED ONLY
Jul 12, 2021	Service	7,277	Troubleshoot Air Conditioner	6-10-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. STARTED MACHINE AND TESTED AIR CONDITIONER. VERIFY CUSTOMER COMPLAINT. BLOWER MOTOR WILL ONLY WORK ON LOW SPEED. REMOVED LEFT CAB STEP. REMOVED ALL PANELS ON LEFT SIDE OF MACHINE TO GAIN ACCESS REMOVED AIR BOX FROM UNDER CAB. REMOVED COVER TO AIR BOX. TESTED RESISTOR FOR BLOWER MOTOR. RESISTOR TESTED OPEN. LOOKED UP PARTS AND ORDER. HAD PARTS TODD RUSH TO SITE. REMOVED AND REPLACED BLOWER RESISTOR. INSTALLED COVER BACK ONTO AIR BOX. LIFTED AIR BOX UNDER CAB AND MOUNTED BACK INTO PLACE. POWER UP CAB AND TESTED BLOWER MOTOR FOR PROPER OPERATIONS. BLOWER MOTOR IS WORKING IN ALL SPEEDS. INSTALLED ALL PANELS THAT WAS REMOVED FOR REPAIR PROCESS. INSTALLED CAB STEP BACK ONTO MACHINE. STARTED MACHINE AND TESTED AIR CONDINTIONER FOR PROPER OPERATIONS. BLOWER MOTOR IS WORKING PROPERLY AND AIR IS BLOWING OUT COLD. CALLED AND HAD OPERATOR RUN MACHINE TO CONFIRM REPAIRS. OPERATOR RETURN BACK WITH MACHINE AND CONFIRM THAT AIR CONDITIONER IS WORKING PROPERLY. CLEANED UP WORK AREA. JOB COMPLETED. A/c fan motor works on low speed only A/C FAN MOTOR WORKS ON LOW SPEED ONLY
May 04, 2021	Service	7,052	Travel To/from Work Area	

May 04, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	<p>AFTER THE MACHINE HAD WARMED UP TO NORMAL OPERATING TEMP THE WARNING FOR CUSHION HITCH FILTER PLUGGED BECAME ACTIVE. LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. Hyd filter light on HYD FILTER LIGHT ON</p>
May 04, 2021	Service	7,052	Repair Data Communication	<p>CUSTOMER CONCERN "REAR ENGINE" TECH ID: 5328 -- WEDNESDAY, FEBRUARY 24, 2021 6:43 PM - TROUBLESHOOT CODES. REPAIR COMMENTS TECH ID: 5328 -- WEDNESDAY, FEBRUARY 24, 2021 6:43 PM - ARRIVED AT MACHINE THROWING DATA LINK CODES. PULLED A PRODUCT STATUS REPORT. CHECKED RESISTANCE IN DATA LINK SYSTEMS AND ALL WERE IN SPEC. CHECKED THAT ALL ECMS HAVE UP TO DATE SOFTWARE. UPDATED DISPLAY SOFTWARE. CHECKED CHASSIS ANGLE SENSOR BECAUSE THAT WAS ONE OF THE DATA LINK CODES AND DID NOT FIND ANY ISSUE WITHIN IT OR THE WIRING TO IT. 2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED SITECH AND THEY SUGGESTED RUNNING THE MACHINE WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. TECH ID: 5328 -- FRIDAY, FEBRUARY 26, 2021 TESTED VOLTAGE IN TOOL AUTOMATION DATA LINK AND FOUND HIGH VOLTAGE. DISCONNECTED HARNESS TO SEE IF I LOSE POWER IN DATA LINK AND DID NOT UNTIL I UNPLUGGED THE GRADE CONTROL GPS. FOUND THERE IS A SHORT IN THAT HARNESS THAT HAS BEEN SPLICED IN. DETERMINED MAIN CAB HARNESS NEEDS REPLACED. CONTACTED CUSTOMER AND JASON SAID THEY DO NOT USE GRADE CONTROL OR ANY TOOL AUTOMATION FEATURES. I EXPLAINED THE TRANSMISSION ECM CODES WERE GONE AND THE ACTION LAMP IS NO LONGER FLASHING. HE SAID WHAT WHAT HE WAS CONCERNED ABOUT AND NOT TO WORRY IT.</p>

May 04, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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				<p>PROGRAMED THE ECM WITH THE SOFTWARE AND CONFIGURED WITH THE ECM WITH THE REPLACEMENT FILE THAT WAS DOWNLOADED. PERFORMED A MANUAL REGEN, AND AFTERTREATMENT FUNCTIONAL TEST. HAD THE OPERATOR RUN THE MACHINE FOR OVER TWO HOURS. THE MACHINE DID NOT HAVE ANY PROBLEMS. THE CUSTOMER WILL CONTINUE TO RUN THE MACHINE FOR ANOTHER FEW DAYS TO VERIFY THE REPAIR. T/s fault codes on machine T/S FAULT CODES ON MACHINE *SPECAIL TERMS WARRANTY*</p>
May 04, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	<p>3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRAILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE</p>
May 04, 2021	Service	7,052	Repair For Warranty Engine	<p>CONCERN WAS CODES BEING THROWN, CAUSE OF FAILURE A 3584-9 CODE. SWITCH PANEL #3: ABNORMAL UPDATE RATE. IM NOT SURE EXACTLY WHAT IS WRONG INSIDE OF IT BUT WHEN I PLUGGED IN ANOTHER FROM ANOTHER MACHINE THE CODE WAS NO LONGER ACTIVE AND THE LEVEL 3 CODE WENT AWAY AND THE BUZZERS AND LIGHTS ALL STOPPED FLASHING AND BEEPING. I DETERMINED THAT WAS THE CAUSE IF THE 246-9 CODE IN THE TRANSMISSION ECM.</p>
May 04, 2021	Service	7,052	Repair Valve Cover	<p>5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK</p>

May 04, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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				<p>PROGRAMED THE ECM WITH THE SOFTWARE AND CONFIGURED WITH THE ECM WITH THE REPLACEMENT FILE THAT WAS DOWNLOADED. PERFORMED A MANUAL REGEN, AND AFTERTREATMENT FUNCTIONAL TEST. HAD THE OPERATOR RUN THE MACHINE FOR OVER TWO HOURS. THE MACHINE DID NOT HAVE ANY PROBLEMS. THE CUSTOMER WILL CONTINUE TO RUN THE MACHINE FOR ANOTHER FEW DAYS TO VERIFY THE REPAIR. T/s fault codes on machine T/S FAULT CODES ON MACHINE *SPECAIL TERMS WARRANTY*</p>
May 04, 2021	Service	7,052	Repair For Warranty Engine	<p>CONCERN WAS CODES BEING THROWN, CAUSE OF FAILURE A 3584-9 CODE. SWITCH PANEL #3: ABNORMAL UPDATE RATE. IM NOT SURE EXACTLY WHAT IS WRONG INSIDE OF IT BUT WHEN I PLUGGED IN ANOTHER FROM ANOTHER MACHINE THE CODE WAS NO LONGER ACTIVE AND THE LEVEL 3 CODE WENT AWAY AND THE BUZZERS AND LIGHTS ALL STOPPED FLASHING AND BEEPING. I DETERMINED THAT WAS THE CAUSE IF THE 246-9 CODE IN THE TRANSMISSION ECM.</p>
May 04, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	<p>AFTER THE MACHINE HAD WARMED UP TO NORMAL OPERATING TEMP THE WARNING FOR CUSHION HITCH FILTER PLUGGED BECAME ACTIVE. LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. Hyd filter light on HYD FILTER LIGHT ON</p>
May 04, 2021	Service	7,052	Repair Valve Cover	<p>5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK</p>
May 04, 2021	Service	7,052	Travel To/from Work Area	

May 04, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
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May 04, 2021 Service 7,052 Repair Data
Communication

CUSTOMER CONCERN "REAR ENGINE" TECH ID: 5328 -- WEDNESDAY, FEBRUARY 24, 2021 6:43 PM - TROUBLESHOOT CODES. REPAIR COMMENTS TECH ID: 5328 -- WEDNESDAY, FEBRUARY 24, 2021 6:43 PM - ARRIVED AT MACHINE THROWING DATA LINK CODES. PULLED A PRODUCT STATUS REPORT. CHECKED RESISTANCE IN DATA LINK SYSTEMS AND ALL WERE IN SPEC. CHECKED THAT ALL ECMS HAVE UP TO DATE SOFTWARE. UPDATED DISPLAY SOFTWARE. CHECKED CHASSIS ANGLE SENSOR BECAUSE THAT WAS ONE OF THE DATA LINK CODES AND DID NOT FIND ANY ISSUE WITHIN IT OR THE WIRING TO IT. 2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED SITECH AND THEY SUGGESTED RUNNING THE MACHINE WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. TECH ID: 5328 -- FRIDAY, FEBRUARY 26, 2021 TESTED VOLTAGE IN TOOL AUTOMATION DATA LINK AND FOUND HIGH VOLTAGE. DISCONNECTED HARNESS TO SEE IF I LOSE POWER IN DATA LINK AND DID NOT UNTIL I UNPLUGGED THE GRADE CONTROL GPS. FOUND THERE IS A SHORT IN THAT HARNESS THAT HAS BEEN SPLICED IN. DETERMINED MAIN CAB HARNESS NEEDS REPLACED. CONTACTED CUSTOMER AND JASON SAID THEY DO NOT USE GRADE CONTROL OR ANY TOOL AUTOMATION FEATURES. I EXPLAINED THE TRANSMISSION ECM CODES WERE GONE AND THE ACTION LAMP IS NO LONGER FLASHING. HE SAID WHAT WHAT HE WAS CONCERNED ABOUT AND NOT TO WORRY IT.

Apr 26, 2021	Service	7,150	Troubleshoot Seat Assembly	CUSTOMER COMPLAINT: 5492-4-16-21 REPAIR PROCESS COMMENTS: ARRIVED AT SITE, FILLED OUT JSA, COULD NOT GET TO CUSTOMER MACHINE ON JOBSITE AND MACHINE WOULD NOT MAKE IT TO TRACKING PAD IN MUD, HAD TO WALK TO MACHINE, REMOVED SEAT SUSPENSION AND USED 259D ON SITE TO TAKE SEAT SUSPENSION FROM SCRAPER TO TRUCK AT TRACKING PAD, DISASSEMBLED SEAT SUSPENSION AND CHANGED HARNESS IN SEAT SUSPENSION, TOOK SUSPENSION BACK TO MACHINE WITH 259D AND INSTALLED SUSPENSION/SEAT, TESTED SEAT SEAT, JOB COMPLETE. T/s seat not working T/S SEAT NOT WORKING
Apr 26, 2021	Service	7,150	Travel To/from Work Area	
Apr 26, 2021	Service	7,150	Travel To/from Work Area	
Apr 26, 2021	Service	7,150	Troubleshoot Seat Assembly	CUSTOMER COMPLAINT: 5492-4-16-21 REPAIR PROCESS COMMENTS: ARRIVED AT SITE, FILLED OUT JSA, COULD NOT GET TO CUSTOMER MACHINE ON JOBSITE AND MACHINE WOULD NOT MAKE IT TO TRACKING PAD IN MUD, HAD TO WALK TO MACHINE, REMOVED SEAT SUSPENSION AND USED 259D ON SITE TO TAKE SEAT SUSPENSION FROM SCRAPER TO TRUCK AT TRACKING PAD, DISASSEMBLED SEAT SUSPENSION AND CHANGED HARNESS IN SEAT SUSPENSION, TOOK SUSPENSION BACK TO MACHINE WITH 259D AND INSTALLED SUSPENSION/SEAT, TESTED SEAT SEAT, JOB COMPLETE. T/s seat not working T/S SEAT NOT WORKING
Apr 19, 2021	Service	7,052	Travel To/from Work Area	
Apr 19, 2021	Service	7,052	Repair Valve Cover	5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK

Apr 19, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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PROGRAMED THE ECM WITH THE SOFTWARE AND CONFIGURED WITH THE ECM WITH THE REPLACEMENT FILE THAT WAS DOWNLOADED. PERFORMED A MANUAL REGEN, AND AFTERTREATMENT FUNCTIONAL TEST. HAD THE OPERATOR RUN THE MACHINE FOR OVER TWO HOURS. THE MACHINE DID NOT HAVE ANY PROBLEMS. THE CUSTOMER WILL CONTINUE TO RUN THE MACHINE FOR ANOTHER FEW DAYS TO VERIFY THE REPAIR. T/s fault codes on machine T/S FAULT CODES ON MACHINE *SPECAIL TERMS WARRANTY*

Apr 19, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRAILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
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Apr 19, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRAILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
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Apr 19, 2021	Service	7,052	Repair Valve Cover	5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK
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Apr 19, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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Apr 19, 2021	Service	7,052	Travel To/from Work Area	
Apr 07, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRAILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
Apr 07, 2021	Service	7,052	Travel To/from Work Area	

Apr 07, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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Apr 07, 2021	Service	7,052	Travel To/from Work Area	
Apr 07, 2021	Service	7,052	Repair Valve Cover	5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK

Apr 07, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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Mar 28, 2021	Service	7,052	Repair Valve Cover	5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK
Mar 28, 2021	Service	7,052	Travel To/from Work Area	

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Mar 28, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
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Mar 25, 2021	Service	7,052	Travel To/from Work Area	
Mar 25, 2021	Service	7,052	Repair Valve Cover	5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK

Mar 25, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE
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Mar 25, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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				<p>PROGRAMED THE ECM WITH THE SOFTWARE AND CONFIGURED WITH THE ECM WITH THE REPLACEMENT FILE THAT WAS DOWNLOADED. PERFORMED A MANUAL REGEN, AND AFTERTREATMENT FUNCTIONAL TEST. HAD THE OPERATOR RUN THE MACHINE FOR OVER TWO HOURS. THE MACHINE DID NOT HAVE ANY PROBLEMS. THE CUSTOMER WILL CONTINUE TO RUN THE MACHINE FOR ANOTHER FEW DAYS TO VERIFY THE REPAIR. T/s fault codes on machine T/S FAULT CODES ON MACHINE *SPECAIL TERMS WARRANTY*</p>
Mar 25, 2021	Service	7,052	Repair Valve Cover	<p>5151-3-10-21 "REAR ENGINE" REPAIR PROCESS COMMENTS: ARRIVED ON LOCATION. LOCATED MACHINE. REMOVED SIDE ENGINE ENCLOSURE COVER AND LADDER. MOVED HOSES OUT OF THE WAY. UNBOLTED AND REMOVED VALVE AND LEAKING. BOLTED VALVE COVER DOWN. REATTACHED ALL I HAD REMOVED. RAN MACHINE. NO LEAKS WERE FOUND. CLEANED UP WORK AREA, LEFT THE JOB SITE. Reseal valve cover leak RESEAL VALVE COVER LEAK</p>
Mar 25, 2021	Service	7,052	Troubleshoot Hydraulic Oil Filter	<p>3-3-21 STARTED THE MACHINE AND TESTED THE OPERATION. AFTER THE MACHINE HAD WARMED UP TO NORMAL PPERATING TEMP THE WARNING FOR CUSHION HITCH SYSTEM WIRING. THE BYPASS SWITCH WAS OPEN, LOOKED UP AND ORDERED NEW FILTER. PICKED UP FILTER FROM WAGNER AND REPLACED. THE SWITCH WAS STILL READING OPEN. DETEMINED THE SWITCH HAD FAILED. ORDERED NEW SWITCH THAT BACK ORDERED FROM AUSTRILA, WILL HAVE TO REPLACE WHEN THE PART ARRIVES. 5151-3-24-21 HYDRAULIC FILTER CODE LIGHT ON. SHORT ON SWITCH. INSTALLED NEW PRESSURE SWITCH DONNIE HAD GAVE TO ME TO INSTALL. STARTED MACHINE. NO CODES WERE ACTIVE. CLEANED UP WORK AREA, WROTE SERVICE REPORT AND LEFT THE JOB SITE. Trouble shoot and repair hyd. filter code TROUBLE SHOOT AND REPAIR HYD. FILTER CODE</p>

Mar 25, 2021	Service	7,052	Troubleshoot Engine	<p>2377-3-1-21 "REAR ENGINE" THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED TOO MANY CODES TO LIST, BUT WOULD HAVE AN INTERMITTENT ACTIVE CODES;1952- 9 CHASSIS ANGLE SENSOR : ABNORMAL UPDATE RATE,246- 9 PROPRIETARY CAN DATA LINK : ABNORMAL UPDATE RATE, AND 2905- 9 SWITCH PANEL #2 : ABNORMAL UPDATE RATE. PERFORMED THE TROUBLE SHOOTING PROCEDURE. THE DATA LINK HAD 15 VOLTS OF POWER ON EACH LEG OF THE DATA LINK. TRACED THE POWER SOURCE FROM THE BACK OF MACHINE AT THE ANGLE SENSOR TO THE CAB. FOUND THE GRADE CONTROL RECIEVER WAS THE CAUSE OF THE ISSUE AND ONCE UNPLUGGED THE CODE DID NOT RETURN. CONTACTED WITH IT PLUGGED IN TO SEE IF THE CODES RETURNED. AFTER AN HOUR AND A HALF THE CODE DID NOT RETURN. THE CUSTOMER REQUESTED THE GRADE BE UNPLUGGED TO ELIMINATE THE POSSIBLE RETURN OF THE CODES TO REDUCE DOWNTIME. THE CUSTOMER COMPLAINED OF THE MACHINE HAVING DIFFERENT DATA LINK FAULTS. ARRIVED ON SITE AND HOOKED UP CAT ET. THE MACHINE HAD LOGGED OPERATOR INDUCEMENTS UP TO LEVEL 3. THE ENGINE ECM HAD SYSTEM COMMUNICATION FAULTS FOR NOT BEING ABLE TO COMMUNICATE ON THE DATA LINK. NO CODES OR EVENTS WERE ACTIVE. STARTED THE MACHINE AND TESTED THE OPERATION. HAD THE CUSTOMER RUN THE MACHINE, THE OPERATOR RETURNED WITH ALARMS ON. HOOKED UP CAT ET, THE ALARMS SHUT OFF AFTER A FEW MINUTES. THE MACHINE HAD LOGGED DATA LINK FAULT FOR THE AFTERTREATMENT ECM #1 NOT COMMUNICATING ON THE DATA LINK. LOWERED THE BELLY PANS AND REMOVED THE TINWARE FROM THE LEFT SIDE OF THE MACHINE. PERFORMED A WIGGLE TEST ON THE WIREING AND INSPECTED FOR RUBBING OR WEAR SPOTS. NO PROBLEMS COULD BE FOUND AND THE DATA LINK FAULTS DID NOT RETURN. DISCONNECTED INSPECTED THE CONNECTIONS. NO ISSUES WERE FOUND. INSTALLED ALL REMOVED GAURDS AND HAD THE OPERATOR RUN THE MACHINE AGAIN, AFTER AN HOUR HE RETURNED WITH THE SAME LOGGED CODE FOR THE AFTERTREATMENT #1 NOT COMMUNICATING ON THE DATA LINK. RAN THE MACHINE WHILE HOOKED UP TO CAT ET ON THE AFTERTREATMENT ECM. THE CODE WOULD BECOME ACTIVE, KICKING ET OUT AND THEN WOULD BECOME DORMANT. AT A VERY FAST RATE. REMOVED ALL GAURDING AND THE CODE WOULD BECOME ACTIVE AND DORMANT RAPIDLY AND INTERMETENTLY. TESTED THE VOLTAGES AT THE ECMS ON THE DATA LINK LEGS TO TRY TO FIND A CAUSE. THE CODE BEING ACTIVE DID NOT GROUNDS COULD BE FOUND. DETERMINED THE PROBLEM SEEMED TO BE MOST ACTIVE WHEN THE ENGINE ECM TEMP WOULD RISE. LOOKED UP AND ORDERED AN AFTERTREATMENT ECM. WILL RETURN IN THE MORNING FOR ECM REPLACEMENT. 2377-3-4-21 RETURNED TO THE MACHINE AND REMOVED AND REPLACED THE AFTERTREATMENT ECM. FLASH</p>
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PROGRAMED THE ECM WITH THE SOFTWARE AND CONFIGURED WITH THE ECM WITH THE REPLACEMENT FILE THAT WAS DOWNLOADED. PERFORMED A MANUAL REGEN, AND AFTERTREATMENT FUNCTIONAL TEST. HAD THE OPERATOR RUN THE MACHINE FOR OVER TWO HOURS. THE MACHINE DID NOT HAVE ANY PROBLEMS. THE CUSTOMER WILL CONTINUE TO RUN THE MACHINE FOR ANOTHER FEW DAYS TO VERIFY THE REPAIR. T/s fault codes on machine T/S FAULT CODES ON MACHINE *SPECAIL TERMS WARRANTY*

Mar 25, 2021	Service	7,052	Travel To/from Work Area	
Feb 28, 2021	Service	6,984	Travel To/from Work Area	
Feb 28, 2021	Service	6,984	Troubleshoot Engine	2-11-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND CHECKED FOR ACTIVE CODES. MACHINE HAS ACTIVE CODES FOR HIGH SOOT LEVEL. TO NORMAL OPERATING TEMPERATURE. USED ET AND PERFORMED MANUAL REGENERATION ON FRONT AND REAR ENGINE. MANUAL REGENERATION COMPLETED 100% AND ALL CODES CLEARED. CLEANED UP WORK AREA. JOB COMPLETED. T/s aftertreatment issue on machine T/S AFTERTREATMENT ISSUE ON MACHINE
Feb 28, 2021	Service	6,984	Troubleshoot Engine	2-10-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND DOWNLOADED PRODUCT STATUS REPORT. USED ET AND CHECKED FOR ACTIVE CODES. MACHINE HAS ACTIVE CODE 246-9, 1952-9, & 2905-9 ACTIVE. LOOKED UP TROUBLESHOOTING PROCEDURE ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE. FOUND KEY PAD MODULE AT REAR OF ENGINE BAD. LOOKED UP PARTS AND ORDER. PARTS BACK ORDER. INFORMED CUSTOMER THAT PART BACK ORDER. INFORMED CUSTOMER THAT I WILL BE BACK IN THE MORNING WHEN PARTS COME IN. CLEANED UP WORK AREA. 2-11-21 4829 PICKED UP PARTS FROM WAGNER AND PROCEEDED TO CUSTOMER SITE. ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. REMOVED REAR FUSE PANEL FROM MACHINE. REMOVED AND REPLACED KEY PAD ON PANEL. INSTALLED PANEL BACK ONTO MACHINE. STARTED MACHINE AND CHECKED FOR ACTIVE CODES. NO ACTIVE CODES. CLEANED UP WORK AREA. JOB COMPLETED. T/s machine throwing several codes, 2466-9, 2905-9 T/S MACHINE THROWING SEVERAL CODES, 2466-9, 2905-9 --& OTHERS

Feb 28, 2021	Service	6,984	Troubleshoot Engine	2-10-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND DOWNLOADED PRODUCT STATUS REPORT. USED ET AND CHECKED FOR ACTIVE CODES. MACHINE HAS ACTIVE CODE 246-9, 1952-9, & 2905-9 ACTIVE. LOOKED UP TROUBLESHOOTING PROCEDURE ON CAT SIS. FOLLOWED CAT SIS TROUBLESHOOTING PROCEDURE. FOUND KEY PAD MODULE AT REAR OF ENGINE BAD. LOOKED UP PARTS AND ORDER. PARTS BACK ORDER. INFORMED CUSTOMER THAT PART BACK ORDER. INFORMED CUSTOMER THAT I WILL BE BACK IN THE MORNING WHEN PARTS COME IN. CLEANED UP WORK AREA. 2-11-21 4829 PICKED UP PARTS FROM WAGNER AND PROCEEDED TO CUSTOMER SITE. ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. REMOVED REAR FUSE PANEL FROM MACHINE. REMOVED AND REPLACED KEY PAD ON PANEL. INSTALLED PANEL BACK ONTO MACHINE. STARTED MACHINE AND CHECKED FOR ACTIVE CODES. NO ACTIVE CODES. CLEANED UP WORK AREA. JOB COMPLETED. T/s machine throwing several codes, 2466-9, 2905-9 T/S MACHINE THROWING SEVERAL CODES, 2466-9, 2905-9 --& OTHERS
Feb 28, 2021	Service	6,984	Travel To/from Work Area	
Feb 28, 2021	Service	6,984	Troubleshoot Engine	2-11-21 4829 ARRIVED AT CUSTOMER SITE AND LOCATED MACHINE. HOOKED UP ET AND CHECKED FOR ACTIVE CODES. MACHINE HAS ACTIVE CODES FOR HIGH SOOT LEVEL. TO NORMAL OPERATING TEMPERATURE. USED ET AND PERFORMED MANUAL REGENERATION ON FRONT AND REAR ENGINE. MANUAL REGENERATION COMPLETED 100% AND ALL CODES CLEARED. CLEANED UP WORK AREA. JOB COMPLETED. T/s aftertreatment issue on machine T/S AFTERTREATMENT ISSUE ON MACHINE
Feb 09, 2021	Service	6,970	Load/unload Machine	
Feb 09, 2021	Service	6,970	Inspect Machine	
Feb 09, 2021	Service	6,970	Rental Steam Clean Machine	
Feb 09, 2021	Service	6,970	Remove & Install/replace Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKING HYDRAULIC LINE FRONT FRAME L/SIDE OF ENGINE. CAUSE OF FAILURE: HYDRAULIC LINE LEAKING FROM CRIMPED END. INSTALLATION OVERSIGHT. REPAIR PROCESS COMMENTS: 5734 HOSE WAS LEAKING FROM THE CRIMPED END OF THE HOSE. REPLACED HOSE AND BOTH O-RINGS Replace leaky hydraulic line on front frame left REPLACE LEAKY HYDRAULIC LINE ON FRONT FRAME LEFT SIDE OF ENGINE.

Feb 09, 2021	Service	6,970	Troubleshoot Valve Cover	CUSTOMER COMPLAINT: LEAKY VALVE COVER CAUSE OF FAILURE: FASTENERS. THIS CAUSED THE VALVE COVER GASKET TO COMPRESS AND THE VALVE COVER TO CONTACT ROCKER SHAFT MOUNT STUDS. RESULTANT DAMAGE: REPLACE BOLTS AS BOLT HEADS WERE DAMAGED BY OVERTIGHTENING. REPAIR PROCESS COMMENTS: 5651 REMOVED HOOD PANELS. DRAINED COOLANT AND REMOVED SHUNT TANK AND BRACKET. REMOVED VALVE COVER AND FOUND 2 HOLES IN IT. REPLACED VALVE COVER GASKET AND VALVE COVER. INSTALLED VALVE COVER WITH NEW FASTENERS AND TORQUED THEM TO SPEC FOUND ON SISWEB. INSTALLED SHUNT TANK AND BRACKETS. FILLED MACHINE WITH COOLANT. RAN MACHINE AND CHECKED FOR LEAKS. VALVE COVER NO LONGER LEAKING. Trouble shoot rear of front engine, valve cover le TROUBLE SHOOT REAR OF FRONT ENGINE, VALVE COVER LE AKING
Feb 09, 2021	Service	6,970	Remove & Install/replace Transmission Lines/hoses	CUSTOMER COMPLAINT: LEAKING TRANS LINE CAUSE OF FAILURE: HOSE WAS DRY ROTTING AND WAS LEAKING FROM CRIMP CONNECTION REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY TRANSMISSION LINE GOING TO FILTER. Replace transmission line from filter to rear of t REPLACE TRANSMISSION LINE FROM FILTER TO REAR OF T RANSMISSION, LEAKING
Feb 09, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Feb 09, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT
Feb 09, 2021	Service	6,970	Rental Steam Clean Machine	
Feb 09, 2021	Service	6,970	Adjust Ejector	REPAIR PROCESS COMMENTS: 5734 ADJUSTED EJECTOR FROM RUBBING FLOOR. Adjust lower ejector rollers. ejector rubbing on ADJUST LOWER EJECTOR ROLLERS. EJECTOR RUBBING ON FLOOR
Feb 09, 2021	Service	6,970	Install Make Ready For Rent	REPAIR PROCESS COMMENTS: 5651 MADE MACHINE RENTAL READY PER SHOP INSTRUCTION. Make rental ready MAKE RENTAL READY
Feb 09, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT

Feb 09, 2021	Service	6,970	Troubleshoot Valve Cover	CUSTOMER COMPLAINT: LEAKY VALVE COVER CAUSE OF FAILURE: FASTENERS. THIS CAUSED THE VALVE COVER GASKET TO COMPRESS AND THE VALVE COVER TO CONTACT ROCKER SHAFT MOUNT STUDS. RESULTANT DAMAGE: REPLACE BOLTS AS BOLT HEADS WERE DAMAGED BY OVERTIGHTENING. REPAIR PROCESS COMMENTS: 5651 REMOVED HOOD PANELS. DRAINED COOLANT AND REMOVED SHUNT TANK AND BRACKET. REMOVED VALVE COVER AND FOUND 2 HOLES IN IT. REPLACED VALVE COVER GASKET AND VALVE COVER. INSTALLED VALVE COVER WITH NEW FASTENERS AND TORQUED THEM TO SPEC FOUND ON SISWEB. INSTALLED SHUNT TANK AND BRACKETS. FILLED MACHINE WITH COOLANT. RAN MACHINE AND CHECKED FOR LEAKS. VALVE COVER NO LONGER LEAKING. Trouble shoot rear of front engine, valve cover le TROUBLE SHOOT REAR OF FRONT ENGINE, VALVE COVER LE AKING
Feb 09, 2021	Service	6,970	Inspect Do Not Use - After Servic	
Feb 09, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Feb 09, 2021	Service	6,970	Remove & Install/replace Transmission Lines/hoses	CUSTOMER COMPLAINT: LEAKING TRANS LINE CAUSE OF FAILURE: HOSE WAS DRY ROTTING AND WAS LEAKING FROM CRIMP CONNECTION REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY TRANSMISSION LINE GOING TO FILTER. Replace transmission line from filter to rear of t REPLACE TRANSMISSION LINE FROM FILTER TO REAR OF T RANSMISSION, LEAKING
Feb 09, 2021	Service	6,970	Perform When Required	REPAIR PROCESS COMMENTS: 5651 CHECKED ALL FLUIDS AND GREASED MACHINE.
Feb 09, 2021	Service	6,970	Inspect Machine	
Feb 09, 2021	Service	6,970	Remove & Install/replace Eng Oil Filter Hsg/base	REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY ENGINE OIL SOS PORT ON FRONT ENGINE. Replace sos port at front engine oil filter REPLACE SOS PORT AT FRONT ENGINE OIL FILTER
Feb 09, 2021	Service	6,970	Repair Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: 5651 CLEARED LOGGED CODES AND GENERATED A PRODUCT STATUS REPORT. FLASHED TRANSMISSION ECM. Repair elec sys/panel: clear codes & pull product REPAIR ELEC SYS/PANEL: CLEAR CODES & PULL PRODUCT STATUS REPORT
Feb 09, 2021	Service	6,970	Load/unload Machine	

Feb 09, 2021	Service	6,970	Remove & Install/replace Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKING HYDRAULIC LINE FRONT FRAME L/SIDE OF ENGINE. CAUSE OF FAILURE: HYDRAULIC LINE LEAKING FROM CRIMPED END. INSTALLATION OVERSIGHT. REPAIR PROCESS COMMENTS: 5734 HOSE WAS LEAKING FROM THE CRIMPED END OF THE HOSE. REPLACED HOSE AND BOTH O-RINGS Replace leaky hydraulic line on front frame left REPLACE LEAKY HYDRAULIC LINE ON FRONT FRAME LEFT SIDE OF ENGINE.
Feb 09, 2021	Service	6,970	Repair Floodlight	REPAIR PROCESS COMMENTS: 5651 REPLACED LIGHT BULB. LIGHT STILL N/W. CHECKED POWER AT CONNECTOR, ONLY HAD 12V. INSPECTED WIRING HARNESS AND FOUND THAT CONNECTORS WERE SWITCHED UP WITH THE STEERING PRESSURE SENSORS. REARRANGED WIRES CORRECTLY TO BOTH LIGHTS AND BOTH FILTER FILTER HOUSINGS. LIGHT NOW OPERATIONAL. Repair rear work light on transmission, not workin REPAIR REAR WORK LIGHT ON TRANSMISSION, NOT WORKIN G
Feb 09, 2021	Service	6,970	Remove & Install/replace Ejector Guide Roller	REPAIR PROCESS COMMENTS: 5651 REPLACED WORN ROLLERS AND ADJUSTED ROLLERS FOR SMOOTH EJECTOR OPERATION. Replace upper side ejector guide roller, worn, and REPLACE UPPER SIDE EJECTOR GUIDE ROLLER, WORN, AND ADJUST
Feb 08, 2021	Service	0	Load/unload Machine	LOAD/UNLOAD MACHINE
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877

Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 18, 2021	Service	6,970	Add Parts Product Support Pgm (psp)	
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877
Jan 18, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 18, 2021	Service	6,970	Add Parts Product Support Pgm (psp)	
Jan 17, 2021	Service	6,970	Load/unload Machine	
Jan 17, 2021	Service	6,970	Inspect Machine	

Jan 17, 2021	Service	6,970	Rental Steam Clean Machine	
Jan 17, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT
Jan 17, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Jan 17, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Jan 17, 2021	Service	6,970	Remove & Install/replace Ejector Guide Roller	REPAIR PROCESS COMMENTS: 5651 REPLACED WORN ROLLERS AND ADJUSTED ROLLERS FOR SMOOTH EJECTOR OPERATION. Replace upper side ejector guide roller, worn, and REPLACE UPPER SIDE EJECTOR GUIDE ROLLER, WORN, AND ADJUST
Jan 17, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT
Jan 17, 2021	Service	6,970	Perform When Required	REPAIR PROCESS COMMENTS: 5651 CHECKED ALL FLUIDS AND GREASED MACHINE.
Jan 17, 2021	Service	6,970	Remove & Install/replace Eng Oil Filter Hsg/base	REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY ENGINE OIL SOS PORT ON FRONT ENGINE. Replace sos port at front engine oil filter REPLACE SOS PORT AT FRONT ENGINE OIL FILTER

Jan 17, 2021	Service	6,970	Troubleshoot Valve Cover	CUSTOMER COMPLAINT: LEAKY VALVE COVER CAUSE OF FAILURE: FASTENERS. THIS CAUSED THE VALVE COVER GASKET TO COMPRESS AND THE VALVE COVER TO CONTACT ROCKER SHAFT MOUNT STUDS. RESULTANT DAMAGE: REPLACE BOLTS AS BOLT HEADS WERE DAMAGED BY OVERTIGHTENING. REPAIR PROCESS COMMENTS: 5651 REMOVED HOOD PANELS. DRAINED COOLANT AND REMOVED SHUNT TANK AND BRACKET. REMOVED VALVE COVER AND FOUND 2 HOLES IN IT. REPLACED VALVE COVER GASKET AND VALVE COVER. INSTALLED VALVE COVER WITH NEW FASTENERS AND TORQUED THEM TO SPEC FOUND ON SISWEB. INSTALLED SHUNT TANK AND BRACKETS. FILLED MACHINE WITH COOLANT. RAN MACHINE AND CHECKED FOR LEAKS. VALVE COVER NO LONGER LEAKING. Trouble shoot rear of front engine, valve cover le TROUBLE SHOOT REAR OF FRONT ENGINE, VALVE COVER LE AKING
Jan 17, 2021	Service	6,970	Remove & Install/replace Transmission Lines/hoses	CUSTOMER COMPLAINT: LEAKING TRANS LINE CAUSE OF FAILURE: HOSE WAS DRY ROTTING AND WAS LEAKING FROM CRIMP CONNECTION REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY TRANSMISSION LINE GOING TO FILTER. Replace transmission line from filter to rear of t REPLACE TRANSMISSION LINE FROM FILTER TO REAR OF T RANSMISSION, LEAKING
Jan 17, 2021	Service	6,970	Load/unload Machine	
Jan 17, 2021	Service	6,970	Adjust Ejector	REPAIR PROCESS COMMENTS: 5734 ADJUSTED EJECTOR FROM RUBBING FLOOR. Adjust lower ejector rollers. ejector rubbing on ADJUST LOWER EJECTOR ROLLERS. EJECTOR RUBBING ON FLOOR
Jan 17, 2021	Service	6,970	Rental Steam Clean Machine	
Jan 17, 2021	Service	6,970	Inspect Machine	
Jan 17, 2021	Service	6,970	Repair Floodlight	REPAIR PROCESS COMMENTS: 5651 REPLACED LIGHT BULB. LIGHT STILL N/W. CHECKED POWER AT CONNECTOR, ONLY HAD 12V. INSPECTED WIRING HARNESS AND FOUND THAT CONNECTORS WERE SWITCHED UP WITH THE STEERING PRESSURE SENSORS. REARRANGED WIRES CORRECTLY TO BOTH LIGHTS AND BOTH FILTER FILTER HOUSINGS. LIGHT NOW OPERATIONAL. Repair rear work light on transmission, not workin REPAIR REAR WORK LIGHT ON TRANSMISSION, NOT WORKIN G
Jan 17, 2021	Service	6,970	Install Make Ready For Rent	REPAIR PROCESS COMMENTS: 5651 MADE MACHINE RENTAL READY PER SHOP INSTRUCTION. Make rental ready MAKE RENTAL READY

Jan 17, 2021	Service	6,970	Repair Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: 5651 CLEARED LOGGED CODES AND GENERATED A PRODUCT STATUS REPORT. FLASHED TRANSMISSION ECM. Repair elec sys/panel: clear codes & pull product REPAIR ELEC SYS/PANEL: CLEAR CODES & PULL PRODUCT STATUS REPORT
Jan 17, 2021	Service	6,970	Inspect Do Not Use - After Servic	
Jan 17, 2021	Service	6,970	Remove & Install/replace Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKING HYDRAULIC LINE FRONT FRAME L/SIDE OF ENGINE. CAUSE OF FAILURE: HYDRAULIC LINE LEAKING FROM CRIMPED END. INSTALLATION OVERSIGHT. REPAIR PROCESS COMMENTS: 5734 HOSE WAS LEAKING FROM THE CRIMPED END OF THE HOSE. REPLACED HOSE AND BOTH O-RINGS Replace leaky hydraulic line on front frame left REPLACE LEAKY HYDRAULIC LINE ON FRONT FRAME LEFT SIDE OF ENGINE.

Jan 17, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
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Jan 17, 2021	Service	6,967	Travel To/from Work Area
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Jan 17, 2021	Service	6,967	Travel To/from Work Area
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Jan 17, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
Jan 17, 2021	Service	6,967	Travel To/from Work Area	

Jan 17, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
Jan 17, 2021	Service	6,967	Travel To/from Work Area	

Jan 17, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
Jan 14, 2021	Service	6,970	Load/unload Machine	
Jan 14, 2021	Service	6,970	Inspect Machine	

Jan 14, 2021	Service	6,970	Rental Steam Clean Machine	
Jan 14, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Jan 14, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT
Jan 14, 2021	Service	6,970	Install Make Ready For Rent	REPAIR PROCESS COMMENTS: 5651 MADE MACHINE RENTAL READY PER SHOP INSTRUCTION. Make rental ready MAKE RENTAL READY
Jan 14, 2021	Service	6,970	Remove & Install/replace Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKING HYDRAULIC LINE FRONT FRAME L/SIDE OF ENGINE. CAUSE OF FAILURE: HYDRAULIC LINE LEAKING FROM CRIMPED END. INSTALLATION OVERSIGHT. REPAIR PROCESS COMMENTS: 5734 HOSE WAS LEAKING FROM THE CRIMPED END OF THE HOSE. REPLACED HOSE AND BOTH O-RINGS Replace leaky hydraulic line on front frame left REPLACE LEAKY HYDRAULIC LINE ON FRONT FRAME LEFT SIDE OF ENGINE.
Jan 14, 2021	Service	6,970	Perform When Required	REPAIR PROCESS COMMENTS: 5651 CHECKED ALL FLUIDS AND GREASED MACHINE.
Jan 14, 2021	Service	6,970	Inspect Do Not Use - After Servic	
Jan 14, 2021	Service	6,970	Load/unload Machine	
Jan 14, 2021	Service	6,970	Straighten Ladder/step	REPAIR PROCESS COMMENTS: 5651 STRAIGHTENED FRONT STEPS ON RIGHT SIDE OF TRACTOR. Straighten step at front right engine ladder, bent STRAIGHTEN STEP AT FRONT RIGHT ENGINE LADDER, BENT
Jan 14, 2021	Service	6,970	Remove & Install/replace Eng Oil Filter Hsg/base	REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY ENGINE OIL SOS PORT ON FRONT ENGINE. Replace sos port at front engine oil filter REPLACE SOS PORT AT FRONT ENGINE OIL FILTER
Jan 14, 2021	Service	6,970	Remove & Install/replace Transmission Lines/hoses	CUSTOMER COMPLAINT: LEAKING TRANS LINE CAUSE OF FAILURE: HOSE WAS DRY ROTTING AND WAS LEAKING FROM CRIMP CONNECTION REPAIR PROCESS COMMENTS: 5651 REPLACED LEAKY TRANSMISSION LINE GOING TO FILTER. Replace transmission line from filter to rear of t REPLACE TRANSMISSION LINE FROM FILTER TO REAR OF T RANSMISSION, LEAKING

Jan 14, 2021	Service	6,970	Rental Steam Clean Machine	
Jan 14, 2021	Service	6,970	Repair Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: 5651 CLEARED LOGGED CODES AND GENERATED A PRODUCT STATUS REPORT. FLASHED TRANSMISSION ECM. Repair elec sys/panel: clear codes & pull product REPAIR ELEC SYS/PANEL: CLEAR CODES & PULL PRODUCT STATUS REPORT
Jan 14, 2021	Service	6,970	Troubleshoot Valve Cover	CUSTOMER COMPLAINT: LEAKY VALVE COVER CAUSE OF FAILURE: FASTENERS. THIS CAUSED THE VALVE COVER GASKET TO COMPRESS AND THE VALVE COVER TO CONTACT ROCKER SHAFT MOUNT STUDS. RESULTANT DAMAGE: REPLACE BOLTS AS BOLT HEADS WERE DAMAGED BY OVERTIGHTENING. REPAIR PROCESS COMMENTS: 5651 REMOVED HOOD PANELS. DRAINED COOLANT AND REMOVED SHUNT TANK AND BRACKET. REMOVED VALVE COVER AND FOUND 2 HOLES IN IT. REPLACED VALVE COVER GASKET AND VALVE COVER. INSTALLED VALVE COVER WITH NEW FASTENERS AND TORQUED THEM TO SPEC FOUND ON SISWEB. INSTALLED SHUNT TANK AND BRACKETS. FILLED MACHINE WITH COOLANT. RAN MACHINE AND CHECKED FOR LEAKS. VALVE COVER NO LONGER LEAKING. Trouble shoot rear of front engine, valve cover le TROUBLE SHOOT REAR OF FRONT ENGINE, VALVE COVER LE AKING
Jan 14, 2021	Service	6,970	Adjust Ejector	REPAIR PROCESS COMMENTS: 5734 ADJUSTED EJECTOR FROM RUBBING FLOOR. Adjust lower ejector rollers. ejector rubbing on ADJUST LOWER EJECTOR ROLLERS. EJECTOR RUBBING ON FLOOR
Jan 14, 2021	Service	6,970	Repair Floodlight	REPAIR PROCESS COMMENTS: 5651 REPLACED LIGHT BULB. LIGHT STILL N/W. CHECKED POWER AT CONNECTOR, ONLY HAD 12V. INSPECTED WIRING HARNESS AND FOUND THAT CONNECTORS WERE SWITCHED UP WITH THE STEERING PRESSURE SENSORS. REARRANGED WIRES CORRECTLY TO BOTH LIGHTS AND BOTH FILTER FILTER HOUSINGS. LIGHT NOW OPERATIONAL. Repair rear work light on transmission, not workin REPAIR REAR WORK LIGHT ON TRANSMISSION, NOT WORKIN G
Jan 14, 2021	Service	6,970	Remove & Install/replace Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED R/ REAR STEPS. Replace rear step and straps, torn and bent REPLACE REAR STEP AND STRAPS, TORN AND BENT
Jan 14, 2021	Service	6,970	Remove & Install/replace Ejector Guide Roller	REPAIR PROCESS COMMENTS: 5651 REPLACED WORN ROLLERS AND ADJUSTED ROLLERS FOR SMOOTH EJECTOR OPERATION. Replace upper side ejector guide roller, worn, and REPLACE UPPER SIDE EJECTOR GUIDE ROLLER, WORN, AND ADJUST

Jan 14, 2021	Service	6,970	Inspect Machine	
Jan 13, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 13, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877
Jan 13, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46877 BEFORE FAILURE. Perform ps46877 PERFORM PS46877
Jan 13, 2021	Service	6,970	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: 5734 PERFORMED PS46880. DRAINED FLUID REMOVED WHEEL FINAL DRIVE COVERS REMOVED DRIVE SHAFT AND BOTH AXLE SHAFTS REMOVED BOTH FENDERS AND INNER GUARDS REMOVED BELLY PANS REMOVED VALVE BLOCK .DRIVE SHAFT TUBE. REMOVED TRANSMISSION AND DIFF UNIT LEAKED DIFF HOUSING OUT REPLACED HARD BROKEN SUCTION SCREEN RUBBER TUBE. REBUILD DIF LOCKER UNIT. INSTALLED BACK ONTO TRANS REINSTALLED TRANS UNIT AND ALL HOSES . Perform ps46880 PERFORM PS46880
Jan 13, 2021	Service	6,970	Add Parts Product Support Pgm (psp)	
Jan 11, 2021	Service	6,967	Travel To/from Work Area	

Jan 11, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
Jan 11, 2021	Service	6,967	Travel To/from Work Area	

Jan 11, 2021	Service	6,967	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: MULTIPLE FAULT CODES ACTIVE. CAUSE OF FAILURE: NOX OUTLET MODULE SHORTING OUT INTERMIT CAUSING DATA FAULTS. REPAIR PROCESS COMMENTS: #1806 11/30/20 TRAVEL TO MACHINE LOCATION AND CONNECT ET DOWNLOAD PSR THEN TEST TO SEE WHAT IS CAUSING FAULTS FOR COMMUNICATION LINK #2 NOT COMMUNICATION TO AFTERTREATMENT CONTROLLER. FOUND THAT THE NOX SENSOR IS SHORTING OUT THE DATA LINK INTERNAL FAULT. THIS TOOK SOME TIME TO FIND DUE TO INTERMIT. NATURE OF FAULT. I ORDERED PARTS AND WILL RETURN WHEN PARTS ARRIVE. I ADVISED CUSTOMER PARTS ORDERED. NOT COMPLETE. #1806 12/3/20 PICK UP PARTS WECO TRAVEL TO MACHINE LOCATION AND REPLACE BOTH NOX SENSORS SUSPECTED OF INTERMIT INTERNAL FAULT CAUSING EMISHIONS FAULT. CONNECT ET AND CLEAR CODES THEN TEST RUN THROUGH REGEN. COMPLETED REGEN NO ISSUES BUT FOUND THAT ONE SERVICE CODE WOULD NOT CLEAR FOR COMMUNICATIONS ON THE FRT. #2 DATA LINK THE CODE IS NOT ACTIVE AND WHEN I CHECKED IN NEW PSR THE CODE CLEARED. I SUSPECT THERE IS AN INTERNAL ISSUE WITH THE DEF PUMP CONTROL BUT NOT ACTIVE SO ADVISED CUSTOMER TO RUN MACHINE AND ADVISE IF ISSUE COMES BACK. CUSTOMER CALLED AND ADVISED THAT FAULT CAME BACK I RETURNED AND CONNECTED ET FOUND ACTIVE CODE FOR #2 DATA LINK AND THE DEF CONTROL IS NOT SHOWING ON THE DATA LINK. I TESTED WIRING AND VOLTAGE IS GOOD ON THE TWISTED PAIR AT THE CONTROL. SUSPECT CUSTOMER. 12/4/20 PART WENT CBO. REPAIR PROCESS COMMENTS: #1806 12/4/20 PICK UP PARTS AT WAGNER FOUND MISSING CONTROLLER. GOT WITH PARTS AND HAD THEM TRACK DOWN PART AND FOUND THAT IT SHORTED OUT OF DENVER AND WENT CBO I HAD ASKED IF PARTS CAN GET ME AN ETA. ADVISED BRAD K. RENTAL FLEET, CUSTOMER AND WECO DISPATCH OF SHORT PART. WILL ADVISE WHEN I GET AN ETA. NOT COMPLETE. #1806 1/8/21 REPAIR SERVICE CODE FOR EMISHIONS. CONNECT ET AND DOWN LOAD PSR. RUN MACHINE UNTIL FAULT OCCURED ABOUT AN HOUR. CHECK FOR FAULT AND FOUND LOSS OF COMMUNICATION FROM DEF MODULE TO THE ENGINE ECM. I REMOVED AND REPLACED THE DOSING MAKESURE THAT FAULT IS GONE. FAULT DID NOT REOCCURE. REQ. EXTRA TIME AS THE FAULT WAS INTERMIT. AND SOMETIMES WOULD TAKE SEVERAL HOURS BEFOR THE FAULT WOULD OCCURE. COMPLETE T/s several emission codes flashing on machine T/S SEVERAL EMISSION CODES FLASHING ON MACHINE</p>
Dec 27, 2020	Service	6,795	Travel To/from Work Area	

Dec 27, 2020	Service	6,795	Troubleshoot Cushion Hitch	CUSTOMER CONCERN TECH ID: 5140 -- WEDNESDAY, SEPTEMBER 23, 2020 6:43 AM - HOOKED UP THE GAUGE TO THE CUSHION HITCH ACCUMULATOR AND FOUND THAT THE ACCUMUALTORS WHERE CHARGES BACKWARDS. THE HIGH SIDE WAS CHARGED TO LOW SIDE SPEC AND THE LOW SIDE WAS CHARGED TO THE HIGH SIDE SPEC. CHARGED THEM PROPERLY AND HAD TIME. T/s cushion hitch inop T/S CUSHION HITCH INOP
Dec 27, 2020	Service	6,795	Troubleshoot Hydraulic System	CUSTOMER CONCERN TECH ID: 5140 -- WEDNESDAY, SEPTEMBER 23, 2020 6:39 AM - GOT TO MACHINE AND FOUND THE HYD LEAK. THE BRAKE FILTER HOUSING IS LEAKING ALONG WITH THE HOSE FOR THE STEERING PUMP. REPLACED THE O-RINGS ON THE FILTER HOUSING AND THE HOSE. FILLED HYD OIL TO SPEC HAD CUSTOMER RUN MACHINE NO OTHER ISSUES. T/s & repair hyd leak on machine T/S & REPAIR HYD LEAK ON MACHINE
Dec 27, 2020	Service	6,795	Troubleshoot Hydraulic System	CUSTOMER CONCERN TECH ID: 5140 -- FRIDAY, SEPTEMBER 25, 2020 11:13 AM - GO TO MACHINE AND FOUND THE TRANS LEAK. REMOVED THE LEAKING HOSE AND ISNSTALLLED A NEW O-RING. FILLED THE MACHINE TO SPEC SO IT COULD BE STARTED. HAD CUSTOMER RUN MACHINE NO OTHER LEAKS T/s hyd leak on machine, a transmission leak- T/S HYD LEAK ON MACHINE, A TRANSMISSION LEAK- ADDED SEG ON 9/24/20 RWH
Dec 27, 2020	Service	6,795	Troubleshoot Cushion Hitch	CUSTOMER CONCERN TECH ID: 5140 -- WEDNESDAY, SEPTEMBER 23, 2020 6:43 AM - HOOKED UP THE GAUGE TO THE CUSHION HITCH ACCUMULATOR AND FOUND THAT THE ACCUMUALTORS WHERE CHARGES BACKWARDS. THE HIGH SIDE WAS CHARGED TO LOW SIDE SPEC AND THE LOW SIDE WAS CHARGED TO THE HIGH SIDE SPEC. CHARGED THEM PROPERLY AND HAD TIME. T/s cushion hitch inop T/S CUSHION HITCH INOP
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Dec 27, 2020	Service	6,795	Troubleshoot Hydraulic System	CUSTOMER CONCERN TECH ID: 5140 -- FRIDAY, SEPTEMBER 25, 2020 11:13 AM - GO TO MACHINE AND FOUND THE TRANS LEAK. REMOVED THE LEAKING HOSE AND INSTALLED A NEW O-RING. FILLED THE MACHINE TO SPEC SO IT COULD BE STARTED. HAD CUSTOMER RUN MACHINE NO OTHER LEAKS T/s hyd leak on machine, a transmission leak- T/S HYD LEAK ON MACHINE, A TRANSMISSION LEAK- ADDED SEG ON 9/24/20 RWH
Dec 16, 2020	Service	6,962	Travel To/from Work Area	
Dec 16, 2020	Service	6,962	Troubleshoot Engine	CUSTOMER CONCERN TECH ID: 8111 -- MONDAY, NOVEMBER 23, 2020 1:09 PM - REPAIR COMMENTS TECH ID: 8111 -- MONDAY, NOVEMBER 23, 2020 1:09 PM - TALKED TO CUSTOMER AND VERIFIED WHICH MACHINE WAS HAVING THE ISSUE. HOOKED UP ET AND FOUND ACTIVE EVENT E1052 AND FUEL PRESSURE LOW. DOWNLOADED PSR. RESET ACTIVE EVENTS AND STARTED MACHINE RAN MANUAL REGEN AND IT COMPLETED SUCCESSFULLY. LOOKED UP WORK ORDER HISTORY AND FOUND THIS MACHINE HAD SAME ISSUE ABOUT 2 WEEKS PRIOR. PUT A GAGE ON AND FUEL PRESSURE OUTLET OF CRS PUMP. STARTED MACHINE AND USED OVERRIDE TO CHECK FUEL PRESSURE. SPEC IS 275 --15PSI. WHEN INITIALLY OVERRIDDEN PRESSURE COMES UP TO 275 HOWEVER THE LONGER I LET PUMP RUN THE LOWER THE FUEL PRESSURE GOT AT 250PSI DECIDED TO REPLACE THE FUEL PUMP. WENT TO WAGNER AND PICKED UP NEW FUEL PUMP AND NEW FILTER. RETURNED TO MACHINE. REMOVED OLD PUMP. TRANSFERRED FITTINGS TO NEW PUMP. INSTALLED NEW PUMP. CHECKED FUEL PRESSURE AGAIN AND HOLDS AT 275. RAN AN ARD IGNITION TEST AND MACHINE PASSED. RELEASED MACHINE. T/s ard fuel pressure low front engine e1050-2 T/S ARD FUEL PRESSURE LOW FRONT ENGINE E1050-2 *CONFIRM SERIAL NUMBER OF MACHINE POSSIBLE WRRNTY*

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Dec 16, 2020	Service	6,962	Travel To/from Work Area	
Dec 14, 2020	Service	6,951	Travel To/from Work Area	
Dec 14, 2020	Service	6,951	Troubleshoot Ride Control System	CUSTOMER COMPLAINT: 3749-11-17-20 REPAIR PROCESS COMMENTS: MACHINE CUSHION HITCH REPORTED STIFF SO CHECKED OUT SYSTEM AND DID CHECK ACCUM CHARGE AND FOUND ACCUM WAS SET AT 1500 PSI AND SPEC IS 1342 SO PUT PROPER CHARGE IN IT AND THEN HAD OPERATOR RUN MACHINE AND TO CHECK OUT AND OPERATOR SAID IT IS WORKING GOOD T/s cushion hitch ride control issue on machine T/S CUSHION HITCH RIDE CONTROL ISSUE ON MACHINE
Dec 14, 2020	Service	6,951	Troubleshoot Ride Control System	CUSTOMER COMPLAINT: 3749-11-17-20 REPAIR PROCESS COMMENTS: MACHINE CUSHION HITCH REPORTED STIFF SO CHECKED OUT SYSTEM AND DID CHECK ACCUM CHARGE AND FOUND ACCUM WAS SET AT 1500 PSI AND SPEC IS 1342 SO PUT PROPER CHARGE IN IT AND THEN HAD OPERATOR RUN MACHINE AND TO CHECK OUT AND OPERATOR SAID IT IS WORKING GOOD T/s cushion hitch ride control issue on machine T/S CUSHION HITCH RIDE CONTROL ISSUE ON MACHINE

Dec 14, 2020	Service	6,951	Travel To/from Work Area	
Nov 19, 2020	Parts			
Nov 19, 2020	Service	6,867	Troubleshoot Engine	3749-11-5-20 REPAIR PROCESS COMMENTS: MACHINE ON FRONT ENGINE HAD A E1053-2 LOW ARD FUEL PRESSURE SO CHECKED OUT FAULT ON SIS AND DID STEPS ON M0091957 FIRST CHECKED FOR LEAKS OR SMASHED LINE AND ALL LOOKED OK. CHECKED POWER TO PUMP AND HAD 26 VOLTS. DID PUMP TEST AND PUMP WAS AT 265 PSI. ORDERED FILTER AND SOLENOID AND HEADED TO WAGNER TO PICKUP PARTS. INSTALLED NEW FILTER IN MANIFOLD. REPLACED AS PER SIS THEN REPLACED SOLOINEDS AS PER SIS. THAT FIXED LOW RESSURE AND CLEARED FAULT.DID A ARD TEST AND PASSED AND THEN DID A MANUAL REGEN ON MACHINE AND EVERYTHING PASSED. CALLED CUST AND LET THEM KNOW THEY COULD RUN MACHINE Ard low fuel pressure alarm ARD LOW FUEL PRESSURE ALARM
Nov 19, 2020	Service	6,867	Travel To/from Work Area	
Nov 19, 2020	Service	6,867	Troubleshoot Engine	3749-11-5-20 REPAIR PROCESS COMMENTS: MACHINE ON FRONT ENGINE HAD A E1053-2 LOW ARD FUEL PRESSURE SO CHECKED OUT FAULT ON SIS AND DID STEPS ON M0091957 FIRST CHECKED FOR LEAKS OR SMASHED LINE AND ALL LOOKED OK. CHECKED POWER TO PUMP AND HAD 26 VOLTS. DID PUMP TEST AND PUMP WAS AT 265 PSI. ORDERED FILTER AND SOLENOID AND HEADED TO WAGNER TO PICKUP PARTS. INSTALLED NEW FILTER IN MANIFOLD. REPLACED AS PER SIS THEN REPLACED SOLOINEDS AS PER SIS. THAT FIXED LOW RESSURE AND CLEARED FAULT.DID A ARD TEST AND PASSED AND THEN DID A MANUAL REGEN ON MACHINE AND EVERYTHING PASSED. CALLED CUST AND LET THEM KNOW THEY COULD RUN MACHINE Ard low fuel pressure alarm ARD LOW FUEL PRESSURE ALARM
Nov 19, 2020	Service	6,867	Travel To/from Work Area	
Nov 01, 2020	Service	6,791	Load/unload Machine	
Nov 01, 2020	Service	6,791	Inspect Machine	
Nov 01, 2020	Service	6,791	Rental Steam Clean Machine	

Nov 01, 2020	Service	6,791	Repair For Warranty Product Support Pgm (psp)	REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS46141 ON SEAT . REMOVED INSTALLED SEAT ASSEMBLY FROM CAB. Machine is exceeds ps46141 due to age (0-48) MACHINE IS EXCEEDS PS46141 DUE TO AGE (0-48)
Nov 01, 2020	Service	6,791	Recondition Bowl Lift Cylinder	CUSTOMER COMPLAINT: RECONDITION BOWL LIFT CYLINDER. LEVEL 2 CAUSE OF FAILURE: TIME IN USE RESULTANT DAMAGE: DISASSEMBLED CLEANED AND INSPECTED PARTS. FOUND BARREL AND ROD TO HAVE LIGHT SCORING, HEAD SEAL LANDS ARE RUSTED. FACES ARE RUSTED. HONED BARREL TO REMOVE SCORING. POLISHED ROD. BUFFED AND WIRE WHEELED HEAD SEAL LANDS TO REMOVE RUST. TESTED SENSOR. REPAIR PROCESS COMMENTS: ASSEMBLED CYLINDER WITH NEW SEALS. TORQUED LOCK NUT TO 2500 FT LBS, HEAD BOLTS TO 600, AND SENSOR LEAKS OR DRIFTING FOUND. TESTED SENSOR. NO ISSUES FOUND.
Nov 01, 2020	Service	6,791	Install Fire Extinguisher	REPAIR PROCESS COMMENTS: FIREEXTINGUISHER. Install fire ext. front and rear INSTALL FIRE EXT. FRONT AND REAR
Nov 01, 2020	Service	6,791	Repair Hydraulic Hoses/lines	REPLACED LEAKING 2 HOSES ON EJECTOR CYLINDER . Hyd. hose leaking for ejector
Nov 01, 2020	Service	6,791	Remove & Install Battery	REPAIR PROCESS COMMENTS: REMOVED INSTALLED FRONT PANEL OF CAB . REMOVED INSTALLED FRONT BATTERY COMPARTMENT PANEL. DISCONNECTED ALL THE BATTERIES . TESTED THE BATTERIES. THE BATTERIES WERE LOW ON CHARGE . RECHARGED THE BATTERIES AND TESTED AGAIN . THE BATTERIES PASSED LOAD TEST. RECONNECTED BATTERY CABLES . Remove and replace batteries REMOVE AND REPLACE BATTERIES
Nov 01, 2020	Service	6,791	Replace Ground Engaging TI (get)	Turn edges TURN EDGES
Nov 01, 2020	Service	6,791	Inspect Machine	
Nov 01, 2020	Service	6,791	Inspect Do Not Use - After Servic	

Nov 01, 2020	Service	6,791	Repair Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: DOWNLOADED PSR AND CHECKED CLEARED CODES. FLASHED ECM'S WITH LATEST SOFTWARE. WHEN I FLASHING ECM'S MACHINE LOST POWER AND ABORTED FLASHING PROCEDURE . FRONT BATTERIES WERE LOW ON CHARGE. AFTER RESTORED POWER TO MACHINE WHEN THE KEY ON MONITOR DOES NOT TURNED ON. TROUBLESHOT AND FOUND LOST POWER WHEN FLASHED FRONT TRANSMISSION ECM . FRONT TRANSMISSION ECM IS MAIN ECM FOR POWER TO OTHER ECM'S. AFTER FLASHED FRONT TRANSMISSION ECM EVERYTHING RESTORED BACK TO NORMAL. FLASHED REMAINING ECM'S.
Nov 01, 2020	Service	6,791	Rental Steam Clean Machine	
Nov 01, 2020	Service	6,791	Load/unload Machine	
Nov 01, 2020	Service	6,791	Troubleshoot Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: REMOVED INSTALLED REAR BOTTOM GUARD. TROUBLESHOT CODE 291-5 FOR FRONT ENGINE COOLING FAN SOLENOID. FOUND OUT THERE WAS JUMPER HARNESS INSTALLED FAN SOLENOID HARNESS AND RUN BACK TO CAB. DID NOT FIND ANY INFORMATION ON SIS ABOUT THE JUMPER WIRES. CONTACTED T/C . T/C SENT ME EMAIL ABOUT JUMPER WIRES IT WAS INSTALLED BACK IN 2016 PER CAT INSTALLING FAN BYPASS SWITCH IN THE CAB. REMOVED JUMPER WIRE AND SWITCH OUT OF CAB . REINSTALLED WIRING TO FAN SOLENOID ORGINAL INSTALLATION PER SCHEMATIC. THE CODE NO LONGER ACTIVE . Troubleshoot active code 291-5 TROUBLESHOOT ACTIVE CODE 291-5
Nov 01, 2020	Service	6,791	Remove & Install Bowl Lift Cylinder	REPAIR PROCESS COMMENTS: REMOVED INSTALLED RIGHT BOWL CYLINDER. R & i right lift cylinder for leaking
Nov 01, 2020	Service	6,791	Perform When Required	REPAIR PROCESS COMMENTS: PERFORMED DAILY MAINTENANCE ON MACHINE. TOP OFF FRONT REAR DIFFERENTIAL OIL LEVEL.REPLACED FRONT DEF TANK CAP. Daily - def cap broke DAILY - DEF CAP BROKE
Oct 28, 2020	Service	0	Load/unload Machine	
Oct 22, 2020	Service	6,795	Travel To/from Work Area	

Oct 22, 2020	Service	6,795	Troubleshoot Cushion Hitch	CUSTOMER CONCERN TECH ID: 5140 -- WEDNESDAY, SEPTEMBER 23, 2020 6:43 AM - HOOKED UP THE GAUGE TO THE CUSHION HITCH ACCUMULATOR AND FOUND THAT THE ACCUMUALTORS WHERE CHARGES BACKWARDS. THE HIGH SIDE WAS CHARGED TO LOW SIDE SPEC AND THE LOW SIDE WAS CHARGED TO THE HIGH SIDE SPEC. CHARGED THEM PROPERLY AND HAD TIME. T/s cushion hitch inop T/S CUSHION HITCH INOP
Oct 22, 2020	Service	6,795	Troubleshoot Hydraulic System	CUSTOMER CONCERN TECH ID: 5140 -- WEDNESDAY, SEPTEMBER 23, 2020 6:39 AM - GOT TO MACHINE AND FOUND THE HYD LEAK. THE BRAKE FILTER HOUSING IS LEAKING ALONG WITH THE HOSE FOR THE STEERING PUMP. REPLACED THE O-RINGS ON THE FILTER HOUSING AND THE HOSE. FILLED HYD OIL TO SPEC HAD CUSTOMER RUN MACHINE NO OTHER ISSUES. T/s & repair hyd leak on machine T/S & REPAIR HYD LEAK ON MACHINE
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Oct 22, 2020	Service	6,795	Travel To/from Work Area	
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Oct 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Oct 13, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Oct 13, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.

Oct 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Oct 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Oct 13, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS

Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Oct 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP

Oct 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Oct 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Oct 13, 2020	Service	6,663	Remove & Install Power Pack Eng	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Oct 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	<p>REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313</p>
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.</p>

Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Oct 13, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>

Oct 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Oct 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>
Oct 13, 2020	Service	6,663	Remove & Install Serpentine Belt	<p>REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS</p>

Oct 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Oct 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Oct 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Oct 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Oct 13, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Oct 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Oct 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REFLACE DAMAGED CEM WIRING HARNESS
Oct 13, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Oct 13, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.

Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.
Oct 13, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Oct 13, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPLOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Oct 13, 2020	Service	6,663	Inspect Machine	
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Oct 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.

Oct 13, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>
Oct 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>
Oct 13, 2020	Service	6,663	Repair Access Panel	<p>Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL</p>

Oct 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISASSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Oct 13, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Oct 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Oct 13, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Oct 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Oct 13, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER

Oct 13, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Oct 13, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Oct 13, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Oct 13, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER
Oct 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS

Oct 13, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Oct 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832
Oct 13, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Oct 13, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Oct 13, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.

Oct 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Oct 13, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Oct 13, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Oct 13, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT
Oct 13, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Oct 13, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Oct 13, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.

NOTICE THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION

 WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).

 REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE

Oct 13, 2020 Service 6,663 Perform Pm 4

Oct 13, 2020 Service 6,663 Repair Apron REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS

Oct 13, 2020 Service 6,663 Repair Seat Assembly REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT

Oct 13, 2020 Service 6,663 Repair Engine Front Support REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT

Oct 13, 2020 Service 6,663 Repair For Warranty Diesel Exh Fluid Injector REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.

Oct 13, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Oct 13, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Oct 13, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.

Oct 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS

Oct 13, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.
Oct 13, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Oct 13, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Oct 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Oct 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Oct 13, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
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Oct 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Oct 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Oct 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Oct 13, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Oct 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.

Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Oct 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Oct 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP

Oct 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	<p>REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Radiator	<p>REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Body	<p>REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	<p>REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Oct 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Oct 13, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear

Oct 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Oct 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>

Oct 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Oct 13, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Oct 13, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Oct 13, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Oct 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION

Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Oct 13, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Oct 13, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Oct 13, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Oct 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Oct 13, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.
Oct 13, 2020	Service	6,663	Inspect Machine	
Oct 13, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS
Oct 13, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Oct 13, 2020	Service	6,663	Repair Access Panel	Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL
Oct 13, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Oct 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Oct 13, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPLOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE

Oct 13, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Oct 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Oct 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Oct 13, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Oct 13, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Oct 13, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL

Oct 13, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & I rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Oct 13, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Oct 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Oct 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Oct 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Oct 13, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Oct 13, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Oct 13, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS
Oct 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER

Oct 13, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Oct 13, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Oct 13, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Oct 13, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Oct 13, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT

Oct 13, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Oct 13, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Oct 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Oct 13, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Oct 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832

Oct 13, 2020	Service	6,663	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION</p> <p>*****</p> <p>WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p> <p>REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE</p>
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Oct 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY

Oct 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Oct 13, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Oct 13, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Oct 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REFLACE DAMAGED CEM WIRING HARNESS

Oct 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Oct 13, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER

Oct 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Oct 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Oct 13, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Oct 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Oct 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Oct 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Oct 13, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Oct 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.

Sep 28, 2020	Service	6,656	Inspect Machine	
Sep 28, 2020	Service	6,656	Repair For Warranty Product Link System	REPAIR PROCESS COMMENTS: PERFORMED BY EMPLOYEE #5563 BEFORE FAILURE.
Sep 28, 2020	Service	6,656	Repair For Warranty Accessory Drive	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46472 BEFORE FAILURE
Sep 28, 2020	Service	6,656	Repair Ladder/step	REPAIR PROCESS COMMENTS: 5651 REPLACED STEP. STEP MOUNT WAS BENT SLIGHTLY, SO IT WAS REMOVED AND BENT BACK USING THE PRESS. Right rear step mount bent RIGHT REAR STEP MOUNT BENT
Sep 28, 2020	Service	6,656	Repair Turbocharger	REPAIR PROCESS COMMENTS: 5651 FOUND DAMAGED CLAMP AND IMPROPERLY ALIGNED FLANGE ON TURBO OUTLET. REPLACED CLAMP AND PROPERLY ALIGNED EXHAUST PIPE TO TURBO FLANGE. Exhaust leak at rear engine, turbo outlet EXHAUST LEAK AT REAR ENGINE, TURBO OUTLET
Sep 28, 2020	Service	6,656	Remove & Install/replace Owning & Operating Info	REPAIR PROCESS COMMENTS: 5651 INSTALLED SAFETY MANUAL AND LANYARD IN MACHINE. O+M MANUAL STILL MISSING DUE TO PART AVAILABILITY. 0 & m safety manual missing
Sep 28, 2020	Service	6,656	Repair Miscellaneous	REPAIR PROCESS COMMENTS: 5651 EMPLOYEE #5563 PERFORMED THIS SEGMENT. Trans shifter missing hardware TRANS SHIFTER MISSING HARDWARE
Sep 28, 2020	Service	6,656	Repair Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: 5651 CLEARED CODES AND GENERATED A PRODUCT STATUS REPORT.
Sep 28, 2020	Service	6,656	Repair Fender	REPAIR PROCESS COMMENTS: 5651 REMOVED LIGHT BRACKET ON FENDER. BENT BACK BRACKET USING HYDRAULIC PRESS. REPLACED DAMAGED LIGHT. INSTALLED LIGHT BRACKET ON FENDER. Left rear fender right light not working LEFT REAR FENDER RIGHT LIGHT NOT WORKING
Sep 28, 2020	Service	6,656	Repair For Warranty Product Link System	REPAIR PROCESS COMMENTS: PERFORMED BY EMPLOYEE #5563 BEFORE FAILURE.
Sep 28, 2020	Service	6,656	Repair For Warranty Accessory Drive	REPAIR PROCESS COMMENTS: 5651 PERFORMED PS46472 BEFORE FAILURE
Sep 28, 2020	Service	6,656	Perform When Required	REPAIR PROCESS COMMENTS: 5651 PERFORMED BY 5563. #5651 GREASED MACHINE AND TOPPED OFF BOTH COOLANT TANKS.

Sep 28, 2020	Service	6,656	Install Fire Extinguisher	REPAIR PROCESS COMMENTS: 5651 INSTALLED FIRE EXTINGUISHER.
Sep 28, 2020	Service	6,656	Inspect Machine	
Sep 22, 2020	Service	0	Load/unload Machine	LOAD/UNLOAD MACHINE
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613

Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING

Sep 14, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REFLACE DAMAGED CEM WIRING HARNESS
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 14, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	<p>REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	<p>REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	<p>REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	<p>REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.</p>

Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.

Sep 14, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
				<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS</p> <p>CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	

Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>

Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISASSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 14, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Sep 14, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832
Sep 14, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 14, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.

Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Sep 14, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS

Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19</p> <p>REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 14, 2020	Service	6,663	Repair Draft Arm	<p>CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.</p>
Sep 14, 2020	Service	6,663	Repair Access Panel	<p>Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL</p>
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.</p>
Sep 14, 2020	Service	6,663	Troubleshoot Engine	<p>CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY</p>
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	<p>REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS</p>

Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 14, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 14, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Sep 14, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.

Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 14, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Sep 14, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 14, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Sep 14, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 14, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Sep 14, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 14, 2020	Service	6,663	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER - CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL - CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION</p> <p>*****</p> <p>WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p> <p>REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 14, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Sep 14, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT
Sep 14, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY

Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	<p>REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.</p>
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.</p>

Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 14, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Sep 14, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Sep 14, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.

Sep 14, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Sep 14, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 14, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Sep 14, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND

Sep 14, 2020	Service	6,663	Repair For Warranty Engine	REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.
Sep 14, 2020	Service	6,663	Inspect Machine	

Sep 14, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Sep 14, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Sep 14, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Sep 14, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPLOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Sep 14, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS

Sep 14, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY

Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.

Sep 14, 2020	Service	6,663	Troubleshoot Engine	<p>CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY</p>
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Sep 14, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Remove & Install Engine	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED
Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REFLACE DAMAGED CEM WIRING HARNESS

Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>
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Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	<p>REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS</p>
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.</p>

Sep 14, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Sep 14, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 14, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS
Sep 14, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 14, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 14, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Sep 14, 2020	Service	6,663	Repair Access Panel	Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL
Sep 14, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Sep 14, 2020	Service	6,663	Remove & Install Engine	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED

Sep 14, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP

Sep 14, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 14, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Sep 14, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Sep 14, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Sep 14, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Sep 14, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Sep 14, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING

Sep 14, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Sep 14, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Sep 14, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Sep 14, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.
Sep 14, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY

Sep 14, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Sep 14, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING

Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.

Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Inspect Machine	
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 14, 2020	Service	6,663	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION</p> <p>*****</p> <p>WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p> <p>REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE</p>
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	<p>REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613</p>
Sep 14, 2020	Service	6,663	Repair Apron	<p>REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR</p>
Sep 14, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	<p>CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED</p> <p>REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR</p>

Sep 14, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPLOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Sep 14, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Sep 14, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.

Sep 14, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Sep 14, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS

Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Sep 14, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT
Sep 14, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 14, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Sep 14, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.

Sep 14, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP

Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313

Sep 14, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	<p>REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.</p>
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	<p>REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>

Sep 14, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.

Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>
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Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	<p>CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 14, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Sep 14, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Sep 14, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 14, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 14, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.

Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
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Sep 14, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 14, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Sep 14, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 14, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT
Sep 14, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Sep 14, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Sep 14, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 14, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 14, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS

Sep 14, 2020	Service	6,663	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION</p> <p>*****</p> <p>WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p> <p>REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE</p>
Sep 14, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	<p>REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY</p>
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Sep 14, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL

Sep 14, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 14, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 14, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.

Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 14, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 14, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT

Sep 14, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING
Sep 14, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & I rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Sep 14, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 14, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE

Sep 14, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 14, 2020	Service	6,663	Repair Push Block	<p>REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK</p>
Sep 14, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	<p>REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 14, 2020	Service	6,663	Rework Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.</p>
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	<p>REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS</p>

Sep 14, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Sep 14, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 14, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Sep 14, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 14, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Sep 14, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Sep 14, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS

Sep 14, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.
Sep 14, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Sep 14, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Sep 14, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Sep 14, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Sep 14, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Repair Access Panel	Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL
Sep 14, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Sep 14, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS

Sep 14, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 14, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 14, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Sep 14, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Sep 14, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 14, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Sep 14, 2020	Service	6,663	Inspect Machine	
Sep 14, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 14, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER

Sep 14, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 14, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Sep 13, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS

Sep 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Remove & Install Power Pack Eng	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 13, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.

Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Sep 13, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>

Sep 13, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 13, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613

Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 13, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	<p>CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Sep 13, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER
Sep 13, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Sep 13, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 13, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Sep 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Sep 13, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 13, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Sep 13, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Sep 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS
Sep 13, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Sep 13, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL
Sep 13, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING

Sep 13, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 13, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 13, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.

Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Sep 13, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Sep 13, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 13, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832
Sep 13, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT

Sep 13, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 13, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Sep 13, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS
Sep 13, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Sep 13, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Sep 13, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 13, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO

Sep 13, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 13, 2020	Service	6,663	Remove & Install Power Pack Eng	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19</p> <p>REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 13, 2020	Service	6,663	Repair Access Panel	Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL
Sep 13, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Sep 13, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS
Sep 13, 2020	Service	6,663	Troubleshoot Engine	<p>CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY</p>

Sep 13, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Sep 13, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 13, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 13, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 13, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 13, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT
Sep 13, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Sep 13, 2020	Service	6,663	Inspect Machine	
Sep 13, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS

Sep 13, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 13, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 13, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Sep 13, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.

Sep 13, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Sep 13, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 13, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Sep 13, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Sep 13, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS</p> <p>CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 13, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Sep 13, 2020	Service	6,663	Perform Pm 4	<p>*NOTICE* THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER - CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL - CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION</p> <p>*****</p> <p>WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).</p> <p>*****</p> <p>REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE</p>
Sep 13, 2020	Service	6,663	Repair Final Drive	REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.

Sep 13, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 13, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Sep 13, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 13, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 13, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS

Sep 08, 2020	Service	6,663	Troubleshoot Engine	CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Sep 08, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 08, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 08, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL

Sep 08, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 08, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 08, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 08, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 08, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 08, 2020	Service	6,663	Remove & Install Power Pack Eng	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19</p> <p>REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 08, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS</p> <p>CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>
Sep 08, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 08, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & I rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 08, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 08, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 08, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY

Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair Transmission & Drive Line	CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.

Sep 08, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS
Sep 08, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 08, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT

Sep 08, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Sep 08, 2020	Service	6,663	Repair For Warranty Combustion Air System	REPAIR PROCESS COMMENTS: CRACK IN VALVE WHERE OIL WAS COMING OUT. REPLACED WITH NEW VALVE. ALSO FOUND WIRES TO NOX TEMPERATURE SENSOR WERE SHORTED. REPLACED SENSOR. Repair leaking nrs exhaust valve REPAIR LEAKING NRS EXHAUST VALVE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair Air Conditioner	CUSTOMER COMPLAINT: A/C WOULD NOT COOL REPAIR PROCESS COMMENTS: AND CHARGED, COOLED TO 48 DEGREES. Repair a/c that is not cooling REPAIR A/C THAT IS NOT COOLING
Sep 08, 2020	Service	6,663	Repair Scraper Bowl	REPAIR PROCESS COMMENTS: CUT OUT PLATES ON BOTH SIDES OF BOWL THAT WERE MAKING APRON BIND. INSTALLED WITH NEW GUIDES. THEN WELDED UP. Replace plate that was welded into right side of REPLACE PLATE THAT WAS WELDED INTO RIGHT SIDE OF BOWL AND CAUSING APRON TO BIND
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED AND LEAKING
Sep 08, 2020	Service	6,663	Repair Seat Assembly	REPAIR PROCESS COMMENTS: R/I SEAT AND INSTALLED NEW BOOT ON SUSPENSION. REPLACED CUSHIONS WITH NEW. R&i seat for recover and replace suspension boot R&I SEAT FOR RECOVER AND REPLACE SUSPENSION BOOT
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HAD TO CUT HOSE TO REMOVE. TOO HARD. Repair leaking hose in front engine compartment. REPAIR LEAKING HOSE IN FRONT ENGINE COMPARTMENT. ADVISE IF MORE HOSES NEED REPAIRED OR REPLACED.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE LEAKS AT CRIMP
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS CRACKED AND HARD, LEAKING. REPLACED.
Sep 08, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: RIGHT. Replace apron end bearings REPLACE APRON END BEARINGS

Sep 08, 2020	Service	6,663	R/i Replace After Failure Diesel Particulate Filter	REPAIR PROCESS COMMENTS: REMOVED CEM AND FOUND BAD DIESEL PARTICULATE FILTER. THE WHOLE CEM UNIT WAS FILLED WITH OIL. CLEANED OUT ALL LINES AND VALVES THEN REINSTALLED NEW FILTER. Clean out cem and replace dpf due to engine CLEAN OUT CEM AND REPLACE DPF DUE TO ENGINE INSPECT DOC SEBP5613 WARRANTY REPAIR. SIMS IS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 08, 2020	Service	6,663	Repair For Warranty Combustion Body	REPAIR PROCESS COMMENTS: HEAD HAD EXCESSIVE CARBON AND PLUGGED, AND TUBE HAD CRACKS REPAIR PROCESS COMMENTS: TURBO FAILURE ON ENGINE HAD TO DO CLEAN OUT ON CEM AND FOUND ARD HEAD WAS PLUGGED WITH OIL AND CARBON SO I REPLACED WITH REMAN HEAD T/s aftertreatment T/S AFTERTREATMENT
Sep 08, 2020	Service	6,663	Repair Apron	REPAIR PROCESS COMMENTS: APRON EDGE WAS NOT WORN. WENT TO TECH SERVICE AND GOT BLUE PRINT OF EDGE AND DIMENSION WERE WITH IN SPEC. AFTER I HAD GOT STEEL FROM WELD SHOP. RETURNED STEEL TO WELD SHOP. Check apron edge for wear CHECK APRON EDGE FOR WEAR
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS.
Sep 08, 2020	Service	6,663	Remove & Install Tilt Link	REPAIR PROCESS COMMENTS: R/I TILT LINK. REMOVED BEARINGS AND INSTALLED NEW BEARINGS IN TILT LINK. REPLACED WITH NEW PINS. R&i tilt link and replace broken bearings and pins R&I TILT LINK AND REPLACE BROKEN BEARINGS AND PINS AS NEEDED
Sep 08, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: HOSE HARD AND LEAKS
Sep 08, 2020	Service	6,663	Repair Drive Train Oil Lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND RUBBED ON CLAMP
Sep 08, 2020	Service	6,663	Inspect Machine	Final inspect FINAL INSPECT

Sep 08, 2020	Service	6,663	Repair Transmission & Drive Line	<p>CUSTOMER COMPLAINT: REPAIR FOR WARRANTY TRANSMISSION. LOUD NOISE IN 1ST GEAR. REPAIR PROCESS COMMENTS: DISASSEMBLED THE TRANSMISSION FOR INSPECTION. DISCS, PLATES AND SHAFTS. FOUND NO ISSUES WITH ANY OF THE PARTS THAT MIGHT CAUSE A LOUD NOISE. FOUND THAT THE FRICTION MATERIAL FOR THE 7T-2336 FRICTION DISCS IN THE #5 CLUTCH SEPARATING FROM THE DISCS. FOUND THE 1S-5621 RING GEAR AND THE 9W-5235 RING GEAR HAS PITTING ON THE TEETH. FOUND CAVITATION ON THE SURFACE OF THE 6P-0103 HOUSING FOR THE PUMP. PART WAS SET UP IN MILL AND FIRST HOLE WAS LOCATED AND HOLE WAS MILLED BIGGER FOR NEW SLEEVE THEN NEW SLEEVE WAS PRESSED IN THIS SAME PROSE'S WAS COMPLETED ON OTHER 4 HOLES 5 REACTION DOWEL HOLE WERE SLEEVED AND READY FOR REUSE CUSTOMER COMPLAINT: BENCH TEST TRANS REPAIR PROCESS COMMENTS: HOOKED TRANS TO DYNO. VERIFIED PUMP PRESSURE AT LOW IDLE SHIFTED THROUGH GEARS FOR INITIAL PRESSURE CHECKS, FOUND THAT CLUTCH 2 WAS NOT BUILDING PROPER PRESSURE AND WHEN CLUTCH 2 WAS ENGAUGED THE TRANSMISSION HAD 0 LUBE FLOW/PRESSURE. REMOVED VALVE COVER AND SWAPPED #2 CLUTCH SOLENOID WITH NUMBER 3 CLUTCH (KNOWN GOOD CLUTCH) PROBLEM DID NOT FOLLOW. REMOVED TRANS FROM TEST BENCH AND RETURNED TO BUILDER FOR REPAIRS CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) ADJUSTED MAIN RELIEF PRESSURE TO CAT SPEC VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Repair trans for loud noise in 1st gear</p>
Sep 08, 2020	Service	6,663	Repair Final Drive	<p>REPAIR PROCESS COMMENTS: PULLED RIGHT REAR FINAL TO CHECK, HAD BAD OIL SAMPLE. FINAL AND PLANETARIES LOOKED GOOD. AXLE SPLINES LOOK GOOD. DIFFERENTIAL SPIDERS AND SIDE GEARS MIGHT BE GOING OUT BECAUSE BACK LASH IS GOOD IS CONCERNING. RING PINION GOOD. PLAY IN DID NOT WANT TO REPAIR. FINAL CHECKED GOOD . Repair right rear final drive. the oil sample REPAIR RIGHT REAR FINAL DRIVE. THE OIL SAMPLE SHOWS HIGH IRON AND THERE IS VISIBLE METAL IN THE OIL.</p>

Sep 08, 2020	Service	6,663	Remove & Install Electric Starting Motor	**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ELECTRIC STARTING MOTOR (FRONT) -REPLACE MOUNTING GASKET -REPAIR OR REPLACE MOTOR -REPLACE GROUND WIRE ASSEMBLY -FLYWHEEL HOUSING REPAIRS -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS HARD TURNING OVER. DRAWS A LOT OF AMPS. AND LEAKS ALL AROUND. REPLACED WITH OR. CUSTOMER COMPLAINT: STARTER FAILED CAUSE OF FAILURE: STARTER DRAWS TOO MANY AMPS OVER CAT SPECS CAUSING ENGINE NOT TO START REPAIR PROCESS COMMENTS: REPLACED WITH OR STARTER
Sep 08, 2020	Service	6,663	Perform Maintenance On Battery	REPAIR PROCESS COMMENTS: TESTED BATTERIES ON FRONT AND FOUND ALL 4 BATTERIES NO GOOD. CLEANED OUT, PACKED FULL OF DIRT AND REPAIRED POST. INSTALLED NEW BATTERIES. CHECKED REAR BATTERIES AND FOUND GOOD. Perform battery maintenance PERFORM BATTERY MAINTENANCE
Sep 08, 2020	Service	6,663	Remove & Install Serpentine Belt	REPAIR PROCESS COMMENTS: REMOVED REAR ENGINE FAN BELTS THAT WERE CUT. ALTERNATOR PULLEYS WERE WORN DID NOT WANT TO REPLACE. Replace rear engine fan belts REPLACE REAR ENGINE FAN BELTS
Sep 08, 2020	Service	6,663	Repair Bottom Guard	REPLACED BOWED CENTER BELLY PAN. P/N 372-0599 Repair bent and bowed center belly pan REPAIR BENT AND BOWED CENTER BELLY PAN NEW PART# 372-0599 \$2500 CBO
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: INSTALLED CORRECT HARDWARE AND REPLACED DAMAGED BELTING ON LEFT REAR STEP. Install correct hardware and replace damaged INSTALL CORRECT HARDWARE AND REPLACE DAMAGED BELTING ON LEFT REAR STEP
Sep 08, 2020	Service	6,663	Repair Brake Accumulator	CUSTOMER COMPLAINT: ACTIVE CODE FOR BRAKE ACCUMULATORS REPAIR PROCESS COMMENTS: LOW BUT NOT LEAKING. CHARGED TO CAT SPECS AND CODE WENT AWAY .WORKS GOOD T/s active code for brake accumulator T/S ACTIVE CODE FOR BRAKE ACCUMULATOR
Sep 08, 2020	Service	6,663	Repair For Warranty Crankshaft Damper/pulley	REPAIR PROCESS COMMENTS: REAR ENGINE CRANK SHAFT SEAL LEAKS. REPLACED SEAL AND ADAPTER THAT HAD GROOVE IN IT. Replace worn rear engine dampner adapter and seal REPLACE WORN REAR ENGINE DAMPNER ADAPTER AND SEAL

Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED BRITTLE HOSE SECTION ON TRANSMISSION SUMP TUBE Repair oil leak to rear trans sump hose REPAIR OIL LEAK TO REAR TRANS SUMP HOSE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: INSTALLED NEW ANTIFREEZE IN FRONT ENGINE -35 TAGGED AND ADDED TO REAR ENGINE -35 TAGGED. CHECKED FOR LEAKS Perform cooling system maintenance PERFORM COOLING SYSTEM MAINTENANCE
Sep 08, 2020	Service	6,663	Remove & Install Bottom Guard	REPAIR PROCESS COMMENTS: R/I BOTTOM GUARDS TO CLEAN R/i bottom guards R/I BOTTOM GUARDS
Sep 08, 2020	Service	6,663	Repair Engine Front Support	REAR ENGINE FRONT ENGINE MOUNT RUBBER COMING APART. REPLACED MOUNT. Replace separating rear engine mount REPLACE SEPARATING REAR ENGINE MOUNT
Sep 08, 2020	Service	6,663	Rework Repair Transmission & Drive Line	CUSTOMER COMPLAINT: BENCH TEST TRANS (2ND TEST) REPAIR PROCESS COMMENTS: VERIFIED CORRECT OPERATION OF CONVERTER INLET RELIEF VALVE VERIFIED ALL CLUTCH PRESSURES AND LEAKAGE MEETS SPEC VERIFIED SMOOTH ENGAGEMENT AND DISENGAGEMENT OF ALL CLUTCHES INSPECTED FOR LEAKS AND ABNORMAL SOUNDS Cut piston seal at assembly. CUT PISTON SEAL AT ASSEMBLY.
Sep 08, 2020	Service	6,663	Repair Transmission Oil Tank	REPAIR PROCESS COMMENTS: SIGHT GLASS LEAKS AND LENS IS SHADED CUSTOMER COMPLAINT: LENS LEAKS CAUSE OF FAILURE: GASKET CRACKED AND LENS REPAIR PROCESS COMMENTS: REPLACED BOTH REAR TRANSMISSION LEVEL GAUGES THAT WERE LEAKING AT MOUNTING SEALS AND CRACKED Replace leaking rear trans tank sight glass REPLACE LEAKING REAR TRANS TANK SIGHT GLASS
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE TO TRANSMISSION MAGNETIC Repair leak to rear trans magnetic screen WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair Ladder/step	REPAIR PROCESS COMMENTS: REPLACED DAMAGED LEFT REAR LADDER 3094832 Replace damaged left rear ladder 309-4832 REPLACE DAMAGED LEFT REAR LADDER 309-4832

Sep 08, 2020	Service	6,663	Repair Push Block	REPAIR PROCESS COMMENTS: R / I WEAR PLATES AT SCRAPER PUSH BLOCK . Repair or replace plate at scraper push block REPAIR OR REPLACE PLATE AT SCRAPER PUSH BLOCK
Sep 08, 2020	Service	6,663	Repair Draft Tube	REPAIR PROCESS COMMENTS: CUT OUT AND WELDED CRACKS IN DRAFT TUBE LEFT, CENTER, AND RIGHT SIDE. Repair cracks to left side of draft tube REPAIR CRACKS TO LEFT SIDE OF DRAFT TUBE

Sep 08, 2020	Service	6,663	Repair For Warranty Engine	<p>REPAIR PROCESS COMMENTS: MEASURED AND DOCUMENTED DECK HEIGHT, PAN HEIGHT, MAIN BORE SIZE AND STRAIGHTNESS. INSPECT MAIN CAP SEATS, DECK SURFACE, LINER SEATS, WATER FERRULES, LOWER LINER BORES, LOWER CHAMFERS, FILLER BAND AREA, ALL BOLT HOLES AND GASKET SURFACES. NO SALVAGE WORK NEEDED AT THIS TIME. REPAIR PROCESS COMMENTS: HONED 6 CYLINDER LINERS TO CAT SPEC. ALL 6 MAKE GOOD REUSE. CUSTOMER COMPLAINT: REPAIR FOR WARRANTY ENGINE CAUSE OF FAILURE: TURBO FAILURE PUMPING OIL INTO THE ENTIRE ENGINE RESULTANT DAMAGE: NONE REPAIR PROCESS COMMENTS: RECEIVED CYLINDER HEAD AND INSPECTED. FOUND BAKED OIL IN THE INTAKE AND EXHAUST. EXTRA TIME TO CLEAN CASTING. INSPECTED DECK AND FOUND NO CRACKS, STRAIGHT, AND FIRE RINGS OK. DISASSEMBLED AND FOUND ALL VALVES MEET SPECS, FACES NEED TO BE CUT. TESTED BOTH SETS OF SPRINGS AND FOUND THEY ARE ALL WITHIN SPECS. SPRING SEATS ARE REUSEABLE. ALL GUIDES MEET SPECS. ROTOCOILS ARE OK TO REUSE. ALL SEATS ARE PREMACHINED, REPLACE. REMOVED INJECTOR CUPS, ALL ARE REUSEABLE-RESEAL. RESEAL PLUGS. CLEAN CASTING. BUILD TO CAT SPECS. ADDITIONAL LABOR TO CLEAN OUT AIR INTAKE SYSTEM WHICH WAS HEAVILY COKED WITH OIL FROM FAILURE!!! CUSTOMER COMPLAINT: TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. CAUSE OF FAILURE: TURBO FAILURE REPAIR PROCESS COMMENTS: IN THE TURBO. THE TURBO WILL NEED TO BE REPLACED. THE ENGINE WAS HYDRO LOCKED WHEN HEAD WAS REMOVED FOUND MULTIPLE CYLINDERS FULL OF OIL. THE LIFTER ON THE EXHAUST PORT OF CYLINDER NUMBER ONE HAD SEVERE PITTING THAT SCORED THE CAMSHAFT LOBE FOR NEED TO BE REPLACED. THE TURBO FAILURE SENT CONTAMINATION THROUGH THE ENTIRE LUBE SYSTEM CAM BEARINGS, AND THE OIL PUMP. ALL WILL NEED TO BE REPLACED. THE BREATHER WAS SATURATED WITH CONTAMINATED OIL AND WILL NEED TO BE REPLACED. THE OIL COOLER WAS FULL OF DEBRIS AND WILL NOT MAKE REUSE. ALL SIX CYLINDER LINERS WERE SENT TO THE MACHINE SHOP TO BE INSPECTED AND HONED TO REMOVE LIGHT SCORING. ALL SIX PISTONS WERE CLEANED AND INSPECTED. ALL SIX ARE FIT FOR REUSE. CRANKSHAFT WAS INSPECTED AND POLISHED. CRANKSHAFT MEASURED STANDARD STANDARD AND IS GOOD FOR REUSE. NRS COOLER WAS CLEANED OUT AND PRESSURE TESTED FOR LEAKS. NRS COOLER IS GOOD FOR REUSE. THE BODY AND NOZZLE ON THE INJECTOR IN CYLINDER NUMBER SIX IS RUSTY AND WILL NEED TO BE REPLACED. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS.POSSIBLY WARRANTY. SIMS REQUIRED. SAVE ALL PARTS FOR WARRANTY.</p>
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Sep 08, 2020	Service	6,663	Move Machine	REPAIR PROCESS COMMENTS: HAD TO MOVE DEAD MACHINE INTO BAY 12. DID NOT GET WASHED. Move dead machine into the shop for repairs. MOVE DEAD MACHINE INTO THE SHOP FOR REPAIRS.
Sep 08, 2020	Service	6,663	Repair For Warranty Wiring Harness	REPAIR PROCESS COMMENTS: REPLACED HARNESS BECAUSE WIRES WERE RUBBING ON CLAMP AND CUT INTO HARNESS. Reflace damaged cem wiring harness REPLACE DAMAGED CEM WIRING HARNESS
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACK, LEAKS
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HOSE HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Perform Maintenance On Window Washer	REPAIR PROCESS COMMENTS: FILLED WASHER AND CHECKED OPERATION. WORKED GOOD. Fill windshield washer reservoir and advise on FILL WINDSHIELD WASHER RESERVOIR AND ADVISE ON OPERATION
Sep 08, 2020	Service	6,663	Remove & Install Apron	REPAIR PROCESS COMMENTS: R/I APRON. REPLACED TRUNNION BALLS LEFT AND RIGHT WITH HARDWARE AND CAPS. TORQUED TO CAT SPEC. R&i apron and replace trunnion R&I APRON AND REPLACE TRUNNION
Sep 08, 2020	Service	6,663	Clean Machine	REPAIR PROCESS COMMENTS: HAD TO HAND CLEAN MACHINE AND AIR HAMMER DIRT TO GET TO PARTS
Sep 08, 2020	Service	6,663	Inspect Catalytic Converter	REPAIR PROCESS COMMENTS: MODULE INLET WAS PLUGGED SO REPLACED WITH NEW. Inspect doc sebp5613 INSPECT DOC SEBP5613
Sep 08, 2020	Service	6,663	Replace Seat Belt	REPAIR PROCESS COMMENTS: REPLACED OUT DATED SEAT BELT WITH NEW. Replace expired seat belt REPLACE EXPIRED SEAT BELT
Sep 08, 2020	Service	6,663	Repair Bumper	REPAIR PROCESS COMMENTS: BENT PLATE TO FIT LEFT FRONT BUMPER THEN WELDED. Repair dent at left front bumper corner REPAIR DENT AT LEFT FRONT BUMPER CORNER
Sep 08, 2020	Service	6,663	Remove & Install Push Block/bail	REPAIR PROCESS COMMENTS: REMOVED BAIL AND SENT TO WELD SHOP TUBE STRAIGHTENED. INSTALLED ON MACHINE. TORQUED ALL Remove and install bail REMOVE AND INSTALL BAIL
Sep 08, 2020	Service	6,663	Repair Access Panel	Repair cracks to engine enclosure panel REPAIR CRACKS TO ENGINE ENCLOSURE PANEL

Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKS AND LEAKS.
Sep 08, 2020	Service	6,663	Remove & Install Power Pack Eng	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE POWER PACK (REAR) -DISCONNECT & CONNECT DRIVE SHAFT **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ENGINE -MOUNTING HARDWARE -ELECTRICAL REPAIRS -TRANSPORTATION OF MACHINE OR COMPONENTS CAUSE OF FAILURE: SEE SEG 19 REPAIR PROCESS COMMENTS: REMOVED POWER PACK TO SEAL OIL PAN. THEN INSTALLED BACK ON SCRAPER. R & i rear power pack to repair leaking engine oil R & I REAR POWER PACK TO REPAIR LEAKING ENGINE OIL PAN WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.</p>
Sep 08, 2020	Service	6,663	Remove & Install Trans & Differential Unit	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL TRANS & DIFFERENTIAL UNIT -REMOVE & INSTALL CRANKCASE GUARDS, HOOD, MUFFLER AND AIR INTAKE SYSTEM (AS NECESSARY) -REMOVAL OF ALL LINES, HOSES AND TRANS MOUNTS -INCLUDES REMOVAL OF ANY MAJOR COMPONENTS, TORQUE CONVERTER, PUMP DRIVES/TRANSFER GEARS AND PUMPS -R&I CAB OR ENGINE (WHEN APPLICABLE) -INSTALL GASKETS AND SEALS -TEST OPERATION **AVAILABLE AS NEEDED AT ADDITIONAL COST** -LINES AND HOSE REPLACEMENT -REMOVAL OF BROKEN BOLTS AND MACHINING -ENGINE/HYDRAULIC OIL COOLER REPLACEMENT OR REPAIR -ELECTRICAL REPAIRS - RIPPER/WINCH -CLEAN SYSTEM/PARTS LABOR TO REPLACE TRANSMISSION COOLER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: CHECKED ALL PRESSURES IN TRANSMISSION AND HYDRAULIC, EXCEPT TORQUE CONVERTER INLET AND OUTLET PRESSURES. WERE SLIGHTLY BELOW CAT SPEC. R/I TRANS. HAD COMPONENT SHOP TEAR TRANS CHECK. THEY FOUND 2 ROUGH BEARINGS AND BAD GEAR. TRANS WAS OUT I THOUGHT I WOULD CHECK INPUT DRIVE SHAFT AND FOUND STRIPED SPLINES IN INPUT SHAFT DRIVE. INSTALLED TRANS BACK IN. OPERATED MACHINE AND IT WORKS GOOD, QUIET. R/i trans for loud banking noise R/I TRANS FOR LOUD BANKING NOISE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT</p>

Sep 08, 2020	Service	6,663	Remove & Install Engine	<p>**REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL ENGINE MUFFLER AND AIR INTAKE SYSTEM -R&I OF HARDNOSE / RADIATOR (WHEN APPLICABLE) -REMOVAL OF ALL LINES, HOSES AND ENGINE MOUNTS -REPLACE TOP AND BOTTOM RADIATOR HOSES -ANTIFREEZE -AIR FILTERS (CAT) - R&I OF ALL HYDRAULIC PUMPS (AS NECESSARY) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -FUEL SYSTEM REPAIRS - A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER - HYDRAULIC PUMP REPAIRS -ELECTRICAL REPAIRS -RADIATOR, ENGINE, HYDRAULIC OIL COOLER AND AFTER COOLER REPAIRS -BELTS LINES,ETC. -ADDITIONAL CHARGE FOR BELLY PANS THAT ARE WELDED ON, BOLT HOLE REPAIRS, AND STRAIGHTENING OF BELLY PANS -REPAIRING LUGS OR REPLACING MISSING LUGS -SWEEPS R&I (WHEN APPLICABLE) -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE CONVERTER -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: ENGINE WAS HYDRAULIC LOCKED HAD TO TOW IN SHOP REPAIR PROCESS COMMENTS: R/I ENGINE AND REPLACED TOP AND BOTTOM RADIATOR HOSES. ALSO REPLACED RUBBER FRONT ENGINE MOUNTS. SENT TO COMPONENT SHOP FOR REBUILD. Warranty repair. sims required & save all failed WARRANTY REPAIR. SIMS REQUIRED & SAVE ALL FAILED</p>
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Troubleshoot Engine	<p>CAUSE OF FAILURE: SEE SEG 12 REPAIR PROCESS COMMENTS: DRAIN 5 GALLONS OF COOLANT FROM RADIATOR AND TANK OVER ENGINE VALVE COVER. REMOVE COOLANT TANK, HOSES, WIRES, AND BRACKETS IN WAY OF ENGINE VALVE COVER. REMOVE VALVE COVER AND FOUND MILKY OIL AROUND CYLINDER SIX. REMOVE ROCKER ARMS FROM RODS AND VALVES. REMOVE ALL SIX INJECTORS. SUCK OUT WHAT LOOKS LIKE COOLANT, FUEL, AND OIL ON TOP OF CYLINDER #6. SUCK OUT OIL ON TOP OF CYLINDER #5 AND #4. SUCK OUT A SMALL AMOUNT OF FUEL AND OIL FROM CYLINDER #3 AND #2. SUCK OUT NOTHING OUT OF CYLINDER #1. REINSTALL ALL SIX INJECTORS AND ROCKER ARMS. INSTALL VALVE COVER. TURN ENGINE OVER BY HAND A HALF OF TURN. ENGINE LOCKED UP AND COULD NOT TURN AFTER HALF TURN. Troubleshoot engine miss and possible coolant in TROUBLESHOOT ENGINE MISS AND POSSIBLE COOLANT IN ONE OF THE CYLINDERS. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN FAILED PARTS FOR WARRANTY</p>

Sep 08, 2020	Service	6,663	Repair For Warranty Expansion Tank	REPAIR PROCESS COMMENTS: TANK LEAKS AT SENDER REPLACED WITH NEW TANK. CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CRACKED OUTLET TUBE AT RECOVERY TANK RESULTANT DAMAGE: LEAKS WATER REPAIR PROCESS COMMENTS: REPLACED WITH NEW RECOVERY TANK Replace leaking coolant resevoir REPLACE LEAKING COOLANT RESEVOIR WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair For Warranty Radiator	REPAIR PROCESS COMMENTS: LEAKS WHERE FINS MEET PLASTIC CHAMBER IN CORNER CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: CORE CRACKED AT BOTTOM WELD AT TANK CAUSING COOLANT LEAK Remove radiator and repair for leaks REMOVE RADIATOR AND REPAIR FOR LEAKS
Sep 08, 2020	Service	6,663	Inspect Machine	
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: LINE IS HARD AND CRACKED CAUSING LEAK.
Sep 08, 2020	Service	6,663	Repair Push Block/bail	STRAIGHTENED LEFT SIDE OF BAIL IN HYDRAULIC PRESS. CUT OUT 4" TUBE ON LEFT SIDE OF BAIL FOR REPLACEMENT. PREPPED BAIL FOR NEW TUBING. ADDED 34" OF NEW 4" ROUND TUBE TO LEFT SIDE OF BAIL AND FULL WELDED MAKING MULTIPLE PASSES. BUILT AND BORED 2 HOLES: 3" DIA X 2.5" LONG. REPLACED BOTH BEARINGS. Repair bent bail. REPAIR BENT BAIL.
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPLACED MULTIPLE HOSES AND CLAMPS AND RESEALED. PARTS GOT THROW AWAY BY ACCIDENT. CANT GET WARRANTY. Replace leaking hyd hose bail pump to filter REPLACE LEAKING HYD HOSE BAIL PUMP TO FILTER
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: BREATHER MISSING REPAIR PROCESS COMMENTS: INSTALLED NEW BREATHER
Sep 08, 2020	Service	6,663	Repair Draft Arm	REPAIR PROCESS COMMENTS: CUT TRUNNIONS OFF DRAFT ARMS AND WELDED NEW ONES Replace draft arm ends REPLACE DRAFT ARM ENDS
Sep 08, 2020	Service	6,663	Repair For Warranty Diesel Exh Fluid Injector	REPAIR PROCESS COMMENTS: NEW REPAIR PROCESS COMMENTS: TURBO FAILED ON ENGINE SO I HAD TO DO A CLEAN OUT WAS PLUGGED WITH OIL SO I REPLACED IT.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.

Sep 08, 2020	Service	6,663	Repair Draft Arm	CUSTOMER COMPLAINT: DRAFT ARM TRUNNIONS WORN AND BALLS REPAIR PROCESS COMMENTS: TRUNNIONS ON DRAFT FRAME. INSTALLED ON SCRAPER WITH NEW HARDWARE AND TRUNNION BALLS, CAP TORQUED BOLT TO CAT SPEC. Draft arm trunnion ends are worn. separate and DRAFT ARM TRUNNION ENDS ARE WORN. SEPARATE AND CONNECT TRACTOR TO SCRAPER AND REMOVE GOOSENECK. ADVISE ON HITCH PINS.
Sep 08, 2020	Service	6,663	Test Transmission & Drive Line	Pull samples and check all trans pressures
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKED RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: HOSE Replace leaking front transmission oil cooler hose REPLACE LEAKING FRONT TRANSMISSION OIL COOLER HOSE
Sep 08, 2020	Service	6,663	Repair For Warranty Alternator	REPAIR PROCESS COMMENTS: WELDED BRACKET BACK TOGETHER. WAS BROKE ON GUARD. Replace broken rear engine alternator belt guard REPLACE BROKEN REAR ENGINE ALTERNATOR BELT GUARD
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKING.
Sep 08, 2020	Service	6,663	Repair Drive Shaft	REPAIR PROCESS COMMENTS: TRANSFER OUTPUT YOKE LEAKING. REPLACED YOKE AND SEAL. YOKE HAD GROOVE IN IT AND SEAL WAS HARD. R & i rear driveshaft and repair loose yoke/joint R & I REAR DRIVESHAFT AND REPAIR LOOSE YOKE/JOINT WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS FOR WARRANTY
Sep 08, 2020	Service	6,663	Perform Maintenance On Electronic Mon Sys/panel	REPAIR PROCESS COMMENTS: CLEARED ALL SERVICE CODES. DOWNLOADED PSR AND UPLOADED LATEST SOFTWARE. T/S CODE 3838-5 FOUND WIRES CUT AT CONNECTER ON REAR ENGINE AFTER TREATMENT MODULE. REPAIRED WIRES. FIXED CODE. T/s and clear all service codes, download psr and T/S AND CLEAR ALL SERVICE CODES, DOWNLOAD PSR AND UPLOAD LATEST SOFTWARE.
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD CRACKED, LEAKS.

Sep 08, 2020	Service	6,663	Remove & Install Tc/trans Scavenge Pump	REPAIR PROCESS COMMENTS: SCAVENGE PUMP WAS LEAKING. TOOK OFF AND FOUND CRACK IN HOUSING. REPLACED WITH NEW. CUSTOMER COMPLAINT: CRACKED MANIFOLD CAUSE OF FAILURE: FOREIGN MATERIAL REPAIR PROCESS COMMENTS: DISSEMBLED PUMP AND FOUND CRACK IN MANIFOLD FROM THIS WOULD CAUSE CAVITATION AND AFFECT PUMP BRITTLE HOSE SECTION GOING TO PUMP WITH NEW CLAMPS. Replace leaking front scavenge pump. 2p9313 REPLACE LEAKING FRONT SCAVENGE PUMP. 2P9313
Sep 08, 2020	Service	6,663	Replace Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD AND CRACKED, LEAKS.
Sep 08, 2020	Service	6,663	Repair For Warranty Drive Shaft	CUSTOMER COMPLAINT: LOUD NOISE COMING FROM TRANSMISSION CAUSE OF FAILURE: SOFT INPUT SHAFT RESULTANT DAMAGE: SPLINES STRIPED INSIDE INPUT SHAFT REPAIR PROCESS COMMENTS: PERFORMED SERVICE LETTER PS53992 Perform s/l ps53992 updating torque limiter PERFORM S/L PS53992 UPDATING TORQUE LIMITER DATED 20FEB2019 WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Troubleshoot Hydraulic Fan Motor	CUSTOMER COMPLAINT: E 1363 CODE LOW FAN SPEED REPAIR PROCESS COMMENTS: PERFORMED FAN OVERRIDE TEST AND CODE WENT AWAY. POSSIBLE AIR IN SYSTEM. FAN WORKS GOOD. T/s active code for front fan motor T/S ACTIVE CODE FOR FRONT FAN MOTOR
Sep 08, 2020	Service	6,663	Adjust Ejector	REPAIR PROCESS COMMENTS: LEFT REAR EJECTOR ROLL BEARING WAS SEIZED. HAD TO REPLACE BEARING AND SEALS. THEN ADJUSTED EJECTOR ROLLERS. Adjust ejector support rollers ADJUST EJECTOR SUPPORT ROLLERS
Sep 08, 2020	Service	6,663	Repair For Warranty Engine Oil Pan	REPAIR PROCESS COMMENTS: REMOVED LEAKING OIL PAN GASKET ON REAR ENGINE AND INSTALLED NEW. TORQUED PAN BOLTS. Repair leaking engine oil pan on the rear engine REPAIR LEAKING ENGINE OIL PAN ON THE REAR ENGINE AFTER THE POWER PACK HAS BEEN REMOVED. WARRANTY REPAIR. SIMS REQUIRED AND TURN IN OLD PARTS TO WARRANTY.
Sep 08, 2020	Service	6,663	Repair Hydraulic Hoses/lines	REPAIR PROCESS COMMENTS: HARD, CRACKED CAUSING LEAKS.

NOTICE THE FOLLOWING DEFINITION IS A GENERAL STATEMENT AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO THE MODEL YOU ARE WORKING ON. ALWAYS FOLLOW CATERPILLAR OPERATIONAL MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE PERFORMING. -CHANGE ENGINE OIL AND FILTER -CHANGE TRANSMISSION OIL AND FILTER -CLEAN AND INSPECT MAGNETIC SCREEN -CHANGE HYDRAULIC OIL AND FILTERS -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -CHANGE SWING DRIVE OIL (WHEN APPLICABLE) -ADJUST ENGINE VALVE LASH & CHECK ROTATORS -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -CHANGE ENGINE COOLANT IF RECOMMENDED OR CHECK COOLANT CONDITION AND ADD INHIBITOR IF NECESSARY -ADJUST ENGINE VALVE LASH AND CHECK ROTATORS -CLEAN AIR INTAKE PRE-CLEANER BOWL -LUBRICATE ALL GREASE FITTINGS -CHECK ALL FLUID LEVELS -CLEAN ENGINE CRANKCASE BREATHER -DRAIN WATER SEPARATOR -CLEAN PRIMARY FUEL FILTER AND REPLACE SECONDARY -PERFORM VISUAL OPERATIONAL INSPECTION

WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. FILTERS, MAKEUP OIL AND G.E.T.), ADJUSTMENT OF BALL SOCKETS, CIRCLES, ADJUSTMENT AND REPACKING OF ROLLERS (WHEN APPLICABLE).

REPAIR PROCESS COMMENTS: PERFORMED 2000 HR SERVICE

Sep 08, 2020	Service	6,663	Perform Pm 4	
Sep 08, 2020	Service	6,663	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: LEAKS CAUSE OF FAILURE: HARD AND CRACKING RESULTANT DAMAGE: LEAKS REPAIR PROCESS COMMENTS: REPLACED LEAKING HOSE SECTION AT FRONT TRANSMISSION FILL TUBE Repair leaking trans fill tube REPAIR LEAKING TRANS FILL TUBE WARRANTY SAVE ALL PARTS/SUBMIT SIMS REPORT
Sep 08, 2020	Service	6,663	Repair Machine	REPAIR PROCESS COMMENTS: REPAIRED BROKEN BOLTS AND ADDED CLAMPS ON FRAME. Remove broken bolts REMOVE BROKEN BOLTS
Sep 08, 2020	Service	6,663	Replace Cutting Edge	REPLACED CUTTING EDGES AND ROUTERS AND HARDWARE. Replace worn cutting edges and routers REPLACE WORN CUTTING EDGES AND ROUTERS
Mar 10, 2020	Service	0	Load/unload Machine	LOAD/UNLOAD MACHINE

Dec 15, 2019	Service	6,598	Troubleshoot Engine	CUSTOMER CONCERN TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:45 PM - AFTERTREATMENT #1 KEEPS LOSSING ARD COMBUSTION. CAUSE OF FAILURE TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:46 PM - FUEL PRESSURE SITTING AT 240 PSI RESULTANT DAMAGE TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:46 PM - SYSTEM WONT AUTOMATIC REGEN CONSISTANTLY REPAIR COMMENTS TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:47 PM - CHECKED FUEL PRESSURE FROM ELECTRIC LIFT PUMP. WAS SITTING AT 240 PSI. THE PRESSURE IS SUPPOSED TO BE 275 +OR- 17. DURING AFTER TREATMENT FUNCTION TEST ARD LOST COMBUSTION JUST LIKE CUSTOMER COMPLAINS ABOUT. I HAD THE LOW PRESSURE SO I CHANGED THE FUEL PUMP. TESTED UNIT AFTER PUMP WAS INSTALLED, IT PASSED ARD IGNITION THE E1052. TURNED IN CORE AND DID PAPERWORK.
Dec 15, 2019	Service	6,598	Troubleshoot Engine	CUSTOMER CONCERN TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:45 PM - AFTERTREATMENT #1 KEEPS LOSSING ARD COMBUSTION. CAUSE OF FAILURE TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:46 PM - FUEL PRESSURE SITTING AT 240 PSI RESULTANT DAMAGE TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:46 PM - SYSTEM WONT AUTOMATIC REGEN CONSISTANTLY REPAIR COMMENTS TECH ID: 5612 -- SATURDAY, DECEMBER 07, 2019 5:47 PM - CHECKED FUEL PRESSURE FROM ELECTRIC LIFT PUMP. WAS SITTING AT 240 PSI. THE PRESSURE IS SUPPOSED TO BE 275 +OR- 17. DURING AFTER TREATMENT FUNCTION TEST ARD LOST COMBUSTION JUST LIKE CUSTOMER COMPLAINS ABOUT. I HAD THE LOW PRESSURE SO I CHANGED THE FUEL PUMP. TESTED UNIT AFTER PUMP WAS INSTALLED, IT PASSED ARD IGNITION THE E1052. TURNED IN CORE AND DID PAPERWORK.
Dec 15, 2019	Service	6,598	Troubleshoot Engine	CUSTOMER COMPLAINT: ENGINE WARNING COMES ON REPAIR PROCESS COMMENTS: FOUND DPF HAS A HIGH SOOT LOAD. THERE ARE TWO REGENERATION INHIBITED DUE TO INHIBIT SWITCH" WHICH IS THE MOST RECENT (FOUR HOURS AGO) AND "E1052 (2) LOW AFTERTREATMENT #1 FUEL PRESSURE #1" (ELEVEN HOURS AGO). PERFORMED A REGENERATION TO LOWER SOOT LEVEL. THE REGENERATION PASSED WITH NO ISSUES, THE AFTERTREATMENT FUEL PRESSURE WAS CORRECT DURING OPERATION AND WAS NOT ABLE TO REPLICATE THE EVENT. Refrence work order 9d77832 REFERENCE WORK ORDER 9D77832
Dec 15, 2019	Service	6,598	Travel To/from Work Area	REPAIR PROCESS COMMENTS: TRAVEL TO CUSTOMERS LOCATION NEAR LAFAYETTE CO

Nov 18, 2019	Service	6,532	Troubleshoot Engine	CUSTOMER COMPLAINT: SERVICE REGENERATION SYSTEM LIGHT ON CAUSE OF FAILURE: OPERATOR INHIBIT SWITCH USED 6 TIMES ATAAC HOSE CLAMP ON REAR ENGINE IMPROPERLY INSTALLED - BOOT CAME OFF RESULTANT DAMAGE: PLUGGED DPF FILTER ENGINE DERATED REPAIR PROCESS COMMENTS: 11-14-19 HELP GORDON CONNECTED ET TO REAR ENGINE ECM CHECKED ENGINE OIL LEVEL WARMED ENGINE TO OPERATING TEMPERATURE RAN MANUAL DPF REGENERATION - FAILED RAN AIR SYSTEM VERIFICATION TEST - FAILED SHUT OFF REAR ENGINE OFF OF ATAAC RECONNECTED BOOT TO ATAAC TIGHTENED HOSE CLAMP IN CORRECT LOCATION RERAN AIR SYSTEM VERIFICATION TEST - PASSED RERAN MANUAL DPF REGENERATION - PASSED - CLEARED ALL CODES UNCHOCKED MACHINE OPERATED MACHINE TO VERIFY REPAIR RETURNED MACHINE TO CUSTOMER Rear engine regen locked out
Nov 18, 2019	Service	6,532	Travel To/from Work Area	
Nov 18, 2019	Service	6,532	Troubleshoot Engine	CUSTOMER COMPLAINT: SERVICE REGENERATION SYSTEM LIGHT ON CAUSE OF FAILURE: OPERATOR INHIBIT SWITCH USED 6 TIMES RESULTANT DAMAGE: PLUGGED DPF FILTER REPAIR PROCESS COMMENTS: 11-14-19 HELPED GORDON WITH UNIT LOTO MACHINE CHOCKED MACHINE TURNED MASTER SWITCH ON CONNECTED ET TO MACHINE PULLED PSR FOUND OPERATOR PRESSED DPF INHIBIT SWITCH 6 TIMES IN LAST ~30 HOURS CHECKED ENGINE OIL LEVEL ALLOWED ENGINE TO WARM TO OPERATING TEMPERATURE RAN DIAGNOSTIC TESTING SOOT LOAD FOR FRONT ENGINE EXCESSIVE - SEE PSR RAN MANUAL REGENERATION PROCEDURE - PASSED CLEARED ALL DIAGNOSTIC CODES & EVENTS 5 CODES Won't regen without doing it manually WON'T REGEN WITHOUT DOING IT MANUALLY
Oct 15, 2019	Service	6,141	Travel To/from Work Area	
Oct 15, 2019	Service	6,141	Troubleshoot Engine	CUSTOMER COMPLAINT: TROUBLESHOOT ENG WHISTL REPAIR PROCESS COMMENTS: REAR ENG NEEDS TRUBO CUSTOMER COMPLAINT: REPLACE TURBO REPAIR PROCESS COMMENTS: REPLACED TURBO ON REAR ENG CUSTOMER COMPLAINT: REPLACE TURBO REPAIR PROCESS COMMENTS: REPLACED TRUBO ON REAR ENG Engine whistling noise ENGINE WHISTLING NOISE

Oct 15, 2019	Service	6,141	Troubleshoot Engine	CUSTOMER COMPLAINT: TROUBLESHOOT ENG WHISTL REPAIR PROCESS COMMENTS: REAR ENG NEEDS TRUBO CUSTOMER COMPLAINT: REPLACE TURBO REPAIR PROCESS COMMENTS: REPLACED TURBO ON REAR ENG CUSTOMER COMPLAINT: REPLACE TURBO REPAIR PROCESS COMMENTS: REPLACED TRUBO ON REAR ENG Engine whistling noise ENGINE WHISTLING NOISE
Oct 15, 2019	Service	6,141	Travel To/from Work Area	
Oct 14, 2019	Service	6,386	Engine	CUSTOMER COMPLAINT: DPF IS FULL, DPF WAS JUST REPLACED REPAIR PROCESS COMMENTS: 9-12-19 - ENGINE WENT INTO REGEN RIGHT AWAY - GOT ET HOOKED UP AND DOWN LOADED PRODUCT STATUS REPORT AND AFTERTREATMENT HISTORY - DPF WAS AT 113% - FOUND LOGGED E1008 HIGH DPF INTAKE TEMP CODES - LOOKS LIKE THE MACHINE IS UNABLE TO PERFORM A HIGH SPEED REGEN - I OBSERVED THE INTAKE TEMP DURING A LOW SPEED REGEN AND IT WAS STAYING AROUND THE 1000 DEGREES - LET THE MACHINE REGEN TO ABOUT 18 % I HAD TO LEAVE AT THIS POINT IN TIME. - SENT RESULTS TO TC FOR ADVICE. REPAIR PROCESS COMMENTS: 9-13-19 - REMOVED THE DOC TO INSPECT. LOOKED NORMAL HAD SOOT ON IT BUT NOT BUILT UP AND IT IS NOT PLUGGED. - INSTALLED THE DOC - FOUND A SMALL BOOST LEAK ON THE ELBOW OFF THE TURBO - REPAIRED LEAK - REMOVED THE EXHAUST PIPE FROM THE TURBO TO THE CEM - RUN ENGINE AND CHECKED SOOT AND INJECTOR CUT OUT TEST - NO ABNORMAL ISSUES NOTICED - INSTALLED THE EXHAUST PIPE - WHEN I STARTED THE MACHINE IT SAID WE HAD 26 % WAS AT 18% - IT ALSO STATES THAT THE LAST REGEN WAS ENDED DUE TO WORK. THIS MACHINE WAS MANUALLY STOPPED ON THE - PERFORMED A MANUAL REGEN AND GOT DPF TO 0% SOOT LOAD - CHECKED OUT TOTALS ON THE PRODUCT STATUS REPORT AND NOTICED THE TOTALS ON THE C13 WAS EXTREMELY ABNORMAL. -- 107374182 IDLE HRS -- 42087 GAL PER HR FUEL USAGE --1683487 % IDLE TIME - ORDERED REMAN ENGINE ECM - SENT RESULTS TO GREG MANN FOR REVIEW REPAIR PROCESS COMMENTS: 9-16-19 - START TO REMOVE ENGINE ECM 9-17-19 - FINISH REMOVING OLD C13 ENGINE ECM - INSTALL REMAN ECM - FLASH NEW SOFTWARE - CONFIGURE NEW ECM - INSTALL TRIM FILES - PERFORM TIMING CALIBRATION MISMATCH - DOUBLE CHECKED CONFIGURATION AND IT WAS SET AS PER OLD ECM - GOT AHOLD OF TECH SERVICES AND WE CHANGED DPF TYPE FROM TYPE 2 TO TYPE 1 - POWER ON AND OFF ECM AND CODE IS NOW GONE - RAN ENGINE THROUGH A REGEN AND ALL FUNCTIONS ARE NORMAL - MACHINE IS READY FOR CUSTOMER Ard issues ARD ISSUES

Oct 14, 2019	Service	6,386	Travel To/from Work Area	<p>* FUEL ONLY * NO LABOR REPAIR PROCESS COMMENTS: 9-13-19 - REMOVED THE DOC TO INSPECT. LOOKED NORMAL HAD SOOT ON IT BUT NOT BUILT UP AND IT IS NOT PLUGGED. - INSTALLED THE DOC - FOUND A SMALL BOOST LEAK ON THE ELBOW OFF THE TURBO - REPAIRED LEAK - REMOVED THE EXHAUST PIPE FROM THE TURBO TO THE CEM - RUN ENGINE AND CHECKED SOOT AND INJECTOR CUT OUT TEST - NO ABNORMAL ISSUES NOTICED - INSTALLED THE EXHAUST PIPE - WHEN I STARTED THE MACHINE IT SAID WE HAD 26 % SOOT LOAD</p>
Oct 14, 2019	Service	6,386	Engine	<p>CUSTOMER COMPLAINT: DPF IS FULL, DPF WAS JUST REPLACED REPAIR PROCESS COMMENTS: 9-12-19 - ENGINE WENT INTO REGEN RIGHT AWAY - GOT ET HOOKED UP AND DOWN LOADED PRODUCT STATUS REPORT AND AFTERTREATMENT HISTORY - DPF WAS AT 113% - FOUND LOGGED E1008 HIGH DPF INTAKE TEMP CODES - LOOKS LIKE THE MACHINE IS UNABLE TO PERFORM A HIGH SPEED REGEN - I OBSERVED THE INTAKE TEMP DURING A LOW SPEED REGEN AND IT WAS STAYING AROUND THE 1000 DEGREES - LET THE MACHINE REGEN TO ABOUT 18 % I HAD TO LEAVE AT THIS POINT IN TIME. - SENT RESULTS TO TC FOR ADVICE. REPAIR PROCESS COMMENTS: 9-13-19 - REMOVED THE DOC TO INSPECT. LOOKED NORMAL HAD SOOT ON IT BUT NOT BUILT UP AND IT IS NOT PLUGGED. - INSTALLED THE DOC - FOUND A SMALL BOOST LEAK ON THE ELBOW OFF THE TURBO - REPAIRED LEAK - REMOVED THE EXHAUST PIPE FROM THE TURBO TO THE CEM - RUN ENGINE AND CHECKED SOOT AND INJECTOR CUT OUT TEST - NO ABNORMAL ISSUES NOTICED - INSTALLED THE EXHAUST PIPE - WHEN I STARTED THE MACHINE IT SAID WE HAD 26 % WAS AT 18% - IT ALSO STATES THAT THE LAST REGEN WAS ENDED DUE TO WORK. THIS MACHINE WAS MANUALLY STOPPED ON THE - PERFORMED A MANUAL REGEN AND GOT DPF TO 0% SOOT LOAD - CHECKED OUT TOTALS ON THE PRODUCT STATUS REPORT AND NOTICED THE TOTALS ON THE C13 WAS EXTREMELY ABNORMAL. -- 107374182 IDLE HRS -- 42087 GAL PER HR FUEL USAGE --1683487 % IDLE TIME - ORDERED REMAN ENGINE ECM - SENT RESULTS TO GREG MANN FOR REVIEW REPAIR PROCESS COMMENTS: 9-16-19 - START TO REMOVE ENGINE ECM 9-17-19 - FINISH REMOVING OLD C13 ENGINE ECM - INSTALL REMAN ECM - FLASH NEW SOFTWARE - CONFIGURE NEW ECM - INSTALL TRIM FILES - PERFORM TIMING CALIBRATION MISMATCH - DOUBLE CHECKED CONFIGURATION AND IT WAS SET AS PER OLD ECM - GOT AHOLD OF TECH SERVICES AND WE CHANGED DPF TYPE FROM TYPE 2 TO TYPE 1 - POWER ON AND OFF ECM AND CODE IS NOW GONE - RAN ENGINE THROUGH A REGEN AND ALL FUNCTIONS ARE NORMAL - MACHINE IS READY FOR CUSTOMER Ard issues ARD ISSUES</p>
Oct 07, 2019	Parts			

Sep 24, 2019	Service	6,364	Troubleshoot Engine	REPAIR PROCESS COMMENTS: PERFORMED MANUAL REGEN AS MACHINE WAS 118% SOOT LOAD. REGEN FINISHED WITH NO ACTIVE CODES OR EVENTS. REPAIR PROCESS COMMENTS: 8-28 PERFORMED MANUAL REGEN AS MACHINE WAS 126% SOOT LOAD. REGEN FINISHED WITH NO ACTIVE CODES OR EVENTS. PUT MACHINE BACK INTO SERVICE. 8-29 MACHINE RAN 3 HOURS BEFORE ENDING AT 126% SOOT LOAD. E991 EVENT CODE ACTIVE. TROUBLESHOOTING SAYS TO REPLACE DPF. REMOVED NECESSARY PARTS TO REMOVE DPF. REMOVED DPF AND ORDERED NEW. BO OUT OF MORTON. REPLACED DPF Down with re-gen issues again DOWN WITH RE-GEN ISSUES AGAIN
Sep 24, 2019	Service	6,364	Travel To/from Work Area	
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
Aug 15, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884
Aug 15, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677

Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325
Aug 15, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339
Aug 15, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.
Aug 15, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.

Aug 15, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551
Aug 15, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM -REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMEMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESSS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Aug 15, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION -TRANSPORTATION OF MACHINE OR COMPONENTS

Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESSES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESSES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESSES AND ZIP TIED HARNESSES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Aug 15, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.

Aug 15, 2019	Service	5,738	Troubleshoot Seat Assembly	CUSTOMER COMPLAINT: VALVE POSITION SENSOR FOR SEAT CODE AND VOICE COIL CODE CAUSE OF FAILURE: DAMAGED HARNESS FOR SEAT SHOCK ABSORBER SEAT WAS ALWAYS OUT OF RANGE REPAIR PROCESS COMMENTS: HOOKED UP CAT ET TO MACHINE. RECORDED CODES AND LOOKED UP TROUBLESHOOTING PROCEDURE IN SIS. AFTER LOOKING IN SIS I FOUND THAT THE SENSOR SUPPLY VOLTAGE NEEDED TO BE TESTED. WHILE TESTING SENSOR I FOUND THAT BY MOVING THE THREE WIRES GOING TO THE SEAT SHOCK ABSORBER THE DTC CODE WOULD GO AWAY. REMOVED THE PROTECTIVE COVER FOR WIRES AND INSPECTED WIRES AND FOUND NO DAMAGE OR SIGN OF WORN WIRES. REMOVED SHOCK ABSORBER AND REMOVED THE WIRE HARNESS FROM SHOCK AND REPLACED WITH ANOTHER HARNESS FROM ANOTHER 627K. INSTALLED SHOCK AND HARNESS AND TESTED MACHINE. DROVE MACHINE AROUND THE YARD WITH CUSHION HITCH ON AND FOUND NO CODES PRESENT. Suspension has intermittent codes
Aug 15, 2019	Service	5,738		
Aug 15, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESSES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESSES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESSES AND ZIP TIED HARNESSES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Aug 15, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884

Aug 15, 2019	Service	5,738	Troubleshoot Seat Assembly	CUSTOMER COMPLAINT: VALVE POSITION SENSOR FOR SEAT CODE AND VOICE COIL CODE CAUSE OF FAILURE: DAMAGED HARNESS FOR SEAT SHOCK ABSORBER SEAT WAS ALWAYS OUT OF RANGE REPAIR PROCESS COMMENTS: HOOKED UP CAT ET TO MACHINE. RECORDED CODES AND LOOKED UP TROUBLESHOOTING PROCEDURE IN SIS. AFTER LOOKING IN SIS I FOUND THAT THE SENSOR SUPPLY VOLTAGE NEEDED TO BE TESTED. WHILE TESTING SENSOR I FOUND THAT BY MOVING THE THREE WIRES GOING TO THE SEAT SHOCK ABSORBER THE DTC CODE WOULD GO AWAY. REMOVED THE PROTECTIVE COVER FOR WIRES AND INSPECTED WIRES AND FOUND NO DAMAGE OR SIGN OF WORN WIRES. REMOVED SHOCK ABSORBER AND REMOVED THE WIRE HARNESS FROM SHOCK AND REPLACED WITH ANOTHER HARNESS FROM ANOTHER 627K. INSTALLED SHOCK AND HARNESS AND TESTED MACHINE. DROVE MACHINE AROUND THE YARD WITH CUSHION HITCH ON AND FOUND NO CODES PRESENT. Suspension has intermittent codes
Aug 15, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.

Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
Aug 15, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP
Aug 15, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER

Aug 15, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM -REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 15, 2019	Service	5,738		
Aug 15, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958
Aug 15, 2019	Service	5,738	Recondition Bowl Lift Cylinder	CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD AREA CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: CLEANED DISASSEMBLED AND INSPECTED CYLINDER. FOUND ROD TO HAVE PITTING, UNABLE TO POLISH OUT DAMAGED RECOMMEND NEW ROD OR RECHROME. CLEANED AND INSPECTED BARREL FOUND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNION. FOUND ROD EYE BEARING TON BE OUT OF ROUND RECOMMEND REPLACING. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TORQUED SENSOR HOUSING BOLTS TO 175 LB FT. TORQUED SET SCREW TO 26 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA
Aug 15, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND
Aug 15, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND

Aug 15, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** - REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION - TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 15, 2019	Service	5,738	Recondition Bowl Lift Cylinder	CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD. CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: ROD TO HAVE DEEP SCORING AND PITTING RECOMMEND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON, GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNIONS, GOOD FOR REUSE. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325
Aug 15, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.
Aug 15, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	**REPAIR SPECIFICATION INCLUDES** -BLOCK SUPPORT AREAS -REMOVE & INSTALL BOWL LIFT CYLINDER (RIGHT SIDE) -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** (PINS, BUSHINGS) -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: REMOVED RIGHT SIDE BOWL CYLINDER. DRAINED FLUID HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID.

Aug 15, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	CUSTOMER COMPLAINT: HYDRAULIC CYLINDER LEAKING REPAIR PROCESS COMMENTS: REMOVED LEFT SIDE BOWL CYLINDER. DRAINED FLUID AND STRAPPED TO PALLET FOR SHIPPING TO S00 HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID. **REPAIR SPECIFICATION INCLUDES** - BLOCK SUPPORT AREAS -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** -SALVAGE OR REPLACE OTHER CYLINDER COMPONENTS -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS Both cylinders leaking BOTH CYLINDERS LEAKING
Aug 15, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551
Aug 15, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
Aug 15, 2019	Service	5,738	Clean Machine	
Aug 15, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
Aug 15, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339

Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325
Aug 14, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339
Aug 14, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884
Aug 14, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
Aug 14, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP

Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677
Aug 14, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
Aug 14, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.

Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESSES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESSES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESSES AND ZIP TIED HARNESSES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMEMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESSSS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Aug 14, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.

Aug 14, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** - REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION - TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 14, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM - REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 14, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
Aug 14, 2019	Service	5,738		
Aug 14, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.
Aug 14, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND

Aug 14, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	CUSTOMER COMPLAINT: HYDRAULIC CYLINDER LEAKING REPAIR PROCESS COMMENTS: REMOVED LEFT SIDE BOWL CYLINDER. DRAINED FLUID AND STRAPPED TO PALLET FOR SHIPPING TO S00 HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID. **REPAIR SPECIFICATION INCLUDES** - BLOCK SUPPORT AREAS -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** -SALVAGE OR REPLACE OTHER CYLINDER COMPONENTS -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS Both cylinders leaking BOTH CYLINDERS LEAKING
Aug 14, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** - REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION - TRANSPORTATION OF MACHINE OR COMPONENTS
Aug 14, 2019	Service	5,738	Clean Machine	
Aug 14, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339
Aug 14, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND

Aug 14, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	<p>**REPAIR SPECIFICATION INCLUDES** -BLOCK SUPPORT AREAS -REMOVE & INSTALL BOWL LIFT CYLINDER (RIGHT SIDE) -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** (PINS, BUSHINGS) -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: REMOVED RIGHT SIDE BOWL CYLINDER. DRAINED FLUID HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID.</p>
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	<p>CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.</p>
Aug 14, 2019	Service	5,738	Recondition Bowl Lift Cylinder	<p>CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD. CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: ROD TO HAVE DEEP SCORING AND PITTING RECOMMEND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON, GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNIONS, GOOD FOR REUSE. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA</p>
Aug 14, 2019	Service	5,738	Troubleshoot Seat Assembly	<p>CUSTOMER COMPLAINT: VALVE POSITION SENSOR FOR SEAT CODE AND VOICE COIL CODE CAUSE OF FAILURE: DAMAGED HARNESS FOR SEAT SHOCK ABSORBER SEAT WAS ALWAYS OUT OF RANGE REPAIR PROCESS COMMENTS: HOOKED UP CAT ET TO MACHINE. RECORDED CODES AND LOOKED UP TROUBLESHOOTING PROCEDURE IN SIS. AFTER LOOKING IN SIS I FOUND THAT THE SENSOR SUPPLY VOLTAGE NEEDED TO BE TESTED. WHILE TESTING SENSOR I FOUND THAT BY MOVING THE THREE WIRES GOING TO THE SEAT SHOCK ABSORBER THE DTC CODE WOULD GO AWAY. REMOVED THE PROTECTIVE COVER FOR WIRES AND INSPECTED WIRES AND FOUND NO DAMAGE OR SIGN OF WORN WIRES. REMOVED SHOCK ABSORBER AND REMOVED THE WIRE HARNESS FROM SHOCK AND REPLACED WITH ANOTHER HARNESS FROM ANOTHER 627K. INSTALLED SHOCK AND HARNESS AND TESTED MACHINE. DROVE MACHINE AROUND THE YARD WITH CUSHION HITCH ON AND FOUND NO CODES PRESENT. Suspension has intermittent codes</p>

Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.
Aug 14, 2019	Service	5,738		
Aug 14, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
Aug 14, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677
Aug 14, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM - REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS

Aug 14, 2019	Service	5,738	Recondition Bowl Lift Cylinder	CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD AREA CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: CLEANED DISASSEMBLED AND INSPECTED CYLINDER. FOUND ROD TO HAVE PITTING, UNABLE TO POLISH OUT DAMAGED RECOMMEND NEW ROD OR RECHROME. CLEANED AND INSPECTED BARREL FOUND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNION. FOUND ROD EYE BEARING TON BE OUT OF ROUND RECOMMEND REPLACING. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TORQUED SENSOR HOUSING BOLTS TO 175 LB FT. TORQUED SET SCREW TO 26 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA
Aug 14, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
Aug 14, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMEMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESSS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER

Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325
Aug 14, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551
Aug 14, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
Aug 14, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP
Aug 14, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESES AND ZIP TIED HARNESES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
Jul 30, 2019	Parts			
Jul 29, 2019	Service	6,204	Repair For Warranty Product Link System	

Jul 29, 2019	Service	6,204	Repair For Warranty Product Link System	
Jul 14, 2019	Service	6,204	Travel To/from Work Area	CUSTOMER COMPLAINT: TRAVEL REPAIR PROCESS COMMENTS: TRAVEL TO AND FROM JOB.
Jul 14, 2019	Service	6,204	Troubleshoot Engine	CUSTOMER COMPLAINT: REPAIR REGEN REPAIR PROCESS COMMENTS: ARRIVED AT MACHINE AND HOOKED UP ET FOUND THAT HAD HIGH SOOT LOAD AND LOCKED OUT. CLEARED CODES AND RAN MACHINE, IT TOOK A WHILE TO GET MACHINE WARMED UP DUE TO SOOT LOAD SO HIGH WOULD KEEP SHUTTING DOWN. RAN MACHINE THROUGH REGEN, CHECKED OUT GOOD. LOOKED FOR ANY BOOST OR EXHAUST LEAKS THAT MAY CAUSE HIGH SOOT LOAD NONE WERE FOUND. CHECKED ASH SERVICE HISTORY AND FOUND DPF WAS FIELD CLEANED IN 2001 AND 490 HOURS AGO. INFORMED CUSTOMER THAT IF CODE HAPPENS AGAIN WILL PROBABLY NEED A NEW DPF. Have had to shut it down three times and reset the HAVE HAD TO SHUT IT DOWN THREE TIMES AND RESET THE MASTER AND KEY TO KEEP RUNNING
May 08, 2019	Parts			
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.
May 07, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551

May 07, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
May 07, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677
May 07, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958

May 07, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.
May 07, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESSES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESSSES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESSSES AND ZIP TIED HARNESSSES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER

May 07, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM -REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS
May 07, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.
May 07, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION -TRANSPORTATION OF MACHINE OR COMPONENTS

May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
May 07, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
May 07, 2019	Service	5,738		
May 07, 2019	Service	5,738	Remove & Install Differential	CUSTOMER COMPLAINT NOISE IN FRONT DIFF-R/I CAUSE OF FAILURE BROKEN TOOTH ON RING GEAR REPAIR PROCESS COMMENTS **REPAIR SPECIFICATION INCLUDES** -REMOVE & INSTALL DIFFERENTIAL (FRONT) -REPLACE MOUNTING SEALS -TOP OFF DIFFERENTIAL OIL (AS NEEDED) **AVAILABLE AS NEEDED AT ADDITIONAL COST** -REMOVE & INSTALL ALL COMPONENTS NEEDED TO ACCESS DIFFERENTIAL (REPAIR OR REPLACE AS NEEDED) -REPAIR OR REPLACE DRIVE LINE OR TRANSMISSION OUTPUT SHAFT -FLUSH LUBE SYSTEM -REPAIR OR REPLACE AXLE SHAFTS -REPLACE LINES OR HOSES -REPLACE DIFFERENTIAL OIL -PERFORM ANY NEEDED UPDATES -TRANSPORTATION OF MACHINE OR COMPONENTS
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0083551 WAS APPROVED BY CAT. AFTER WASHING DIRT AWAY FROM TUBE AND FINDING THE PART NUMBER TAG ON ALREADY PERFORMED. Service mag m0083551 SERVICE MAG M0083551

May 07, 2019	Service	5,738	Recondition Bowl Lift Cylinder	CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD. CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: ROD TO HAVE DEEP SCORING AND PITTING RECOMMEND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON, GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNIONS, GOOD FOR REUSE. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0086339 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED HOSE 4413488 WITH NEW HOSE 5435276. TESTED FOR LEAKS. Service mag m0086339 SERVICE MAG M0086339
May 07, 2019	Service	5,738	Repair For Warranty Main System Relief Valve	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0079958 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED PUSH PULL VALVE GROUP FOLLOWING PROCEDURE MACHINE FOR LEAKS. Service mag mm0079958 SERVICE MAG MM0079958
May 07, 2019	Service	5,738	Troubleshoot Seat Assembly	CUSTOMER COMPLAINT: VALVE POSITION SENSOR FOR SEAT CODE AND VOICE COIL CODE CAUSE OF FAILURE: DAMAGED HARNESS FOR SEAT SHOCK ABSORBER SEAT WAS ALWAYS OUT OF RANGE REPAIR PROCESS COMMENTS: HOOKED UP CAT ET TO MACHINE. RECORDED CODES AND LOOKED UP TROUBLESHOOTING PROCEDURE IN SIS. AFTER LOOKING IN SIS I FOUND THAT THE SENSOR SUPPLY VOLTAGE NEEDED TO BE TESTED. WHILE TESTING SENSOR I FOUND THAT BY MOVING THE THREE WIRES GOING TO THE SEAT SHOCK ABSORBER THE DTC CODE WOULD GO AWAY. REMOVED THE PROTECTIVE COVER FOR WIRES AND INSPECTED WIRES AND FOUND NO DAMAGE OR SIGN OF WORN WIRES. REMOVED SHOCK ABSORBER AND REMOVED THE WIRE HARNESS FROM SHOCK AND REPLACED WITH ANOTHER HARNESS FROM ANOTHER 627K. INSTALLED SHOCK AND HARNESS AND TESTED MACHINE. DROVE MACHINE AROUND THE YARD WITH CUSHION HITCH ON AND FOUND NO CODES PRESENT. Suspension has intermittent codes

May 07, 2019	Service	5,738	Recondition Bowl Lift Cylinder	<p>CUSTOMER COMPLAINT: REPAIR BOWL LIFT CYLINDER LEAKING AT ROD AREA CAUSE OF FAILURE: DAMAGED ROD RESULTANT DAMAGE: CLEANED DISASSEMBLED AND INSPECTED CYLINDER. FOUND ROD TO HAVE PITTING, UNABLE TO POLISH OUT DAMAGED RECOMMEND NEW ROD OR RECHROME. CLEANED AND INSPECTED BARREL FOUND LIGHT SCORING AND GLAZE, HARD HONE TO REMOVE. CLEANED AND INSPECTED HEAD AND PISTON GOOD FOR REUSE. CLEANED AND INSPECTED TRUNNION. FOUND ROD EYE BEARING TON BE OUT OF ROUND RECOMMEND REPLACING. QUOTED PARTS. REPAIR PROCESS COMMENTS: 3/26/19 5682; REASSEMBLED CYLINDER WITH NEW SEALS, RECHROME ROD AND BEARING. TORQUED HEAD BOLTS TO 600 LB FT. TORQUED PISTON NUT TO 2275 LB FT. TORQUED SENSOR HOUSING BOLTS TO 175 LB FT. TORQUED SET SCREW TO 26 LB FT. TESTED CYLINDER TO 3000 PSI FOUND NO LEAKS AND NO DRIFT. Leaking at rod area LEAKING AT ROD AREA</p>
May 07, 2019	Service	5,738	Repair For Warranty Cgi Cooler	<p>CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53551 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C9 ENGINE PER M0081814 SERVICE MAGAZINE. DRAINED COOLANT FROM ENGINE. DISCONNECTED HOSE ASSEMBLIES, CLIPS AND ADAPTERS FROM TOP SIDE OF NRS COOLER. LOOSENED CLAMPS FROM FROM NRS COOLER. UNBOLTED NRS COOLERS AND MOVED UPWARD TO REMOVE THE COOLING TUBES ATTACHED TO TUBE AND EXHAUST PIPING FROM TURBO. UNBOLTED TURBO AND REMOVED OIL LINES FROM TURBO. MOVED TURBO TO THE SIDE TO REMOVED NRS COOLER. INSTALLED NEW O-RINGS ONTO COOLING TUBES FOR NRS COOLER AND INSTALLED NEW NRS COOLER. BOLTED NEW COOLER INTO PLACE. BOLTED TURBO BACK INTO PLACE. INSTALLED NEW BELLOW ONTO COOLER. AND TIGHTENED CLAMPS. INSTALLED TUBES AND BRACKET THAT COVER NRS COOLER. INSTALLED AIR INLET HOSE AND EXHAUST PIPING. VACUUM FILLED COOLING SYSTEM AND TESTED SYSTEM FOR LEAKS.</p>

May 07, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	CUSTOMER COMPLAINT: HYDRAULIC CYLINDER LEAKING REPAIR PROCESS COMMENTS: REMOVED LEFT SIDE BOWL CYLINDER. DRAINED FLUID AND STRAPPED TO PALLET FOR SHIPPING TO S00 HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID. **REPAIR SPECIFICATION INCLUDES** - BLOCK SUPPORT AREAS -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** -SALVAGE OR REPLACE OTHER CYLINDER COMPONENTS -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS Both cylinders leaking BOTH CYLINDERS LEAKING
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Hoses/lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0096203 WAS APPROVED BY CAT REPLACED CUSHION HITCH LINES FOLLOWING PROCEDURE OUTLINED IN SERVICE MAGAZINE M0096203. TESTED MACHINE FOR LEAKS. Service mag mm0096203 SERVICE MAG MM0096203
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Fan Motor	REPAIR PROCESS COMMENTS: MACHINE CAME IN FOR UPDATES SERVICE MAGAZINE M0078677 WAS APPROVED BY CAT. AFTER INSPECTION OF AREA OF UPDATED I NOTICED THAT THE SERVICE MAGAZINE HAD ALREADY BEEN DONE. Service mag m0078677 SERVICE MAG M0078677
May 07, 2019	Service	5,738	Separate & Connect Trans & Differential Unit	**REPAIR SPECIFICATION INCLUDES** -SEPARATE & CONNECT TRANS & DIFFERENTIAL UNIT (FRONT) -REPLACE SEAL **AVAILABLE AS NEEDED AT ADDITIONAL COST** - REMOVE & INSTALL TRANSMISSION -REMOVE AND INSTALL ANY COMPONENTS NEEDED TO ACCESS TRANSMISSION - TRANSPORTATION OF MACHINE OR COMPONENTS
May 07, 2019	Service	5,738	Clean Machine	
May 07, 2019	Service	5,738	Repair For Warranty Hydraulic Control Valve	CUSTOMER COMPLAINT: PS45999 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REWORKED CUSHION HITCH VALVE PER SERVICE LETTER PS45999. RAN MACHINE AND TESTED CUSHION HITCH OPERATION AND TESTED FOR LEAKS.

May 07, 2019	Service	5,738	Repair For Warranty Differential	CUSTOMER COMPLAINT: DIFF NOISE CAUSE OF FAILURE: BROKEN RING GEAR REPAIR PROCESS COMMENTS: BOTH FINAL DRIVES. REMOVED BOTH AXLE SHAFTS. REMOVED DRIVE SHAFT. REMOVED TRANSMISSION AND DIFFERENTIAL. FOUND THAT THE DIFFERENTIAL RING GEAR HAD A MISSING TOOTH. SEPARATED DIFFERENTIAL PINION GEAR FROM DIFFERENTIAL. DISASSEMBLED DIFFERENTIAL. FOUND EXCESSIVE WEAR ON SPIDER GEARS AND SHAFTS. ALSO FOUND EXCESSIVE WEAR ON PINION GEAR. ORDERED NEW COMPLETE DIFFERENTIAL. INSTALLED NEW DIFFERENTIAL AND RING GEAR ONTO CARRIER. INSTALLED NEW PINION GEAR AND SET ROLL TORQUE FOR PINION GEAR. INSTALLED DIFFERENTIAL INTO CARRIER AND SET BACKLASH FOR RING GEAR. TIGHTENED BEARING CAPS FOR DIFFERENTIAL. CHECKED MESH FOR RING GEAR TO PINION GEAR. ADDED THE CATCH SCREEN TO THE DIFF LOCK ASSEMBLY. INSTALLED DIFFERENTIAL ONTO TRANSMISSION. INSTALLED TRANSMISSION AND DIFFERENTIAL BACK INTO MACHINE. FILLED FLUIDS TO PROPER LEVELS. AND TESTED FOR LEAKS. AFTER ALL OTHER REPAIRS WERE COMPLETED I DROVE MACHINE TO TEST PROPER OPERATION.
May 07, 2019	Service	5,738	Add Parts Implement Controls	CUSTOMER COMPLAINT PILOT MANIFOLD LEAKING CAUSE OF FAILURE 382-3097 REPAIR PROCESS COMMENTS REPLACED LEAKING PILOT MANIFOLD 382-3097 AS INSTRUCTED IN TIB M0103761. TESTED FOR LEAKS Hydraulic valve that claystone has already HYDRAULIC VALVE THAT CLAYSTONE HAS ALREADY REPLACED *382 3097 MANIFOLD GROUP
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: WIRES ARE WORN THROUGH ON BOTH HARNESES MISALIGNED LADDER CLIPS AND ECM CONNECTOR COVERS RESULTANT DAMAGE: RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMENTS: HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. AND HARNESS 374 8955 WAS WORN THROUGH AT A COUPLE OF LADDER CLIPS. REMOVED BOTH WIRING HARNESES. REPLACED LADDER CLIPS AND REALIGNED FOR PROPER ROUTING OF HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED BOTH NEW HARNESES AND ZIP TIED HARNESES TO LADDER CLIPS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER

May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT WIRES ARE WORN THROUGH ON HARNESS CAUSE OF FAILURE ECM CONNECTOR COVERS RESULT OF DAMAGE RUBBED THROUGH PROTECTIVE LAYER ON HARNESS AND WORN THROUGH TO THE BARE WIRE REPAIR PROCESS COMMEMENTS HARNESS 374-8986 WAS WORN THROUGH AT THE ECM CONNECTOR COVERS. REMOVED WIRING HARNESS. REMOVED COVERS FOR ECM ON HARNESS 374-8986 AND GROUND DOWN THE RIB ON THE INSIDE OF COVER TO AVOID FROM WIRES BEING DAMAGED. INSTALLED NEW HARNESSSS. Replace wiring harness for rear engine that is REPLACE WIRING HARNESS FOR REAR ENGINE THAT IS DAMAGED. THIS WILL BE COVERED BY PREMIER
May 07, 2019	Service	5,738	Repair For Warranty Cgi Cooler	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53383 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED NRS COOLER ON C13 ENGINE PER SERVICE MAGAZINE M0078038. VACUUM FILLED COOLING SYSTEM
May 07, 2019	Service	5,738	Repair For Warranty Drive Train Oil Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0076884 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: ADDED SAMPLING PORT TO REAR POWER TRAIN SYSTEM PER SPECIAL INSTRUCTIONS M0076882. TESTED FOR LEAKS Service mag m0076884 SERVICE MAG M0076884
May 07, 2019	Service	5,738	Remove & Install Bowl Lift Cylinder	**REPAIR SPECIFICATION INCLUDES** -BLOCK SUPPORT AREAS -REMOVE & INSTALL BOWL LIFT CYLINDER (RIGHT SIDE) -REPLACE SEALS AND GASKETS AS NEEDED -TOP OFF HYDRAULIC SYSTEM **AVAILABLE AS NEEDED AT ADDITIONAL COST** (PINS, BUSHINGS) -FLUSH HYDRAULIC SYSTEM -REPLACE HYDRAULIC OIL -CUSTOM HYDRAULIC SERVICE INSPECTION -TRANSPORTATION OF MACHINE OR COMPONENTS CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: REMOVED RIGHT SIDE BOWL CYLINDER. DRAINED FLUID HYDRAULIC SHOP FOR REBUILD. UNPACKAGED REBUILT CYLINDER AND INSTALLED ONTO MACHINE. RAN BOWL CYLINDER AND TOPPED OFF HYDRAULIC FLUID.
May 07, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND
May 07, 2019	Service	5,738	Add Parts Bowl Lift Cylinder	Rechrome damaged rod RECHROME DAMAGED ROD INSTALL ROD EYE BEARING - OUT OF ROUND
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0087325 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED IMU BRACKET PER SERVICE MAGAZINE M0087325. Service mag mm0087325 SERVICE MAG MM0087325

May 07, 2019	Service	5,738	Furnish **use 608** Seals & Gaskets	Replace seal that was damaged at installation. REPLACE SEAL THAT WAS DAMAGED AT INSTALLATION.
May 07, 2019	Service	5,738		
May 07, 2019	Service	5,738	Repair For Warranty Brake Lines	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE MAGAZINE M0082272 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED CUSHION HITCH AND BRAKE LINES GROUP PER SPECIAL INSTRUCTIONS M0082270. TESTED MACHINE FOR LEAKS AND PROPER OPERATION. Service mag m0082272 SERVICE MAG M0082272
May 07, 2019	Service	5,738	Repair For Warranty Wiring Harness	CUSTOMER COMPLAINT: MACHINE CAME IN FOR UPDATES. SERVICE LETTER PS53512 WAS APPROVED BY CAT REPAIR PROCESS COMMENTS: REPLACED LOAD AND SEQUENCE ASSIST SWITCH PER SPECIAL INSTRUCTIONS M0084459.
May 01, 2019	Parts			
Apr 17, 2019	Parts			
Apr 17, 2019	Parts			
Dec 06, 2018	Parts			
Dec 05, 2018	Parts			
Aug 27, 2018	Service	4,840	Engine	CUSTOMER COMPLAINT: UNIT WILL NOT REGEN, STOP ENGINE LIGHT ON CAUSE OF FAILURE: FAILED OUTPUT NOX SENSOR REPAIR PROCESS COMMENTS: CONNECTED CAT ET AND FOUND CODE FOR FAILED OUTPUT NOX SENSOR. REMOVED COWLING AND REPLACED OUTPUT NOX SENSOR. AFTER SENSOR REPLACEMENT FORCED REGEN TO VERIFY REPAIRS. AFTER REGEN CODES WENT TO STORED. CUSTOMER COMPLAINT: UNIT WILL NOT REGEN, STOP ENGINE LIGHT ON CAUSE OF FAILURE: FAILED OUTPUT NOX SENSOR REPAIR PROCESS COMMENTS: CONNECTED CAT ET AND FOUND CODE FOR FAILED OUTPUT NOX SENSOR. REMOVED COWLING AND REPLACED OUTPUT NOX SENSOR. AFTER SENSOR REPLACEMENT FORCED REGEN TO VERIFY REPAIRS. AFTER REGEN CODES WENT TO STORED. Wont regen WONT REGEN
Aug 27, 2018	Service	4,840	Travel To/from Work Area	REPAIR PROCESS COMMENTS: TRAVEL TO AND FROM MACHINE LOCATION. WAS TOLD WRONG LOCATION OF MACHINE.

Aug 27, 2018	Service	4,840	Engine	CUSTOMER COMPLAINT: UNIT WILL NOT REGEN, STOP ENGINE LIGHT ON CAUSE OF FAILURE: FAILED OUTPUT NOX SENSOR REPAIR PROCESS COMMENTS: CONNECTED CAT ET AND FOUND CODE FOR FAILED OUTPUT NOX SENSOR. REMOVED COWLING AND REPLACED OUTPUT NOX SENSOR. AFTER SENSOR REPLACEMENT FORCED REGEN TO VERIFY REPAIRS. AFTER REGEN CODES WENT TO STORED. CUSTOMER COMPLAINT: UNIT WILL NOT REGEN, STOP ENGINE LIGHT ON CAUSE OF FAILURE: FAILED OUTPUT NOX SENSOR REPAIR PROCESS COMMENTS: CONNECTED CAT ET AND FOUND CODE FOR FAILED OUTPUT NOX SENSOR. REMOVED COWLING AND REPLACED OUTPUT NOX SENSOR. AFTER SENSOR REPLACEMENT FORCED REGEN TO VERIFY REPAIRS. AFTER REGEN CODES WENT TO STORED. Wont regen WONT REGEN
Aug 07, 2018	Service	4,938	Travel To/from Work Area	
Aug 07, 2018	Service	4,938	Machine	CUSTOMER COMPLAINT: AC NOT WORKING CAUSE OF FAILURE: NONE FOUND REPAIR PROCESS COMMENTS: TALK WITH OPERATOR, FOUND AC TO BE WORKING FOR LAST COUPLE DAYS. AMBIENT HAS BEEN COOLER LAST COUPLE DAYS ALSO. CHECK AC OUTPUT TO BE 38 AT VENTS. CLEANED CAB FILTERS AND REINSTALLED. HOOK UP GAUGES AND FOUND LOW SIDE PRESSURES WITHIN RANGE BUT HIGH SIDE SLIGHTLY HIGHER THAN NORMAL. BLEW OUT CONDENSER AND CHECKED THAT BOTH FANS WORKED. PRESSURES LOWER BUT CONDENSER COULD USE A ISSUE WITH HYDRAULIC LEAK, WILL ORDER PART TO REPAIR. ALSO APRON AUTO DOWN NOT WORKING CORRECTLY. CALIBRATED WHEEL ON JOYSTICK. A/c not working again A/C NOT WORKING AGAIN
Jul 26, 2018	Parts			

Jul 12, 2018	Service	4,711	Machine	<p>CUSTOMER COMPLAINT: SEAT CODES REPAIR PROCESS</p> <p>COMMENTS: 5-16-18 SENSOR AND VOICE COIL SAME SENSOR - INSPECT WIRING AND IT LOOKS OK - CODES NOT ACTIVE COULD NOT GET IT TO BECOME ACTIVE WHILE RUNNING IT - ORDERED NEW SENSOR CUSTOMER COMPLAINT: SEAT CODES REPAIR PROCESS COMMENTS: 5-16-18 - 520705-2 & 520716-6 CODES FOR THE VALVE POSITION SENSOR AND VOICE COIL SAME SENSOR - INSPECT WIRING AND IT LOOKS OK - CODES NOT ACTIVE COULD NOT GET IT TO BECOME - ORDERED NEW SENSOR CUSTOMER COMPLAINT: SEAT CODES REPAIR PROCESS COMMENTS: 5-16-18 - 520705-2 & 520716-6 CODES FOR THE VALVE POSITION SENSOR AND VOICE COIL SAME SENSOR - INSPECT WIRING AND IT LOOKS OK - CODES NOT ACTIVE COULD NOT GET IT TO BECOME ACTIVE WHILE RUNNING IT - ORDERED NEW SENSOR CUSTOMER COMPLAINT: SEAT CODES REPAIR PROCESS COMMENTS: 5-16-18 SENSOR AND VOICE COIL SAME SENSOR - INSPECT WIRING AND IT LOOKS OK - CODES NOT ACTIVE COULD NOT GET IT TO BECOME ACTIVE WHILE RUNNING IT - ORDERED NEW SENSOR</p> <p>CUSTOMER COMPLAINT: SEAT CODES REPAIR PROCESS COMMENTS: 5-16-18 SENSOR AND VOICE COIL SAME SENSOR - INSPECT WIRING AND IT LOOKS OK - CODES NOT ACTIVE COULD NOT GET IT TO BECOME ACTIVE WHILE RUNNING IT - ORDERED NEW SENSOR CUSTOMER COMPLAINT: CODE COME ON INTERMITTENTLY J520716-6 CAUSE OF FAILURE: THE SENSOR IS MALFUNCTIONING INTERMITTENTLY REPAIR PROCESS COMMENTS: 6-26-18 -CHRIS WENT OUT AND TROUBLE SHOT THE CODE AND SAID THE VALVE NEEDED TO BE REPLACED -I REMOVED THE OLD VALVE AND INSTALLED A NEW VALVE -OPERATE UNIT AND CODE NEVER CAME ON</p> <p>Repair seat REPAIR SEAT</p>
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Jul 12, 2018	Service	4,711	Lubrication System	CUSTOMER COMPLAINT: CAUSE OF FAILURE: INJECTOR OR INJECTOR SEALS REPAIR PROCESS COMMENTS: 5-16-18 - WAIT UNTIL CUSTOMER WOULD SHUT DOWN MACHINE - HOOK UP ET AND PERFORM FUEL SYSTEM FUNCTION TEST AND VERIFICATION TEST PASSED ALL TESTS - LOOKS LIKE A HIGH PRESSURE PUMP WAS REPLACED NOT TOO LONG AGO - LOOKED A MACHINE HISTORY AND THE HEIGHT PRESSURE BEFORE AND AFTER OIL SAMPLES OF FUEL DILUTION - NEXT STEP IS TO REMOVE THE EMISSIONS SYSTEM AND VALVE COVER AND INSPECT . - ORDERED PARTS - 5-17-18 - REMOVE HOOD - DISCONNECT LINES, HOSES AND HARNESS TO CLEAN EMISSIONS SYSTEM - REMOVE BRACKETS THAT HOLD THE CLEAN EMISSIONS SYSTEM REPAIR PROCESS COMMENTS: 5-18-18 - REMOVE AIR CLEAN ASSEMBLY - UNBOLT AND REMOVE EMISSIONS SYSTEM - REMOVE VALVE COVER - REMOVE JAKE BRAKES - REMOVE INJECTORS - INSPECT INJECTORS FOR DAMAGED O RINGS - O RINGS LOOK OK I WILL REPLACE ALL INJECTORS - INSTALL REMAN INJECTORS WITH NEW HOLD DOWN BOLTS - INSTALL QUIL TUBES AND FUEL LINES - INSTALL JAKE BRAKES - INSTALL VALVE COVER WITH NEW GASKET REPAIR PROCESS COMMENTS: 5-21-18 - INSTALL EMISSIONS SYSTEM BRACKETS - INSTALL EMISSION SYSTEM AND HOOK ALL LINES, HOSES AND ELECTRICAL - INSTALL AIR CLEANER - INSTALL HOOD - PROGRAM THE ECM WITH NEW INJECTOR TRIM CODES FOUND - MACHINE IS READY FOR CUSTOMER USE Rear engine 19% fuel dilution REAR ENGINE 19% FUEL DILUTION
Jul 12, 2018	Service	4,711	Machine	CUSTOMER COMPLAINT: A/C IS BLOWING HOT CAUSE OF FAILURE: RESULTANT DAMAGE: HOT AIR REPAIR PROCESS COMMENTS: 6-26-18 -INSTALL GAUGE AND FIND IT IS A LITTLE LOW ON FREON -PULL A VACUUM TEST ON SYSTEM AND NO LEAK -FILL WITH FREON AND UNIT WORKS FINE REPAIR PROCESS COMMENTS: -REMOVED PANELES FOR ACCESS -HOOKED UP GAUGES, SYSTEM PRESSRUE ARE LOW - RECOVERED SYSTEM PER GUIDE LINES -SYSTEM WAS 3.7 LBS LOW -CHARGED SYSTEM WITH 3 LBS OF R134A AND LEAK CHECKED -FOUND LINE FROM COMPRESSOR TO CONDENSOR LEAKING WITH A VERY SMALL HOLE, DUE TO SUN AGING. - CONDENSOR TO DRIER LINE IS ALSO VERY SUN AGED - ORDRED LINES -RECOVERED SYSTEM. Repair a/c REPAIR A/C
Jul 12, 2018	Service	4,711	Engine	CUSTOMER COMPLAINT: CHANGE REAR ENGINE OIL AND FILTER AFTER INJECTOR REPLACEMENT REPAIR PROCESS COMMENTS: 5-21-18 - CHANGE ENGINE OIL AND FILTER - TOP OFF OIL AFTER ENGINE WAS RAN Change oil after rear engine injector repair CHANGE OIL AFTER REAR ENGINE INJECTOR REPAIR
Jul 12, 2018	Service	4,711	Repair For Warranty Accessory Drive	CUSTOMER COMPLAINT: REPAIR PROCESS COMMENTS: 6-26-18 INSTALL PS45509 SWITCHING OUT THE SERPENTINE BELT

Jul 12, 2018	Service	4,711	Travel To/from Work Area	
Jul 12, 2018	Service	4,711	Engine Cooling System	Front engine over heating FRONT ENGINE OVER HEATING
Jun 19, 2018	Service	4,495	Machine	REPAIR PROCESS COMMENTS: 6-7-18 REMOVING A/C UNIT TO REPLACE FAN MOTOR AND FOUND THAT I NEED TO DRAIN A/C UNIT TO REMOVE HOSES. I DIDN'T HAVE A RECLAIMER. I WENT TO SEE IF PARTS WERE IN FOR THE OTHER MACHINE THEY WERE NOT . REPAIR PROCESS COMMENTS: 6-12-18 RECOVERED REFRIGERANT. REMOVED UNIT AND REPLACED FAN MOTOR. INSTALLED UNIT BACK IN THE MACHINE. REPAIR PROCESS COMMENTS: 6-13-18 FINISHED INSTALLING FAN MOTOR AND INSTALLING COVERS. CUSTOMER COMPLAINT: THE A/C DOES NOT WORK THE BLOWER FAN HAS SHORTED OUT INTERNAL REPAIR PROCESS COMMENTS: TESTED THE FUESES AND RELAY. I HAD POWERED AND GOOD FUSES. I ISOLATED THE FANS AND FOUND THAT CONTINUITY. THE FAN NEEDS TO BE REPLACE. Repair ac REPAIR AC
Jun 19, 2018	Service	4,495	Machine	REPAIR PROCESS COMMENTS: 6-7-18 REMOVING A/C UNIT TO REPLACE FAN MOTOR AND FOUND THAT I NEED TO DRAIN A/C UNIT TO REMOVE HOSES. I DIDN'T HAVE A RECLAIMER. I WENT TO SEE IF PARTS WERE IN FOR THE OTHER MACHINE THEY WERE NOT . REPAIR PROCESS COMMENTS: 6-12-18 RECOVERED REFRIGERANT. REMOVED UNIT AND REPLACED FAN MOTOR. INSTALLED UNIT BACK IN THE MACHINE. REPAIR PROCESS COMMENTS: 6-13-18 FINISHED INSTALLING FAN MOTOR AND INSTALLING COVERS. CUSTOMER COMPLAINT: THE A/C DOES NOT WORK THE BLOWER FAN HAS SHORTED OUT INTERNAL REPAIR PROCESS COMMENTS: TESTED THE FUESES AND RELAY. I HAD POWERED AND GOOD FUSES. I ISOLATED THE FANS AND FOUND THAT CONTINUITY. THE FAN NEEDS TO BE REPLACE. Repair ac REPAIR AC
Jun 14, 2018	Parts			
Apr 16, 2018	Service	4,296	Travel To/from Work Area	

Apr 16, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
Apr 16, 2018	Service	4,296	Repair Fuel Injection Pump	3/28/18 EMP 3804 T/S ENGINE CODES. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, ORDERED A NEW FUEL PUMP TO BE INSTALLED. 3/29/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: REPLACED THE HIGH PRESSURE FUEL PUMP WITH NEW. INSTALLED NEW SEALS, RAN MACHINE AND PERFORMED THE FUEL SYSTEM VERIFICATION TEST AND THE FUEL SYSTEM FUNCTION TEST. BOTH PASSED. THE CODE DID NOT RETURN.
Apr 16, 2018	Service	4,296	Travel To/from Work Area	
Apr 16, 2018	Service	4,296	Repair Fuel Injection Pump	3/28/18 EMP 3804 T/S ENGINE CODES. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, ORDERED A NEW FUEL PUMP TO BE INSTALLED. 3/29/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: REPLACED THE HIGH PRESSURE FUEL PUMP WITH NEW. INSTALLED NEW SEALS, RAN MACHINE AND PERFORMED THE FUEL SYSTEM VERIFICATION TEST AND THE FUEL SYSTEM FUNCTION TEST. BOTH PASSED. THE CODE DID NOT RETURN.

Apr 16, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLOWS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
Apr 08, 2018	Service	4,296	Travel To/from Work Area	
Apr 08, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLOWS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
Apr 08, 2018	Service	4,296	Travel To/from Work Area	

Apr 08, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLOWS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
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Apr 08, 2018	Service	4,296	Travel To/from Work Area	
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Apr 08, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLOWS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
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Apr 08, 2018	Service	4,296	Repair For Warranty Unit Injector	3/22/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: ARRIVED ON SITE AND HAD TO WAIT FOR THE MACHINE TO BE SHUT DOWN TO WORK ON. HOOKED UP ET AND DOWNLOADED A PRODUCT STATUS REPORT. MACHINE HAS ACTIVE CODE 1780-5 FUEL RAIL #2 PRESSURE VALVE SOLENOID : CURRENT BELOW NORMAL. DISCONNECTED THE WIRE HARNESS FOR THE #2 SOLENOID ON THE FUEL PUMP AND INSTALLED A JUMPER WIRE AND THE CODE WENT 1780-6 VOLTAGE ABOVE NORMAL. MADE JUMPER HARNESS TO SWAP THE #1 AND #2 SOLENOIDS AND THE CODE FALLOWS WHEN THE PUMP SOLENOID TEST WAS PERFORMED CODE 1779-5 COME ACTIVE. WHEN YOU START THE MACHINE THE CODE RETURNS 1780-5 EVEN IF THE WIRES ARE SWAPPED. CONTACTED TECHNICAL SERVICE AND CHECKED THE DSN TICKETS AND ANOTHER MACHINE HAD SIMILAR PROBLEM AND THE ECM #2 DRIVE IN THE ECM WAS BAD. ORDERED A NEW ECM TO BE REPLACED LATER. 3/28/18 EMP 3804 T/S ENGINE CODES. REPAIR PROCESS COMMENTS: INSTALLED REMAN REAR ENGINE ECM AND PROGRAMMED. RAN MACHINE AND THE 1780-5 CODE CAME BACK ON, Troubleshoot engine error codes TROUBLESHOOT ENGINE ERROR CODES
Apr 08, 2018	Service	4,296	Travel To/from Work Area	
Apr 06, 2018	Parts			
Mar 30, 2018	Service	4,170	Body	9575 3/8/18 CUSTOMER COMPLAINT FUSE BLOWS. CAUSE OF FAILURE: RESULTANT DAMAGE: CAUSING FUSE TO BLOW WHEN BRAKE PEDAL DEPRESSED. REPAIR PROCESS COMMENTS: SCHEMATIC FOR WHAT FUSE POWERED. FOUND FUSE POWERS BRAKE LIGHT, NOTICE WHEN BRAKE PEDAL DEPRESSED FUSE WOULD BLOW. MEASURED WIRE 604 FROM BRAKE PEDAL, FOUND SHORT TO GROUND. CHECK HARNESSES BETWEEN DRAFT ARMS, BACK TO BRAKE LIGHTS, FOUND WHEN RIGHT HAND LIGHT UN PLUGGED, SHORT IN 604 WIRE WENT AWAY. 9575 3/9/18 REPLACE RIGHT HAND BRAKE LIGHT, TEST, FOUND OPERATES PROPERLY. Light keep blowing fuse LIGHT KEEP BLOWING FUSE

Mar 30, 2018	Service	4,170	Troubleshoot Seat Assembly	9575 3/8/18 CUSTOMER COMPLAINT SEAT LOOSE. REPAIR PROCESS COMMENTS: CHECK MACHINE, COULD NOT PROPERLY COMMUNICATE WITH OPERATOR. OPERATOR DID SHOW ME A LOOSE BOLT IN THE BACK OF THE SEAT FOR THE SWIVEL, REMOVED BOLT, AND INSTALLED A SECOND WASHER, TIGHTENED BOLT. OPERATOR THEN SAID WHEN HE IS IN THE HOLE, VALVE WAS BROKEN, OPERATOR ALSO MENTIONED THE CUSHION HITCH MAY NOT OPERATE PROPERLY. ORDERED VALVE FOR SEAT. 9575 3/9/18 LOAD PARTS, AND TOOLS. CHECK FOR CHARGE IN CUSHION HITCH ACCUMULATORS, FOUND LOW PRESSURE ACCUMULATOR CHARGED AT 100 PSI, AND HIGH PRESSURE WAS OVER 1500 PSI. ADJUSTED LOW PRESSURE TO 360 PSI, AND HIGH PRESSURE ACCUMULATOR TO 1360 PSI. REPLACED VALVE KIT FOR SEAT, HAD OPERATOR RUN MACHINE, HE SAID IT WAS BETTER, EXPLAIN TO OPERATOR TO ADJUST SEAT, TO FIND BEST RIDE SPOT FOR SEAT. RETURN BACK, SAID IT STILL WOULD THROW HIM FROM THE SEAT. CHECK SEAT NOTICE STRUT ASSY FEELS WEAK. REPLACED STRUT, HAD OPERATOR RUN MACHINE, OPERATOR SAID IT WAS GOOD. RETURN MACHINE TO SERVICE. Troubleshoot swivel for seat not working correctly TROUBLESHOOT SWIVEL FOR SEAT NOT WORKING CORRECTLY
Mar 30, 2018	Service	4,170	Travel To/from Work Area	
Mar 30, 2018	Service	4,170	Body	9575 3/8/18 CUSTOMER COMPLAINT FUSE BLOWS. CAUSE OF FAILURE: RESULTANT DAMAGE: CAUSING FUSE TO BLOW WHEN BRAKE PEDAL DEPRESSED. REPAIR PROCESS COMMENTS: SCHEMATIC FOR WHAT FUSE POWERED. FOUND FUSE POWERS BRAKE LIGHT, NOTICE WHEN BRAKE PEDAL DEPRESSED FUSE WOULD BLOW. MEASURED WIRE 604 FROM BRAKE PEDAL, FOUND SHORT TO GROUND. CHECK HARNESSSES BETWEEN DRAFT ARMS, BACK TO BRAKE LIGHTS, FOUND WHEN RIGHT HAND LIGHT UN PLUGGED, SHORT IN 604 WIRE WENT AWAY. 9575 3/9/18 REPLACE RIGHT HAND BRAKE LIGHT, TEST, FOUND OPERATES PROPERLY. Light keep blowing fuse LIGHT KEEP BLOWING FUSE

Mar 30, 2018	Service	4,170	Troubleshoot Seat Assembly	9575 3/8/18 CUSTOMER COMPLAINT SEAT LOOSE. REPAIR PROCESS COMMENTS: CHECK MACHINE, COULD NOT PROPERLY COMMUNICATE WITH OPERATOR. OPERATOR DID SHOW ME A LOOSE BOLT IN THE BACK OF THE SEAT FOR THE SWIVEL, REMOVED BOLT, AND INSTALLED A SECOND WASHER, TIGHTENED BOLT. OPERATOR THEN SAID WHEN HE IS IN THE HOLE, VALVE WAS BROKEN, OPERATOR ALSO MENTIONED THE CUSHION HITCH MAY NOT OPERATE PROPERLY. ORDERED VALVE FOR SEAT. 9575 3/9/18 LOAD PARTS, AND TOOLS. CHECK FOR CHARGE IN CUSHION HITCH ACCUMULATORS, FOUND LOW PRESSURE ACCUMULATOR CHARGED AT 100 PSI, AND HIGH PRESSURE WAS OVER 1500 PSI. ADJUSTED LOW PRESSURE TO 360 PSI, AND HIGH PRESSURE ACCUMULATOR TO 1360 PSI. REPLACED VALVE KIT FOR SEAT, HAD OPERATOR RUN MACHINE, HE SAID IT WAS BETTER, EXPLAIN TO OPERATOR TO ADJUST SEAT, TO FIND BEST RIDE SPOT FOR SEAT. RETURN BACK, SAID IT STILL WOULD THROW HIM FROM THE SEAT. CHECK SEAT NOTICE STRUT ASSY FEELS WEAK. REPLACED STRUT, HAD OPERATOR RUN MACHINE, OPERATOR SAID IT WAS GOOD. RETURN MACHINE TO SERVICE. Troubleshoot swivel for seat not working correctly TROUBLESHOOT SWIVEL FOR SEAT NOT WORKING CORRECTLY
Mar 30, 2018	Service	4,170	Travel To/from Work Area	
Mar 06, 2018	Parts			
Mar 06, 2018	Service	4,088	Travel To/from Work Area	
Mar 06, 2018	Service	4,088	Troubleshoot Suspension Seat	2/16/18 EMP 8111 TALKED TO CUSTOMER AND FOUND OUT THEY BELIEVE THE BUSHINGS ARE WORN OUT. ORDERED A KIT TO REPAIR THE SCISSORS ASSEMBLY. KIT CAME OUT OF DENVER DEPOT. PICKED UP PART AND WENT TO MACHINE. REMOVED SEAT AND SEAT SUSPENSION. FOUND BUSHINGS WORN FLAT ON CORNER. DISASSEMBLED SUSPENSION AND TRIED TO TRANSFER DAMPER AND AIRBAG TO NEW ASSEMBLY. FOUND THAT THE NEW PANS ARE NOT THE SAME AND COULD NOT BE USED. HAD TO TRANSFER THE OLD PANS TO THE NEW SCISSOR ASSEMBLY AND BUSHINGS. THE NEW SCISSOR DOES NOT HAVE NEW MOUNTING LOCATIONS FOR HARNESS. ROUTED THE HARNESS AS BEST AS I COULD AND TESTED SEAT. ALL PIECES REMOVED. REINSTALLED SEAT INTO MACHINE. AND MOTOR CONTROL KNOB IS BROKEN OFF. IT IS STILL USABLE HOWEVER IT IS MORE DIFFICULT. DECIDED TO REASSEMBLE FOR NOW AND WILL DECIDE IF REPAIR NEEDED LATER. RELEASED MACHINE TO CUSTOMER. Troubleshoot seat TROUBLESHOOT SEAT

Mar 06, 2018	Service	4,088	Troubleshoot Suspension Seat	2/16/18 EMP 8111 TALKED TO CUSTOMER AND FOUND OUT THEY BELIEVE THE BUSHINGS ARE WORN OUT. ORDERED A KIT TO REPAIR THE SCISSORS ASSEMBLY. KIT CAME OUT OF DENVER DEPOT. PICKED UP PART AND WENT TO MACHINE. REMOVED SEAT AND SEAT SUSPENSION. FOUND BUSHINGS WORN FLAT ON CORNER. DISASSEMBLED SUSPENSION AND TRIED TO TRANSFER DAMPER AND AIRBAG TO NEW ASSEMBLY. FOUND THAT THE NEW PANS ARE NOT THE SAME AND COULD NOT BE USED. HAD TO TRANSFER THE OLD PANS TO THE NEW SCISSOR ASSEMBLY AND BUSHINGS. THE NEW SCISSOR DOES NOT HAVE NEW MOUNTING LOCATIONS FOR HARNESS. ROUTED THE HARNESS AS BEST AS I COULD AND TESTED SEAT. ALL PIECES REMOVED. REINSTALLED SEAT INTO MACHINE. AND MOTOR CONTROL KNOB IS BROKEN OFF. IT IS STILL USABLE HOWEVER IT IS MORE DIFFICULT. DECIDED TO REASSEMBLE FOR NOW AND WILL DECIDE IF REPAIR NEEDED LATER. RELEASED MACHINE TO CUSTOMER. Troubleshoot seat TROUBLESHOOT SEAT
Mar 06, 2018	Service	4,088	Travel To/from Work Area	
Feb 15, 2018	Service	4,003	Travel To/from Work Area	
Feb 15, 2018	Service	4,003	Repair For Warranty Fuel Priming Pump	2/2/18 FOUND MULTIPLE CODES ON REAR ENGINE ALL DEALING WITH LOSS OF FUEL PRESSURE. FOUND THE FUSE FOR THE PRIMING PUMP WAS BLOWN. INSTALLED A NEW FUSE AND PRIMED FUEL SYSTEM. STARTED MACHINE AND FORCED A REGEN. REGEN FAILED DUE TO LOW FUEL INSTALLED BREAKER TO FIND OUT WHEN FUSE BLOWS. MACHINE STARTED REGEN BUT ONLY LASTED ABOUT A MINUTE BEFORE BREAKER POPPED. INSTALLED A SLIGHTLY LARGER BREAKER AND THE MACHINE COMPLETED REGEN FINE. ORDERED A PUMP REPAIR KIT FOR MONDAY. 2/5/18 MOVED MACHINE TO SAFE WORK AREA. REMOVED OLD FUEL INSTALLED NEW FUEL SCREEN/FITTING IN FUEL MANIFOLD FOR ARD. INSTALLED CORRECT FUSE IN FUEL PUMP CIRCUIT. PRIMED FUEL SYSTEM. STARTED MACHINE AND FORCED MANUAL REGEN. REGEN COMPLETED SUCCESSFULLY. RELEASED MACHINE TO CUSTOMER. Ard fuel pressure high
Feb 15, 2018	Service	4,003	Travel To/from Work Area	

Feb 15, 2018	Service	4,003	Repair For Warranty Fuel Priming Pump	2/2/18 FOUND MULTIPLE CODES ON REAR ENGINE ALL DEALING WITH LOSS OF FUEL PRESSURE. FOUND THE FUSE FOR THE PRIMING PUMP WAS BLOWN. INSTALLED A NEW FUSE AND PRIMED FUEL SYSTEM. STARTED MACHINE AND FORCED A REGEN. REGEN FAILED DUE TO LOW FUEL INSTALLED BREAKER TO FIND OUT WHEN FUSE BLOWS. MACHINE STARTED REGEN BUT ONLY LASTED ABOUT A MINUTE BEFORE BREAKER POPPED. INSTALLED A SLIGHTLY LARGER BREAKER AND THE MACHINE COMPLETED REGEN FINE. ORDERED A PUMP REPAIR KIT FOR MONDAY. 2/5/18 MOVED MACHINE TO SAFE WORK AREA. REMOVED OLD FUEL INSTALLED NEW FUEL SCREEN/FITTING IN FUEL MANIFOLD FOR ARD. INSTALLED CORRECT FUSE IN FUEL PUMP CIRCUIT. PRIMED FUEL SYSTEM. STARTED MACHINE AND FORCED MANUAL REGEN. REGEN COMPLETED SUCCESSFULLY. RELEASED MACHINE TO CUSTOMER. Ard fuel pressure high
Jan 29, 2018	Service	3,917	Travel To/from Work Area	
Jan 29, 2018	Service	3,917	Body	THE CUSTOMER COMPLAINED OF THE LEFT FRONT FENDER AREA. FOUND THE MOUNTING BOLTS THAT HOLD THE FENDER SUPPORT WERE ALL BROKEN. REMOVED THE SUPPORT AND HAD TO DRILL OUT ALL 5 MOUNTING BOLTS. RETHREADED THE BOLT HOLES AND INSTALLED TH SUPPORT. INSTALLED NEW MOUNTING HARDWARE AND Front fender loose FRONT FENDER LOOSE
Jan 29, 2018	Service	3,917	Travel To/from Work Area	
Jan 29, 2018	Service	3,917	Body	THE CUSTOMER COMPLAINED OF THE LEFT FRONT FENDER AREA. FOUND THE MOUNTING BOLTS THAT HOLD THE FENDER SUPPORT WERE ALL BROKEN. REMOVED THE SUPPORT AND HAD TO DRILL OUT ALL 5 MOUNTING BOLTS. RETHREADED THE BOLT HOLES AND INSTALLED TH SUPPORT. INSTALLED NEW MOUNTING HARDWARE AND Front fender loose FRONT FENDER LOOSE
Jan 11, 2018	Service	3,861	Travel To/from Work Area	

Jan 11, 2018	Service	3,861	Troubleshoot Engine	1/5/18 SITE AND FILLED OUT THE REQUIRED SAFETY PAPERWORK. PERFORMED A WALK AROUND INSPECTION OF THE MACHINE AND THE WORK AREA. REMOVED THE BELLY PAN AND INSPECTED FOR A LEAK. FOUND OIL WAS COVERING EVERYTHING IN THE COMPARTMENT. CLEANED OFF AREAS THAT HAD DRIPS ON THEM AND STARTED THE MACHINE. INSPECTED FOR LEAK. NO OBVIOUS LEAK WAS FOUND. ALLOWED THE MACHINE TO REACH OPERATING TEMP AND CYCLED ALL FUNCTIONS OF THE POWERTRAIN, AND HYDRAULICS INCLUDING THE BRAKES, FAN AND STEERING. STALLED ALL IMPLEMENTS IN ALL DIRECTIONS. NO LEAKS WERE FOUND HEATED THE SYSTEMS TO ABOVE NORMAL AND FOUND NO LEAKS. CLEANED OUT THE BELLY PAN THAT WAS FULL OF OIL SOAKED DIRT AND INSTALLED. RAN THE MACHINE SIMULATING OPERATION AND FOUND NO FRESH OIL DRIPS IN THE BELLY PAN. THE CUSTOMER HAD A HOSE BREAK THE DAY BEFORE AND ALL OF THE OIL IN THE COMPARTMENT APPEARS TO BE RESIDUE. RELEASED THE MACHINE TO THE CUSTOMER. Troubleshoot engine oil leak TROUBLESHOOT ENGINE OIL LEAK CUSTOMER NOT SURE OF LOCATION
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Jan 11, 2018	Service	3,861	Travel To/from Work Area
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Jan 11, 2018	Service	3,861	Troubleshoot Engine	1/5/18 SITE AND FILLED OUT THE REQUIRED SAFETY PAPERWORK. PERFORMED A WALK AROUND INSPECTION OF THE MACHINE AND THE WORK AREA. REMOVED THE BELLY PAN AND INSPECTED FOR A LEAK. FOUND OIL WAS COVERING EVERYTHING IN THE COMPARTMENT. CLEANED OFF AREAS THAT HAD DRIPS ON THEM AND STARTED THE MACHINE. INSPECTED FOR LEAK. NO OBVIOUS LEAK WAS FOUND. ALLOWED THE MACHINE TO REACH OPERATING TEMP AND CYCLED ALL FUNCTIONS OF THE POWERTRAIN, AND HYDRAULICS INCLUDING THE BRAKES, FAN AND STEERING. STALLED ALL IMPLEMENTS IN ALL DIRECTIONS. NO LEAKS WERE FOUND HEATED THE SYSTEMS TO ABOVE NORMAL AND FOUND NO LEAKS. CLEANED OUT THE BELLY PAN THAT WAS FULL OF OIL SOAKED DIRT AND INSTALLED. RAN THE MACHINE SIMULATING OPERATION AND FOUND NO FRESH OIL DRIPS IN THE BELLY PAN. THE CUSTOMER HAD A HOSE BREAK THE DAY BEFORE AND ALL OF THE OIL IN THE COMPARTMENT APPEARS TO BE RESIDUE. RELEASED THE MACHINE TO THE CUSTOMER. Troubleshoot engine oil leak TROUBLESHOOT ENGINE OIL LEAK CUSTOMER NOT SURE OF LOCATION
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Jan 03, 2018	Service	3,761	Travel To/from Work Area
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Jan 03, 2018	Service	3,761	Repair For Warranty Electric Starting Motor	12/12/17 The operator also complained of the machine not Restarting after the engine had been running for Most of the day. was able to verify the compaint DURING THE TROUBLE SHOOTING OF THE TRANS SHIFTING Issue. tested the relay and found it was open. Ordered new relay to be installed the following Morning. 12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Installed the belly pan and tested the operaiton. Found no further problems.
Jan 03, 2018	Service	3,761	Troubleshoot Wiring Harness	12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning. 12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer
Jan 03, 2018	Service	3,761	Travel To/from Work Area	

Jan 03, 2018	Service	3,761	Repair For Warranty Electric Starting Motor	12/12/17 The operator also complained of the machine not Restarting after the engine had been running for Most of the day. was able to verify the compaint DURING THE TROUBLE SHOOTING OF THE TRANS SHIFTING Issue. tested the relay and found it was open. Ordered new relay to be installed the following Morning. 12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Installed the belly pan and tested the operaiton. Found no further problems.
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Jan 03, 2018	Service	3,761	Troubleshoot Wiring Harness	12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning. 12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer
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Dec 26, 2017	Service	3,761	Troubleshoot Wiring Harness	<p>12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning.</p> <p>12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer</p>
Dec 26, 2017	Service	3,761	Travel To/from Work Area	

Dec 26, 2017	Service	3,761	Troubleshoot Wiring Harness	12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning. 12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer
Dec 26, 2017	Service	3,761	Travel To/from Work Area	
Dec 20, 2017	Parts			
Dec 18, 2017	Service	3,761	Travel To/from Work Area	

Dec 18, 2017	Service	3,761	Troubleshoot Wiring Harness	<p>12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning.</p> <p>12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer</p>
Dec 18, 2017	Service	3,761	Travel To/from Work Area	

Dec 18, 2017	Service	3,761	Troubleshoot Wiring Harness	<p>12/12/17 EMP 2377 THE CUSTOMER COMPLAINED OF THE MACHINE SHIFTING HARD INTO GEAR. ARRIVED ON SITE AND FILLED OUT The required safety paperwork. performed a walk Around inspection of the machine and the work Area. hooked up et and reviewed the Codes/events. found logged code for the lock up Clutch solenoid being shorted to ground. the Code is very intermetent and would become active And then inactive with nothing moving. tested The solenoid and found no issues. the resistance Would not change when the code was active. after Extensive trouble shooting i found the main Harness had rubbed through at a ladder clip. Also found more damaged areas along the routing Of the harness. secured the wiring to prevent Any further rubbing. ordered new harness to be Installed upon its delivery. the operator also Complained of the machine not restarting after The engine had been running for most of the day. Was able to verify the compaint during the Trouble shooting of the trans shifting issue. Tested the relay and found it was open. ordered New relay to be installed the following morning.</p> <p>12/13/17 Emp 2377 Removed belly pan and replaced the start relay. Secured engine wiring to prevent rubbing on the Ecm. installed the belly pan and tested the Operaiton. found no further problems. 12/26/17 The customer complained of the trans slamming in And out of gear. tested and found the 3748955 Harness was rubbed through in multiple places. Removed and replaced the harness and secured with New ties to prevent rubbing. tested the Operation and found no problems. installed all Gaurds and covers that were removed to gain Access to the harness. released the machine to The customer. Transmission slamming into to gear per customer Transmission slamming into to gear per customer</p>
Nov 22, 2017	Service	0	Troubleshoot Engine	<p>11/16/17 Emp 2377 The customer complained of the machine having a FAULT CODE OF DELAYED ENIGNE SHUTDOWN OVERRIDE. Arrived on site and filled out the required Safety paperwork. performed a walk around Inspection of the machine and the work area. Hooked up et and reviewed the codes/events. found Two occurances of the override. tested the Function of the engine and found no issues. Tested the key switch operation and found no Issues. checked the configuration of the machine And found the delay is set to 7 minutes. tested The operation of the shut down override warning. Found the system is working correctly. explained To the operator that if he turns the key to the Override position then the warning will be Logged. explained the function to the operator AND THE REASONS IT IS SET INTO PLACE. THE OPERATOR SAID HE WILL NOT OVERRIDE THE SYSTEM ANY More and he will pass it along to the operator of THE OTHER K MODEL SCRAPER ON SITE. Troubleshoot delayed engine shutdown override Troubleshoot delayed engine shutdown override Eid:1217</p>

Nov 22, 2017	Service	0	Travel To/from Work Area	
Nov 22, 2017	Service	0	Troubleshoot Engine	11/16/17 Emp 2377 The customer complained of the machine having a FAULT CODE OF DELAYED ENIGNE SHUTDOWN OVERRIDE. Arrived on site and filled out the required Safety paperwork. performed a walk around Inspection of the machine and the work area. Hooked up et and reviewed the codes/events. found Two occurances of the override. tested the Function of the engine and found no issues. Tested the key switch operation and found no Issues. checked the configuration of the machine And found the delay is set to 7 minutes. tested The operation of the shut down override warning. Found the system is working correctly. explained To the operator that if he turns the key to the Override position then the warning will be Logged. explained the function to the operator AND THE REASONS IT IS SET INTO PLACE. THE OPERATOR SAID HE WILL NOT OVERRIDE THE SYSTEM ANY More and he will pass it along to the operator of THE OTHER K MODEL SCRAPER ON SITE. Troubleshoot delayed engine shutdown override Troubleshoot delayed engine shutdown override Eid:1217
Nov 22, 2017	Service	0	Travel To/from Work Area	
Nov 20, 2017	Parts			
Nov 20, 2017	Service	3,534	Travel To/from Work Area	Repair process comments: Travel to and from riverbend
Nov 20, 2017	Service	3,534	Troubleshoot Braking System	11/3/17 Emp 2377 THE CUSTOMER COMPLAINED OF THE BRAKES OVERHEATING. RAN THE MACHINE FOR OVER TWO HOURS AND HAD NO Issues. 11/6/17 Emp 2377 THE CUSTOMER COMPLAINED OF THE REAR BRAKES Overheating. arrived on site and filled out the REQUIRED SAFETY PAPERWORK. PERFORMED A WALK Around inspection of the machine and the work Area. hooked up et and reviewed the CODES/EVENTS. FOUND 6 LOGGED EVENTS FOR THE REAR Brakes overheating. interviewed the operator and He stated that when going down hill and using the Retarder the brake temp code would come on. Cleared all events and codes. set up a data log To run for two hours. had the operator run the Machine. after two hours i found the rear brake Temp was only at 68 degrees f. the operator Stated that he was not going up and down the Hill. reviewed the data log and suggested to the Operator that he lock the trans in a lower gear When going down. T/s brake problems with machine T/s brake problems with machine

Nov 20, 2017	Service	3,534	Troubleshoot Push-pull Control Valve	<p>11/1/17 Emp 2377 The customer complained of the machine having a Hyd. leak. arrived on site and filled out the Required safety paperwork. performed a walk Around inspection of the machine and the work Area. inspected for the leak but due to oil Being all over the machine it was difficult to FIND. HAD TO START THE MACHINE AND RUN THE Implements. found the 432-8898 tube had broken At the fitting at the return block due to broken Clips. worked on fishing the tube out of the Machine. multiple hoses, tubes, brackets and Hardware had to be removed to get the tube free. Left the tube in the machine for reinstallation Purposes until the new tube came in.</p> <p>11/3/17 Emp 2377 The customer complained of a hyd. leak in the Cushion hitch area. removed all hoses, tubes, Brackets and belly pan to gain access to the tube That hyd. tube that cracked. removed the tube And replaced with new. reassembled the machine And installed new clamps and tightend loose Hardware from previous repair. tested the Operation and found no further issues. installed Belly pans.</p> <p>11/3/17 8111 Helped donnie remove tube from scraper. helped Install new tube in scraper. picked up parts at DROP BOX AND DELIVERED TO JOBSITE. T/s a blown hyd line on machine T/s a blown hyd line on machine</p>
Oct 30, 2017	Service	3,438	Travel To/from Work Area	<p>Repair process comments: - no travel at the shop</p> <p>Repair process comments: - no travel at shop</p>

				<p>10/9/17 The customer complained of the engine dying out Every round. arrived on site and filled out the REQUIRED SAFETY PAPERWORK. PERFORMED A WALK AROUND INSPECTION OF THE MACHINE AND THE WORK Area. hooked up et and reviewed the Codes/events. found the machine had logged 22 Events e369-3 engine stall condition. also found The front and rear engines both having active Event, e114 (1) aftertreatment #1 def dosing unit #1 input lines not purged. due to the cold Ambient temps the aftertreatment needed to be Tested. performed a aftertreatment functional Test on both engines taking over an hour and Half. removed and inspected the trans screen. Found no issues. performed a cylinder cut out Test on both engines. both passed with no Problems. performed a trans fill calibration. Checked the operation of the speed sensors and Found no issues at this time. the machine could Not be driven due to extremely muddy conditions. Checked the steering and hyd. system for too much LOAD ON THE ENGINE. ALL TESTS CAME BACK NORMAL. Contacted the customer and explained to him that We will need to data log the engine performance While in operation to try to find the cause of THE ENGINE DYING.</p> <p>10/12/17 Emp 2377 The customer complained of the machine dieing Every round. interviewed the operator to find Out more information. found the engine would Only die if the machine was warmed up and then it Was intermetent. had the operator run the Machine to have him try to replicate the problem. After approximitly and hour and a half the Operator returned and stated the machine did die One time. the operator also complained of a loud NOISE COMING FROM THE TRANSFER GEAR WHEN THE Machine shut down. had the operator shut down The machine and listend for abnormal noises. Once the engine shut down a very loud backlash of The gears was noticed. possibly from a pump BEING MISADJUSTED. HOOKED UP ET TO DATA LOG THE MACHINE OPERATION. HAD THE OPERATOR RUN THE Machine until the problem happened two times. AFTER AN HOUR THE FOREMAN SAID THE SCRAPER WAS Down and could not restart. drove to the cut of The job site and noticed the engine was running But a very loud grinding noise could be heard at The trans. removed the screen and inspected for Any materail. nothing abnormal was found. the Machine had no hyd. functions, or steering and The brake warning light was on. removed the Brake cooling pump and drive. had the operator Crank the engine over while i monitored the drive Shaft. found the drive shaft would not turn. Removed the drive shaft and inspected. found the Engine end had the splines smeared over. tried To inspect the drive with a flash light but it is Located too deep. the machine was parked in the Cut and the belly pans could not be removed. Contacted the customer and explained what had Happened and the machine would need to be Relocated to work on it. the customer requested That i stay with the machine until he could make It back to the job site to assist with the towing Of the machine if needed. waited for over two Hours for the</p>
Oct 30, 2017	Service	3,438	Troubleshoot Drive Shaft	

customer with the towing of the Machine. 10/13/17 - drop belly pan under transmission - remove drive shaft from transmission -- drive shaft spines are damaged - remove lines around drive coupler -- cap and plug lines - unbolt and remove drive coupler 10/16/17 - tear down coupler and inspect components - female end of the stub shaft in the coupler has Had the splines ripped out - remove shaft - press on new race for new shaft - install new bearing for stub shaft - install new seal for stub shaft - install coupler cover 10/17/17 - install housing on machine - install flywheel scavenge pump - align and install drive shaft - check end play of drive shaft - adjust drive shaft depth to correct depth - install gear and pump - connect fan and brake lines to valve 10/18/17 Emp 5508 - inspect machine for leaks - check machine fluids T/s engine dying out every round. reoccurring -- top off front engine and hydraulic oils using Customer fluids - start and warm machine - customer operated machine for several hours - machine will not duplicate engine stall Condition - check software versions -- all are current - at this time the machine is not doing the ORIGINAL COMPLAINT T/s engine dying out every round. reoccurring Issue, per customer. no prev wo found for this Issue.replace coupling

Oct 30, 2017	Service	3,438	Troubleshoot Drive Shaft	<p>10/9/17 The customer complained of the engine dying out Every round. arrived on site and filled out the REQUIRED SAFETY PAPERWORK. PERFORMED A WALK AROUND INSPECTION OF THE MACHINE AND THE WORK Area. hooked up et and reviewed the Codes/events. found the machine had logged 22 Events e369-3 engine stall condition. also found The front and rear engines both having active Event, e114 (1) aftertreatment #1 def dosing unit #1 input lines not purged. due to the cold Ambient temps the aftertreatment needed to be Tested. performed a aftertreatment functional Test on both engines taking over an hour and Half. removed and inspected the trans screen. Found no issues. performed a cylinder cut out Test on both engines. both passed with no Problems. performed a trans fill calibration. Checked the operation of the speed sensors and Found no issues at this time. the machine could Not be driven due to extremely muddy conditions. Checked the steering and hyd. system for too much LOAD ON THE ENGINE. ALL TESTS CAME BACK NORMAL. Contacted the customer and explained to him that We will need to data log the engine performance While in operation to try to find the cause of THE ENGINE DYING.</p> <p>10/12/17 Emp 2377 The customer complained of the machine dieing Every round. interviewed the operator to find Out more information. found the engine would Only die if the machine was warmed up and then it Was intermetent. had the operator run the Machine to have him try to replicate the problem. After approximitly and hour and a half the Operator returned and stated the machine did die One time. the operator also complained of a loud NOISE COMING FROM THE TRANSFER GEAR WHEN THE Machine shut down. had the operator shut down The machine and listend for abnormal noises. Once the engine shut down a very loud backlash of The gears was noticed. possibly from a pump BEING MISADJUSTED. HOOKED UP ET TO DATA LOG THE MACHINE OPERATION. HAD THE OPERATOR RUN THE Machine until the problem happened two times. AFTER AN HOUR THE FOREMAN SAID THE SCRAPER WAS Down and could not restart. drove to the cut of The job site and noticed the engine was running But a very loud grinding noise could be heard at The trans. removed the screen and inspected for Any materail. nothing abnormal was found. the Machine had no hyd. functions, or steering and The brake warning light was on. removed the Brake cooling pump and drive. had the operator Crank the engine over while i monitored the drive Shaft. found the drive shaft would not turn. Removed the drive shaft and inspected. found the Engine end had the splines smeared over. tried To inspect the drive with a flash light but it is Located too deep. the machine was parked in the Cut and the belly pans could not be removed. Contacted the customer and explained what had Happened and the machine would need to be Relocated to work on it. the customer requested That i stay with the machine until he could make It back to the job site to assist with the towing Of the machine if needed. waited for over two Hours for the</p>
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				customer with the towing of the Machine. 10/13/17 - drop belly pan under transmission - remove drive shaft from transmission -- drive shaft spines are damaged - remove lines around drive coupler -- cap and plug lines - unbolt and remove drive coupler 10/16/17 - tear down coupler and inspect components - female end of the stub shaft in the coupler has Had the splines ripped out - remove shaft - press on new race for new shaft - install new bearing for stub shaft - install new seal for stub shaft - install coupler cover 10/17/17 - install housing on machine - install flywheel scavenge pump - align and install drive shaft - check end play of drive shaft - adjust drive shaft depth to correct depth - install gear and pump - connect fan and brake lines to valve 10/18/17 Emp 5508 - inspect machine for leaks - check machine fluids T/s engine dying out every round. reoccurring -- top off front engine and hydraulic oils using Customer fluids - start and warm machine - customer operated machine for several hours - machine will not duplicate engine stall Condition - check software versions -- all are current - at this time the machine is not doing the ORIGINAL COMPLAINT T/s engine dying out every round. reoccurring Issue, per customer. no prev wo found for this Issue.replace coupling
Oct 30, 2017	Service	3,438	Travel To/from Work Area	Repair process comments: - no travel at the shop Repair process comments: - no travel at shop
Sep 25, 2017	Service	0	Travel To/from Work Area	
Sep 25, 2017	Service	0	Repair Technology Products	
Sep 25, 2017	Service	0	Travel To/from Work Area	
Sep 25, 2017	Service	0	Repair Technology Products	
Sep 17, 2017	Service	3,290	Travel To/from Work Area	

Sep 17, 2017	Service	3,290	Repair For Warranty Eng Electronic Cont Mod	<p>9/13/17 Emp 3915 T/s both engine for shutting down in the cut. the Engine dies out 4 to 5 times. Cause of failure: 5169686 software seems to be causing the front Engine to stall Resultant damage: Updated the front engine software to a 5441161 Repair process comments: WENT OUT TO THE MACHINE & PERFORMED ALL SAFETY Paperwork. talked to the operator and he And explained that both the front engine And the rear engine die while running the Machine at half throttle. was told that was just KNOCKING DOWN WIND ROWS & LOCKED INTO SECOND Gear with the trans lock. hooked up e/t & Downloaded a product status report. found 3 occ Of a e369 engine stall condition on the front ENGINE. THERE WAS SO CODES FRO THE REAR ENGINE Stalling. talked to the operator a little more & Asked if the rear engine really shuts down. was Told that it does. found out that the reason the Rear engine is shutting down is because has to CYCLE THE KEY SWITCH TO START THE FRONT ENGINE Again. when the key is cycled the rear engine Shuts down. checked flash files & found software Out of date. downloaded & installed the newest Flash file in all ecm. checked performance on the Front engine & found fuel pressure, boost all in Spec. ran machine & machine seems to be running Fine with no issues. had the operator run the Machine for 2 hours & was told the machine is Running a lot better. job complete. T/s machine dyes out 4 to 5 times a day, does T/s machine dyes out 4 to 5 times a day, does Restart, cust wants it checked out</p>
Sep 17, 2017	Service	3,290	Travel To/from Work Area	

Sep 17, 2017	Service	3,290	Repair For Warranty Eng Electronic Cont Mod	<p>9/13/17 Emp 3915 T/s both engine for shutting down in the cut. the Engine dies out 4 to 5 times. Cause of failure: 5169686 software seems to be causing the front Engine to stall Resultant damage: Updated the front engine software to a 5441161 Repair process comments: WENT OUT TO THE MACHINE & PERFORMED ALL SAFETY Paperwork. talked to the operator and he And explained that both the front engine And the rear engine die while running the Machine at half throttle. was told that was just KNOCKING DOWN WIND ROWS & LOCKED INTO SECOND Gear with the trans lock. hooked up e/t & Downloaded a product status report. found 3 occ Of a e369 engine stall condition on the front ENGINE. THERE WAS SO CODES FRO THE REAR ENGINE Stalling. talked to the operator a little more & Asked if the rear engine really shuts down. was Told that it does. found out that the reason the Rear engine is shutting down is because has to CYCLE THE KEY SWITCH TO START THE FRONT ENGINE Again. when the key is cycled the rear engine Shuts down. checked flash files & found software Out of date. downloaded & installed the newest Flash file in all ecm. checked performance on the Front engine & found fuel pressure, boost all in Spec. ran machine & machine seems to be running Fine with no issues. had the operator run the Machine for 2 hours & was told the machine is Running a lot better. job complete. T/s machine dyes out 4 to 5 times a day, does T/s machine dyes out 4 to 5 times a day, does Restart, cust wants it checked out</p>
Aug 28, 2017	Parts			
Aug 28, 2017	Parts			
May 10, 2017	Service	2,519	Travel To/from Work Area	
May 10, 2017	Service	2,519	Repair Engine	<p>Customer complaint: Engine stall and codes Cause of failure: Tracton control system was on Repair process comments: 5-10-17 - hook up et and check codes - no codes were active or logged that i belive Will cause a engine stall ie... low fuel pressure - down load product status report - anti tire spin is on, engine will defuel if it Sees wheel spin - turn off anti wheel spin - customer will put machine back in the dirt at This time Machine stalls 5-6 times a day Machine stalls 5-6 times a day</p>

May 10, 2017	Service	2,519	Repair Engine	Customer complaint: Engine stall and codes Cause of failure: Tracton control system was on Repair process comments: 5-10-17 - hook up et and check codes - no codes were active or logged that i belive Will cause a engine stall ie... low fuel pressure - down load product status report - anti tire spin is on, engine will defuel if it Sees wheel spin - turn off anti wheel spin - customer will put machine back in the dirt at This time Machine stalls 5-6 times a day Machine stalls 5-6 times a day
May 10, 2017	Service	2,519	Travel To/from Work Area	
May 05, 2017	Parts			
May 02, 2017	Service	2,309	Repair Transmission	Repair process comments: Resealed rear transmission yoke Reseal leaking yoke at rear transmission Warranty save all parts, sims required
May 02, 2017	Service	2,309	Repair Engine	Repair process comments: Measured and documented - deck height, pan Height, main bore size and counter bore depth. Inspected all bolt holes and gasket contact Surfaces, liner seats and deck surface. honed all Lifter bores. Repair process comments: Received rear scraper module to repair engine for Warranty. disassembled engine to determine if Engine could be repaired without removal from Module. found extent of damage too severe to be Repaired without removing engine. disassembled Module to remove engine. removed radiator, hyd Tank, all necessary lines and tubes and removed Engine from transmission. completely disassembled Engine. found large amount of actual dirt to have Entered engine through oil fill cap in valve Cover under cem module. dirt entry caused Extremely abrasive condition inside engine. Severe wear on valve stem ends, valve bridges, Rocker arm tips and pushrods caused enough Clearance to allow number two cylinder intake Pushrod to come out of rocker arm and lifter Causing number two to be dead hole. abrasive oil Also caused severe wear on several crankshaft Journals making crank not reusable. abrasive oil Also caused excessive wear to turbo shaft and Bearings, high pressure fuel pump, engine oil PUMP, PISTON RING GROOVES AND LINERS. REPLACED All affected parts only as necessary to repair Engine. dyno tested engine and reassembled module Replacing only necessary parts. Repair rear engine that has a bad miss and field Service t/s found filler cap under cem had Vibrated loose Warranty save all parts, sims required

May 02, 2017	Service	2,309	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: There is an exhaust leak on the rear engine of the Machine. Cause of failure: The engine oil filler cap on top of the valve Cover was loose and fell off. Resultant damage: The customer thought there was an exhaust leak on The rear engine. REPAIR PROCESS COMMENTS: 10/21/2016. I investigated the machine for a rear engine Exhaust leak. found what they're looked to be Exhaust soot all over the front top of the valve Cover. the soot extended up into the fan pulleys And front cover of the engine. there was quite a Thick buildup of soot. when inspecting the soot It had a bit of an oily content to it and Appeared to be rather unusual. started and ran THE REAR ENGINE LOOKING FOR THE EXHAUST LEAK. Couldn't pinpoint where the exhaust leak was Coming from but it had to be somewhere up in the Center of the clean emissions module. when i was Running the engine it didn't sound very good but Being there was an exhaust leak i didn't think Twice about it. the clean emissions module is Going to need to come off so i can figure out Where the exhaust leak was coming from. remove The hand railings, pre-cleaner, exhaust pipe, the Hood, and cross brace above the clean emissions Module. removed the exhaust, air piping, fuel Line, coolant lines, def. line, remove the four Mounting bolts one of them is extremely difficult To get to and removed the clean emissions module From the top of the engine. remove the mounting Plate for the clean emissions module that is just Above the valve cover. once i got down to the Valve cover i found that the oil fill cap that is On the valve cover was missing. in this Application the oil fill cap on the valve cover Is not used due to is it is not accessible Because the clean emissions module is mounted Over the top of it. there is another oil filler Tube coming from the front cover extending out The right side where engine oil was added. the Oil fill cap on the valve cover must have Vibrated loose fell off. so what looked to be an Exhaust leak that was generating a soot buildup Was actually an oil leak. the engine oil was Misting out of the valve cover and mixing with THE FINE DIRT AND DUST AROUND THE REAR ENGINE Causing what looked to be a thick sooty buildup Between the clean emissions module and the valve Cover. found missing oil cap lodged between the Fan hub and front cover of the engine. there's an Unknown amount of dirt that is entered the engine At this point the valve cover is going to need to Be removed so i can inspect for debris. the brace From across the valve cover. remove the coolant Hoses and turbo balance hose from over the top of The valve cover. unbolted and removed the valve Cover from the engine. found dirt and debris Pretty much isolated to the number one cylinder AND ENGINE BREAK. VACUUMED AND CLEANED AS MUCH OF The debris as i could from the top of the engine Break and around the valve train. power washed Valve cover and cap. installed valve cover back On the engine tighten the cap down as tight as i Could with pliers. reinstalled the brace, coolant Lines, balance valve line, clean emissions module Mounting plate, clean emissions module, hood, Exhaust pipe, pre-cleaner, and hand railing.</p>
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everything Looked okay so i started the rear engine. once The engine was running i monitored and hurt some Ticking noises that i didn't think was normal. so I just let the rear engine idle and warm up. After about ten minutes all at once there was a Pounding noise coming from the rear engine that Was certainly not normal. the engine seem to be Missing so i shut it down. removed the air Filters from the air filter housing and started The engine back up. there is a loud popping noise Coming out of the air cleaner housing. at this Point we've had a failure in the upper valve Train possibly a stuck bent valve. the engine Will need to come apart to be repaired. at this Point i don't think there's too much damage so i Tag the machine out so i can limit the amount of Damage done to the rear engine. Job complete. 10/26/2016 9476 JIM SCHRECK Troubleshoot rear engine in colorado springs Job # cs09503 was transferred to this job on 11-11

May 02, 2017	Service	2,309	Remove & Install Engine	REPAIR SPECIFICATION INCLUDES: -remove and install crankcase guards, hood, Muffler and air intake system -r&i of hardnose / radiator when applicable -removal of all lines and hoses, engine mounts -replace top and bottom radiator hoses -antifreeze -air filters (cat) -r&i of all hydraulic pumps as necessary Available as needed at additional cost: -fuel system repairs -A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER -hydraulic pump repairs -electrical repairs -radiator, engine/hydraulic oil cooler, after Cooler repairs -belts lines,etc -additional charge for belly pans that are welded ON, BOLT HOLE REPAIRS, STRAIGHTENING OF BELLY Pans - repairing or replacing missing lugs -sweeps r&i when applicable -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE Converter -ACCESSORIES -work performed outside of normal working hours -mileage and travel time -transportation of machine or component Repair process comments: R/i rear engine and sent to component shop for REBUILD. ENGINE OIL CAP WAS MISSING AND DIRT GOT In engine R&i rear engine for repair Warranty save all parts, sims required
May 02, 2017	Service	2,309	Remove & Install Engine	Remove engine for warranty repair. Installed engine, replaced air filters, installed All lines and hoses. Repair process comments: Remove engine from power pack for repair. install Engine into power pack, replace air filters Contaminated from damaged engine. replace ejector Hoses damaged from loose clips, from factory INSTALL. REMOVE ENGINE FROM POWER PACK.

May 02, 2017	Service	2,309	Repair For Warranty Differential Lock	Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required
May 02, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required
May 02, 2017	Service	2,309	Install Fasteners, Conn & Hardwr	Repair process comments: Replaced missing bolt in messenger display Install missing hardware for messenger display Mount
May 02, 2017	Service	2,309	Clean Machine	
May 02, 2017	Service	2,309	Repair Pull Hook/eye	Repair process comments: Repaired scraper hook that had bent plates Repair scraper hook that has bent plates
May 02, 2017	Service	2,309	Repair Transmission	Repair process comments: Resealed rear transmission yoke Reseal leaking yoke at rear transmission Warranty save all parts, sims required
May 02, 2017	Service	2,309	Check Cushion Hitch	Repair process comments: Checked cushion hitch precharge and found that it Was correct charge and cylinders were good Check cushion hitch precharge
May 02, 2017	Service	2,309	Perform Maintenance On Battery	Repair process comments: Cleaned dirt out of box and cleaned and tested Batterys on front and rear scraper Perform battery maintenance
May 02, 2017	Service	2,309	Test Ether Starting Aid	Repair process comments: Tested both engines for start aid operation and They are ok Test start aid operation on both engines

May 02, 2017	Service	2,309	Replace Owning & Operating Info	Repair process comments: Replaced safety and maintenance manual Replace torn operation and maintenance manual
May 02, 2017	Service	2,309	Recondition Bowl Lift Cylinder	Customer complaint: Leaking. Cause of failure: WIPER FAILED. Resultant damage: Wiper allowed contamination into seals and into Sensor. Repair process comments: Disassembled, cleaned and measured all parts. Buffed and polished rod to remove scores. flex Honed barrel to remove scratches. tested sensor No output, sensor needs replaced. reassembled With new seals and sensor. tested to 3000 psi Checking for leaks and drifting, none observed. Works good. sensor working normal. Right lift cylinder leaking
May 02, 2017	Service	2,309	Repair Bumper	REPAIR PROCESS COMMENTS: Repaired right front bumper that was smashed in Repair right front of bumper that is gouged and Needs replaced
May 02, 2017	Service	2,309	Repair Engine	Repair process comments: Measured and documented - deck height, pan Height, main bore size and counter bore depth. Inspected all bolt holes and gasket contact Surfaces, liner seats and deck surface. honed all Lifter bores. Repair process comments: Received rear scraper module to repair engine for Warranty. disassembled engine to determine if Engine could be repaired without removal from Module. found extent of damage too severe to be Repaired without removing engine. disassembled Module to remove engine. removed radiator, hyd Tank, all necessary lines and tubes and removed Engine from transmission. completely disassembled Engine. found large amount of actual dirt to have Entered engine through oil fill cap in valve Cover under cem module. dirt entry caused Extremely abrasive condition inside engine. Severe wear on valve stem ends, valve bridges, Rocker arm tips and pushrods caused enough Clearance to allow number two cylinder intake Pushrod to come out of rocker arm and lifter Causing number two to be dead hole. abrasive oil Also caused severe wear on several crankshaft Journals making crank not reusable. abrasive oil Also caused excessive wear to turbo shaft and Bearings, high pressure fuel pump, engine oil PUMP, PISTON RING GROOVES AND LINERS. REPLACED All affected parts only as necessary to repair Engine. dyno tested engine and reassembled module Replacing only necessary parts. Repair rear engine that has a bad miss and field Service t/s found filler cap under cem had Vibrated loose Warranty save all parts, sims required
May 02, 2017	Service	2,309	Repair Ejector Guide	Repair process comments: Straighten bent metal at front of ejector guide Rails both sides Straighten bent over material at front of ejector Guide rails on both sides

May 02, 2017	Service	2,309	Remove & Install Bowl Lift Cylinder	Repair specification include: -BLOCK SUPPORT AREAS FOR R&I -replace seals and gaskets as needed -top off hydraulics system Available as needed at additional cost: -salvage or replace other cylinder components (pins, bushings) -flush hydraulic system -custom hydraulic service inspection - mileage and travel time -work performed outside of normal working hours -transportation of machine or component Repair process comments: R/i right bowl lift cylinder for repair, sent to Hydraulic shop. R&i right lift cylinder for leaking
May 02, 2017	Service	2,309	Inspect Machine	

May 02, 2017	Service	2,309	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: There is an exhaust leak on the rear engine of the Machine. Cause of failure: The engine oil filler cap on top of the valve Cover was loose and fell off. Resultant damage: The customer thought there was an exhaust leak on The rear engine. REPAIR PROCESS COMMENTS: 10/21/2016. I investigated the machine for a rear engine Exhaust leak. found what they're looked to be Exhaust soot all over the front top of the valve Cover. the soot extended up into the fan pulleys And front cover of the engine. there was quite a Thick buildup of soot. when inspecting the soot It had a bit of an oily content to it and Appeared to be rather unusual. started and ran THE REAR ENGINE LOOKING FOR THE EXHAUST LEAK. Couldn't pinpoint where the exhaust leak was Coming from but it had to be somewhere up in the Center of the clean emissions module. when i was Running the engine it didn't sound very good but Being there was an exhaust leak i didn't think Twice about it. the clean emissions module is Going to need to come off so i can figure out Where the exhaust leak was coming from. remove The hand railings, pre-cleaner, exhaust pipe, the Hood, and cross brace above the clean emissions Module. removed the exhaust, air piping, fuel Line, coolant lines, def. line, remove the four Mounting bolts one of them is extremely difficult To get to and removed the clean emissions module From the top of the engine. remove the mounting Plate for the clean emissions module that is just Above the valve cover. once i got down to the Valve cover i found that the oil fill cap that is On the valve cover was missing. in this Application the oil fill cap on the valve cover Is not used due to is it is not accessible Because the clean emissions module is mounted Over the top of it. there is another oil filler Tube coming from the front cover extending out The right side where engine oil was added. the Oil fill cap on the valve cover must have Vibrated loose fell off. so what looked to be an Exhaust leak that was generating a soot buildup Was actually an oil leak. the engine oil was Misting out of the valve cover and mixing with THE FINE DIRT AND DUST AROUND THE REAR ENGINE Causing what looked to be a thick sooty buildup Between the clean emissions module and the valve Cover. found missing oil cap lodged between the Fan hub and front cover of the engine. there's an Unknown amount of dirt that is entered the engine At this point the valve cover is going to need to Be removed so i can inspect for debris. the brace From across the valve cover. remove the coolant Hoses and turbo balance hose from over the top of The valve cover. unbolted and removed the valve Cover from the engine. found dirt and debris Pretty much isolated to the number one cylinder AND ENGINE BREAK. VACUUMED AND CLEANED AS MUCH OF The debris as i could from the top of the engine Break and around the valve train. power washed Valve cover and cap. installed valve cover back On the engine tighten the cap down as tight as i Could with pliers. reinstalled the brace, coolant Lines, balance valve line, clean emissions module Mounting plate, clean emissions module, hood, Exhaust pipe, pre-cleaner, and hand railing.</p>
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May 02, 2017	Service	2,309	Lubricate Machine	Repair process comments: Checked all fluids and greased Check and lube all grease points
May 02, 2017	Service	2,309	Perform Maintenance On Electronic Mon Sys/panel	Repair process comments: T/s and cleared all service codes. downloaded psr And uploaded latest software T/s and clear all service codes. download psr and Upload latest software. has many logged codes.
May 02, 2017	Service	2,309	Replace Light(s)	Repair process comments: Repaired dome light that was falling out Replace dome light that is falling out of Headliner
May 02, 2017	Service	2,309	Perform Maintenance On Machine	Repair process comments: Checked levels and greased machine Check levels and grease machine
May 02, 2017	Service	2,309	Add Parts Bowl Lift Cylinder	Repair process comments: Quoted new sensor. Add parts for right lift cylinder
May 02, 2017	Service	2,309	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: Pressure tested cooling system and tightened Clamps. antifreeze is good for -40 degrees Perform cooling system maintenance
May 02, 2017	Service	2,309	Remove & Install Bottom Guard	Repair process comments: R/i bottom guards R&i bottom guards and advise on leaks to front Engine trans area

May 02, 2017	Service	2,309	Remove & Install Engine	REPAIR SPECIFICATION INCLUDES: -remove and install crankcase guards, hood, Muffler and air intake system -r&i of hardnose / radiator when applicable -removal of all lines and hoses, engine mounts -replace top and bottom radiator hoses -antifreeze -air filters (cat) -r&i of all hydraulic pumps as necessary Available as needed at additional cost: -fuel system repairs -A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER -hydraulic pump repairs -electrical repairs -radiator, engine/hydraulic oil cooler, after Cooler repairs -belts lines,etc -additional charge for belly pans that are welded ON, BOLT HOLE REPAIRS, STRAIGHTENING OF BELLY Pans -repairing or replacing missing lugs -sweeps r&i when applicable -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE Converter -ACCESSORIES -work performed outside of normal working hours -mileage and travel time -transportation of machine or component Repair process comments: R/i rear engine and sent to component shop for REBUILD. ENGINE OIL CAP WAS MISSING AND DIRT GOT In engine R&i rear engine for repair Warranty save all parts, sims required
May 02, 2017	Service	2,309	Remove & Install Engine	Remove engine for warranty repair. Installed engine, replaced air filters, installed All lines and hoses. Repair process comments: Remove engine from power pack for repair. install Engine into power pack, replace air filters Contaminated from damaged engine. replace ejector Hoses damaged from loose clips, from factory INSTALL. REMOVE ENGINE FROM POWER PACK.
May 02, 2017	Service	2,309	Replace Cutting Edge	Repair process comments: REPLACED CUTTING EDGES AND ROUTER WITH DROP CENTER Replace cutting edges and routers, drop center
May 02, 2017	Service	2,309	Straighten Ejector	Repair process comments: Straighten rolled edges on ejector Straighten rolled edges on ejector
May 02, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required
May 02, 2017	Service	2,309	Add Parts Differential Lock	Additional parts from seg 31 not covered by the Service letter.
May 02, 2017	Service	2,309	Check Air Conditioner	Repair process comments: Checked pressures for a/c and they were good a/c Works good-42 Check a/c operation

May 02, 2017	Service	2,309	Take & Analyze S-o-s From Machine	Repair process comments: Sampled all compartments Sample all compartments
May 02, 2017	Service	2,309	Furnish Miscellaneous Eng Parts	Furnish hoses and filters not included in Repair engine for warranty.
May 02, 2017	Service	2,309	Inspect Machine	Final inspect
May 02, 2017	Service	2,309	Remove & Install Decals	Repair process comments: Fastened key and removed decals, installed s/n Fasten key, remove customer decals and install #'s On windshield (monks decals)
May 02, 2017	Service	2,309	Repair Scraper Bowl	Repair process comments: Replaced missing safety pin for apron also cut Hole in guard that customer welded shut so i Could lock pin down Install missing apron safety pin # 8w2083
May 02, 2017	Service	2,309	Repair For Warranty Differential Lock	Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required

May 02, 2017	Service	2,309	Repair Engine	<p>Repair process comments: Measured and documented - deck height, pan Height, main bore size and counter bore depth. Inspected all bolt holes and gasket contact Surfaces, liner seats and deck surface. honed all Lifter bores. Repair process comments: Received rear scraper module to repair engine for Warranty. disassembled engine to determine if Engine could be repaired without removal from Module. found extent of damage too severe to be Repaired without removing engine. disassembled Module to remove engine. removed radiator, hyd Tank, all necessary lines and tubes and removed Engine from transmission. completely disassembled Engine. found large amount of actual dirt to have Entered engine through oil fill cap in valve Cover under cem module. dirt entry caused Extremely abrasive condition inside engine. Severe wear on valve stem ends, valve bridges, Rocker arm tips and pushrods caused enough Clearance to allow number two cylinder intake Pushrod to come out of rocker arm and lifter Causing number two to be dead hole. abrasive oil Also caused severe wear on several crankshaft Journals making crank not reusable. abrasive oil Also caused excessive wear to turbo shaft and Bearings, high pressure fuel pump, engine oil PUMP, PISTON RING GROOVES AND LINERS. REPLACED All affected parts only as necessary to repair Engine. dyno tested engine and reassembled module Replacing only necessary parts. Repair rear engine that has a bad miss and field Service t/s found filler cap under cem had Vibrated loose Warranty save all parts, sims required</p>
May 02, 2017	Service	2,309	Repair Transmission	<p>Repair process comments: Resealed rear transmission yoke Reseal leaking yoke at rear transmission Warranty save all parts, sims required</p>
May 02, 2017	Service	2,309	Remove & Install Engine	<p>Remove engine for warranty repair. Installed engine, replaced air filters, installed All lines and hoses. Repair process comments: Remove engine from power pack for repair. install Engine into power pack, replace air filters Contaminated from damaged engine. replace ejector Hoses damaged from loose clips, from factory INSTALL. REMOVE ENGINE FROM POWER PACK.</p>

May 02, 2017	Service	2,309	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: There is an exhaust leak on the rear engine of the Machine. Cause of failure: The engine oil filler cap on top of the valve Cover was loose and fell off. Resultant damage: The customer thought there was an exhaust leak on The rear engine. REPAIR PROCESS COMMENTS: 10/21/2016. I investigated the machine for a rear engine Exhaust leak. found what they're looked to be Exhaust soot all over the front top of the valve Cover. the soot extended up into the fan pulleys And front cover of the engine. there was quite a Thick buildup of soot. when inspecting the soot It had a bit of an oily content to it and Appeared to be rather unusual. started and ran THE REAR ENGINE LOOKING FOR THE EXHAUST LEAK. Couldn't pinpoint where the exhaust leak was Coming from but it had to be somewhere up in the Center of the clean emissions module. when i was Running the engine it didn't sound very good but Being there was an exhaust leak i didn't think Twice about it. the clean emissions module is Going to need to come off so i can figure out Where the exhaust leak was coming from. remove The hand railings, pre-cleaner, exhaust pipe, the Hood, and cross brace above the clean emissions Module. removed the exhaust, air piping, fuel Line, coolant lines, def. line, remove the four Mounting bolts one of them is extremely difficult To get to and removed the clean emissions module From the top of the engine. remove the mounting Plate for the clean emissions module that is just Above the valve cover. once i got down to the Valve cover i found that the oil fill cap that is On the valve cover was missing. in this Application the oil fill cap on the valve cover Is not used due to is it is not accessible Because the clean emissions module is mounted Over the top of it. there is another oil filler Tube coming from the front cover extending out The right side where engine oil was added. the Oil fill cap on the valve cover must have Vibrated loose fell off. so what looked to be an Exhaust leak that was generating a soot buildup Was actually an oil leak. the engine oil was Misting out of the valve cover and mixing with THE FINE DIRT AND DUST AROUND THE REAR ENGINE Causing what looked to be a thick sooty buildup Between the clean emissions module and the valve Cover. found missing oil cap lodged between the Fan hub and front cover of the engine. there's an Unknown amount of dirt that is entered the engine At this point the valve cover is going to need to Be removed so i can inspect for debris. the brace From across the valve cover. remove the coolant Hoses and turbo balance hose from over the top of The valve cover. unbolted and removed the valve Cover from the engine. found dirt and debris Pretty much isolated to the number one cylinder AND ENGINE BREAK. VACUUMED AND CLEANED AS MUCH OF The debris as i could from the top of the engine Break and around the valve train. power washed Valve cover and cap. installed valve cover back On the engine tighten the cap down as tight as i Could with pliers. reinstalled the brace, coolant Lines, balance valve line, clean emissions module Mounting plate, clean emissions module, hood, Exhaust pipe, pre-cleaner, and hand railing.</p>
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everything Looked okay so i started the rear engine. once The engine was running i monitored and hurt some Ticking noises that i didn't think was normal. so I just let the rear engine idle and warm up. After about ten minutes all at once there was a Pounding noise coming from the rear engine that Was certainly not normal. the engine seem to be Missing so i shut it down. removed the air Filters from the air filter housing and started The engine back up. there is a loud popping noise Coming out of the air cleaner housing. at this Point we've had a failure in the upper valve Train possibly a stuck bent valve. the engine Will need to come apart to be repaired. at this Point i don't think there's too much damage so i Tag the machine out so i can limit the amount of Damage done to the rear engine. Job complete. 10/26/2016 9476 JIM SCHRECK Troubleshoot rear engine in colorado springs Job # cs09503 was transferred to this job on 11-11

May 02, 2017 Service 2,309 Remove & Install Engine

REPAIR SPECIFICATION INCLUDES: -remove and install crankcase guards, hood, Muffler and air intake system -r&i of hardnose / radiator when applicable -removal of all lines and hoses, engine mounts -replace top and bottom radiator hoses -antifreeze -air filters (cat) -r&i of all hydraulic pumps as necessary Available as needed at additional cost: -fuel system repairs -A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER -hydraulic pump repairs -electrical repairs -radiator, engine/hydraulic oil cooler, after Cooler repairs -belts lines,etc -additional charge for belly pans that are welded ON, BOLT HOLE REPAIRS, STRAIGHTENING OF BELLY Pans -repairing or replacing missing lugs -sweeps r&i when applicable -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE Converter -ACCESSORIES -work performed outside of normal working hours -mileage and travel time -transportation of machine or component Repair process comments: R/i rear engine and sent to component shop for REBUILD. ENGINE OIL CAP WAS MISSING AND DIRT GOT In engine R&i rear engine for repair Warranty save all parts, sims required

May 02, 2017 Service 2,309 Repair For Warranty Differential Lock

Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required

May 02, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required
May 02, 2017	Service	2,309	Replace Light(s)	Repair process comments: Repaired dome light that was falling out Replace dome light that is falling out of Headliner
May 02, 2017	Service	2,309	Check Cushion Hitch	Repair process comments: Checked cushion hitch precharge and found that it Was correct charge and cylinders were good Check cushion hitch precharge
May 02, 2017	Service	2,309	Clean Machine	
May 02, 2017	Service	2,309	Add Parts Bowl Lift Cylinder	Repair process comments: Quoted new sensor. Add parts for right lift cylinder
May 02, 2017	Service	2,309	Remove & Install Bottom Guard	Repair process comments: R/i bottom guards R&i bottom guards and advise on leaks to front Engine trans area
May 02, 2017	Service	2,309	Remove & Install Engine	Remove engine for warranty repair. Installed engine, replaced air filters, installed All lines and hoses. Repair process comments: Remove engine from power pack for repair. install Engine into power pack, replace air filters Contaminated from damaged engine. replace ejector Hoses damaged from loose clips, from factory INSTALL. REMOVE ENGINE FROM POWER PACK.
May 02, 2017	Service	2,309	Repair Ejector Guide	Repair process comments: Straighten bent metal at front of ejector guide Rails both sides Straighten bent over material at front of ejector Guide rails on both sides

May 02, 2017	Service	2,309	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: There is an exhaust leak on the rear engine of the Machine. Cause of failure: The engine oil filler cap on top of the valve Cover was loose and fell off. Resultant damage: The customer thought there was an exhaust leak on The rear engine. REPAIR PROCESS COMMENTS: 10/21/2016. I investigated the machine for a rear engine Exhaust leak. found what they're looked to be Exhaust soot all over the front top of the valve Cover. the soot extended up into the fan pulleys And front cover of the engine. there was quite a Thick buildup of soot. when inspecting the soot It had a bit of an oily content to it and Appeared to be rather unusual. started and ran THE REAR ENGINE LOOKING FOR THE EXHAUST LEAK. Couldn't pinpoint where the exhaust leak was Coming from but it had to be somewhere up in the Center of the clean emissions module. when i was Running the engine it didn't sound very good but Being there was an exhaust leak i didn't think Twice about it. the clean emissions module is Going to need to come off so i can figure out Where the exhaust leak was coming from. remove The hand railings, pre-cleaner, exhaust pipe, the Hood, and cross brace above the clean emissions Module. removed the exhaust, air piping, fuel Line, coolant lines, def. line, remove the four Mounting bolts one of them is extremely difficult To get to and removed the clean emissions module From the top of the engine. remove the mounting Plate for the clean emissions module that is just Above the valve cover. once i got down to the Valve cover i found that the oil fill cap that is On the valve cover was missing. in this Application the oil fill cap on the valve cover Is not used due to is it is not accessible Because the clean emissions module is mounted Over the top of it. there is another oil filler Tube coming from the front cover extending out The right side where engine oil was added. the Oil fill cap on the valve cover must have Vibrated loose fell off. so what looked to be an Exhaust leak that was generating a soot buildup Was actually an oil leak. the engine oil was Misting out of the valve cover and mixing with THE FINE DIRT AND DUST AROUND THE REAR ENGINE Causing what looked to be a thick sooty buildup Between the clean emissions module and the valve Cover. found missing oil cap lodged between the Fan hub and front cover of the engine. there's an Unknown amount of dirt that is entered the engine At this point the valve cover is going to need to Be removed so i can inspect for debris. the brace From across the valve cover. remove the coolant Hoses and turbo balance hose from over the top of The valve cover. unbolted and removed the valve Cover from the engine. found dirt and debris Pretty much isolated to the number one cylinder AND ENGINE BREAK. VACUUMED AND CLEANED AS MUCH OF The debris as i could from the top of the engine Break and around the valve train. power washed Valve cover and cap. installed valve cover back On the engine tighten the cap down as tight as i Could with pliers. reinstalled the brace, coolant Lines, balance valve line, clean emissions module Mounting plate, clean emissions module, hood, Exhaust pipe, pre-cleaner, and hand railing.</p>
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everything Looked okay so i started the rear engine. once The engine was running i monitored and hurt some Ticking noises that i didn't think was normal. so I just let the rear engine idle and warm up. After about ten minutes all at once there was a Pounding noise coming from the rear engine that Was certainly not normal. the engine seem to be Missing so i shut it down. removed the air Filters from the air filter housing and started The engine back up. there is a loud popping noise Coming out of the air cleaner housing. at this Point we've had a failure in the upper valve Train possibly a stuck bent valve. the engine Will need to come apart to be repaired. at this Point i don't think there's too much damage so i Tag the machine out so i can limit the amount of Damage done to the rear engine. Job complete. 10/26/2016 9476 JIM SCHRECK Troubleshoot rear engine in colorado springs Job # cs09503 was transferred to this job on 11-11

May 02, 2017	Service	2,309	Lubricate Machine	Repair process comments: Checked all fluids and greased Check and lube all grease points
May 02, 2017	Service	2,309	Furnish Miscellaneous Eng Parts	Furnish hoses and filters not included in Repair engine for warranty.
May 02, 2017	Service	2,309	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: Pressure tested cooling system and tightened Clamps. antifreeze is good for -40 degrees Perform cooling system maintenance
May 02, 2017	Service	2,309	Inspect Machine	Final inspect
May 02, 2017	Service	2,309	Remove & Install Decals	Repair process comments: Fastened key and removed decals, installed s/n Fasten key, remove customer decals and install #'s On windshield (monks decals)
May 02, 2017	Service	2,309	Repair Scraper Bowl	Repair process comments: Replaced missing safety pin for apron also cut Hole in guard that customer welded shut so i Could lock pin down Install missing apron safety pin # 8w2083
May 02, 2017	Service	2,309	Replace Owning & Operating Info	Repair process comments: Replaced safety and maintenance manual Replace torn operation and maintenance manual
May 02, 2017	Service	2,309	Install Fasteners, Conn & Hardwr	Repair process comments: Replaced missing bolt in messenger display Install missing hardware for messenger display Mount
May 02, 2017	Service	2,309	Perform Maintenance On Machine	Repair process comments: Checked levels and greased machine Check levels and grease machine

May 02, 2017	Service	2,309	Perform Maintenance On Electronic Mon Sys/panel	Repair process comments: T/s and cleared all service codes. downloaded psr And uploaded latest software T/s and clear all service codes. download psr and Upload latest software. has many logged codes.
May 02, 2017	Service	2,309	Repair For Warranty Differential Lock	Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required
May 02, 2017	Service	2,309	Straighten Ejector	Repair process comments: Straighten rolled edges on ejector Straighten rolled edges on ejector
May 02, 2017	Service	2,309	Repair Pull Hook/eye	Repair process comments: Repaired scraper hook that had bent plates Repair scraper hook that has bent plates
May 02, 2017	Service	2,309	Repair Bumper	REPAIR PROCESS COMMENTS: Repaired right front bumper that was smashed in Repair right front of bumper that is gouged and Needs replaced
May 02, 2017	Service	2,309	Repair Transmission	Repair process comments: Resealed rear transmission yoke Reseal leaking yoke at rear transmission Warranty save all parts, sims required
May 02, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required

May 02, 2017	Service	2,309	Remove & Install Bowl Lift Cylinder	Repair specification include: -BLOCK SUPPORT AREAS FOR R&I -replace seals and gaskets as needed -top off hydraulics system Available as needed at additional cost: -salvage or replace other cylinder components (pins, bushings) -flush hydraulic system -custom hydraulic service inspection - mileage and travel time -work performed outside of normal working hours -transportation of machine or component Repair process comments: R/i right bowl lift cylinder for repair, sent to Hydraulic shop. R&i right lift cylinder for leaking
May 02, 2017	Service	2,309	Repair Engine	Repair process comments: Measured and documented - deck height, pan Height, main bore size and counter bore depth. Inspected all bolt holes and gasket contact Surfaces, liner seats and deck surface. honed all Lifter bores. Repair process comments: Received rear scraper module to repair engine for Warranty. disassembled engine to determine if Engine could be repaired without removal from Module. found extent of damage too severe to be Repaired without removing engine. disassembled Module to remove engine. removed radiator, hyd Tank, all necessary lines and tubes and removed Engine from transmission. completely disassembled Engine. found large amount of actual dirt to have Entered engine through oil fill cap in valve Cover under cem module. dirt entry caused Extremely abrasive condition inside engine. Severe wear on valve stem ends, valve bridges, Rocker arm tips and pushrods caused enough Clearance to allow number two cylinder intake Pushrod to come out of rocker arm and lifter Causing number two to be dead hole. abrasive oil Also caused severe wear on several crankshaft Journals making crank not reusable. abrasive oil Also caused excessive wear to turbo shaft and Bearings, high pressure fuel pump, engine oil PUMP, PISTON RING GROOVES AND LINERS. REPLACED All affected parts only as necessary to repair Engine. dyno tested engine and reassembled module Replacing only necessary parts. Repair rear engine that has a bad miss and field Service t/s found filler cap under cem had Vibrated loose Warranty save all parts, sims required
May 02, 2017	Service	2,309	Perform Maintenance On Battery	Repair process comments: Cleaned dirt out of box and cleaned and tested Batterys on front and rear scraper Perform battery maintenance
May 02, 2017	Service	2,309	Replace Cutting Edge	Repair process comments: REPLACED CUTTING EDGES AND ROUTER WITH DROP CENTER Replace cutting edges and routers, drop center
May 02, 2017	Service	2,309	Test Ether Starting Aid	Repair process comments: Tested both engines for start aid operation and They are ok Test start aid operation on both engines

May 02, 2017	Service	2,309	Add Parts Differential Lock	Additional parts from seg 31 not covered by the Service letter.
May 02, 2017	Service	2,309	Take & Analyze S-o-s From Machine	Repair process comments: Sampled all compartments Sample all compartments
May 02, 2017	Service	2,309	Inspect Machine	
May 02, 2017	Service	2,309	Recondition Bowl Lift Cylinder	Customer complaint: Leaking. Cause of failure: WIPER FAILED. Resultant damage: Wiper allowed contamination into seals and into Sensor. Repair process comments: Disassembled, cleaned and measured all parts. Buffed and polished rod to remove scores. flex Honed barrel to remove scratches. tested sensor No output, sensor needs replaced. reassembled With new seals and sensor. tested to 3000 psi Checking for leaks and drifting, none observed. Works good. sensor working normal. Right lift cylinder leaking
May 02, 2017	Service	2,309	Remove & Install Engine	REPAIR SPECIFICATION INCLUDES: -remove and install crankcase guards, hood, Muffler and air intake system -r&i of hardnose / radiator when applicable -removal of all lines and hoses, engine mounts -replace top and bottom radiator hoses -antifreeze -air filters (cat) -r&i of all hydraulic pumps as necessary Available as needed at additional cost: -fuel system repairs -A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER -hydraulic pump repairs -electrical repairs -radiator, engine/hydraulic oil cooler, after Cooler repairs -belts lines,etc -additional charge for belly pans that are welded ON, BOLT HOLE REPAIRS, STRAIGHTENING OF BELLY Pans -repairing or replacing missing lugs -sweeps r&i when applicable -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE Converter -ACCESSORIES -work performed outside of normal working hours -mileage and travel time -transportation of machine or component Repair process comments: R/i rear engine and sent to component shop for REBUILD. ENGINE OIL CAP WAS MISSING AND DIRT GOT In engine R&i rear engine for repair Warranty save all parts, sims required
May 02, 2017	Service	2,309	Check Air Conditioner	Repair process comments: Checked pressures for a/c and they were good a/c Works good-42 Check a/c operation

Apr 27, 2017	Service	2,369	Repair Engine	Customer complaint: Rear engine is shutting off Cause of failure: Outlet line on def tank popping off causing Emissions shutdown Repair process comments: 4-7-17 - check codes and had a rear engine def failure to Prime - inspect def tank and found leaks - removed covers to inspect and found outline had Popped off and would not pop on - ordered parts - let customer know that parts are in mor and will Not be in until monday 4-10-17 Customer complaint: Rear engine has shut down Cause of failure: Def line between ejector and def pump is leaking Repair process comments: Remove def line between def ejector and def tank. Install new def line. do def dosing verification Test thru et. do after treatment verification Test. do manual regen thru et. all tests are Good. reinstall covers for def tank. reinstall Rear radiator screen. Rear engine keeps dying Rear engine keeps dying
Apr 27, 2017	Service	2,369	Repair Engine	Customer complaint: Rear engine is shutting off Cause of failure: Outlet line on def tank popping off causing Emissions shutdown Repair process comments: 4-7-17 - check codes and had a rear engine def failure to Prime - inspect def tank and found leaks - removed covers to inspect and found outline had Popped off and would not pop on - ordered parts - let customer know that parts are in mor and will Not be in until monday 4-10-17 Customer complaint: Rear engine has shut down Cause of failure: Def line between ejector and def pump is leaking Repair process comments: Remove def line between def ejector and def tank. Install new def line. do def dosing verification Test thru et. do after treatment verification Test. do manual regen thru et. all tests are Good. reinstall covers for def tank. reinstall Rear radiator screen. Rear engine keeps dying Rear engine keeps dying
Apr 27, 2017	Service	2,369	Interview Customer About Machine	Repair process comments: Travel from windsor to johnstown 5 miles
Apr 27, 2017	Service	2,369	Repair Engine	Customer complaint: Rear engine is shutting off Cause of failure: Outlet line on def tank popping off causing Emissions shutdown Repair process comments: 4-7-17 - check codes and had a rear engine def failure to Prime - inspect def tank and found leaks - removed covers to inspect and found outline had Popped off and would not pop on - ordered parts - let customer know that parts are in mor and will Not be in until monday 4-10-17 Customer complaint: Rear engine has shut down Cause of failure: Def line between ejector and def pump is leaking Repair process comments: Remove def line between def ejector and def tank. Install new def line. do def dosing verification Test thru et. do after treatment verification Test. do manual regen thru et. all tests are Good. reinstall covers for def tank. reinstall Rear radiator screen. Rear engine keeps dying Rear engine keeps dying

Apr 27, 2017	Service	2,369	Repair Engine	Customer complaint: Rear engine is shutting off Cause of failure: Outlet line on def tank popping off causing Emissions shutdown Repair process comments: 4-7-17 - check codes and had a rear engine def failure to Prime - inspect def tank and found leaks - removed covers to inspect and found outline had Popped off and would not pop on - ordered parts - let customer know that parts are in mor and will Not be in until monday 4-10-17 Customer complaint: Rear engine has shut down Cause of failure: Def line between ejector and def pump is leaking Repair process comments: Remove def line between def ejector and def tank. Install new def line. do def dosing verification Test thru et. do after treatment verification Test. do manual regen thru et. all tests are Good. reinstall covers for def tank. reinstall Rear radiator screen. Rear engine keeps dying Rear engine keeps dying
Apr 27, 2017	Service	2,369	Interview Customer About Machine	Repair process comments: Travel from windsor to johnstown 5 miles
Apr 27, 2017	Service	2,369	Repair Engine	Customer complaint: Rear engine is shutting off Cause of failure: Outlet line on def tank popping off causing Emissions shutdown Repair process comments: 4-7-17 - check codes and had a rear engine def failure to Prime - inspect def tank and found leaks - removed covers to inspect and found outline had Popped off and would not pop on - ordered parts - let customer know that parts are in mor and will Not be in until monday 4-10-17 Customer complaint: Rear engine has shut down Cause of failure: Def line between ejector and def pump is leaking Repair process comments: Remove def line between def ejector and def tank. Install new def line. do def dosing verification Test thru et. do after treatment verification Test. do manual regen thru et. all tests are Good. reinstall covers for def tank. reinstall Rear radiator screen. Rear engine keeps dying Rear engine keeps dying
Apr 20, 2017	Service	2,415	Travel To/from Work Area	
Apr 20, 2017	Service	2,415	Repair Electric System	Customer complaint: Charging system is not working Cause of failure: 451-6661 belt Repair process comments: 4-18-17 - remove hood and inspect belt - belt is broken - inspect all pulleys and no issues found - install new belt - start machine and check operation - active code for air charge temp sensor - unbolt and move coolant shunt tank out of the Way - check wiring and green wire was broken off Connector - install new connector on both wires - check operation and no codes - zie tie wiring up correctly - BOLT UP SHUNT TANK - install hood - machine is ready for customer Charging system is down Charging system is down

Apr 20, 2017	Service	2,415	Repair Electric System	Customer complaint: Charging system is not working Cause of failure: 451-6661 belt Repair process comments: 4-18-17 - remove hood and inspect belt - belt is broken - inspect all pulleys and no issues found - install new belt - start machine and check operation - active code for air charge temp sensor - unbolt and move coolant shunt tank out of the Way - check wiring and green wire was broken off Connector - install new connector on both wires - check operation and no codes - zie tie wiring up correctly - BOLT UP SHUNT TANK - install hood - machine is ready for customer Charging system is down Charging system is down
Apr 20, 2017	Service	2,415	Travel To/from Work Area	
Apr 14, 2017	Parts			
Apr 12, 2017	Service	2,309	Repair For Warranty Differential Lock	Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Replace Cutting Edge	Repair process comments: REPLACED CUTTING EDGES AND ROUTER WITH DROP CENTER Replace cutting edges and routers, drop center
Apr 12, 2017	Service	2,309	Repair Scraper Bowl	Repair process comments: Replaced missing safety pin for apron also cut Hole in guard that customer welded shut so i Could lock pin down Install missing apron safety pin # 8w2083

Apr 12, 2017	Service	2,309	Recondition Bowl Lift Cylinder	Customer complaint: Leaking. Cause of failure: WIPER FAILED. Resultant damage: Wiper allowed contamination into seals and into Sensor. Repair process comments: Disassembled, cleaned and measured all parts. Buffed and polished rod to remove scores. flex Honed barrel to remove scratches. tested sensor No output, sensor needs replaced. reassembled With new seals and sensor. tested to 3000 psi Checking for leaks and drifting, none observed. Works good. sensor working normal. Right lift cylinder leaking
Apr 12, 2017	Service	2,309	Test Ether Starting Aid	Repair process comments: Tested both engines for start aid operation and They are ok Test start aid operation on both engines
Apr 12, 2017	Service	2,309	Check Air Conditioner	Repair process comments: Checked pressures for a/c and they were good a/c Works good-42 Check a/c operation
Apr 12, 2017	Service	2,309	Install Fasteners, Conn & Hardwr	Repair process comments: Replaced missing bolt in messenger display Install missing hardware for messenger display Mount
Apr 12, 2017	Service	2,309	Perform Maintenance On Electronic Mon Sys/panel	Repair process comments: T/s and cleared all service codes. downloaded psr And uploaded latest software T/s and clear all service codes. download psr and Upload latest software. has many logged codes.
Apr 12, 2017	Service	2,309	Add Parts Bowl Lift Cylinder	Repair process comments: Quoted new sensor. Add parts for right lift cylinder
Apr 12, 2017	Service	2,309	Remove & Install Engine	Remove engine for warranty repair. Installed engine, replaced air filters, installed All lines and hoses. Repair process comments: Remove engine from power pack for repair. install Engine into power pack, replace air filters Contaminated from damaged engine. replace ejector Hoses damaged from loose clips, from factory INSTALL. REMOVE ENGINE FROM POWER PACK.
Apr 12, 2017	Service	2,309	Repair Pull Hook/eye	Repair process comments: Repaired scraper hook that had bent plates Repair scraper hook that has bent plates
Apr 12, 2017	Service	2,309	Repair For Warranty Engine Software	Customer complaint: Perform service letter ps45056 for installing new Engine and after treatment software. Cause of failure: The existing software can exhibit a false trip -7 (CYLINDER # INJECTOR: NOT RESPONDING PROPERLY) And 499 (fuel rail #1 pressure leak) codes. Resultant damage: Before failure Repair process comments: Installed soft ware 4933331 and 4933332 according To service letter. Perform servie letter ps45056 dated 29 apr 2016 For installing new engine and aftertreatment Software Warranty save all parts, sims required

Apr 12, 2017	Service	2,309	Furnish Miscellaneous Eng Parts	Furnish hoses and filters not included in Repair engine for warranty.
Apr 12, 2017	Service	2,309	Inspect Machine	Final inspect
Apr 12, 2017	Service	2,309	Repair Transmission	Repair process comments: Resealed rear transmission yoke Reseal leaking yoke at rear transmission Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Straighten Ejector	Repair process comments: Straighten rolled edges on ejector Straighten rolled edges on ejector

Apr 12, 2017	Service	2,309	Troubleshoot Engine	<p>CUSTOMER COMPLAINT: There is an exhaust leak on the rear engine of the Machine. Cause of failure: The engine oil filler cap on top of the valve Cover was loose and fell off. Resultant damage: The customer thought there was an exhaust leak on The rear engine. REPAIR PROCESS COMMENTS: 10/21/2016. I investigated the machine for a rear engine Exhaust leak. found what they're looked to be Exhaust soot all over the front top of the valve Cover. the soot extended up into the fan pulleys And front cover of the engine. there was quite a Thick buildup of soot. when inspecting the soot It had a bit of an oily content to it and Appeared to be rather unusual. started and ran THE REAR ENGINE LOOKING FOR THE EXHAUST LEAK. Couldn't pinpoint where the exhaust leak was Coming from but it had to be somewhere up in the Center of the clean emissions module. when i was Running the engine it didn't sound very good but Being there was an exhaust leak i didn't think Twice about it. the clean emissions module is Going to need to come off so i can figure out Where the exhaust leak was coming from. remove The hand railings, pre-cleaner, exhaust pipe, the Hood, and cross brace above the clean emissions Module. removed the exhaust, air piping, fuel Line, coolant lines, def. line, remove the four Mounting bolts one of them is extremely difficult To get to and removed the clean emissions module From the top of the engine. remove the mounting Plate for the clean emissions module that is just Above the valve cover. once i got down to the Valve cover i found that the oil fill cap that is On the valve cover was missing. in this Application the oil fill cap on the valve cover Is not used due to is it is not accessible Because the clean emissions module is mounted Over the top of it. there is another oil filler Tube coming from the front cover extending out The right side where engine oil was added. the Oil fill cap on the valve cover must have Vibrated loose fell off. so what looked to be an Exhaust leak that was generating a soot buildup Was actually an oil leak. the engine oil was Misting out of the valve cover and mixing with THE FINE DIRT AND DUST AROUND THE REAR ENGINE Causing what looked to be a thick sooty buildup Between the clean emissions module and the valve Cover. found missing oil cap lodged between the Fan hub and front cover of the engine. there's an Unknown amount of dirt that is entered the engine At this point the valve cover is going to need to Be removed so i can inspect for debris. the brace From across the valve cover. remove the coolant Hoses and turbo balance hose from over the top of The valve cover. unbolted and removed the valve Cover from the engine. found dirt and debris Pretty much isolated to the number one cylinder AND ENGINE BREAK. VACUUMED AND CLEANED AS MUCH OF The debris as i could from the top of the engine Break and around the valve train. power washed Valve cover and cap. installed valve cover back On the engine tighten the cap down as tight as i Could with pliers. reinstalled the brace, coolant Lines, balance valve line, clean emissions module Mounting plate, clean emissions module, hood, Exhaust pipe, pre-cleaner, and hand railing.</p>
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				<p>everything Looked okay so i started the rear engine. once The engine was running i monitored and hurt some Ticking noises that i didn't think was normal. so I just let the rear engine idle and warm up. After about ten minutes all at once there was a Pounding noise coming from the rear engine that Was certainly not normal. the engine seem to be Missing so i shut it down. removed the air Filters from the air filter housing and started The engine back up. there is a loud popping noise Coming out of the air cleaner housing. at this Point we've had a failure in the upper valve Train possibly a stuck bent valve. the engine Will need to come apart to be repaired. at this Point i don't think there's too much damage so i Tag the machine out so i can limit the amount of Damage done to the rear engine. Job complete. 10/26/2016 9476 JIM SCHRECK Troubleshoot rear engine in colorado springs Job # cs09503 was transferred to this job on 11-11</p>
Apr 12, 2017	Service	2,309	Lubricate Machine	Repair process comments: Checked all fluids and greased Check and lube all grease points
Apr 12, 2017	Service	2,309	Replace Owning & Operating Info	Repair process comments: Replaced safety and maintenance manual Replace torn operation and maintenance manual
Apr 12, 2017	Service	2,309	Repair Bumper	REPAIR PROCESS COMMENTS: Repaired right front bumper that was smashed in Repair right front of bumper that is gouged and Needs replaced
Apr 12, 2017	Service	2,309	Perform Maintenance On Machine	Repair process comments: Checked levels and greased machine Check levels and grease machine
Apr 12, 2017	Service	2,309	Remove & Install Bowl Lift Cylinder	<p>Repair specification include: -BLOCK SUPPORT AREAS FOR R&I -replace seals and gaskets as needed -top off hydraulics system Available as needed at additional cost: -salvage or replace other cylinder components (pins, bushings) -flush hydraulic system -custom hydraulic service inspection - mileage and travel time -work performed outside of normal working hours -transportation of machine or component</p> <p>Repair process comments: R/i right bowl lift cylinder for repair, sent to Hydraulic shop. R&i right lift cylinder for leaking</p>
Apr 12, 2017	Service	2,309	Perform Maintenance On Engine Cooling System	REPAIR PROCESS COMMENTS: Pressure tested cooling system and tightened Clamps. antifreeze is good for -40 degrees Perform cooling system maintenance

Apr 12, 2017	Service	2,309	Remove & Install Engine	REPAIR SPECIFICATION INCLUDES: -remove and install crankcase guards, hood, Muffler and air intake system -r&i of hardnose / radiator when applicable -removal of all lines and hoses, engine mounts -replace top and bottom radiator hoses -antifreeze -air filters (cat) -r&i of all hydraulic pumps as necessary Available as needed at additional cost: -fuel system repairs -A/C EVACUATION/REPAIRS TO COMPRESSOR AND DRYER -hydraulic pump repairs -electrical repairs -radiator, engine/hydraulic oil cooler, after Cooler repairs -belts lines,etc -additional charge for belly pans that are welded ON, BOLT HOLE REPAIRS, STRAIGHTENING OF BELLY Pans -repairing or replacing missing lugs -sweeps r&i when applicable -CLEAN MACHINE -SEPARATE AND CONNECT TRANSMISSION AND TORQUE Converter -ACCESSORIES -work performed outside of normal working hours -mileage and travel time -transportation of machine or component Repair process comments: R/i rear engine and sent to component shop for REBUILD. ENGINE OIL CAP WAS MISSING AND DIRT GOT In engine R&i rear engine for repair Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Perform Maintenance On Battery	Repair process comments: Cleaned dirt out of box and cleaned and tested Batterys on front and rear scraper Perform battery maintenance
Apr 12, 2017	Service	2,309	Clean Machine	
Apr 12, 2017	Service	2,309	Remove & Install Bottom Guard	Repair process comments: R/i bottom guards R&i bottom guards and advise on leaks to front Engine trans area
Apr 12, 2017	Service	2,309	Remove & Install Decals	Repair process comments: Fastened key and removed decals, installed s/n Fasten key, remove customer decals and install #'s On windshield (monks decals)
Apr 12, 2017	Service	2,309	Check Cushion Hitch	Repair process comments: Checked cushion hitch precharge and found that it Was correct charge and cylinders were good Check cushion hitch precharge

Apr 12, 2017	Service	2,309	Repair Engine	Repair process comments: Measured and documented - deck height, pan Height, main bore size and counter bore depth. Inspected all bolt holes and gasket contact Surfaces, liner seats and deck surface. honed all Lifter bores. Repair process comments: Received rear scraper module to repair engine for Warranty. disassembled engine to determine if Engine could be repaired without removal from Module. found extent of damage too severe to be Repaired without removing engine. disassembled Module to remove engine. removed radiator, hyd Tank, all necessary lines and tubes and removed Engine from transmission. completely disassembled Engine. found large amount of actual dirt to have Entered engine through oil fill cap in valve Cover under cem module. dirt entry caused Extremely abrasive condition inside engine. Severe wear on valve stem ends, valve bridges, Rocker arm tips and pushrods caused enough Clearance to allow number two cylinder intake Pushrod to come out of rocker arm and lifter Causing number two to be dead hole. abrasive oil Also caused severe wear on several crankshaft Journals making crank not reusable. abrasive oil Also caused excessive wear to turbo shaft and Bearings, high pressure fuel pump, engine oil PUMP, PISTON RING GROOVES AND LINERS. REPLACED All affected parts only as necessary to repair Engine. dyno tested engine and reassembled module Replacing only necessary parts. Repair rear engine that has a bad miss and field Service t/s found filler cap under cem had Vibrated loose Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Add Parts Differential Lock	Additional parts from seg 31 not covered by the Service letter.
Apr 12, 2017	Service	2,309	Repair For Warranty Differential Lock	Customer complaint: Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Cause of failure: The differential locks are failing at low hours. DEBRIS GENERATED DURING CLUTCH ENGAGEMENT CAN BE Trapped inside the piston and damage the piston And seals causing the hydraulic oil to mix with Differential oil. the resultant differential lock Debris can also cause wheel speed sensor housing Wear. Repair process comments: Performed service letter ps45337 after failure and Speed sensor according to m0075476 and m0065480 Special instructions. Perform service letter ps45337 dated 20 dec 2016 For reworking the differential lock system Warranty save all parts, sims required
Apr 12, 2017	Service	2,309	Take & Analyze S-o-s From Machine	Repair process comments: Sampled all compartments Sample all compartments
Apr 12, 2017	Service	2,309	Replace Light(s)	Repair process comments: Repaired dome light that was falling out Replace dome light that is falling out of Headliner

Apr 12, 2017	Service	2,309	Repair Ejector Guide	Repair process comments: Straighten bent metal at front of ejector guide Rails both sides Straighten bent over material at front of ejector Guide rails on both sides
Apr 12, 2017	Service	2,309	Inspect Machine	
Mar 30, 2017	Service	0	Fill With Fuel Used Machine	
Mar 30, 2017	Service	0	Load/unload Machine	
Mar 30, 2017	Service	0	Fill With Fuel Used Machine	
Feb 12, 2017	Service			**missing demo equipment
Feb 12, 2017	Service			**missing demo equipment
Dec 27, 2016	Service			
Dec 16, 2016	Service			
Dec 09, 2016	Service			
Dec 09, 2016	Service			
Nov 22, 2016	Service	2,269	Repair For Warranty Implement Controls	Customer complaint: There is hose on hitch it is beginning to leak Hydraulic oil. Cause of failure: The hose is beginning to fail. Resultant damage: THERE IS A HYDRAULIC OIL LEAKING. Repair process comments: 10/14/2016. The operator had been noticing that there seem to Be a hydraulic hose in hitch area that was Beginning to leak hydraulic oil. i inspected for The leak found hose part number 4413488 on the Right side of the hitch was beginning to leak HYDRAULIC OIL. THERE WAS VISIBLE CRACKING ON THE Outside layer of rubber in the center of the hose And that appeared to be where the hydraulic oil Was beginning to seep through the hose. it looks Like it had been leaking for a while and is Beginning to get worse. the hose was going to FAIL SO IT NEEDS TO BE REPLACED. ORDERED A NEW Hose. 10/15/2016. INSTALLED TOOLING ONTO HYDRAULIC TANK TO PULL A Vacuum due to the hydraulic hose that need to be Replaced was a return hose and would have leaked Lots of hydraulic fluid. remove the old hose from The machine installed new o-rings on the fittings AND INSTALLED THE NEW HOSE. REMOVE THE TOOLING From the hydraulic tank ran the machine and check For leaks everything with good. JOB COMPLETE. 10/17/2016 9476 Jim schreck Repair for hyd leak

Nov 22, 2016	Service	2,269	Repair For Warranty Implement Controls	Customer complaint: There is hose on hitch it is beginning to leak Hydraulic oil. Cause of failure: The hose is beginning to fail. Resultant damage: THERE IS A HYDRAULIC OIL LEAKING. Repair process comments: 10/14/2016. The operator had been noticing that there seem to Be a hydraulic hose in hitch area that was Beginning to leak hydraulic oil. i inspected for The leak found hose part number 4413488 on the Right side of the hitch was beginning to leak HYDRAULIC OIL. THERE WAS VISIBLE CRACKING ON THE Outside layer of rubber in the center of the hose And that appeared to be where the hydraulic oil Was beginning to seep through the hose. it looks Like it had been leaking for a while and is Beginning to get worse. the hose was going to FAIL SO IT NEEDS TO BE REPLACED. ORDERED A NEW Hose. 10/15/2016. INSTALLED TOOLING ONTO HYDRAULIC TANK TO PULL A Vacuum due to the hydraulic hose that need to be Replaced was a return hose and would have leaked Lots of hydraulic fluid. remove the old hose from The machine installed new o-rings on the fittings AND INSTALLED THE NEW HOSE. REMOVE THE TOOLING From the hydraulic tank ran the machine and check For leaks everything with good. JOB COMPLETE. 10/17/2016 9476 Jim schreck Repair for hyd leak
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Nov 04, 2016 Service

Nov 03, 2016

Service

1,908

Replace Wiring Harness

REPAIR PROCESS COMMENTS: 8/18/2016. This was a factory request from the scraper group AT CATERPILLAR. I SPOKE WITH NATE LENTZ HE SAID That the scraper group wanted us to install a fan Bypass switch in the cab of the machine so the Operator could toggle the switch and turn the Engine cooling fan on to maximum rpm. a super Comm ii had been installed on the machine Previously, caterpillar had been collecting all The data to address our front brake/transmission Temperature event codes. the scraper group at Caterpillar wanted to see how the temperatures of The transmission would react to the engine fan Turning faster. i ordered on implement lockout Switch and several connectors to build the bypass Harness. removed one of the blank switch inserts In the instrument panel and installed the Implement lockout switch. i made a label and Stuck it on top of the implement lockout symbol So the operator would no which switch to toggle. MADE WIRING HARNESS AND RAN IT THROUGH THE Bulkhead connector plug on the side of the cab. Removed the belly pan on the machine to gain Access to the fan solenoid. unplugged the fan Solenoid and installed my bypass harness. Reinstall the belly pan. ran the machine and Checked the operation of the fan bypass switch. The switch was working correctly but i was Monitoring the fan rpm and found it Higher-than-expected. the engineering group was Expecting about 1600 rpm out of the fan and it Was turning 2050 rpm. i called nate lentz and we Talked about the rpm and decided we needed to get It down as close to 1600 as we could. i adjusted The fan and brake flow compensator and was able To get the fan speed down to 1750 rpm. i trained The operator on how caterpillar wanted us to use The fan bypass switch. Job complete. 9/12/2016 9476 Jim schreck Custom make a wirearness to by pass fan per NATE LENTS

Nov 03, 2016	Service	1,908	Replace Wiring Harness	<p>REPAIR PROCESS COMMENTS: 8/18/2016. This was a factory request from the scraper group AT CATERPILLAR. I SPOKE WITH NATE LENTZ HE SAID That the scraper group wanted us to install a fan Bypass switch in the cab of the machine so the Operator could toggle the switch and turn the Engine cooling fan on to maximum rpm. a super Comm ii had been installed on the machine Previously, caterpillar had been collecting all The data to address our front brake/transmission Temperature event codes. the scraper group at Caterpillar wanted to see how the temperatures of The transmission would react to the engine fan Turning faster. i ordered on implement lockout Switch and several connectors to build the bypass Harness. removed one of the blank switch inserts In the instrument panel and installed the Implement lockout switch. i made a label and Stuck it on top of the implement lockout symbol So the operator would no which switch to toggle. MADE WIRING HARNESS AND RAN IT THROUGH THE Bulkhead connector plug on the side of the cab. Removed the belly pan on the machine to gain Access to the fan solenoid. unplugged the fan Solenoid and installed my bypass harness. Reinstall the belly pan. ran the machine and Checked the operation of the fan bypass switch. The switch was working correctly but i was Monitoring the fan rpm and found it Higher-than-expected. the engineering group was Expecting about 1600 rpm out of the fan and it Was turning 2050 rpm. i called nate lentz and we Talked about the rpm and decided we needed to get It down as close to 1600 as we could. i adjusted The fan and brake flow compensator and was able To get the fan speed down to 1750 rpm. i trained The operator on how caterpillar wanted us to use The fan bypass switch. Job complete. 9/12/2016 9476 Jim schreck Custom make a wirearness to by pass fan per NATE LENTS</p>
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Oct 27, 2016	Service	2,275	Perform 250 Svc Hour Maint (pm1)	<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter -obtain scheduled oil samples - the results of These will be sent to you upon completion -clean air intake pre-cleaner -lubricate all grease fittings -drain water separator -check coolant condition and add inhibitor if Necessary -check all fluid levels -perform visual operational inspection -adjust oscillating hitch (when applicable) -check track adjustment (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking of Rollers (when applicable)</p> <p>*****</p> <p>Perform pm1</p>
Oct 27, 2016	Service	2,275	Add Parts 250 Svc Hour Maint (pm1)	Replace fuel filters at each 250 hour service
Oct 11, 2016	Service	1,549	Troubleshoot Brake Accumulator	<p>Customer complaint: The machine has low brake accumulator pressure Events happening. Cause of failure: The break accumulators have a low nitrogen Charge. RESULTANT DAMAGE: Low brake accumulator pressure events are Occurring. Repair process comments: 6/28/2016. The operator said that the machine is having low Brake accumulator pressure events. each day low Brake accumulator pressure events seem to happen MORE FREQUENTLY. I TROUBLESHOT THE MACHINE FOUND Event code e284 low brake accumulator pressure FAULT WAS HAPPENING A LOT. PERFORM THE BRAKE Accumulator test and found i could only get five BRAKE APPLICATIONS BEFORE THE LOW-PRESSURE ALARM Would come on. this indicates a low nitrogen Charge in the break accumulators. hooked up the Nitrogen charge kit to the break accumulators and Check the pressure's. the break accumulators are Supposed to have a nitrogen charge of 725 psi. One brake accumulator had 450 psi the other brake ACCUMULATOR HAD 330 PSI. THE BREAK ACCUMULATORS Appear to be leaking the nitrogen charge. i Recharged the break accumulators with nitrogen to 725 psi. check the service valves for leaks Didn't find any. return the machine to the Customer and will monitor the machine for low Brake accumulator codes to see if the nitrogen Charge leaks off-again. 7/19/2016. After several weeks the machine is beginning to Set low brake accumulator event codes again. the Break accumulators must be leaking the nitrogen Charge past the piston seals. the break Accumulators will need to be replaced. T/s brake accumulator, low psi faults.</p>

Oct 11, 2016	Service	1,549	Repair Brake Accumulator	<p>Customer complaint: The machine has low brake accumulator pressure Events happening. Cause of failure: The break accumulators have a low nitrogen Charge. Resultant damage: Low brake accumulator pressure events are Occurring. Repair process comments: 8/15/2016. Received the new accumulators that were ordered on 6/28/2016. PERFORM THE PROCEDURE ON DISCHARGING The break accumulators. remove the right hand Latter and side panel to gain access to the Bottom side of the accumulators. remove the Bottom accumulator cover and disconnected the Hydraulic lines. remove the fittings in the Bottom of the accumulators and removed the lower MOUNTING BOLTS ON THE ACCUMULATORS. REMOVE THE Upper clamp on the top side of the break Accumulators. remove the accumulators from the Machine. remove the new accumulators from the Crates that they had been shipped in. installed Plugs in the old accumulators and installed them In the original crates for warranty purposes. Installed the new break accumulators in the Machine. install the lower fittings on the break Accumulators and hooked up the hydraulic lines. Reinstalled the lower cover on the break Accumulators. charge the break accumulators with Nitrogen to the specification 725 psi. Reinstalled the right side panel and ladder GROUP. RAN THE MACHINE AND CHECK FOR LEAKS. Everything looked good so i return the machine to Service. Job complete. 8/16/2016 9476 Jim schreck Repair brake accumultor.</p>
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Oct 02, 2016	Service	1,584	Repair Machine	<p>Customer complaint: Factory requested that to super comm's. be Installed onto machines. Repair process comments: 7/6/2016. The factory requested that super comm's be Installed on two 627k's. serial number's WTC00171, WTC00210. INSTALL THE SUPER COMM'S ON Both machines with nate lentz. verified both Super comm units were powering on and Communicating. secure all the hardware to the Machine. 7/6/2016 9476 Jim schreck Help cat install super com</p>
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Oct 02, 2016	Service	1,584	Repair Machine	<p>Customer complaint: Factory requested that to super comm's. be Installed onto machines. Repair process comments: 7/6/2016. The factory requested that super comm's be Installed on two 627k's. serial number's WTC00171, WTC00210. INSTALL THE SUPER COMM'S ON Both machines with nate lentz. verified both Super comm units were powering on and Communicating. secure all the hardware to the Machine. 7/6/2016 9476 Jim schreck Help cat install super com</p>
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Sep 26, 2016	Service	1,584	Repair Machine	Customer complaint: Factory requested that to super comm's. be Installed onto machines. Repair process comments: 7/6/2016. The factory requested that super comm's be Installed on two 627k's. serial number's WTC00171, WTC00210. INSTALL THE SUPER COMM'S ON Both machines with nate lentz. verified both Super comm units were powering on and Communicating. secure all the hardware to the Machine. 7/6/2016 9476 Jim schreck Help cat install super com
Sep 26, 2016	Service	1,584	Travel To/from Field Service	Machine is at sterling ranch
Sep 26, 2016	Service	1,584	Repair Machine	Customer complaint: Factory requested that to super comm's. be Installed onto machines. Repair process comments: 7/6/2016. The factory requested that super comm's be Installed on two 627k's. serial number's WTC00171, WTC00210. INSTALL THE SUPER COMM'S ON Both machines with nate lentz. verified both Super comm units were powering on and Communicating. secure all the hardware to the Machine. 7/6/2016 9476 Jim schreck Help cat install super com
Sep 26, 2016	Service	1,584	Travel To/from Field Service	Machine is at sterling ranch
Sep 21, 2016	Service	1,571	Repair For Warranty Wheel Spindle	Customer complaint: The factory requested that we check the bolt Torque for the rear wheel retainers. bolt part Number 1187313. REPAIR PROCESS COMMENTS: 7/1/2016. The factory requested that the bolt torque for the Rear wheel retainers be checked, bolt part number 1187313. i blocked the rear wheels up on the Machine so i could rotate the wheels to get the Drain plugs oriented down so i could drain the Final drive oil. drained the final drive oil and Removed the axel covers from the final drives. Remove the axles and visually inspected the bolts And washers for looseness. the bolts appeared to Be tied and there were white marks across the Head of the bolts like the torque and been CHECKED. CHECK THE TORQUE ON THE BOLTS ONE AT A Time as i turned the final drive around to gain Access to each one of the bolts. the bolts were All at the specified torque 207+ or - 20 Foot-pounds. reinstalled the axles and the axel Covers back on the machine. fill the final drives Up with 80/90 weight gear oil. check the rear Axle oil level and top it off. ran the machine And checked for leaks everything looked good so i Return the machine to the customer. 7/20/2016 9476 Jim schreck Check torque on rear spindle bolts.

Sep 21, 2016	Service	1,571	Repair For Warranty Wheel Spindle	<p>Customer complaint: The factory requested that we check the bolt Torque for the rear wheel retainers. bolt part Number 1187313. REPAIR PROCESS COMMENTS: 7/1/2016. The factory requested that the bolt torque for the Rear wheel retainers be checked, bolt part number 1187313. i blocked the rear wheels up on the Machine so i could rotate the wheels to get the Drain plugs oriented down so i could drain the Final drive oil. drained the final drive oil and Removed the axel covers from the final drives. Remove the axles and visually inspected the bolts And washers for looseness. the bolts appeared to Be tied and there were white marks across the Head of the bolts like the torque and been CHECKED. CHECK THE TORQUE ON THE BOLTS ONE AT A Time as i turned the final drive around to gain Access to each one of the bolts. the bolts were All at the specified torque 207+ or - 20 Foot-pounds. reinstalled the axles and the axel Covers back on the machine. fill the final drives Up with 80/90 weight gear oil. check the rear Axle oil level and top it off. ran the machine And checked for leaks everything looked good so i Return the machine to the customer. 7/20/2016 9476 Jim schreck Check torque on rear spindle bolts.</p>
Sep 21, 2016	Service	1,623	Repair Radiator	<p>Customer complaint: The coolant samples are coming back bad on the Front engine of the machine. Cause of failure: There was a small coolant leak. Resultant damage: The coolant samples were coming back from the lab Bad. Repair process comments: 7/11/2016. THE CUSTOMER INFORMED ME THAT THE COOLANT SAMPLES Had been coming back bad on the front engine of THE MACHINE. I HAD THE CUSTOMER GET ME THE SAMPLE Reports. the last two samples that had been Pulled on the machine had been bad. the first bad Sample recommended adding elc conditioner to the Coolant and resampling. the second bad sample Recommended draining a quarter of the coolant From the cooling system and adding fresh elc Coolant to the machine. the coolant on the Machine really needs to be replaced. i ordered New coolant for the machine. had to remove the Belly pan from the machine to gain access to the Coolant drain do to there is no access panel. Drained the coolant from the machine. refilled The cooling system with fresh elc coolant, ran The machine. check the coolant level, topped it Off as needed, return the machine to the Customer. 7/25/2016 9476 Jim schreck Repair coolant leak. and coolant sample is showing Bad</p>

Sep 21, 2016	Service	1,623	Repair Radiator	<p>Customer complaint: The coolant samples are coming back bad on the Front engine of the machine. Cause of failure: There was a small coolant leak. Resultant damage: The coolant samples were coming back from the lab Bad. Repair process comments: 7/11/2016. THE CUSTOMER INFORMED ME THAT THE COOLANT SAMPLES Had been coming back bad on the front engine of THE MACHINE. I HAD THE CUSTOMER GET ME THE SAMPLE Reports. the last two samples that had been Pulled on the machine had been bad. the first bad Sample recommended adding elc conditioner to the Coolant and resampling. the second bad sample Recommended draining a quarter of the coolant From the cooling system and adding fresh elc Coolant to the machine. the coolant on the Machine really needs to be replaced. i ordered New coolant for the machine. had to remove the Belly pan from the machine to gain access to the Coolant drain do to there is no access panel. Drained the coolant from the machine. refilled The cooling system with fresh elc coolant, ran The machine. check the coolant level, topped it Off as needed, return the machine to the Customer. 7/25/2016 9476 Jim schreck Repair coolant leak. and coolant sample is showing Bad</p>
Sep 21, 2016	Service	1,868	Troubleshoot Machine	<p>Customer complaint: There are active fault codes occurring on the Machine. Cause of failure: The super comm2 unit that had been installed on The machine. Resultant damage: Active fault codes were occurring. Repair process comments: 8/15/2016. There are active fault codes occurring on the Machine. i inspected the machine and found Several active fault codes. found fault codes 4545-9, 45449, e 1132. i researched the fault CODES AND WAS FOCUSED ON THE 4545-9 AND 4544-9 First. i went through the troubleshooting Procedure on the suspension system code. checked Power and ground at the cushion hitch control. The power and ground were okay. went to go hook Up my computer to the service port connector on The machine. this machine had a super comm2 INSTALLED ON IT AT THE REQUEST OF CATERPILLAR. When i unplugged the super comm2 units from the Service port connector i found that all of the Active codes went away. the super comm2 unit is Causing the active fault codes. all the systems Seem to be functioning okay. i inform the Operator to ignore these specific fault codes for The time being. Job complete. 8/17/2016 9476 Jim schreck Troubleshoot fault codes</p>

Sep 21, 2016	Service	1,868	Troubleshoot Machine	Customer complaint: There are active fault codes occurring on the Machine. Cause of failure: The super comm2 unit that had been installed on The machine. Resultant damage: Active fault codes were occurring. Repair process comments: 8/15/2016. There are active fault codes occurring on the Machine. i inspected the machine and found Several active fault codes. found fault codes 4545-9, 45449, e 1132. i researched the fault CODES AND WAS FOCUSED ON THE 4545-9 AND 4544-9 First. i went through the troubleshooting Procedure on the suspension system code. checked Power and ground at the cushion hitch control. The power and ground were okay. went to go hook Up my computer to the service port connector on The machine. this machine had a super comm2 INSTALLED ON IT AT THE REQUEST OF CATERPILLAR. When i unplugged the super comm2 units from the Service port connector i found that all of the Active codes went away. the super comm2 unit is Causing the active fault codes. all the systems Seem to be functioning okay. i inform the Operator to ignore these specific fault codes for The time being. Job complete. 8/17/2016 9476 Jim schreck Troubleshoot fault codes
Sep 19, 2016	Service	1,968	Repair For Warranty Air Induction & Exh Sys	7052-8.30.16 T/s regen system for rear engine CAUSE OF FAILURE: 5 volt sensor supply shorted, engine oil pressure Sensor failed Resultant damage: Sensor replacement Repair process comments: Installed e.t. and checked for any active or Logged codes, found regen system was locked out Due to soot load at 122 percent. also found Logged code for 5 volt sensor supply. tried to Perform a manual regen and test would fail Because of an active 5 volt sensor supply. t/s This code through sis and unplugged all 5 volt Sensors. once the engine oil pressure sensor was Unplugged 5 volt supply was no longer active and Now was logged. ordered sensor and had todd rush Deliver sensor to me. waited for part to arrive. Removed and replaced sensor and code was no Longer active. performed a manual regen, manual Regen was successful. cleared all events and Logged codes. released machine to customer. T/s rear engine wont regen
Sep 19, 2016	Service	1,968	Troubleshoot Air Induction & Exh Sys	7052-8.30.16 T/s front regen system Cause of failure: NONE FOUND Resultant damage: None Repair process comments: INSTALLED E.T. AND FOUND NO ACTIVE OR LOGGED CODES For regen system. perform a after treatment Functionality test and it was successful. Released machine to customer. T/s front engine wont regen
Sep 19, 2016	Service	1,968	Travel To/from Work Area	

Sep 19, 2016	Service	1,968	Repair For Warranty Air Induction & Exh Sys	7052-8.30.16 T/s regen system for rear engine CAUSE OF FAILURE: 5 volt sensor supply shorted, engine oil pressure Sensor failed Resultant damage: Sensor replacement Repair process comments: Installed e.t. and checked for any active or Logged codes, found regen system was locked out Due to soot load at 122 percent. also found Logged code for 5 volt sensor supply. tried to Perform a manual regen and test would fail Because of an active 5 volt sensor supply. t/s This code through sis and unplugged all 5 volt Sensors. once the engine oil pressure sensor was Unplugged 5 volt supply was no longer active and Now was logged. ordered sensor and had todd rush Deliver sensor to me. waited for part to arrive. Removed and replaced sensor and code was no Longer active. performed a manual regen, manual Regen was successful. cleared all events and Logged codes. released machine to customer. T/s rear engine wont regen
Sep 19, 2016	Service	1,584	Travel To/from Field Service	Machine is at sterling ranch
Sep 19, 2016	Service	1,584	Repair Machine	Customer complaint: Factory requested that to super comm's. be Installed onto machines. Repair process comments: 7/6/2016. The factory requested that super comm's be Installed on two 627k's. serial number's WTC00171, WTC00210. INSTALL THE SUPER COMM'S ON Both machines with nate lentz. verified both Super comm units were powering on and Communicating. secure all the hardware to the Machine. 7/6/2016 9476 Jim schreck Help cat install super com

Sep 15, 2016	Service	2,047	Perform 2000 Svc Hour Maint (pm4)	<p>*notice* The following definition is a general statement AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter - change transmission oil and filter -clean and inspect magnetic screen -change hydraulic oil and filters -CHANGE DIFFERENTIAL AND FINAL DRIVE OIL -change swing drive oil (when applicable) -adjust engine valve lash & check rotators - obtain scheduled oil samples - the results of These will be sent to you upon completion -change engine coolant if recommended or check Coolant condition and add inhibitor if necessary -adjust engine valve lash and check rotators -clean air intake pre-cleaner bowl -lubricate all grease fittings - CHECK ALL FLUID LEVELS -clean engine crankcase breather - DRAIN WATER SEPARATOR -clean primary fuel filter and replace secondary -perform visual operational inspection</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or WEEKLY, 100 HOUR OR BI-MONTHLY SERVICE INTERVALS. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.), adjustment of Ball sockets, circles, adjustment and repacking Of rollers (when applicable).</p> <p>***** (1)</p> <p>excessive metal debris found on all magnetic Plugs of front differential and final drives. Sample taken of diff mag plug debis... will Forward to mechanic for eval. (2) all oil already billed to work order. Stan vann 5386 9/12/2016 Perform pm4</p>
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Sep 15, 2016	Service	2,047	Add Parts 2000 Svc Hour Maint (pm4)	Replace fuel filters at each 250 hour service
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Aug 28, 2016	Service	1,623	Drain & Refill Radiator	<p>Customer complaint: There is a small coolant leak on the machine Somewhere. coolant level is dropping 1 to 2 Gallons per day. Cause of failure: Hose clamp was loose. Resultant damage: A coolant leak. Repair process comments: 7/11/2016. The customer oiler informed me that there must be A coolant leak on the machine because they're Having to add 1 to 2 gallons of coolant each day To the machine. i inspected the machine found THAT I COULD SMELL COOLANT AS SOON AS I GOT CLOSE To the machine. opened the little hatch door on The top of the hood. looked down inside on top of THE ENGINE TO SEE WHAT I COULD SEE. I COULD TELL THERE WAS COOLANT ON THE TOP OF THE FRONT OF THE Cylinder head. remove the hood to gain better Access to the top of the engine. found that the Coolant was leaking from the top front coolant Fitting on the thermostat housing. coolant seem TO BE COMING FROM THE HOSE THAT RUNS FROM THE Coolant expansion tank to the fitting. there is a Clamp that appeared to be loose. attempted to Tighten clamp up but the clamp would not tighten Any tighter. inspected the hose a little closer And found that was definitely where the coolant Was leaking and the hose seem to be loose on the Fitting due to i could twist the hose. remove the Coolant cap on the expansion tank to relieve Cooling system pressure. remove the hose clamp on The hose that was leaking and inspected it. the Hose clamp needs to be changed to a different Size clamp. the inner tab on the hose clamp hits The adjustment side of the clamp and prevents the Clamp from getting any tighter. i believe when The machine is new the wall thickness of the COOLANT HOSE IS THICKER AND THE CLAMP IS Sufficient to tighten the hose against the Fitting. after the machine gets some hours on it And the hose is heated the wall thickness of the Hose shrinks and the clamp is too big and cannot Be tightened any further due to the interference Of the clamp itself. i had spare clamps on the Truck so i chose one that looked to be about the Right size. installed clamp on the hose tightened To specified torque for the diameter of the Clamp. pressure tested the cooling system to make Sure that the coolant leak been repaired. Everything looks good so i return the machine to The customer. 7/25/2016 9476 Jim schreck Chg coolant</p>
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Aug 28, 2016	Service	1,623	Repair Final Drive	<p>Customer complaint: Left rear final drive cover is leaking a small Amount oil. Cause of failure: The o-ring. Resultant damage: There was an oil leak. Repair process comments: 7/11/2016. The operator had noticed that there was a small Oil leak coming from left rear final drive cover. THE FINAL DRIVE COVER WAS LEAKING A SMALL AMOUNT Of oil. rotated the final drive to get the drain Plug at the bottom of the wheel. drained the oil Out of the final drive. remove the final drive COVER AND INSPECTED FOR THE CAUSE OF THE OIL Leak. found that the o-ring had gotten pinched. Replaced the o-ring with the new one cleaned the Mounting surfaces reinstalled the cover back on Final drive. installed the drain plug and filled The final drive with 80/90 weight oil. ran the Machine and checked for leaks, everything looks Good so i return the machine to the customer. 7/25/2016 9476 Jim schreck Repair left rear final drive cover leaking</p>
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Aug 28, 2016	Service	1,623	Drain & Refill Radiator	<p>Customer complaint: There is a small coolant leak on the machine Somewhere. coolant level is dropping 1 to 2 Gallons per day. Cause of failure: Hose clamp was loose. Resultant damage: A coolant leak. Repair process comments: 7/11/2016. The customer oiler informed me that there must be A coolant leak on the machine because they're Having to add 1 to 2 gallons of coolant each day To the machine. i inspected the machine found THAT I COULD SMELL COOLANT AS SOON AS I GOT CLOSE To the machine. opened the little hatch door on The top of the hood. looked down inside on top of THE ENGINE TO SEE WHAT I COULD SEE. I COULD TELL THERE WAS COOLANT ON THE TOP OF THE FRONT OF THE Cylinder head. remove the hood to gain better Access to the top of the engine. found that the Coolant was leaking from the top front coolant Fitting on the thermostat housing. coolant seem TO BE COMING FROM THE HOSE THAT RUNS FROM THE Coolant expansion tank to the fitting. there is a Clamp that appeared to be loose. attempted to Tighten clamp up but the clamp would not tighten Any tighter. inspected the hose a little closer And found that was definitely where the coolant Was leaking and the hose seem to be loose on the Fitting due to i could twist the hose. remove the Coolant cap on the expansion tank to relieve Cooling system pressure. remove the hose clamp on The hose that was leaking and inspected it. the Hose clamp needs to be changed to a different Size clamp. the inner tab on the hose clamp hits The adjustment side of the clamp and prevents the Clamp from getting any tighter. i believe when The machine is new the wall thickness of the COOLANT HOSE IS THICKER AND THE CLAMP IS Sufficient to tighten the hose against the Fitting. after the machine gets some hours on it And the hose is heated the wall thickness of the Hose shrinks and the clamp is too big and cannot Be tightened any further due to the interference Of the clamp itself. i had spare clamps on the Truck so i chose one that looked to be about the Right size. installed clamp on the hose tightened To specified torque for the diameter of the Clamp. pressure tested the cooling system to make Sure that the coolant leak been repaired. Everything looks good so i return the machine to The customer. 7/25/2016 9476 Jim schreck Chg coolant</p>
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Aug 28, 2016	Service	1,623	Repair Final Drive	<p>Customer complaint: Left rear final drive cover is leaking a small Amount oil. Cause of failure: The o-ring. Resultant damage: There was an oil leak. Repair process comments: 7/11/2016. The operator had noticed that there was a small Oil leak coming from left rear final drive cover. THE FINAL DRIVE COVER WAS LEAKING A SMALL AMOUNT Of oil. rotated the final drive to get the drain Plug at the bottom of the wheel. drained the oil Out of the final drive. remove the final drive COVER AND INSPECTED FOR THE CAUSE OF THE OIL Leak. found that the o-ring had gotten pinched. Replaced the o-ring with the new one cleaned the Mounting surfaces reinstalled the cover back on Final drive. installed the drain plug and filled The final drive with 80/90 weight oil. ran the Machine and checked for leaks, everything looks Good so i return the machine to the customer. 7/25/2016 9476 Jim schreck Repair left rear final drive cover leaking</p>
Aug 25, 2016	Service	1,340	Repair Transmission	<p>Customer complaint: The machine has event code slogging for high Scraper torque converter outlet temperatures. Cause of failure: The scraper radiator was 40% plugged with grass. Resultant damage: There were high torque converter outlet Temperature events being logged. Repair process comments: 6/9/2016. The operator said that there are high torque Converter outlet temperature events happening on The machine. i hooked up my computer to the Machine and found that the high torque converter Outlet attempts had been happening pretty Regularly. troubleshot the machine checked all The normal things first like coolant level and Transmission oil levels. check the radiator for Blockage and found that the radiator was probably 40% blocked from grass been pulled up into the Radiator. removed the grill to gain access to the Radiator. clean the grass from the radiator Core's and blew out the radiator. reinstalled the GRILL AND RETURN THE MACHINE TO THE CUSTOMER. 7/18/2016 9476 Jim schreck Troubleshoot and repair transmission oil Overheat</p>

Aug 25, 2016	Service	1,340	Troubleshoot Transmission	<p>Customer complaint: There are event codes going active for the Transmission of overheating. Repair process comments: 6/7/2016 The machine is throwing event code e1497 front Brake/transmission temperature high. i had the Operator latched the throttle lock on high idle And let the front brake/transmission oil Temperature cool down. i hooked up my computer to The machine and checked fault codes. found event Code e 1497 was going to a level ii and level iii Event. i had the operator put the machine back to Work. i did some research on event code e1497 sis Has very little troubleshooting information due To the fault code is an event which is a CONDITION ABOVE NORMAL OPERATION. SIS SAID THAT The probable causes was the under use of engine Braking. i stop the operator and asked him how he Was using the engine break. the engine break was Set on the medium level so i had him set it on High to see if this would help. had the operator Continue to run the machine while i monitored the Machine. as far as i could tell the operator was Not doing anything unusual with the machine. the Machine was being worked hard but it wasn't doing Anything it shouldn't be capable of. the operator Had to stop the machine several more times during The day when the high front brake/transmission Fault code would elevate to a level iii fault. 6/8/2016 I continue to monitor the machine the next day. The machine ran fine with no event codes in the Morning when it was cooler. then in the afternoon When the ambient temperature began to get pretty Hot the machine began to throw the fault code E1497 high front brake/transmission oil Temperature event again. i hooked my laptop up to The machine after we began to get the high front Brakes/transmission temperature events and Performed a data logger on the machine to try to Capture some parameters when the event would go Active. after they parked the machines at the end Of the day i took a look at the data logger to See if i could see anything unusual. i was Concerned about the service brake being used too Much but after looking at the data logger it Looked normal and the service brakes were not Adding any unusual heat into the system. i Checked the coolant level on the machine it was Normal. i checked for debris in the radiator it Was clean but i blew it out anyway's. at this Point i got the technical communicators involved In the issue as well as caterpillar. we are Currently working on the problem to better Understand the issue. at this point it looks as Though we may be exceeding the cooling capability Of the cooling pack at our altitude of 6000 feet And near 100f ambient temperatures. a super Comm. has been installed on the machine from Caterpillar and we continue to work on the Issue. 7/18/2016 9476 Jim schreck Troubleshoot and repair transmission oil Overheat</p>
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Aug 25, 2016	Service	1,340	Troubleshoot Transmission	<p>Customer complaint: There are event codes going active for the Transmission of overheating. Repair process comments: 6/7/2016 The machine is throwing event code e1497 front Brake/transmission temperature high. i had the Operator latched the throttle lock on high idle And let the front brake/transmission oil Temperature cool down. i hooked up my computer to The machine and checked fault codes. found event Code e 1497 was going to a level ii and level iii Event. i had the operator put the machine back to Work. i did some research on event code e1497 sis Has very little troubleshooting information due To the fault code is an event which is a CONDITION ABOVE NORMAL OPERATION. SIS SAID THAT The probable causes was the under use of engine Braking. i stop the operator and asked him how he Was using the engine break. the engine break was Set on the medium level so i had him set it on High to see if this would help. had the operator Continue to run the machine while i monitored the Machine. as far as i could tell the operator was Not doing anything unusual with the machine. the Machine was being worked hard but it wasn't doing Anything it shouldn't be capable of. the operator Had to stop the machine several more times during The day when the high front brake/transmission Fault code would elevate to a level iii fault. 6/8/2016 I continue to monitor the machine the next day. The machine ran fine with no event codes in the Morning when it was cooler. then in the afternoon When the ambient temperature began to get pretty Hot the machine began to throw the fault code E1497 high front brake/transmission oil Temperature event again. i hooked my laptop up to The machine after we began to get the high front Brakes/transmission temperature events and Performed a data logger on the machine to try to Capture some parameters when the event would go Active. after they parked the machines at the end Of the day i took a look at the data logger to See if i could see anything unusual. i was Concerned about the service brake being used too Much but after looking at the data logger it Looked normal and the service brakes were not Adding any unusual heat into the system. i Checked the coolant level on the machine it was Normal. i checked for debris in the radiator it Was clean but i blew it out anyway's. at this Point i got the technical communicators involved In the issue as well as caterpillar. we are Currently working on the problem to better Understand the issue. at this point it looks as Though we may be exceeding the cooling capability Of the cooling pack at our altitude of 6000 feet And near 100f ambient temperatures. a super Comm. has been installed on the machine from Caterpillar and we continue to work on the Issue. 7/18/2016 9476 Jim schreck Troubleshoot and repair transmission oil Overheat</p>
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Aug 25, 2016	Service	1,340	Repair Transmission	<p>Customer complaint: The machine has event code slogging for high Scraper torque converter outlet temperatures. Cause of failure: The scraper radiator was 40% plugged with grass. Resultant damage: There were high torque converter outlet Temperature events being logged. Repair process comments: 6/9/2016. The operator said that there are high torque Converter outlet temperature events happening on The machine. i hooked up my computer to the Machine and found that the high torque converter Outlet attempts had been happening pretty Regularly. troubleshot the machine checked all The normal things first like coolant level and Transmission oil levels. check the radiator for Blockage and found that the radiator was probably 40% blocked from grass been pulled up into the Radiator. removed the grill to gain access to the Radiator. clean the grass from the radiator Core's and blew out the radiator. reinstalled the GRILL AND RETURN THE MACHINE TO THE CUSTOMER. 7/18/2016 9476 Jim schreck Troubleshoot and repair transmission oil Overheat</p>
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Aug 09, 2016	Service	1,243	Repair Machine	<p>Customer complaint: Repair the tire monitoring system.</p> <p>Cause of failure: The product link software needed to be updated. Too many resistors in the datalink wiring that Was added. the can. datalink wires were connected To the wrong can. datalink Resultant damage: The tire monitoring data was not being transmitted Into vision link. REPAIR PROCESS COMMENTS: 5/16/2016 A tire monitoring system had been installed on the Machine for a trial from caterpillar. the tire Monitoring system has never worked completely Correctly. the tire data has never been able to Upload from the machine into vision link. nathan Lenz the caterpillar rep. requested that we get The tire monitoring system working correctly. Kris bohling got involved and took a look at the Product link side. he thought that we needed to Update the software in the product link and Radio. kris came out to the job site at lunch Time one day while the machines were down for Lunch. we tried to tie into the machine with the Ethernet cable. found to service port plugs on The panels inside the cab. one is the regular Service port to communicate with the machine with Electronic technician. the other plug was located Behind the great control monitor which was the Correct plug configuration to tie the ethernet Cord into. we hook the ethernet cord up to it but There was no communication with product link. i Had found previously that there was another Service port plug installed with the tire Monitoring system that was behind the back panel Underneath of the key switch zip tied to the Harness. removed the panel to gain access to the Service port. the service port was a regular nine And port that doesn't accept the ethernet cable. At this point we didn't know where to go and we Were running out of time so he reassembled the Panels back on the machine and what the customer Have machine back. the consensus after all this Troubleshooting was that we had to get the Current flash files in the product link and we Had to figure out what was going on with the Service ports so we could tie into the system With the ethernet cable. so at this point i went On a hunt for service ports and data links inside The cab of the machine. remove the seat in the Back panels to gain access to the wiring for the Tire monitoring system a traced the wiring out. Pulled more interior panels remove the headliner For the product link is located and found another Service port located in the roof of the tractor Close to the product link ecm. it had the correct Pin configuration on the service ports to accept The ethernet cable. hooked my computer up to it To see if it would communicate with the product Link. it did finally found the correct service Port for the product link. installed the most Current flash files for the product link in the Radio. connected my computer to the regular Service port and initiated electronic technician. I was unable to see any of the ecm's for the tire Monitoring system which should include a Messenger panel and the tire monitoring system Receiver. hooked into the service port that was Tied in with the wiring harness for the tire Monitoring system initiated electronic technician And i could communicate with the tire monitoring</p>
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ANYTHING ELSE ON THE Machine. something still seems to be wrong. Pulled the installation instructions for the tire Monitoring system off of sis web media number Rehs9135. researched installation instructions And it looks as if tire monitoring system is a LEGACY SYSTEM AND IS DESIGNED TO GO IN ALL KINDS Of different applications. there's no specific Wiring for our machine. went through the wiring To make sure that it was wired correctly and at First it appeared to be. check the resistance on The datalink the instructions specify you should HAVE 60 OHMS OR THE DATALINK WON'T COMMUNICATE Correctly. if the resistance is right supposed to Remove resistors in the tire monitoring circuit. My resistance was not right i had to remove one Resistor to get to 60 ohms. plug the harness is All back in and attempted communication. found i Had the same problem unable to see any tire Monitoring ecm's connected to the normal service Port on the machine. continue troubleshooting Found i didn't have any continuity between the Datalink on the normal service port and where the Datalink wires were pinned in for the tire Monitoring system. had to reassemble the inside Of the machine and put the seat back in due to it Was getting ready to rain. 5/18/2016 Track the wire numbers down in the machine Schematic and in the tire monitoring schematic And found that the datalink wires for the tire Monitoring system had been connected to the can. Datalink wires for the grade control system. the Can. datalink's for the machine systems and the Grade control are two separate data links. the Datalink wires for the tire monitoring system Need to be connected to the machine systems Datalink. the datalink wires that the tire Monitoring system was tied into were y787e536 CAN. HIGH AND Y788E537 CAN. LOW. THE DATALINK Wires that they need to be tied into our f711cf9 CAN. HIGH AND F712-CF10 CAN. LOW. WILL MAKE Corrections to the wiring when i get a chance to Take the machine down the next time. 5/19/2016 Remove the seat from the machine in the bottom Rear panel from the inside of the cab to access The wiring. made a datalink harness which was a Twisted pair of wires. tied the new datalink WIRING INTO DATALINK WIRES Y711CF9 CAN. HIGH AND Y712cf10 can. low at the backside of the machine Service port connector. soldered the wiring into The existing datalink and heat shrink. ran the New datalink wiring down to the tire monitoring System. installed two pin connector on the tire Monitoring datalink wiring and plugged it into The fabricated datalink. check communication with Caterpillar electronic technician. i was able to See the tire monitoring system with et. now. Reinstalled the rear panel in the cab and Reinstalled the seat. will monitor for the tire Monitoring data to come through on vision link The next 24 hours 5/20/2016 Checked for the tire monitoring data in vision Link. found tire monitoring data was being Received. the tire monitoring system was now Reporting data. Job complete 5/24/2016 9476 Jim schreck REPAIR TIRE MONITER SYSTEM.

Aug 09, 2016	Service	1,243	Repair Machine	<p>Customer complaint: Repair the tire monitoring system.</p> <p>Cause of failure: The product link software needed to be updated. Too many resistors in the datalink wiring that Was added. the can. datalink wires were connected To the wrong can. datalink Resultant damage: The tire monitoring data was not being transmitted Into vision link. REPAIR PROCESS</p> <p>COMMENTS: 5/16/2016 A tire monitoring system had been installed on the Machine for a trial from caterpillar. the tire Monitoring system has never worked completely Correctly. the tire data has never been able to Upload from the machine into vision link. nathan Lenz the caterpillar rep. requested that we get The tire monitoring system working correctly. Kris bohling got involved and took a look at the Product link side. he thought that we needed to Update the software in the product link and Radio. kris came out to the job site at lunch Time one day while the machines were down for Lunch. we tried to tie into the machine with the Ethernet cable. found to service port plugs on The panels inside the cab. one is the regular Service port to communicate with the machine with Electronic technician. the other plug was located Behind the great control monitor which was the Correct plug configuration to tie the ethernet Cord into. we hook the ethernet cord up to it but There was no communication with product link. i Had found previously that there was another Service port plug installed with the tire Monitoring system that was behind the back panel Underneath of the key switch zip tied to the Harness. removed the panel to gain access to the Service port. the service port was a regular nine And port that doesn't accept the ethernet cable. At this point we didn't know where to go and we Were running out of time so he reassembled the Panels back on the machine and what the customer Have machine back. the consensus after all this Troubleshooting was that we had to get the Current flash files in the product link and we Had to figure out what was going on with the Service ports so we could tie into the system With the ethernet cable. so at this point i went On a hunt for service ports and data links inside The cab of the machine. remove the seat in the Back panels to gain access to the wiring for the Tire monitoring system a traced the wiring out. Pulled more interior panels remove the headliner For the product link is located and found another Service port located in the roof of the tractor Close to the product link ecm. it had the correct Pin configuration on the service ports to accept The ethernet cable. hooked my computer up to it To see if it would communicate with the product Link. it did finally found the correct service Port for the product link. installed the most Current flash files for the product link in the Radio. connected my computer to the regular Service port and initiated electronic technician. I was unable to see any of the ecm's for the tire Monitoring system which should include a Messenger panel and the tire monitoring system Receiver. hooked into the service port that was Tied in with the wiring harness for the tire Monitoring system initiated electronic technician And i could communicate with the tire monitoring</p>
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ANYTHING ELSE ON THE Machine. something still seems to be wrong. Pulled the installation instructions for the tire Monitoring system off of sis web media number Rehs9135. researched installation instructions And it looks as if tire monitoring system is a LEGACY SYSTEM AND IS DESIGNED TO GO IN ALL KINDS Of different applications. there's no specific Wiring for our machine. went through the wiring To make sure that it was wired correctly and at First it appeared to be. check the resistance on The datalink the instructions specify you should HAVE 60 OHMS OR THE DATALINK WON'T COMMUNICATE Correctly. if the resistance is right supposed to Remove resistors in the tire monitoring circuit. My resistance was not right i had to remove one Resistor to get to 60 ohms. plug the harness is All back in and attempted communication. found i Had the same problem unable to see any tire Monitoring ecm's connected to the normal service Port on the machine. continue troubleshooting Found i didn't have any continuity between the Datalink on the normal service port and where the Datalink wires were pinned in for the tire Monitoring system. had to reassemble the inside Of the machine and put the seat back in due to it Was getting ready to rain. 5/18/2016 Track the wire numbers down in the machine Schematic and in the tire monitoring schematic And found that the datalink wires for the tire Monitoring system had been connected to the can. Datalink wires for the grade control system. the Can. datalink's for the machine systems and the Grade control are two separate data links. the Datalink wires for the tire monitoring system Need to be connected to the machine systems Datalink. the datalink wires that the tire Monitoring system was tied into were y787e536 CAN. HIGH AND Y788E537 CAN. LOW. THE DATALINK Wires that they need to be tied into our f711cf9 CAN. HIGH AND F712-CF10 CAN. LOW. WILL MAKE Corrections to the wiring when i get a chance to Take the machine down the next time. 5/19/2016 Remove the seat from the machine in the bottom Rear panel from the inside of the cab to access The wiring. made a datalink harness which was a Twisted pair of wires. tied the new datalink WIRING INTO DATALINK WIRES Y711CF9 CAN. HIGH AND Y712cf10 can. low at the backside of the machine Service port connector. soldered the wiring into The existing datalink and heat shrink. ran the New datalink wiring down to the tire monitoring System. installed two pin connector on the tire Monitoring datalink wiring and plugged it into The fabricated datalink. check communication with Caterpillar electronic technician. i was able to See the tire monitoring system with et. now. Reinstalled the rear panel in the cab and Reinstalled the seat. will monitor for the tire Monitoring data to come through on vision link The next 24 hours 5/20/2016 Checked for the tire monitoring data in vision Link. found tire monitoring data was being Received. the tire monitoring system was now Reporting data. Job complete 5/24/2016 9476 Jim schreck REPAIR TIRE MONITER SYSTEM.

Aug 08, 2016	Service	1,778	Add Parts 250 Svc Hour Maint (pm1)	
				<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter -obtain scheduled oil samples - the results of These will be sent to you upon completion -clean air intake pre-cleaner -lubricate all grease fittings -drain water separator -check coolant condition and add inhibitor if Necessary -check all fluid levels -perform visual operational inspection -adjust oscillating hitch (when applicable) -check track adjustment (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking of Rollers (when applicable)</p> <p>*****</p> <p>Perform pm1 Replace fuel filters at each 250 hour service</p>
Aug 08, 2016	Service	1,778	Perform 250 Svc Hour Maint (pm1)	
Aug 04, 2016	Service	1,530	Repair Engine	<p>CUSTOMER COMPLAINT: The rear transmission is logging high torque Converter outlet temperature events. Cause of failure: The rear radiator is plugged with grass. Resultant damage: The rear transmission temperatures are hot. Repair process comments: 6/25/2016. The transmission temperatures for the rear Transmission are high. inspected the rear Radiator found that the radiator was plugged with Grass. removed the grill on the radiator to gain Access to the front of the radiator core's. clean The grass off the radiator core's and blew out The radiator. reinstalled the grill on the Machine and returned it to the customer. 7/18/2016 9476 Jim schreck Blow out radiator</p>
Jul 05, 2016	Service	1,512	Add Parts 500 Svc Hour Maint (pm2)	Replace fuel filters at each 250 hour service

Jul 05, 2016	Service	1,512	Perform 500 Svc Hour Maint (pm2)	<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are PERFORMING. -change engine oil and filter -change hydraulic and transmission filters -obtain scheduled oil samples - the results of These will be sent to you upon completion. -clean air intake pre-cleaner bowl -lubricate all grease fittings -drain water separator -check coolant condition and add inhibitor if Necessary -check all fluid levels -clean engine crankcase breather replace secondary - CLEAN/REPLACE PRIMARY FUEL FILTER AND REPLACE Secondary -PERFORM VISUAL OPERATIONAL INSPECTION *****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.). adjustment of Ball sockets, circles, adjustment and repacking Of rollers (when applicable) *****</p> <p>Performpm2</p>
Jun 14, 2016	Service	1,244	Repair For Warranty Accessory Drive	<p>Customer complaint: The machine is throwing a low-voltage code. Cause of failure: The serpentine belt broke on the front engine. Resultant damage: Low-voltage code. Repair process comments: 5/20/2016 The machine had a active event code for Low-voltage. check the voltage output on the FRONT ENGINE. FOUND THE CHARGING SYSTEM WAS NOT Working. inspected the serpentine drive belt and Found that the belt had broke. the serpentine Belt will need to be replaced. the customer Needed the machine up and running as soon as Possible. i had a serpentine belt's emergency Delivered to the job site. removed the hood to Gain access to the front of the engine. checked All the pulleys to make sure that they's span FREELY. IT LOOKS LIKE THE SERPENTINE BELT JUST Failed. installed the new serpentine belt when it Showed up to the job site. started the machine And checked charging voltage. the machine was Charging 28 1/2 volts reinstalled the hood and RETURN THE MACHINE TO THE CUSTOMER. Job complete. 5/24/2016 9476 Jim schreck Repair belt assy</p>
Jun 09, 2016	Service	467	Install Product Link System	<p>Complaint Factory equipped pl321 not able to send tpms Data. Correction Need to remove pl321 and install a ple641. module Located under headliner. remove and install new Ple641. Revisit machine because tpms data not coming Thru. check connections and wiring to verify Correct. spoke with kris who put a ticket into Cat. found that software for wts not yet updated To work with tpms. Remove pl321 and install ple641 for tpms demo</p>

Jun 09, 2016	Service	467	Repair Technology Products	Customer complaint: The tire monitoring system is not reporting. Cause of failure: The product link was not configured for the tire Monitoring system. RESULTANT DAMAGE: Tire monitoring was not reporting. Repair process comments: 12/10/2015 I spoke with sytech they wanted me to check the Data link connections at the tire monitoring System and the product link. i removed the panel Behind the seat and head liner to check the Wires. the wires were connected to both boxes. i Found that the tire monitoring system in product Link had not been configured. i called the tc's To get factory passwords to install the tire Monitoring system. i reinstalled the panel and Head liner and will monitor vision link to see if It updates. 12/11/2015 9476 Jim schreck
Jun 09, 2016	Service	467	Repair Technology Products	Customer complaint: The tire monitoring system is not reporting. Cause of failure: The product link was not configured for the tire Monitoring system. RESULTANT DAMAGE: Tire monitoring was not reporting. Repair process comments: 12/10/2015 I spoke with sytech they wanted me to check the Data link connections at the tire monitoring System and the product link. i removed the panel Behind the seat and head liner to check the Wires. the wires were connected to both boxes. i Found that the tire monitoring system in product Link had not been configured. i called the tc's To get factory passwords to install the tire Monitoring system. i reinstalled the panel and Head liner and will monitor vision link to see if It updates. 12/11/2015 9476 Jim schreck
Jun 09, 2016	Service	467	Install Product Link System	Complaint Factory equipped pl321 not able to send tpms Data. Correction Need to remove pl321 and install a ple641. module Located under headliner. remove and install new Ple641. Revisit machine because tpms data not coming Thru. check connections and wiring to verify Correct. spoke with kris who put a ticket into Cat. found that software for wts not yet updated To work with tpms. Remove pl321 and install ple641 for tpms demo

May 26, 2016	Service	1,260	Perform 250 Svc Hour Maint (pm1)	<p>*notice* The following definition is a general statement AND MAY NOT COVER ALL THE CHECKS THAT PERTAIN TO The model you are working on. always follow Caterpillar operational maintenance manual for SPECIFIC INSTRUCTIONS FOR THE SERVICE YOU ARE Performing. - change engine oil and filter -obtain scheduled oil samples - the results of These will be sent to you upon completion - clean air intake pre-cleaner -lubricate all grease fittings -drain water separator -check coolant condition and add inhibitor if Necessary -CHECK ALL FLUID LEVELS -perform visual operational inspection -adjust oscillating hitch (when applicable) -check track adjustment (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking of Rollers (when applicable)</p> <p>*****</p> <p>Perform pm1</p>
May 26, 2016	Service	1,260	Add Parts 250 Svc Hour Maint (pm1)	Replace fuel filters at each 250 hour service
May 24, 2016	Service	467	Repair Technology Products	<p>Customer complaint: The tire monitoring system is not reporting. Cause of failure: The product link was not configured for the tire Monitoring system. RESULTANT DAMAGE: Tire monitoring was not reporting. Repair process comments: 12/10/2015 I spoke with sytech they wanted me to check the Data link connections at the tire monitoring System and the product link. i removed the panel Behind the seat and head liner to check the Wires. the wires were connected to both boxes. i Found that the tire monitoring system in product Link had not been configured. i called the tc's To get factory passwords to install the tire Monitoring system. i reinstalled the panel and Head liner and will monitor vision link to see if It updates. 12/11/2015 9476 Jim schreck</p>
May 24, 2016	Service	467	Install Product Link System	<p>Complaint Factory equipped pl321 not able to send tpms Data. Correction Need to remove pl321 and install a ple641. module Located under headliner. remove and install new Ple641. Revisit machine because tpms data not coming Thru. check connections and wiring to verify Correct. spoke with kris who put a ticket into Cat. found that software for wts not yet updated To work with tpms. Remove pl321 and install ple641 for tpms demo</p>
May 23, 2016	Service	969	Install Field Follow Repair	Install field follow repair Ben green 4758 Install software as per cat instruction

May 23, 2016	Service	969	Install Field Follow Repair	Install field follow repair Ben green 4758 Install software as per cat instruction
May 16, 2016	Service	1,036	Troubleshoot Machine	<p>Customer complaint: There is an active fault code. Cause of failure: Broken wire in hitch harness. Resultant damage: Active fault codes. Repair process comments: 4/11/2016 The machine has active fault codes. hooked my Computer up to the machine and checked fault Codes. found there were two active fault codes 246 9 proprietary can datalink abnormal update Rate and 3584 9 switch panel number three Abnormal update rate. troubleshot the fault codes Followed the troubleshooting procedures on sis. Fault code 3584 9 on a diagnostic code list set To perform the can datalink test. performed the Can datalink test media number uenr3159. i found That switch panel number three which is the Control panel on the rear engine was not lighting Up when the buttons were pressed. unbolted and Removed the panel to gain access to the wiring. Check for powers and grounds going into the Switch panel. found that i had lost the 24 v Power supply to switch panel. left my digital VOLT OHMMETER ATTACHED THE WIRING. I MONITORED The meter while i performed a wiggle test on the Wiring harness. found the voltage began to Fluctuate when i wiggled the hitch harness part NUMBER 374-9009. found the voltage dropped off all the Way to zero. wire number 126 is broken in hitch Harness and the harness will need to be replaced. I did a little research on the harness it looks Like there is a service letter out on hitch Harness service letter ps45031 will need to be Performed. looked up the service letter and Ordered the parts for group 1. Job complete. 4/12/2016 9476 Jim schreck Repair for trouble codes</p>
May 16, 2016	Service	1,036	Repair Machine	<p>Customer complaint: There is an active fault code. Cause of failure: Broken wire in hitch harness. Resultant damage: Active fault codes. Repair process comments: 4/20/2016 Performed service letter ps45031. the letter Refers me to special instructions media number M0069049. i followed the special instructions and Installed the updated hitch wiring harness on the Machine. after the harness was installed i Powered the machine on and checked for faults. no Faults were found. cleared the logged fault Codes. Job complete. 4/21/2016 9476 Jim schreck Repair for trouble codes</p>

May 16, 2016	Service	1,036	Repair Machine	Customer complaint: There is an active fault code. Cause of failure: Broken wire in hitch harness. Resultant damage: Active fault codes. Repair process comments: 4/20/2016 Performed service letter ps45031. the letter Refers me to special instructions media number M0069049. i followed the special instructions and Installed the updated hitch wiring harness on the Machine. after the harness was installed i Powered the machine on and checked for faults. no Faults were found. cleared the logged fault Codes. Job complete. 4/21/2016 9476 Jim schreck Repair for trouble codes
May 16, 2016	Service	1,036	Troubleshoot Machine	Customer complaint: There is an active fault code. Cause of failure: Broken wire in hitch harness. Resultant damage: Active fault codes. Repair process comments: 4/11/2016 The machine has active fault codes. hooked my Computer up to the machine and checked fault Codes. found there were two active fault codes 246 9 proprietary can datalink abnormal update Rate and 3584 9 switch panel number three Abnormal update rate. troubleshot the fault codes Followed the troubleshooting procedures on sis. Fault code 3584 9 on a diagnostic code list set To perform the can datalink test. performed the Can datalink test media number uenr3159. i found That switch panel number three which is the Control panel on the rear engine was not lighting Up when the buttons were pressed. unbolted and Removed the panel to gain access to the wiring. Check for powers and grounds going into the Switch panel. found that i had lost the 24 v Power supply to switch panel. left my digital VOLT OHMMETER ATTACHED THE WIRING. I MONITORED The meter while i performed a wiggle test on the Wiring harness. found the voltage began to Fluctuate when i wiggled the hitch harness part NUMBER 374-9009. found the voltage dropped off all the Way to zero. wire number 126 is broken in hitch Harness and the harness will need to be replaced. I did a little research on the harness it looks Like there is a service letter out on hitch Harness service letter ps45031 will need to be Performed. looked up the service letter and Ordered the parts for group 1. Job complete. 4/12/2016 9476 Jim schreck Repair for trouble codes

May 09, 2016	Service	1,077	Replace Machine	Customer complaint: None. Cause of failure: NONE. Resultant damage: None. Repair process comments: 4-20-2016 arrive at machine and discovered it in a Mud hole. get her running and moved to a suitable Work spot. remove cab side fender and clean mud Off of lower fender mounting bracket. lay out Holes according to installation instructions. Begin drilling holes, holes were ok for pilot Hole but were not fun to hand drill as they were 21 mm wide. a drill this big requires a very Powerful drill motor to turn it and they are Somewhat unwieldy to man handle with out a press, To make it even worse the holes laid out right to One side of the tube weld seam. the large drill Bit did not like that at all and was very Difficult keep straight and sharp through out the Job. i must have had to sharpen the bit no fewer Than five times as the leading edge would catch The weld seam and chip the cutting surface. i Managed to get the holes drilled and installed The mud scraper, torquing the bolts to spec. Reinstall cab side fender. unbolt and attempt to Remove the non cab side fender, found it will not Fit between the hydraulic tank base and the Fender mounting bolt bosses sticking up from the Mounting tube. i messed with it and ended up Unbolting the tank and pulling it back and up With a cumalong to get the fender off and out of The way. laid out holes and drilled them. had The same issues with the 21 mm hole as the other Side but i got it done. install mud scraper and Torque bolts to spec. reinstall fender and put Hydraulic tank back in position and torque it Down. took pictures of work and will attach them. Clean up. Job complete Benjamin green 4758 Install mud gaurds
May 09, 2016	Service	1,077	Travel To/from Field Service	

May 09, 2016	Service	1,077	Replace Machine	Customer complaint: None. Cause of failure: NONE. Resultant damage: None. Repair process comments: 4-20-2016 arrive at machine and discovered it in a Mud hole. get her running and moved to a suitable Work spot. remove cab side fender and clean mud Off of lower fender mounting bracket. lay out Holes according to installation instructions. Begin drilling holes, holes were ok for pilot Hole but were not fun to hand drill as they were 21 mm wide. a drill this big requires a very Powerful drill motor to turn it and they are Somewhat unwieldy to man handle with out a press, To make it even worse the holes laid out right to One side of the tube weld seam. the large drill Bit did not like that at all and was very Difficult keep straight and sharp through out the Job. i must have had to sharpen the bit no fewer Than five times as the leading edge would catch The weld seam and chip the cutting surface. i Managed to get the holes drilled and installed The mud scraper, torquing the bolts to spec. Reinstall cab side fender. unbolt and attempt to Remove the non cab side fender, found it will not Fit between the hydraulic tank base and the Fender mounting bolt bosses sticking up from the Mounting tube. i messed with it and ended up Unbolting the tank and pulling it back and up With a cumalong to get the fender off and out of The way. laid out holes and drilled them. had The same issues with the 21 mm hole as the other Side but i got it done. install mud scraper and Torque bolts to spec. reinstall fender and put Hydraulic tank back in position and torque it Down. took pictures of work and will attach them. Clean up. Job complete Benjamin green 4758 Install mud gaurds
May 09, 2016	Service	1,077	Travel To/from Field Service	
Apr 05, 2016	Service	0	Travel To/from Field Service	Machine is at sterling ranch
Apr 05, 2016	Service	0	Troubleshoot Engine	T/s for axtive coeds e-369

Apr 05, 2016	Service	969	Perform 1000 Svc Hour Maint (pm3)	<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter -change transmission oil and filter -clean and inspect magnetic screen -change hydraulic filters -obtain scheduled oil samples - the results of These will be sent to you upon completion -clean air intake pre-cleaner bowl -lubricate all grease fittings -drain water separator -check coolant condition and add inhibitor if Necessary -check all fluid levels -clean engine crankcase breather -clean primary fuel filter and replace secondary - perform visual operational inspection -change swing drive oil (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking Of rollers (when applicable)</p> <p>*****</p> <p>Perform pm3</p>
Apr 05, 2016	Service	969	Add Parts 1000 Svc Hour Maint (pm3)	Replace fuel filters at each 250 hour service
Mar 29, 2016	Service	1,447	Travel To/from Field Service	Sedalia landfill
Mar 29, 2016	Service	1,447	Test/check & Adjust Machine	
Mar 29, 2016	Service	1,447	Troubleshoot Machine	Customer complaint: Perform service letter ps44748. Cause of failure: Factory request. RESULTANT DAMAGE: Perform update. REPAIR PROCESS COMMENTS: 12/5/2015 PERFORMED THE SERVICE LETTER AS DESCRIBED IN THE Service letter ps44748. 12/11/2015 4758 Benjamin green Troubleshoot codes
Mar 29, 2016	Service	1,447	Repair Machine	
Mar 29, 2016	Service	1,447	Repair Machine	
Mar 29, 2016	Service	1,447	Travel To/from Field Service	Sedalia landfill
Mar 29, 2016	Service	1,447	Test/check & Adjust Machine	

Mar 29, 2016	Service	1,447	Troubleshoot Machine	Customer complaint: Perform service letter ps44748. Cause of failure: Factory request. RESULTANT DAMAGE: Perform update. REPAIR PROCESS COMMENTS: 12/5/2015 PERFORMED THE SERVICE LETTER AS DESCRIBED IN THE Service letter ps44748. 12/11/2015 4758 Benjamin green Troubleshoot codes
Mar 14, 2016	Service	792	Repair Implement Controls	Customer complaint: There is a big hydraulic leak. Cause of failure: The feral on the end of a hydraulic tube had SEPARATED FROM THE TUBE. Resultant damage: Hydraulic oil leak. Repair process comments: 2/19/2016 I inspected the machine and tube part number 432-8898 to figure out what the best way to Remove the tube was going to be. the tube was Going to be very difficult to remove from the Machine because it goes under multiple hoses and Lines that were going to have to be removed to Get the tube out. the belly pan was going to have TO BE REMOVED FROM THE MACHINE TO ACCESS THE Other end of the tube going to the push pull Valve. i removed the belly pan from the machine. Had to remove the differential fill tube, Transmission cooler hoses, and the other hardline To the push pull valve so i had enough space to Manipulate the tube that failed so it could be Removed from the machine. on the top side of the Machine i had to remove multiple hoses and tubes That were routed over the top of the failed tube. Removed drain manifold 345-9205 so i can get the Failed tube out from underneath of the manifold. Remove the three p clamps that retained the Failed tube. remove the failed tube from the Bottom of the machine. when i received the new Tube i found that one of the shipping caps had Been dislodged from the end of the tube. clean THE TUBE TO MAKE SURE THERE WAS NO FOREIGN DEBRIS Caught in the new tube. install the new tube from The bottom of the machine. reinstall the drain Manifold so i could start the end of the failed Tube on its fitting. check the placement and the Routing of the tube to make sure it wasn't Rubbing on anything. it looked good so i Installed the p clamps. installed all the hoses And lines that i had to remove on the top side of The machine to get the failed tube out. Reinstalled the other hardline to the push pull Valve, transmission cooler lines, differential Fill tube on the bottom of the machine. i had re -monk's lube truck filled a hydraulic tank with Oil. i started and ran the machine cycled all the Hydraulics to purge the air. check the hydraulic Tank oil level and top the fluid level off. check For any oil leaks everything looked good. Reinstall the belly pan back on the machine and Return the machine to service. 3/7/2016 9476 Jim schreck Repair hyd oil leak

Mar 14, 2016	Service	792	Troubleshoot Implement Controls	Customer complaint: There is a big hydraulic leak. Cause of failure: The feral on the end of a hydraulic tube had Separated from the tube. Resultant damage: Hydraulic oil leak. Repair process comments: 2/18/2016 The operator lost hydraulic functions on the Machine the hydraulic pumps began to whine and Make noise he shut the machine down and inspected The machine. he found that there was hydraulic Oil all over the back of the transmission and the Hydraulic tank oil level was low. the operator Had shut the machine down in the cut. went down To the machine to inspected. found that the Hydraulic oil level in the tank was low and there Was hydraulic oil all over the back of the Transmission. inspected the machine for the Source of the hydraulic leak. found that still Tube part number 432-8898 had failed. the feral On the end of the tube at the drain manifold had Separated from the end of the tube and all of the Hydraulic oil was lost. tube part number 432-8898 Will need to be replaced. the machine was down. Ordered the new tube it was in morton had to have It overnighed. 3/7/2016 9476 Jim schreck Troubleshoot hyd oil leak
Mar 14, 2016	Service	792	Travel To/from Field Service	
Mar 14, 2016	Service	792	Troubleshoot Implement Controls	Customer complaint: There is a big hydraulic leak. Cause of failure: The feral on the end of a hydraulic tube had Separated from the tube. Resultant damage: Hydraulic oil leak. Repair process comments: 2/18/2016 The operator lost hydraulic functions on the Machine the hydraulic pumps began to whine and Make noise he shut the machine down and inspected The machine. he found that there was hydraulic Oil all over the back of the transmission and the Hydraulic tank oil level was low. the operator Had shut the machine down in the cut. went down To the machine to inspected. found that the Hydraulic oil level in the tank was low and there Was hydraulic oil all over the back of the Transmission. inspected the machine for the Source of the hydraulic leak. found that still Tube part number 432-8898 had failed. the feral On the end of the tube at the drain manifold had Separated from the end of the tube and all of the Hydraulic oil was lost. tube part number 432-8898 Will need to be replaced. the machine was down. Ordered the new tube it was in morton had to have It overnighed. 3/7/2016 9476 Jim schreck Troubleshoot hyd oil leak

Mar 14, 2016	Service	792	Repair Implement Controls	<p>Customer complaint: There is a big hydraulic leak. Cause of failure: The feral on the end of a hydraulic tube had SEPARATED FROM THE TUBE. Resultant damage: Hydraulic oil leak. Repair process comments: 2/19/2016 I inspected the machine and tube part number 432-8898 to figure out what the best way to Remove the tube was going to be. the tube was Going to be very difficult to remove from the Machine because it goes under multiple hoses and Lines that were going to have to be removed to Get the tube out. the belly pan was going to have TO BE REMOVED FROM THE MACHINE TO ACCESS THE Other end of the tube going to the push pull Valve. i removed the belly pan from the machine. Had to remove the differential fill tube, Transmission cooler hoses, and the other hardline To the push pull valve so i had enough space to Manipulate the tube that failed so it could be Removed from the machine. on the top side of the Machine i had to remove multiple hoses and tubes That were routed over the top of the failed tube. Removed drain manifold 345-9205 so i can get the Failed tube out from underneath of the manifold. Remove the three p clamps that retained the Failed tube. remove the failed tube from the Bottom of the machine. when i received the new Tube i found that one of the shipping caps had Been dislodged from the end of the tube. clean THE TUBE TO MAKE SURE THERE WAS NO FOREIGN DEBRIS Caught in the new tube. install the new tube from The bottom of the machine. reinstall the drain Manifold so i could start the end of the failed Tube on its fitting. check the placement and the Routing of the tube to make sure it wasn't Rubbing on anything. it looked good so i Installed the p clamps. installed all the hoses And lines that i had to remove on the top side of The machine to get the failed tube out. Reinstalled the other hardline to the push pull Valve, transmission cooler lines, differential Fill tube on the bottom of the machine. i had re -monk's lube truck filled a hydraulic tank with Oil. i started and ran the machine cycled all the Hydraulics to purge the air. check the hydraulic Tank oil level and top the fluid level off. check For any oil leaks everything looked good. Reinstall the belly pan back on the machine and Return the machine to service. 3/7/2016 9476 Jim schreck Repair hyd oil leak</p>
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Feb 22, 2016	Service	737	Perform 250 Svc Hour Maint (pm1)	<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter -OBTAIN SCHEDULED OIL SAMPLES - THE RESULTS OF THESE WILL BE SENT TO YOU UPON COMPLETION -clean air intake pre-cleaner -lubricate all grease fittings -DRAIN WATER SEPARATOR -check coolant condition and add inhibitor if Necessary -check all fluid levels -perform visual operational inspection -adjust oscillating hitch (when applicable) -check track adjustment (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when REQUIRED ITEMS, 10 HOUR OR DAILY, 50 HOUR OR Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking of Rollers (when applicable)</p> <p>*****</p> <p>Perform pm1</p>
Feb 22, 2016	Service	737	Add Parts 250 Svc Hour Maint (pm1)	Replace fuel filters at each 250 hour service
Feb 19, 2016	Service	494	Perform 500 Svc Hour Maint (pm2)	<p>*notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. -change engine oil and filter -change hydraulic and transmission filters -obtain scheduled oil samples - the results of These will be sent to you upon completion. -clean air intake pre-cleaner bowl -lubricate all grease fittings -drain water separator -CHECK COOLANT CONDITION AND ADD INHIBITOR IF Necessary -check all fluid levels -CLEAN ENGINE CRANKCASE BREATHER REPLACE SECONDARY -clean/replace primary fuel filter and replace Secondary -perform visual operational inspection</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air FILTERS, MAKEUP OIL AND G.E.T.). ADJUSTMENT OF Ball sockets, circles, adjustment and repacking Of rollers (when applicable)</p> <p>*****</p> <p>Perform pm2 Replace fuel filters at each 250 hour service</p>
Oct 22, 2015	Service	226	Add Parts 250 Svc Hour Maint (pm1)	REPLACE FUEL FILTERS AT EACH 250 HOUR SERVICE

Oct 22, 2015	Service	226	Perform 250 Svc Hour Maint (pm1)	<p>*****</p> <p>Last pm performed 08/03/15 16 h *notice* The following definition is a general statement And may not cover all the checks that pertain to The model you are working on. always follow Caterpillar operational maintenance manual for Specific instructions for the service you are Performing. - change engine oil and filter -obtain scheduled oil samples - the results of These will be sent to you upon completion - clean air intake pre-cleaner -LUBRICATE ALL GREASE FITTINGS -DRAIN WATER SEPARATOR -check coolant condition and add inhibitor if Necessary -check all fluid levels -perform visual operational inspection -adjust oscillating hitch (when applicable) -check track adjustment (when applicable)</p> <p>*****</p> <p>Customer is responsible for the following: when Required items, 10 hour or daily, 50 hour or Weekly, 100 hour or bi-monthly service intervals. To include all parts (i.e. engine and cab air Filters, makeup oil and g.e.t.) adjustment of Ball sockets, circles, adjustment and repacking of Rollers (when applicable)</p> <p>*****</p> <p>Perform pm1</p>
Oct 05, 2015	Service	18	Remove & Install Wheels & Tires	R&i tires to install inner fender guards. Policy code xte Pd 56 smcs 7756 Tds charges for w.o 0j64058
Oct 05, 2015	Service	18	Remove & Install Wheels & Tires	R&i tires to install inner fender guards. Policy code xte Pd 56 smcs 7756 Tds charges for w.o 0j64058
Sep 01, 2015	Service	18	Travel To/from Work Area	
Sep 01, 2015	Service	18	Remove & Install Wheels & Tires	<p>8-24-15 Emp 8111 Tds removed front tire and then i replaced the Inner fender with new metal inner fender. Installed tire and turned machine and then REMOVED THE OTHER FRONT TIRE AND REPLACED INNER Fender with metal inner fender pieces. tds Installed tire and checked air pressures. this Machine also had tire pressure sensors mounted in All four tires per instructions included with Sensors. tds tech is concerned with the zip ties MOUNTING ON FINAL, WILL GET HOT AND MELT? PARKED Machine out of the way and released machine to Customer. R&i tires to install inner fender guards. Policy code xte Pd 56 smcs 7756</p>









Sep 01, 2015	Service	18	Remove & Install Wheels & Tires	8-24-15 Emp 8111 Tds removed front tire and then i replaced the Inner fender with new metal inner fender. Installed tire and turned machine and then REMOVED THE OTHER FRONT TIRE AND REPLACED INNER Fender with metal inner fender pieces. tds Installed tire and checked air pressures. this Machine also had tire pressure sensors mounted in All four tires per instructions included with Sensors. tds tech is concerned with the zip ties MOUNTING ON FINAL, WILL GET HOT AND MELT? PARKED Machine out of the way and released machine to Customer. R&i tires to install inner fender guards. Policy code xte Pd 56 smcs 7756
Sep 01, 2015	Service	18	Travel To/from Work Area	
Aug 30, 2015	Service	4	Test/check & Adjust Product Link System	Customer complaint: Register product link system. Repair process comments: Sent registration request on 7/20/15. ecm s/n 0335b754lq and wireless transmission device s/n DQCAT0262382 Activate & register product link / retrieve device SERIAL NO. INSTALL CONDITION MONITORING DECAL IN Conspicuous location inside cab that does not Interfere with critical viewing area of windows
Aug 30, 2015	Service	4	Repair For Warranty Hydraulic System	Customer complaint: Hydraulic lines leaking Repair process comments: Ryder performed this segment. see his notes Customer complaint: HYDRAULIC FITTINGS LEAKING Repair process comments: After final inspection the hydraulic hose for the Cushion hitch was found to be leaking. the same Thing happened with another machine s/n: Wtc00206. i determined that the hose positioning From the factory was not adequate for machine Operation when using the cushion hitch. i removed Hoses and installed new o-ring seals. i adjusted Hoses and tightened fittings. i checked for Leaks. Repair for warr hyd line leaking at hitch
Aug 30, 2015	Service	4	Calibrate Automatic Grade Control	SET-UP & CALIBRATE GRADE CONTROL
Aug 30, 2015	Service	4	Update Hydraulic System	Customer complaint: Perform update on hyd .oil cooler lines gp. Special instructions sepd2016 and rehs9826. work Requested by nate lentz. Cause of failure: Need faster oil warm up. Repair process comments: Followed special instructions rehs9826 and Replaced hyd. oil cooler bypass valve and tubes. Noted that the hyd. hose is built with a Different thickness of flange. ordered and Installed new flanges that will fit and also ORDERED THE FLANGES FOR RYDER B. SCRAPER THAT Also needs updated. (wtc00206) Perform update on oil cooler lines group. special Instruction sepd2016-00 and rehs 9826-00. this Work was requested by nate lentz of cat. 641-330-3262 policy code xte pd code 56 smcs 7756








Aug 30, 2015	Service	4	Pre-deliver Machine	Customer complaint: Pre-deliver machine. Repair process comments: Performed standard new machine get ready, adjusted Levels as needed, grease machine.
Aug 30, 2015	Service	4	Touch-up Machine	
Aug 30, 2015	Service	4	Performance Test Machine	
Aug 30, 2015	Service	4	Weld Scraper Bowl	Customer complaint: Update Cause of failure: N/a Resultant damage: N/a Repair process comments: Brought machine in to shop, cut out steel plates From templates to insert into the bowl, prepped Steel with proper template layout for Welds(sanded of all paint with the sander disks). Tacked floor down, walls down and lower bars down At the proper positions.. welded out all Plates/bars 100%. cleaned up all areas and Checked to make sure all components on the Machine worked properly with the updates for the Customer. backed machine out of the shop and sent It over to the paint booth to be painted. Fabricate & install bowl liner
Aug 30, 2015	Service	4	Install Inst/warning Plate/film	Customer complaint: Install smv sign, warning plates and decals. Repair process comments: Installed smv sign on rear grill. installed tire Decal,sos decal and tier four decal. Install smv sign & lube decal ***** If this machine has a tier 4 engine with a regen Switch please install sticker part # aexq0681
Aug 30, 2015	Service	4	Install Ether Starting Aid	Customer complaint: Install ether start aid. Repair process comments: Installed ether bottles on front and rear engine. Install ether canister if required
Aug 30, 2015	Service	4	Install Radio	CUSTOMER COMPLAINT: Order and install cq-c1333u radio. Repair process comments: Ordered and wired in cq-c1333u radio, tested Operation. Install cq-c1333u radio
Aug 18, 2015	Service	0	Repair Technology Products	
Aug 18, 2015	Service	0	Repair Technology Products	
Jul 12, 2015	Service	0	Install Automatic Grade Control	Repair process comments: Install grade control and cab precleaner motor.
Jul 12, 2015	Service	0	Travel To & From	








Jul 12, 2015	Service	0	Travel To & From	
Jul 12, 2015	Service	0	Install Automatic Grade Control	Repair process comments: Install grade control and cab precleaner motor.
Jun 25, 2015	Service	0	Repair Turn Stop	Repair process comments: Right tractor turn indicator lamp would not work. Found the lamp was never plugged in. plugged lamp In and install cable tie to hold wire in ladder Clip.
Jun 25, 2015	Service	0	Repair Turn Stop	Repair process comments: Right tractor turn indicator lamp would not work. Found the lamp was never plugged in. plugged lamp In and install cable tie to hold wire in ladder Clip.










FLUID ANALYSIS (102 Records)







Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Radiator Front	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	<div><div></div></div> Action Required	9,606	Hydraulic System	SILICON AND ALUMINUM IN THIS RATIO USUALLY INDICATE DIRT ENTRY. IRON IS HIGH. CHECK AND REPAIR SOURCE OF DIRT ENTRY. CHECK FOR LEAKS AND REPAIR IF NECESSARY. FILTER(S) CHANGED AT THIS TIME. ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Radiator Front	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Final Drive Rear Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Differential Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Radiator Rear	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Radiator Rear	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	<div><div></div></div> No Action Required	9,606	Final Drive Front Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.









Sep 04, 2023	 No Action Required	9,606	Final Drive Front Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Sep 04, 2023	 No Action Required	9,606	Differential Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Sep 04, 2023	 No Action Required	9,606	Engine Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Sep 04, 2023	 No Action Required	9,606	Final Drive Rear Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Sep 04, 2023	 No Action Required	9,606	Radiator Rear	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	 No Action Required	9,606	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	 Action Required	9,606	Brake Cooling Oil	SAMPLE IS DARKER THAN NORMAL. IRON IS HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. FLUSH/CK FOR VISIBLE METAL WHEN THE OIL DRAINS. RESAMPLE IN 250 HRS.
Sep 04, 2023	 No Action Required	9,606	Radiator Front	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Sep 04, 2023	 No Action Required	9,606	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.



Nov 10, 2022	 Action Required	9,050	Hydraulic System	SILICON AND IRON ARE HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. CHANGE OIL AND FILTERS IF NOT ALREADY DONE. ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.
Nov 10, 2022	 Action Required	9,050	Engine Front	METAL CONTENT IS HIGH OVERALL. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. CHANGE OIL AND FILTERS IF NOT ALREADY DONE. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 100 HRS.
Nov 10, 2022	 Action Required	9,050	Engine Front	METAL CONTENT IS HIGH OVERALL. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. CHANGE OIL AND FILTERS IF NOT ALREADY DONE. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 100 HRS.
Nov 10, 2022	 Action Required	9,050	Engine Rear	SOOT CONTENT, ALUMINUM, SILICON, LEAD, AND IRON ARE HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 50 HRS.
Nov 10, 2022	 Action Required	9,050	Engine Front	METAL CONTENT IS HIGH OVERALL. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. CHANGE OIL AND FILTERS IF NOT ALREADY DONE. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 100 HRS.
Nov 10, 2022	 No Action Required	9,050	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Nov 10, 2022	 No Action Required	9,050	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.

Nov 10, 2022	 Action Required	9,050	Engine Rear	SOOT CONTENT, ALUMINUM, SILICON, LEAD, AND IRON ARE HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 50 HRS.
Nov 10, 2022	 Action Required	9,050	Engine Rear	SOOT CONTENT, ALUMINUM, SILICON, LEAD, AND IRON ARE HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. OIL & FILTER(S) CHANGED AT THIS TIME. RESAMPLE IN 50 HRS.
Jul 10, 2022	 No Action Required	8,787	Final Drive Rear Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Radiator Rear	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Differential Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 Action Required	8,787	Engine Rear	SILICON AND ALUMINUM IN THIS RATIO USUALLY INDICATE DIRT ENTRY. CHECK AIR INDUCTION SYSTEM FOR DIRT ENTRY & REPAIR IF NECESSARY. SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. LEAD IS HIGH. CK FOR POSSIBLE OVERLOAD CONDITIONS. CK FOR PROPER OPERATING TEMP. RESAMPLE IN 100 HRS.
Jul 10, 2022	 Monitor	8,787	Transmission Power Shift Rear	SAMPLE SHOWS A MODERATE AMOUNT OF FINE DEBRIS THAT PREVENTS PARTICLE COUNT FROM BEING TESTED. ALL OTHER DATA IS NORMAL. IF THE SAMPLE WAS TAKEN HOT THEN ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.



Jul 10, 2022	 No Action Required	8,787	Brake Cooling Oil	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 Monitor	8,787	Radiator Front	PH IS BELOW THE PREFERRED MINIMUM FOR THIS PRODUCT. NITRITES (NO2) ARE LOW. ADD (1) ELC EXTENDER, PART #119-5152. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Differential Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Final Drive Front Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Final Drive Rear Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 No Action Required	8,787	Final Drive Front Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Jul 10, 2022	 Monitor	8,787	Transmission Power Shift Rear	SAMPLE SHOWS A MODERATE AMOUNT OF FINE DEBRIS THAT PREVENTS PARTICLE COUNT FROM BEING TESTED. ALL OTHER DATA IS NORMAL. IF THE SAMPLE WAS TAKEN HOT THEN ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.

Jul 10, 2022	 Monitor	8,787	Hydraulic System	SILICON AND IRON ARE HIGH. CHECK FOR ABNORMAL NOISE/PERFORMANCE AND REPAIR IF NEEDED. FILTER(S) CHANGED AT THIS TIME. CHG OIL IF NOT ALREADY DONE. ADVISE USING ADVANCED EFFICIENCY FILTERS TO HELP REDUCE SYSTEM CONTAMINATION. RESAMPLE IN 250 HRS AND RETURN TO USE OF STANDARD FILTERS.
Jul 10, 2022	 Monitor	8,787	Engine Front	IRON IS HIGH. CHECK AIR FILTERS FOR PLUGGING. HIGH LEVELS OF OXIDATION AND SULFATION TOGETHER ARE SIGNS OF HIGH FUEL CONSUMPTION. HIGH OR INCREASED LEAD (PB) SHOWS BEARING WEAR. CK FOR POSSIBLE OVERLOAD CONDITIONS. CHECK FOR OVERHEATING. CK FOR GOOD AIR FLOW TO THE RADIATOR. MIGHT BE CAUSED BY EXTENDED OIL USAGE. LABEL SAID THE OIL WAS CHANGED AT THIS TIME. RESAMPLE IN 250 HRS.
Nov 09, 2021	 Monitor	7,964	Brake Cooling Oil	NOTE LENGTH OF TIME SINCE LAST SAMPLE TAKEN. CHECK RECORDS TO VERIFY OIL USAGE PERIOD. WE ADVISE SAMPLING ALL SYSTEMS AT LEAST ONCE A YEAR, REGARDLESS OF OIL USAGE. IRON JUMPED OUT OF TREND AND IS HIGH. OIL WAS CHG'D AT THIS TIME. CHANGE FILTER(S) IF NOT ALREADY DONE. IF ALL PRELIMINARY CHECKS ARE NORMAL AND THERE WAS NO ABNORMAL METAL WHEN THE OIL DRAINED THEN RESAMPLE IN 500 HRS. TESTED TO ASTM STANDARDS.
Nov 09, 2021	 No Action Required	7,964	Differential Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Rear Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Differential Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.









Nov 09, 2021	 No Action Required	7,964	Differential Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Hydraulic System	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL. TESTED TO ASTM STANDARDS.
Nov 09, 2021	 Action Required	7,964	Radiator Rear	NOTE LENGTH OF TIME SINCE LAST SAMPLE. PH IS TOO LOW, WHICH RISKS CORROSIVE DAMAGE TO THE ENGINE. DRAIN SYSTEM. FLUSH 3 - 5 TIMES WITH GOOD QUALITY WATER. REFILL WITH NEW RECOMMENDED COOLANT. RESAMPLE IN 90 DAYS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Front Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Front Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Front Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Radiator Front	SYSTEM CONDITIONS ARE ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
Nov 09, 2021	 Action Required	7,964	Engine Rear	SILICON AND ALUMINUM IN THIS RATIO USUALLY INDICATE DIRT ENTRY. CHECK AIR INDUCTION SYSTEM FOR DIRT ENTRY & REPAIR IF NECESSARY. SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. LEAD IS HIGH. CK FOR POSSIBLE OVERLOAD CONDITIONS. CK FOR PROPER OPERATING TEMP. RESAMPLE IN 100 HRS.


Nov 09, 2021	 Monitor	7,964	Engine Front	SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. COPPER IS HIGH. HIGH COPPER IS OFTEN A SIGN THAT THE OIL CHANGE WAS OVEREXTENDED. LABEL SAID THE OIL WAS CHANGED AT THIS TIME. RESAMPLE IN 250 HRS.
Nov 09, 2021	 No Action Required	7,964	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL. TESTED TO ASTM STANDARDS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Rear Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Rear Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Differential Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Front Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Final Drive Rear Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 09, 2021	 No Action Required	7,964	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL. TESTED TO ASTM STANDARDS.
Jun 18, 2020	 No Action Required	6,667	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL. TESTED TO ASTM STANDARDS.


Jun 18, 2020	 No Action Required	6,667	Engine Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Dec 13, 2019	 Monitor	6,652	Engine Rear	SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. RESAMPLE IN 250 HRS.
Dec 13, 2019	 Monitor	6,652	Engine Front	SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. RESAMPLE IN 250 HRS.
Jun 17, 2019	 No Action Required	6,141	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Jun 17, 2019	 No Action Required	6,141	Engine Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Apr 26, 2019	 No Action Required	5,836	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Apr 26, 2019	 No Action Required	5,836	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Apr 26, 2019	 No Action Required	5,836	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Apr 26, 2019	 Monitor	5,836	Engine Rear	SOOT CONTENT IS HIGH. CHECK AIR FILTERS FOR PLUGGING. RESAMPLE IN 250 HRS.
Apr 26, 2019	 No Action Required	5,836	Hydraulic System	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.

Feb 17, 2019	 No Action Required	5,725	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Jan 13, 2019	 No Action Required	5,723	Differential Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Nov 20, 2018	 Monitor	5,490	Engine Rear	SOOT CONTENT IS HIGH. CK AIR CLEANER AND CLEAN OR REPLACE IF NECESSARY. RESAMPLE IN 250 HRS.
Nov 20, 2018	 No Action Required	5,490	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Sep 21, 2018	 No Action Required	5,215	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Sep 21, 2018	 No Action Required	5,215	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Sep 21, 2018	 Monitor	5,215	Engine Rear	SOOT AND IRON ARE HIGH. CHECK AIR FILTERS FOR PLUGGING. RESAMPLE IN 250 HRS.
Sep 21, 2018	 No Action Required	5,215	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Jul 27, 2018	 No Action Required	4,874	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.
Jul 27, 2018	 No Action Required	4,874	Engine Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.

Jun 01, 2018	 No Action Required	4,590	Engine Rear	SILICON IS HIGH. HAS THIS COMPARTMENT BEEN RECENTLY REPAIRED? IF SO, THIS IS THE PROBABLE CAUSE. WEAR PATTERN IS IMPROVING. RESAMPLE IN 250 HRS.
Jun 01, 2018	 No Action Required	4,590	Hydraulic System	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 Monitor	4,590	Final Drive Front Left	MORE THAN ONE SAMPLE TODAY ON THIS COMPARTMENT. WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Final Drive Rear Left	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. OIL WAS CHG'D AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Final Drive Rear Right	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. OIL WAS CHG'D AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Differential Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. OIL WAS CHG'D AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 Monitor	4,590	Engine Front	WEAR PATTERN IS IMPROVING. G.C SHOWS 2.04% FUEL DILUTION, WHICH IS AN IMPROVEMENT. VISCOSITY & ADDITIVE LEVELS ARE NORMAL FOR 15W40 ENGINE OIL. ALL OTHER DATA IS NORMAL. OIL WAS CHG'D AT THIS TIME. METER READINGS SUGGEST CORRECT HRS USAGE MAY BE 123 HRS. RESAMPLE IN 150 HRS.

Jun 01, 2018	 Monitor	4,590	Final Drive Front Left	MORE THAN ONE SAMPLE TODAY ON THIS COMPARTMENT. WEAR PATTERN IS ACCEPTABLE AT THIS TIME. OIL WAS CHG'D AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Jun 01, 2018	 No Action Required	4,590	Differential Front	WEAR PATTERN IS IMPROVING. OIL WAS CHG'D AT THIS TIME. RESAMPLE IN 500 HRS.
Apr 30, 2018	 Action Required	4,467	Engine Front	LOW VISCOSITY AS A RESULT OF 9.44% RAW FUEL CONTENT (PFC). CHECK FUEL SYSTEM AND REPAIR AS NEEDED. AFTER REPAIRS, DRAIN, FLUSH, AND REIFLL WITH NEW OIL. CHANGE FILTER(S). RESAMPLE IN 50 HRS. LPOSSIBLE CAUSES OF FUEL DILUTION ARE: LEAKING INJECTORS, INJECTOR O-RINGS, FAILED INJECTORS, FUEL TRANSFER PUMP, AND ENGINE OVERFUELING.
Apr 02, 2018	 No Action Required	4,325	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 250 HRS.
Apr 02, 2018	 No Action Required	4,325	Transmission Power Shift Rear	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.
Apr 02, 2018	 Action Required	4,325	Engine Rear	SAMPLE IS URGENTLY DILUTED WITH FUEL. LOW VISCOSITY AS A RESULT OF 18.9% FUEL DILUTION. THIS IS HIGHER THAN NORMAL. CHECK FUEL SYSTEM AND REPAIR AS NEEDED. AFTER REPAIRS, FLUSH SYTEM AND RESAMPLE IN 50 HOURS.
Apr 02, 2018	 No Action Required	4,325	Transmission Power Shift Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE IN 500 HRS.

Feb 06, 2018	 No Action Required	4,024	Engine Front	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT THE NORMAL INTERVAL.
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Feb 06, 2018	 Action Required	4,024	Engine Rear	SAMPLE IS URGENTLY DILUTED WITH FUEL. LOW VISCOSITY AS A RESULT OF 17.21% FUEL DILUTION. THIS IS HIGHER THAN NORMAL. CHECK FUEL SYSTEM AND REPAIR AS NEEDED. AFTER REPAIRS, FLUSH SYTEM AND RESAMPLE IN 50 HOURS.
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