



901 West 94th Street
Minneapolis MN 55420-4236

Service Invoice

Minnesota 800-352-2812
Iowa 800-342-7002
Missouri 800-342-7002
Wisconsin 800-342-7002

Invoice SI000498852
Date 6/11/2024
Call Number SC00543147
Location Monticello
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Sold to: ASHWILL COMPANIES
PO BOX 507
COKATO, MN 55321-0507

Ship to 18640 200TH ST NW
BIG LAKE, MN 55309-2118

Invoice Account
0546260

Payment
AR - Net 10th of the
Following Month

Due Date
7/10/2024

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167.00

Summary

Parts	64,904.37
Labor	58,582.75
Misc	-9,898.95

Sales Tax Summary	
MINNESOTA STATE SALES TAX 6.875%	3,828.12
SHERBURNE COUNTY TRANSIT SALES TAX 0.500%	278.48

Parts, Labor and Misc 113,588.17

Flat Rate Total 0.00

Subtotal 113,588.17

Shop Supplies and
Environmental Fees 650.00

Subtotal 114,238.17

Sales Tax 4,106.60

Total \$ 118,369.77

ASHWILL COMPANIES
PO BOX 507
COKATO, MN 55321-0507

Invoice SI000498852
Date 6/11/2024
Account 0546260

Please Remit to:

Ziegler Inc.
SDS 12-0436
PO BOX 86
MINNEAPOLIS, MN 55486-0436

Amount Due: \$118,369.77

Amount Enclosed:

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SC00543147-029 Repair - Wiring Harness

Customer complaint: Repair damaged wires.

Resultant damage: The harness was showing copper in several spots.

Cause of failure: The harness is old and had several loose wire ties.

Repair process comments: Cut back the armor on the spots that were damaged.

Repaired the damaged wires in the spots that were damaged on the platform/chassis harness.

Installed new wire loom.

Tied up the harness so it doesn't rub on anything.

Replaced the AC pressure switches so you are able to use the machine's AC harness.

Started trouble shooting the AC system until the customer needed the machine back so I was unable to finish the trouble shooting.

AC system findings-

The problem is that I am unable to get power to the AC compressor.

I checked at the relay for power and was not getting any power there for the control side. Checked all of the fuses and they are good. I checked the voltages at the sensors and I got nothing. I ohmed out the sensors circuits and they all ok with only .02 ohms of resistance. Then I checked the 10 volt power supply circuit and I was getting 10 volts out of the ECM but I wasn't getting anything on the 10 volt return. Checked to see if I was getting power to ground and I wasn't getting power to ground. I also checked the AC switch and made sure that the ECM was seeing that it was getting activated. The ECM would acknowledge that it was activated.

More time is needed to see where I was losing my power for the relay is at.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
50.00	Parts	7K1181	Strap Cable	0.50	25.00
6.00	Parts	1552270	Plug Kt Conn	5.53	33.18
6.00	Parts	1028802	Receptacle Kt	5.31	31.86
1.00	Parts	1496371	Switch As	122.29	122.29
100.00	Parts	3S2093	Strap-Cable	0.26	26.00
1.00	Parts	3082525	Sensor Gp	103.84	103.84
15.00	Parts	AG517942 - 200	TIE PLATE-L=28.50X28	2.59	38.85
	Labor		Labor		2,298.50

SC00543147-029 Repair - Wiring Harness

Parts	381.02
Labor	2,298.50
Misc	
Segment Subtotal:	2,679.52

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SC00543147-030 Replace - Axle Shaft - Right Customer complaint: Replace right axle shaft. Resultant damage: The axle shaft is missing teeth. Cause of failure: The axle shaft teeth are destroyed due to metal fatigue. Repair process comments: Removed cove plate on the final. Removed old axle shaft. Installed new axle shaft when the new final drive was installed. Installed cover plate on the final.
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	2230567	Gear-Sun	2,462.51	2,462.51
	Labor		Labor		

SC00543147-030	Replace - Axle Shaft - Right	Parts	2,462.51
		Labor	
		Misc	
		Segment Subtotal:	2,462.51

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SC00543147-032 Replace - Fasteners, Cntrs & Hardwr Customer complaint: Replace final drive, transmission, t/c mounting hardware and any other needed hardware. Resultant damage: NA Cause of failure: NA Repair process comments: Replaced all the hardware that is needed due to the bolts being worn.				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
32.00	Parts	8C6913	Washer	2.46	78.72
4.00	Parts	6V0937	Bolt	1.53	6.12
4.00	Parts	2S5658	Washer	0.92	3.68
4.00	Parts	7H3607	Nut	1.55	6.20
4.00	Parts	8T4182	Bolt	1.38	5.52
10.00	Parts	2993423	Nut Hex	5.87	58.70
8.00	Parts	8T5439	Washer	4.83	38.64
8.00	Parts	8T4131	Nut	3.10	24.80
8.00	Parts	8C8478	Bolt	15.59	124.72
10.00	Parts	9M5854	Stud	31.62	316.20
4.00	Parts	9X2027	Washer	0.49	1.96
10.00	Parts	2993426	Washer	5.01	50.10
32.00	Parts	2194481	Bolt-Hex Hea	13.18	421.76
8.00	Parts	2173655	Retainer	48.83	390.64
2.00	Parts	4J2036	Pin	17.66	35.32
6.00	Parts	7X0594	Washer	1.59	9.54
3.00	Parts	P40007 - 354	PIN, COTTER, 1/4" X	1.89	5.67

SC00543147-032 Replace - Fasteners, Cntrs & Hardwr			Parts	1,578.29
			Labor	
			Misc	
			Segment Subtotal:	1,578.29

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SC00543147-033 Replace - Flywheel Housing - Bearing

Customer complaint: Replace pump drive gear bearings in flywheel housing.
Resultant damage: It damaged the bearings and dinged up the shafts.
Cause of failure: Due to the powertrain failure it sent metal through the rear gear terrain.
Repair process comments: Removed the front bell housing covers.
Removed the fly wheel.
Removed the pump adapter covers.
Removed the gear terrain.
Cleaned the bell housing and the oil passages.
Removed the bearings from the bell housing.
Cleaned the bores and installed new bearings.
Removed the remain seal.
Cleaned the sealing surface but the crankshaft has a bigger grove worn into it.
Took photos and attached to the service call.
Installed a new rear main seal with a wear sleeve and torqued to spec.
Cleaned all of the gear terrain.
Installed all new bearings and polished the shafts.
Installed the gear terrain and torqued everything to spec.
Cleaned and installed new bushings into the left pump adapter cover.
Installed the left pump adapter and torqued it to spec.
Cleaned and installed a new bearing and seal for the right pump adapter cover because the bearing had a bad spot.
Installed the pump cover and torqued it to spec.
Installed the front bell housing covers with new seals.
Cleaned the flywheel/torque converter adapter and it was full of metal.
Installed a new pilot bearing into the fly wheel due to it being full of metal.
Installed the fly wheel with the adapter for the torque converter and torqued to spec.
Bared the engine over and it bared smoothly.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	4N1230	Seal-O-Ring	9.85	19.70
1.00	Parts	5285684	Seal Gp-Csha	77.59	77.59
9.00	Parts	9X8256	Washer	0.35	3.15
2.00	Parts	1W4738	Bearing	89.67	179.34
2.00	Parts	1608184	Bearing-Slee	58.73	117.46
3.00	Parts	8M9315	Bearing	55.81	167.43
9.00	Parts	8C3210	Bolt	0.20	1.80
1.00	Parts	2D1523	Ring	6.53	6.53
1.00	Parts	9H8712	Roller A	50.26	50.26
1.00	Parts	1283813	Seal	19.00	19.00
1.00	Parts	2S3029	Bearing	27.92	27.92
1.00	Parts	1L4775	Ring	6.92	6.92
2.00	Parts	6V8260	Seal	28.12	56.24
1.00	Parts	4M0189	Seal O Ring	6.15	6.15
1.00	Parts	3F5792	Seal	6.56	6.56
1.00	Parts	6V6707	Seal	5.40	5.40
	Labor		Labor		

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SC00543147-033 Replace - Flywheel Housing - Bearing

Parts	751.45
Labor	1,510.00
Misc	
Segment Subtotal:	2,261.45

SC00543147-034 Repair - Coolant Hose/Lines - For Leaks

Customer complaint: Replace broken coolant drain valve and pressure test cooling system for leaks.
Resultant damage: Unable to drain coolant properly in the field.
Cause of failure: The handle of the drain valve is broken off.
Repair process comments: Drained the engine coolant.
Removed the broken valve.
Cleaned the sealing surfaces.
Installed the new valve with new seals.
Vacuum filled the cooling system.
Tightened several lose clamps and replaced 2 of them.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	3K0360	Seal	1.52	1.52
1.00	Parts	6V7238	Valve	41.25	41.25
1.00	Parts	1591503	Clamp	11.17	11.17
	Labor		Labor		467.50
2.00	Misc	ELC	CAT ELC GAL	17.18	34.36

SC00543147-034 Repair - Coolant Hose/Lines - For Leaks

Parts	53.94
Labor	467.50
Misc	34.36
Segment Subtotal:	555.80

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SC00543147-035 Repair - Track Link As (S & L) Customer complaint: Repair damaged track master links. Resultant damage: Unable to install tracks. Cause of failure: The threads were pulled out when removing tracks. Repair process comments: Pressed out the pins for the masters. Cleaned the bores and the pins. Inspected them and the bores. The bores have slight wear but the pins had more on them. Replaced the pins due to wear and the over rated force to remove them. Installed seals on the new master links and spacer rings. Pressed the new pins in. Checked endplay and pin protrusion and they are in spec. Filled the links and installed the plugs and stoppers.				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	1528071	Ring	5.17	10.34
3.00	Parts	5G2247	Stopper	0.51	1.53
3.00	Parts	6Y0473	Plug	0.25	0.75
12.00	Parts	2070544	Seal As	17.67	212.04
2.00	Parts	2482306	Pin-Track	40.25	80.50
2.00	Parts	5618138	Link-Pin End	311.26	622.52
2.00	Parts	5618137	Link-Pin End	311.26	622.52
1.00	Parts	6V8352	Seal-O-Ring	7.09	7.09
	Labor		Labor		1,870.00

SC00543147-035 Repair - Track Link As (S & L)			Parts	1,557.29
			Labor	1,870.00
			Misc	
			Segment Subtotal:	3,427.29

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SC00543147-036 Repair - Hoses & Lines - Brake Customer complaint: Replace damaged brake tube in rear case and frame. Resultant damage: The tube leaked oil at the sealing point. Cause of failure: The tube was damaged from a previous repair in the case. Repair process comments: Cut out the old tube and then pounded out the remained parts. Cleaned the sealing surfaces. Installed the new collars. Installed the new tube and swaged it in. Checked the tube for leaks and it is all good to go.
--

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	8G4386	Sleeve	14.27	28.54
	Labor		Labor		1,122.00

SC00543147-036	Repair - Hoses & Lines - Brake	Parts	28.54
		Labor	1,122.00
		Misc	
		Segment Subtotal:	1,150.54

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SC00543147-037 Inspect & Maintain - Engine Oil & Filter Customer complaint: Service engine, Change engine oil ,filter, fuel filters and primary air filter Resultant damage: NA Cause of failure: NA Repair process comments: Sampled oil and sent to the lab. Drained engine oil. Removed oil filter. Installed a new oil filter and refilled the engine oil. Removed Primary and secondary air filters. Installed new air filters. Removed fuel filters plus the fuel water separator and cleaned the fuel water separator. Replaced filters with new seals. Ran machine and checked for leaks.
--

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	5771433	Element-Prim	122.90	122.90
2.00	Parts	1R0749	Filter As Fu	27.71	55.42
1.00	Parts	3261643	Filter As	56.41	56.41
1.00	Parts	1R1808	Filter As-Lu	44.16	44.16
1.00	Parts	3370790	Element Acl	54.50	54.50
	Labor		Labor		561.00
7.00	Misc	CD8	CAT DEO-ULS 10W30 GAL	22.33	156.31
SC00543147-037 Inspect & Maintain - Engine Oil & Filter				Parts	333.39
				Labor	561.00
				Misc	156.31
				Segment Subtotal:	1,050.70

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SC00543147-001 Troubleshoot - Transmission Customer complaint: Customer states transmission slips. Troubleshoot and advise. Resultant damage: Worn powertrain. Cause of failure: Worn powertrain. Repair process comments: Located machine and let it warm up. Ran the machine and got the transmission up to temp. When you stall it out it gets hot instantly. Ran the machine around the yard and didn't feel it slip but I am unable to put a load on the machine. The transmission slams into gear on the 1st to 2nd shift up and down. Then the transmission shifts hard on the 2nd to 3rd shift. Pulled a PSR and found several torque converter over heat codes and shift codes. There was a filter full blockage code as well. Talked to Tod and Jesse about the machine and they were on the same page as I was with cleaning it and inspected before we continue on with trouble shooting. Preformed an in depth machine inspection since there is so much wrong with it. Had to cut serval belly pan bolts to gain access to the underside of the machine to find some leaks that were dripping through the pans. Drained the transmission oil and it was full of debris. Cut the trans filter and it had some material in it but it was replaced very recently by the looks of it. Pulled the mag screen and it was full of metal with larger chucks on it. Was told to preform a full powertrain repair.
--

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
	Labor		Labor		

SC00543147-001	Troubleshoot - Transmission	Parts	
		Labor	1,500.00
		Misc	
		Segment Subtotal:	1,500.00

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SC00543147-018 Clean - Machine
Customer complaint: Clean machine for repairs.
Resultant damage: NA
Cause of failure: NA
Repair process comments: Dropped all belly pans.
Removed the floor panels.
Cleaned machine and got it ready for powertrain repairs.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
	Labor		Labor		

SC00543147-018 Clean - Machine				Parts	
				Labor	1,900.00
				Misc	
				Segment Subtotal:	1,900.00

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SC00543147-002 Remove & Install - Trans & Differential Unit HTZ00001 HTZ99999 *D6T R&I TRANS*

Customer complaint: Remove transmission for a refresh.
Resultant damage: Transmission needs to be refreshed.
Cause of failure: Transmission is worn out.
Repair process comments: Removed driveshaft.
Removed the axle shafts.
Removed the fuel tank guard.
Removed the pressure taps from the transmission housing.
Removed the lines from the transmission.
Removed the fuel drain line from the housing.
Removed the rear cover plate.
Installed the lifting bracket to the transmission.
Pulled the transmission out of the machine and put it on a pallet for shipping.
Cleaned all of the mounting surfaces on the case.
Cleaned the hardware for the transmission.
Installed new seals for the transmission.
Installed the transmission into the machine and torqued the housing to spec.
Installed the fuel drain line brackets.
Installed the lines with new seals.
Removed and installed a new accumulator and charged it to spec.
Installed the pressure tap bracket.
Installed the fuel tank guard.
Installed the axle shafts.
Installed the drive shaft.
Filled the transmission with fluid and installed a new filter.
Ran machine and checked for leaks and there are no leaks.
Performed all of the calibrations for the transmission and brakes.
Pulled a sample and sent it in for warranty.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	5K9090	Seal O Ring		
1.00	Parts	6L5359	Seal O Ring		
1.00	Parts	6V5188	Seal		
1.00	Parts	8M4390	Seal O Ring		
1.00	Parts	6V9746	Seal-O-Ring-		
1.00	Parts	2S4078	Seal		
1.00	Parts	6F0711	Ring		
1.00	Parts	3N0759	Ring		
1.00	Parts	8T7568	Seal		
1.00	Parts	0773241	O-Ring		
1.00	Parts	8T4648	Bolt		
1.00	Parts	8T4223	Washer		
1.00	Parts	5P7462	Clip		
1.00	Parts	5P7463	Clip		
1.00	Parts	8T4121	Washer-Hard		
1.00	Parts	3445675	Nut-Hex		
1.00	Parts	4J5573	Seal		

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Labor
40.00 Misc CT2

Labor
CAT TDTO 30W GAL

SC00543147-002	Remove & Install - Trans & Differential Unit HTZ00001 HTZ99999 *D6T R&I TRANS*	Parts	208.90
		Labor	2,878.68
		Misc	869.20
		Segment Subtotal:	3,956.78

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SC00543147-003 Remove & Install - Torque Converter HTZ00001 HTZ99999 *D6T CONVERTER R&I*

Customer complaint: Removed torque converter.
Resultant damage: Needs to be removed and reconditioned.
Cause of failure: It overheats quickly.
Repair process comments: Drained coolant.
Drained hydraulic oil.
Drained the torque converter.
Evaced the AC system.
Disconnected the AC lines and the harnesses from the ROPS.
Removed the ROPS from the machine.
Removed the hood from the machine.
Removed the harness from the cab.
Removed the heater core/AC lines from the cab.
Removed the overlays from the cab.
Removed the interior to gain access to the mounting hardware and the harnesses under the cab.
Removed the mounting hardware from the cab.
Removed the cab from the machine.
Removed the lines that crossed over the cross member.
Removed the crossmember from the machine.
Removed the lines from the hydraulic pump.
Removed the hyd. pump from the machine.
Removed the lines from the steering pump.
Removed the steering pump from the machine.
Removed the lines from the torque converter.
Removed the harness from the torque converter.
Moved all of the harnesses out of the way.
Removed the mounting hardware from the torque converter.
Removed the torque converter from the machine and packaged it up.
Installed the torque converter into the machine with new seals.
Torqued the mounting hardware to spec.
Installed all of the lines with new seals.
Installed the steering pump with a new seal and torqued it to spec.
Installed all of the lines with new seals.
Installed the hyd. pump with a new seal and torqued it to spec.
Installed all of the hyd. lines with new seals.
Installed the harnesses and tied them all up.
Installed the crossmember and torqued it to spec.
Installed the other lines that had to be removed with new seals.
Tied everything up under the cab.
Installed the cab and torqued the hardware to spec.
Installed the harnesses under the cab and tied them up.
Installed the interior.
Installed the heater core lines and the AC lines.
Installed the the ROPS and torqued to spec.
Reconnected the harness and tied them up.
Connected the AC lines and tied them up.
Installed the hood.
Recharged the AC.
Refilled the coolant.
Refilled the hyd. oil.
Ran the machine and checked for leaks and there are no leaks.

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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	1654854	Seal-O-Ring		
1.00	Parts	5P7085	Seal		
1.00	Parts	6V5266	Seal O Ring		
2.00	Parts	3J1907	Seal		
1.00	Parts	6V8397	Seal		
2.00	Parts	1804362	Seal-Rectang		
1.00	Parts	6V5188	Seal		
1.00	Parts	4J5477	Seal O Ring		
2.00	Parts	8T4121	Washer-Hard		
2.00	Parts	4S5898	Seal-O-Ring		
2.00	Parts	8T0441	Bolt		
8.00	Parts	7X7477	Bolt		
1.00	Parts	5715253	Element As-X		
1.00	Parts	6J2680	Seal O Ring		
1.00	Parts	2P3538	Seal-O-Ring		
1.00	Parts	3551793	Dryer		
2.00	Parts	3270282	Gasket-Edge		
100.00	Parts	7K1181	Strap Cable		
	Labor		Labor		
4.00	Misc	CH1	CAT HYDO ADVANCED 10W GAL		

SC00543147-003	Remove & Install - Torque Converter HTZ00001 HTZ99999 *D6T CONVERTER R&I*	Parts	179.92
		Labor	7,813.56
		Misc	50.00
		Segment Subtotal:	8,043.48

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SC00543147-004 Remove & Install - Transmission Oil Pump Customer complaint: Remove and install Transmission oil pump Resultant damage: Needs to be cleaned and reconditioned. Cause of failure: Powertrain failure. Repair process comments: Removed the driveshaft shielding. Removed the driveshaft. Removed all of the lines going to the powertrain pump. Removed the pick up to the pump. Removed the pump from the machine. Packed it up for shipping. Cleaned the mounting surface. Installed the pump with new seals and torqued the hardware to spec. Installed the pick up with a new screen in it and seals. Installed the lines with new seals. Installed the drive shaft and the shielding torqued the hardware to spec. Ran machine and checked for leaks and there is no leaks.
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	2875812	Seal-O-Ring	29.50	29.50
2.00	Parts	1121102	Seal O Ring	12.39	24.78
1.00	Parts	4S8598	Screen As	16.07	16.07
	Labor		Labor		

SC00543147-004	Remove & Install - Transmission Oil Pump	Parts	70.35
		Labor	1,134.00
		Misc	
		Segment Subtotal:	1,204.35

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SC00543147-014 Recondition - Transmission Oil Pump HTZ00001 HTZ99999 PUMP RECONDITION

Customer complaint: Recondition - Transmission Oil Pump

Resultant damage: Disassembled the transmission oil pump and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Cleaned and salvaged components accordingly to its condition. Reassembled the transmission oil pump based on standard processes. Once assembled, the pump turned over freely by hand. The pump was prepped to paint/shipment. Standard job includes parts labor and miscellaneous to recondition the transmission oil pump. Parts include bearings, woodruff keys, body assembly, internal seals, and mounting seals. Lines seals not included.

Cause of failure: Contamination damage

Repair process comments:

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	2122301	Flange		
1.00	Parts	5H4279	Plug		
1.00	Parts	6L4783	Bolt		
1.00	Parts	2M3974	Ring		
1.00	Parts	2119087	Coupling As		
2.00	Parts	6V1179	Seal		
1.00	Parts	0619457	Seal		
1.00	Parts	2K8257	Seal		
1.00	Parts	1114919	Seal Lip Typ		
1.00	Parts	1H5728	Seal-O-Ring		
4.00	Parts	1618068	Seal		
1.00	Parts	5P9439	Bearing		
1.00	Parts	1B8705	Key		
1.00	Parts	2B9373	Key		
1.00	Parts	1313278	Body As-Oil		
1.00	Parts	4J0522	Seal-O-Ring		
1.00	Parts	4J0520	Seal-O-Ring		
	Labor		Labor		

SC00543147-014	Recondition - Transmission Oil Pump HTZ00001 HTZ99999 PUMP RECONDITION	Parts	536.76
		Labor	1,613.71
		Misc	25.00
		Segment Subtotal:	2,175.47

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SC00543147-005 Remove & Install - Final Drive - Left Side HTZ00001 HTZ99999 *D6T FINAL* Customer complaint: Removed and install left hand final drive. Resultant damage: Needs to be removed to recondition the brake. Cause of failure: Powertrain failure. Repair process comments: Removed the drive shafts. Drained the final oil. Removed the steering motor. Removed the steering motor adapter. Pulled back the steering collar. Cleaned off the mounting hardware and cut new head onto the bolts due to them being gone from the very corrosive material the machine works in. Installed the lifting bracket and the come along to rotate the diff steer down. Removed the mounting hardware. Removed the final from the machine and separated the diff steer from the final for shipping. Installed the diff steer on the final with new hardware and a new seal. Installed the final into the machine and torqued to spec with new hardware plus a new seal. Installed the steering motor adapter. Installed the steering motor. Installed the drive shafts and then refilled the final with new oil. Ran machine and checked for leaks and there is no leaks on the final.				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	6F6673	Seal		
	Labor		Labor		
4.00	Misc	CT3	CAT TDTO 50W GAL		

SC00543147-005	Remove & Install - Final Drive - Left Side HTZ00001 HTZ99999 *D6T FINAL*	Parts	25.16
		Labor	1,295.41
		Misc	86.92
		Segment Subtotal:	1,407.49

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SC00543147-015 Rebearing & Reseal - Final Drive - Off Machine - Left Side HTZ00001 HTZ99999 265-2299

Disassembled the final drive and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the final drive with new bearings, and seals. Once assembled, the final drive turned over freely by hand. The final drive was prepped and painted. Rebearing and Reseal Final Drive, Does not include removing Final Drive from machine. Std Job includes all seals, bearings, orings, Duo-cone seal. Note: {The planetary gear bearings on this parts list are update bearings that are not listed in SIS}

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	9H3360	Seal		
1.00	Parts	2K5066	Bearing-Cone		
1.00	Parts	3K0360	Seal		
1.00	Parts	4194175	Seal Lip		
1.00	Parts	2S4078	Seal		
3.00	Parts	1H9696	Ring		
3.00	Parts	4F8824	Ring		
10.00	Parts	4674196	Bolt-Hex Hea		
1.00	Parts	2R0098	Seal O Ring		
1.00	Parts	1P9005	Seal		
6.00	Parts	3436237	Bearing		
1.00	Parts	6V0330	Cup		
1.00	Parts	6Y0859	Seal Gp-Duo		
1.00	Parts	8H0902	Cone		
1.00	Parts	6V0327	Bearing-Cup		
	Labor		Labor		

SC00543147-015	Rebearing & Reseal - Final Drive - Off Machine - Left Side HTZ00001 HTZ99999 265-2299	Parts	1,643.18
		Labor	2,698.06
		Misc	
		Segment Subtotal:	4,341.24

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SC00543147-019 Extra Parts/Labor/Misc for - Final Drive - Left Customer complaint: Rebearing & Reseal - Final Drive - Off Machine - Left Side Resultant damage: Planetary Gears, Ring Gear, Planetary Pins, and Planetary Carrier showed damage. Sprocket hub flange broken. External hardware had excessive rust. Hub duo cones seal area was no longer within specification and spindle was sent to Machine Shop to have duo cone area built up and re-machined. Cause of failure: Final Drive showed rust on external parts and failure in the Planetary Gear grouping. Repair process comments: Cleaned and buffed/expected parts. Reassembled final, Installed new seals and bearings, New Hub, New ring gear, New ring gear snap ring, New carrier, New carrier gears, New carrier bearings/cups, New Carrier shafts, Installed New segments and hardware, Torqued all bolts to CAT Spec, Pressure tested Duo Cones. (passed)				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
25.00	Parts	6V0937	Bolt	1.53	38.25
25.00	Parts	7H3607	Nut	1.55	38.75
1.00	Parts	9G9180	Hub	5,285.63	5,285.63
1.00	Parts	4619930	Gear-Ring	2,133.55	2,133.55
3.00	Parts	9G8638	Gear	1,838.08	5,514.24
1.00	Parts	4567041	Ring	164.77	164.77
3.00	Parts	3339410	Shaft-Planet	280.16	840.48
33.00	Parts	8T4994	Washer	1.63	53.79
1.00	Parts	9S4185	Plug	6.69	6.69
1.00	Parts	6V0439	Plug	43.09	43.09
33.00	Parts	2012184	Bolt-Hex Hea	6.68	220.44
25.00	Parts	2S5658	Washer	0.92	23.00
1.00	Parts	9G9175	Carrier	6,957.60	6,957.60
5.00	Parts	1730946	Segment-Spro	135.72	678.60

SC00543147-019	Extra Parts/Labor/Misc for - Final Drive - Left	Parts	21,998.88
		Labor	
		Misc	
		Segment Subtotal:	21,998.88

Invoice	Date	Call Number	Location	Page
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SC00543147-006 Remove & Install - Final Drive - Right Side HTZ00001 HTZ99999 *D6T FINAL * Customer complaint: Remove Right hand final drive. Resultant damage: It took out all of the gears in the final. Cause of failure: The planetary gears have shelled out Repair process comments: Removed sun shaft from the final. Drained the final fluid. Cleaned all of the final mounting hardware off and cut new heads onto the bolts because they were all worn down due to the heavy corrosive material the machine was working in. Installed the lifting bracket to the final. Removed the mounting hardware from the final. Removed the final from the machine. Removed the brake from the final and packed them up for shipping. Installed the brake to the final with a new seal and hardware. Installed a new seal on the final and installed it to the machine. Used new mounting hardware on the final and torqued it to spec. Installed the sunshaft. Refilled the final with new oil. Ran machine and checked for leaks and there are no leaks on the final.				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	6F6673	Seal		
	Labor		Labor		
4.00	Misc	CT3	CAT TDTO 50W GAL		

SC00543147-006	Remove & Install - Final Drive - Right Side HTZ00001 HTZ99999 *D6T FINAL*	Parts	25.16
		Labor	1,295.41
		Misc	86.92
		Segment Subtotal:	1,407.49

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SC00543147-016 Rebearing & Reseal - Final Drive - Off Machine - Right Side HTZ00001 HTZ99999 265-2299

Disassembled the final drive and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the final drive with new bearings, and seals. Once assembled, the final drive turned over freely by hand. The final drive was prepped and painted. Rebearing and Reseal Final Drive, Does not include removing Final Drive from machine. Std Job includes all seals, bearings, orings, Duo-cone seal. Note: {The planetary gear bearings on this parts list are update bearings that are not listed in SIS}

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	9H3360	Seal		
1.00	Parts	2R0098	Seal O Ring		
1.00	Parts	4194175	Seal Lip		
1.00	Parts	3K0360	Seal		
6.00	Parts	3436237	Bearing		
3.00	Parts	4F8824	Ring		
1.00	Parts	2K5066	Bearing-Cone		
3.00	Parts	1H9696	Ring		
1.00	Parts	2S4078	Seal		
1.00	Parts	1P9005	Seal		
1.00	Parts	6V0330	Cup		
10.00	Parts	4674196	Bolt-Hex Hea		
1.00	Parts	6Y0859	Seal Gp-Duo		
1.00	Parts	8H0902	Cone		
1.00	Parts	6V0327	Bearing-Cup		
	Labor		Labor		

SC00543147-016	Rebearing & Reseal - Final Drive - Off Machine - Right Side HTZ00001 HTZ99999 265-2299	Parts	1,643.18
		Labor	2,698.06
		Misc	
		Segment Subtotal:	4,341.24

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SI000498852	6/11/2024	SC00543147	Monticello	23 / 38

SC00543147-022 Extra Parts/Labor/Misc for - Final Drive - Right Customer complaint: Rebearing and Reseal Resultant damage: Sprockets were welded together. All external bolts were so rusty they all had to be bought, same with the 3 retainers. Spindle didn't had a step where the dual cone sits, so we sent it to the machine shop for repair. Cause of failure: Final Drive Sprocket Hub has a chunk broken off where the sprockets sit. Repair process comments: When final drive arrived to our bay, we immediately saw all the rust on the final. It all had to be removed in order to remove the planetary bolts, and retainers. We cleaned off majority of the rust with needle scale and wire wheel. Once we had everything apart, noticed the sprockets were welded together, and the hub was missing a chunk where the sprockets sit. We also noticed the spindle didn't had a step where the duo-cone seal sits, so we sent it to the machine shop for repair. We inspected all of the parts and ordered all of the necessary parts.
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
25.00	Parts	6V0937	Bolt		
25.00	Parts	7H3607	Nut		
1.00	Parts	9G9180	Hub		
33.00	Parts	2012184	Bolt-Hex Hea		
33.00	Parts	8T4994	Washer		
1.00	Parts	6V0439	Plug		
3.00	Parts	7X0346	Bolt		
3.00	Parts	2P3696	Retainer		
1.00	Parts	9S4185	Plug		
3.00	Parts	4L6454	Bolt		
3.00	Parts	8T4896	Washer		
25.00	Parts	2S5658	Washer		
5.00	Parts	1730946	Segment-Spro		

SC00543147-022	Extra Parts/Labor/Misc for - Final Drive - Right	Parts	6,510.00
		Labor	
		Misc	
		Segment Subtotal:	6,510.00

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SC00543147-010 Remove & Install - Track Assembly - Both Sides HTZ00001 HTZ99999 R & I TRACKS

Customer complaint: Remove tracks to remove finals.
Resultant damage: The finals need to be removed to be rebuilt and the brakes as well.
Cause of failure: The right final is done and the breaks need to be reconditioned.
Repair process comments: Got the dozer up on stands.
Removed the sun shafts because it is dead.
Relived the pressure off of the track tensioners.
Spun the tracks over with the crane to get the master link in a position to split.
Split the tracks and moved them out of the way to preform the repairs.
Cleaned the mounting surfaces.
Moved the tracks back into position to reconnect them.
Lined up the bolt holes and installed the pads.
Replaced the hardware and torqued to spec.
Tensioned the tracks to spec and then ran the machine and rechecked the tension.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
4.00	Parts	9S1838	Bolt-Track	4.85	19.40
4.00	Parts	5420222	Bolt-Track	3.06	12.24
4.00	Parts	9W3361	Nut Track	1.53	6.12
10.00	Parts	2540224	Bolt-Tck Mst	6.97	69.70
4.00	Parts	6V1792	Bolt	2.61	10.44
4.00	Parts	1S1860	Nut	1.42	5.68
	Labor		Labor		

SC00543147-010	Remove & Install - Track Assembly - Both Sides HTZ00001 HTZ99999 R & I TRACKS	Parts	123.58
		Labor	1,233.72
		Misc	
		Segment Subtotal:	1,357.30

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SC00543147-017 Remove, Clean, Install - Power Train/Driven Compon

Customer complaint: Clean all the lines on powertrain system.
Resultant damage: All the lines need to be cleaned.
Cause of failure: Transmission/torque converter failure.
Repair process comments: Isolated all of the lines on the powertrain side.
Removed the brake valve from the machine.
Removed the distribution block from the case.
Cleaned all of the lines on the powertrain side.
Replaced the lines that were leaking/damaged.
Cleaned all of the mating surfaces on the case since everything was heavily pitted and needed to be polished out.
Disassembled brake valve.
Cleaned all of the parts and then resealed everything.
Reassembled the brake valve.
Disassembled the distribution block and cleaned everything.
Resealed and reassembled everything.
Cleaned all of the mating surfaces on the case and polished them all out due to heavy pitting on the mating surfaces.
Cleaned out the case and all the hard lines in the case.
Removed the transmission filter housing.
Cleaned and resealed the filter housing.
Reinstalled the transmission filter base with a new filter.
Cleaned the rest of the powertrain components.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	5900756	Accumulator	425.72	425.72
2.00	Parts	1804362	Seal-Rectang	17.26	34.52
1.00	Parts	5P7085	Seal	7.62	7.62
1.00	Parts	3308196	Seal-O-Ring	5.34	5.34
8.00	Parts	0617540	Seal O Ring	12.59	100.72
2.00	Parts	3303517	Seal-O-Ring	12.43	24.86
1.00	Parts	3308197	Seal-O-Ring	8.06	8.06
1.00	Parts	4J5573	Seal	3.03	3.03
4.00	Parts	8M5254	Seal O Rin	4.89	19.56
3.00	Parts	2385081	Seal-O-Ring	6.94	20.82
11.00	Parts	3J1907	Seal	1.35	14.85
8.00	Parts	3J7354	Seal O Ring	1.20	9.60
9.00	Parts	3K0360	Seal	1.52	13.68
1.00	Parts	3824228	Hose As.	139.45	139.45
1.00	Parts	3824082	Hose As.	157.19	157.19
3.00	Parts	5P8210	Seal-O-Ring	10.99	32.97
3.00	Parts	0336043	O-Ring	5.10	15.30
2.00	Parts	1691616	Ring-Backup	5.48	10.96
2.00	Parts	1727753	Seal Kit	24.52	49.04
1.00	Parts	2513269	Cartridge As	56.96	56.96
1.00	Parts	3824187	Hose As.	204.96	204.96

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2.00 Parts	3824204	Hose As.	168.90	337.80
1.00 Parts	3824080	Hose As.	161.94	161.94
2.00 Parts	1660321	Seal Kit	26.18	52.36
1.00 Parts	2778873	Seal Kit	15.27	15.27
1.00 Parts	5P7701	Seal	9.52	9.52
1.00 Parts	0336033	O-Ring	4.89	4.89
1.00 Parts	2069295	Seal O Ring	6.36	6.36
1.00 Parts	8L2786	O Ring	6.16	6.16
1.00 Parts	2154575	Foam Kt Clea	42.01	42.01
1.00 Parts	9G5127	Breather	13.73	13.73
1.00 Parts	2147568	Seal-O Ring	5.25	5.25
2.00 Parts	6V0852	Cap	5.51	11.02
1.00 Parts	5K9090	Seal O Ring	1.71	1.71
2.00 Parts	7M8485	Seal	2.28	4.56
7.00 Parts	6V9746	Seal-O-Ring-	1.55	10.85
1.00 Parts	2154566	Foam Kt Clea	31.38	31.38
1.00 Parts	2154570	Foam Kt Clea	36.80	36.80
1.00 Parts	2154569	Foam Kt Clea	33.78	33.78
1.00 Parts	4J0524	Seal-O-Ring	3.45	3.45
1.00 Parts	4J0522	Seal-O-Ring	2.84	2.84
4.00 Parts	2M9780	Seal O Ring	1.66	6.64
4.00 Parts	4J5477	Seal O Ring	1.29	5.16
6.00 Parts	6V8397	Seal	1.37	8.22
2.00 Parts	6V8398	Seal O Ring	1.40	2.80
Labor		Labor		

SC00543147-017	Remove, Clean, Install - Power Train/Driven Compon	Parts	2,169.71
		Labor	7,500.00
		Misc	
		Segment Subtotal:	9,669.71

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SC00543147-021 Replace - Tc/Trans Oil Cooler

Customer complaint: Replace transmission cooler.
Resultant damage: The cooler needs to be replaced.
Cause of failure: There was a powertrain failure.
Repair process comments: Removed the right side access panels.
Drained the engine coolant.
Removed the intercooler piping and found a boot that is rubbed through.
Removed the transmission hard lines.
Removed the coolant lines.
Removed the block heater cord.
Removed the cooler from the machine.
Disassembled the cooler.
Cleaned all of the matting surfaces.
Reassembled the cooler with new gaskets and torqued the adapter plates to spec.
Installed the cooler to the machine with new gaskets and torqued to spec.
Installed the coolant lines with new seals.
Installed the block heater cord.
Installed the transmission hard lines.
Installed the intercooler piping with a new boot and clamps.
Installed the right side access panels.
Refilled the coolant.
Ran machine and checked for leaks and there are no leaks on the cooler.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	3753264	Hose	63.17	63.17
1.00	Parts	6V3250	Seal O Ring	1.34	1.34
1.00	Parts	6V5064	Seal O Ring	2.25	2.25
1.00	Parts	6V6609	Seal	1.49	1.49
1.00	Parts	6F7062	Washer	1.66	1.66
3.00	Parts	3054484	Seal-O-Ring	3.48	10.44
1.00	Parts	8T5917	Seal-O-Ring	2.28	2.28
1.00	Parts	2197000	Seal-O-Ring	4.92	4.92
1.00	Parts	1978419	Gasket	3.69	3.69
1.00	Parts	2109246	Seal-O-Ring	10.75	10.75
1.00	Parts	CH1U-8846 - 200	GASKET	35.44	35.44
-1.00	Parts	10R3644WC	Core As Oil - Worn C	866.00	-866.00
1.00	Parts	1803907	Seal-Integra	17.73	17.73
2.00	Parts	2S0795	Gasket	6.60	13.20
1.00	Parts	10R3644	Core As Oil	2,204.95	2,204.95
1.00	Parts	10R3644CC	Core As Oil - Core C	866.00	866.00
3.00	Parts	2094580	Clamp-T'Bolt	10.28	30.84
	Labor		Labor		3,642.50

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SC00543147-021 Replace - Tc/Trans Oil Cooler

Parts	2,404.15
Labor	3,642.50
Misc	
Segment Subtotal:	6,046.65

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SC00543147-012 Recondition Before Failure - Trans & Differential Unit HTZ00001 HTZ99999 384-4139

Disassembled the transmission & differential unit and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the transmission and differential unit with new bearings, seals, friction discs, clutch plates as needed, solenoid valves, and sensors. The transfer gear endplays were set to spec. The pinion to bevel gear backlash was set to spec. The transmission was sent to the Test Cell. The transmission was tested on the test bench. See the attached test sheet for detailed specs. After testing the transmission was prepped and painted.

Recondition before failure Power Shift Transmission. Standard parts include bearings, seals, clutch discs and plates. All clutch discs that were reused were inspected by a trained and certified Cat reuse parts technician. All technicians involved in reuse processes credentials are up to date in accordance with Cat reuse guidelines. Guidelines followed and referenced are media number SEBF8031-21, SEBF8098-21, SEBF8115-24, SEBF8013-17. Clutch discs that were reused qualified per referenced media numbers to be within the parameters of reusability. These reused clutch discs will carry the Cat parts warranty of one year.

Customer PO		Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
			D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description		Unit Price	Amount
2.00	Parts	8P1964	Plate			
1.00	Parts	SOS001 - 123	ZIEG000 SOS 1 PACK			
1.00	Parts	2H3931	Seal			
2.00	Parts	2033940	Seal-O-Ring			
5.00	Parts	5P7530	Seal O Ring			
1.00	Parts	2385082	Seal-O-Ring			
2.00	Parts	8Y3795	Boss			
2.00	Parts	5234605	Roller			
2.00	Parts	6V3965	Nipple A			
4.00	Parts	8M2530	Bolt			
3.00	Parts	3709778	Disc-Frictio			
1.00	Parts	0S1569	Cap Screw			
1.00	Parts	2B0858	Plug			
2.00	Parts	0310218	Bolt			
6.00	Parts	3709775	Disc-Frictio			
1.00	Parts	5032259	Locknut-Bear			
2.00	Parts	4160654	Seal-Pip			
1.00	Parts	9P7072	Washer			
12.00	Parts	9X2125	Bolt			
6.00	Parts	6287483	Spring-Coned			
1.00	Parts	6V2404	Washer			
1.00	Parts	4N3808	Pin			
1.00	Parts	4F2129	Bearing			
1.00	Parts	5071620	Bearing As			
1.00	Parts	5390567	Kit Dt Gsk T			
1.00	Parts	6009282	Bearing Kt			
1.00	Parts	1046730	Gasket			

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4.00 Parts	8M4432	Seal O Ring
1.00 Parts	1M9011	Seal
2.00 Parts	9M7002	Seal O Ring
1.00 Parts	8M4390	Seal O Ring
1.00 Parts	2D6506	Seal O Ring
Labor		Labor

SC00543147-012

**Recondition Before Failure - Trans &
Differential Unit HTZ00001 HTZ99999
384-4139**

Parts	8,704.47
Labor	6,780.32
Misc	
Segment Subtotal:	15,484.79

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SC00543147-007 Extra Parts/Labor/Misc for - Trans & Differential Unit Customer complaint: Recondition Before Failure - Trans & Differential Unit HTZ00001 HTZ99999 384-4139 Resultant damage: Found Qty 1 6T-3852 plastic roller was missing. Found gear set #1 8P1916 planetary gears, gear set #2 7G2516 planetary gears were pitting out on the gear teeth. Found the rotating clutch 8P1964 plate and 370-9778 friction discs were burnt up and warped. Found the Forward clutch 3709775 friction discs were glazed. Found clutch #2 3709775 friction discs were glazed. Found the transmission input yoke 3T8305 was pitting out in the seal area. Found the relief valve 3540164 was scored up. The plastic rollers update per M0086517 Springs update per M0164627 Cause of failure: Relief valve was scored and the spool was stuck which was not letting oil easily pass through the valve. Leading to clutch plates and friction discs becoming burnt up and glaze over. Repair process comments: The D6T transmission/differential came to the ZRC the get recondition before failure. First, we disassembled the transmission to see what internal components had damage. We found that the relief valve had some scoring marks in the bore where the spool rides. With the spool not flowing correctly we will also need friction discs and plates for the rotating clutch. All of the other parts that meet CAT reusability guidelines were buffed and washed. All of the other parts to perform a recondition were ordered. At assembly we installed all new and reusable parts to CAT specs. All transfer gear endplay's and bevel gear backlash were set in CAT specs. All of the mounting surfaces and bolts were torqued to CAT specs. After the transmission was reassembled, it was prepped for paint and then was tested. After passing test, the Transmission was ready to be installed into the machine. Tagged with a no oil tag. Mounting O-rings and a new yoke were sent with.
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	3540164	Valve Gp-Rlf		
1.00	Parts	4417029	Harness As-X		
1.00	Parts	1918304	Sensor G-Spd		
1.00	Parts	1918305	Sensor Gp		
10.00	Parts	7H7658	Spring		
6.00	Parts	7G2516	Gear Planet		
3.00	Parts	8P1916	Gear		
1.00	Parts	3T8305	Yoke A		
5.00	Parts	2443114	Valve Gp-Mdl		

SC00543147-007	Extra Parts/Labor/Misc for - Trans & Differential Unit	Parts	6,100.00
		Labor	
		Misc	
		Segment Subtotal:	6,100.00

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SC00543147-024 Rebearing & Reseal - Differential Drive & Brak - Left Side HTZ00001 HTZ99999 231-5969

Disassembled the differential drive and brake and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the differential drive and brake with new bearings, seals, brake spring, friction discs, and plates as needed. Set the housing preload to spec. Set the differential drive pinion backlash to spec. Tested the brake with hydraulic pressure and had no leaks. The brake touch up pressure was in spec.

Rebearing and reseal differential drive and brake. Standard job includes labor to disassemble and assemble differential drive and brake. Standard parts include bearings and seals.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	8T0072	Cone		
4.00	Parts	5M7925	Bearing A		
4.00	Parts	0302135	Bolt		
1.00	Parts	6P5317	Ring		
2.00	Parts	3K0360	Seal		
2.00	Parts	0054834	Cone		
1.00	Parts	3T6963	Seal		
1.00	Parts	3B4124	Bearing-Cup		
8.00	Parts	8E8310	Disc-Thrust		
1.00	Parts	8P8357	Ring		
1.00	Parts	8D4771	Seal		
3.00	Parts	5M0578	Bearing A		
1.00	Parts	6P1736	Washer		
2.00	Parts	6F6673	Seal		
6.00	Parts	8E8307	Disc		
1.00	Parts	2R0098	Seal O Ring		
1.00	Parts	6P1735	Lockwasher		
7.00	Parts	3S2708	Pin		
1.00	Parts	8M4438	Seal O Ring		
1.00	Parts	2K9295	Cone		
2.00	Parts	7H4566	Cup		
3.00	Parts	5K9107	Bolt		
2.00	Parts	6T0850	Washer		
1.00	Parts	3748346	Brg-Rlr-Gd		
	Labor		Labor		

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SC00543147-024	Rebearing & Reseal - Differential Drive & Brak - Left Side HTZ00001 HTZ99999 231-5969	Parts	1,587.51
		Labor	2,107.60
		Misc	
		Segment Subtotal:	3,695.11

SC00543147-025 Extra Parts/Labor/Misc for - Differential Drive & Brak

Customer complaint: Rebearing & Reseal - Differential Drive & Brak - Left Side
Resultant damage: The only resultant damage was that metal from the final worked itself into the friction discs of the brake and they should be replaced with new. As well as the 2 plugs for the brake were very rusted and the spindle bolts will be ordered new.
Cause of failure: No major cause of failure found.
Repair process comments: Disassembled, cleaned, and inspected all of the parts. No failure found. Installed all new bearings, seals, and friction discs. Set up the bearing preload to CAT spec. Set up backlash to CAT spec. Torqued all bolts to CAT spec. Sent to test.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
6.00	Parts	1A2029	Capscrew	0.59	3.54
2.00	Parts	9S8005	Plug	6.80	13.60
4.00	Parts	6Y9373	Disc	110.28	441.12

SC00543147-025	Extra Parts/Labor/Misc for - Differential Drive & Brak	Parts	458.26
		Labor	
		Misc	
		Segment Subtotal:	458.26

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SC00543147-023 Rebearing & Reseal - Planetary & Brake - Right Side HTZ00001 HTZ99999 231-5990 Disassembled the planetary and brake and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the planetary and brake with new bearings, seals, brake spring, friction discs, and plates as needed. Tested the brake with hydraulic pressure and had no leaks. The brake touch up pressure was in spec. Rebearing and reseal planetary and brake. Standard job includes labor to disassemble and assemble planetary and brake. Standard parts include bearings and seals.				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	6P5317	Ring		
2.00	Parts	9W7926	Bearing		
1.00	Parts	8D4771	Seal		
2.00	Parts	9W7925	Bearing		
1.00	Parts	8P8357	Ring		
1.00	Parts	8M4438	Seal O Ring		
1.00	Parts	2R0098	Seal O Ring		
2.00	Parts	3K0360	Seal		
6.00	Parts	5M0578	Bearing A		
2.00	Parts	6F6673	Seal		
6.00	Parts	8E8307	Disc		
3.00	Parts	3S2708	Pin		
	Labor		Labor		

SC00543147-023	Rebearing & Reseal - Planetary & Brake - Right Side HTZ00001 HTZ99999 231-5990	Parts	647.92
		Labor	1,690.08
		Misc	
		Segment Subtotal:	2,338.00

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SI000498852	6/11/2024	SC00543147	Monticello	35 / 38

SC00543147-020 Extra Parts/Labor/Misc for - Planetary & Brake Customer complaint: Rebearing / Reseal Resultant damage: Found pitting damage to 3060278 QTY 1 planetary gears. Found 9S8005 QTY 2 plugs damaged and the internal threads in the brake housing required repair and was sent to our in house machine shop to repair the O-ring grooves. Found 6Y9373 friction discs QTY 4 were damaged due to heat. Cause of failure: Disassembled the right side planetary and brake and inspected all of the parts. Found pitting damage to the 3060278 sun gear. The pitting had transferred damage. Repair process comments: Disassembled the planetary and brake and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the planetary and brake with new bearings, seals, brake spring, friction discs, and plates as needed. All bolts and mounting surfaces were torqued to CAT specs. Tested the brake with hydraulic pressure and had no leaks. Tagged no oil				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	3060278	Gear As.-Sun	617.98	617.98
2.00	Parts	9S8005	Plug	6.80	13.60
4.00	Parts	6Y9373	Disc	110.28	441.12
SC00543147-020 Extra Parts/Labor/Misc for - Planetary & Brake				Parts	1,072.70
				Labor	
				Misc	
				Segment Subtotal:	1,072.70

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SC00543147-013 Rebearing & Reseal - Torque Converter HTZ00001 HTZ99999 389-3882

Disassembled the torque converter and inspected all of the parts. All of the parts were inspected per Caterpillar reusability guidelines. The parts that did not meet the guidelines were replaced with new ones. Reassembled the torque converter with new bearings, seals, valve springs, and sensors. The torque converter was sent to the Test Cell. The torque converter was tested on the test bench. The torque converter outlet relief pressure was set to spec and the converter leakage was good. See the attached test sheet for detailed specs. After testing the torque converter was prepped and painted. Rebearing and reseal torque converter, standard job includes bearings, seals and misc hardware.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
1.00	Parts	6V5043	Seal-O-Ring		
1.00	Parts	8H9818	Gasket		
1.00	Parts	0617540	Seal O Ring		
1.00	Parts	8T4176	Bolt		
1.00	Parts	8C5230	Seal O Ring		
1.00	Parts	3308196	Seal-O-Ring		
1.00	Parts	9H8712	Roller A		
1.00	Parts	6V5266	Seal O Ring		
2.00	Parts	1654854	Seal-O-Ring		
24.00	Parts	0343557	Bolt		
3.00	Parts	2A3746	Plug		
1.00	Parts	2D5658	Bearing		
2.00	Parts	8M4986	Seal O Ring		
1.00	Parts	1555161	Seal-Oil-Dam		
1.00	Parts	1F2771	Bearing		
1.00	Parts	1T0441	Bearing		
2.00	Parts	1T0902	Bearing		
2.00	Parts	2K5986	Pin		
3.00	Parts	3S2708	Pin		
6.00	Parts	8E8300	Disc		
3.00	Parts	5P3930	Bearing		
1.00	Parts	9M2008	Ring		
1.00	Parts	5P7679	Race		
1.00	Parts	1T0097	Ring		
1.00	Parts	1T0069	Ring		
1.00	Parts	2986387	Seal-O-Ring		
6.00	Parts	4H1440	Pin		
1.00	Parts	3049651	Bearing-Spl		
1.00	Parts	1362216	Seal-Lip		
	Labor		Labor		

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**SC00543147-013 Rebearing & Reseal - Torque Converter
HTZ00001 HTZ99999 389-3882**

Parts	1,197.06
Labor	2,972.64
Misc	
Segment Subtotal:	4,169.70

SC00543147-026 Extra Parts/Labor/Misc for - Torque Converter

Customer complaint: Rebearing & Reseal - Torque Converter HTZ00001 HTZ99999 389-3882

Resultant damage: Flipping the planetary gears over to rerun.

Cause of failure: No failure found

Repair process comments: Disassembled the Torque Converter to clean and inspect all of the parts. Reassembled the torque converter with new bearings. seals, and miscellaneous hardware.

Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
2.00	Parts	8T4137	Bolt	0.62	1.24
6.00	Parts	8T4121	Washer-Hard	0.67	4.02
1.00	Parts	2905792	Sensor Gp	195.17	195.17
1.00	Parts	1240174	Clip-Loop	10.17	10.17
2.00	Parts	1325789	Clip	7.73	15.46
2.00	Parts	4P7581	Clip	5.27	10.54
4.00	Parts	1837121	Bolt	1.24	4.96
1.00	Parts	8S9008	Sleeve	121.93	121.93
3.00	Parts	2A3746	Plug	2.40	7.20
1.00	Parts	3771484	Hose As.	47.54	47.54
1.00	Parts	2986387	Seal-O-Ring	32.86	32.86

**SC00543147-026 Extra Parts/Labor/Misc for - Torque
Converter**

Parts	451.09
Labor	
Misc	
Segment Subtotal:	451.09

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SC00543147-038 Apply - Promotion UWR applied using Ci rebuild credit per Zach Dufner				
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Customer PO	Customer EQ	Model	Serial Number	Equipment ID	Segment SMU
		D6T	HTZ00414	EQ0113632	11,167
Quantity	Type	Part Number	Description	Unit Price	Amount
-1.00	Misc	UWR	NAT-MLP-5656-18	9,488.87	-9,488.87
-1.00	Misc	DIS	NAT-PR-4+NAT-NEC-3333	1,272.52	-1,272.52
-1.00	Misc	UCA	NAT-UC-3055	421.27	-421.27

SC00543147-038 Apply - Promotion				Parts	
				Labor	
				Misc	-11,182.66
				Segment Subtotal:	-11,182.66