

CUSTOMER-PO	Order No.	MAIN-NUMBER	CUSTOMER-ADVISOR	SALES REP
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Phone #	License #
	Contact #
COMPLETION DATE:	
RTL UNIT:	YEAR: 2018 MAKE/MODEL: PETERBILT/389:PBT
SERIAL: 1XPXD49X0JD476140	MILEAGE: 510,700 MI
Date in Service....: 11/16/2017	Front Diff Model...:
Engine Make/Model...: CUMMINS/ISX	Front Diff Serial...:
Engine Serial No....: 80010176	Rear Diff Model....:
Trans Model.....: /	Rear Diff Serial....:

Job 1 PERFORM STAGE 1 XPRESS CHECK

checked codes unit didn't have any codes so I went to quick serve to symptom search for regeneration excessive and began troubleshooting tree. going to have to remove and inspect and clean EGR Mass Measurement Flow Assembly. waiting for unit to cool down. Cleaned assembly replaced egr pressure sensor due to it being clogged up with soot after replacing sensor and putting everything back together I put unit into an aftertreatment analyzer test and it passed. issue is resolved.

Pulled dpf and doc out to inspect. the doc had a broken baffle inside I took broken pieces out and flow tested it and it was out of spec. I flow tested dpf and it was out of spec as well. will need to bake them and flow test again. in the morning after baking dpf it passed flow test i would advise replacement of doc due to it having a broken baffle

put dpf and doc back on with a new differential pressure sensor due to it having water in it. put unit into regen then will need to be test driven.

test drove unit, had no lights come on

issue is resolved

Connected with cummins insite and checked for codes. No codes stored. Looked at history of regens. Found that it stated about 6 hours between regens the ended less than 1 hours apart. Checked diff pressure sensor and out pressure sensor readings and they are correct. Did dpf regen analyzer test. It passed. Test drove running data log. Did not see anything wrong except that diff pressure reading creep up. Started a eds case. Went through the troubleshooting for too frequent regen. Checked air intake pipes and filters. Checked for exhaust leaks. Checked for boost leaks. Checked egr diff pressure sensor and ports. Checked dpf diff sensor and ports. Removed pipes on both sides of turbo. Found that intake side has dirt in it. The dirt has went through turbo and into air intake of engine. I believe that is engine has ingested too much dirt and rings are worn out causing too much soot.

Removed valve cover. Removed all injectors and connectors. Did cylinder leakage test. It failed.

Got all info together and attached to eds case. Called cummins and talked to engineer. He advised that from pic and data that i provided

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him there is no question the engine is dusted. He said that this would cause too frequent regen issue. Found that looking at regen history it is regening every hour. There is no codes stored. Trouble shoot Too frequent regen. Did all tests and checks. Found that dirt has entered engine through the air intake pipe. Took pics and started EDS case. Cummins says that the engine must be dusted. Removed all injectors and did cylinder leakage test. It has cylinders with too much leakage. Removed head. Measured liner height. They are in spec. Removed pistons and liners. Found that #6 the rings are worn and liner is polished. Cleaned block. Inspected counterbore. They are good. Installed new liners. Measured liner height. They are average of .011. Installed new pistons, rings and rod bearings. Installed new main bearings. Inspected oil pump. It is good. Installed new piston cooling jets. Installed new air compressor, head and turbo. Cleaned all air piping. Installed new air, fuel and oil filters. Installed new engine oil and coolant. Got engine running. Updated ecm software and reset injectors. Test drove. Checked for leaks. None found
(Tech ADVISOR on 2023-07-06 at 07:18:45)

Sales Qty	UOM	Item number	Item description	COR Unit rate	Per Extension
1.000	EA	1985615:WRH	ELECTRICAL TAPE 3/4''X66' 7 MIL		
<p>LABOR SUBTOTAL:</p> <p>PARTS SUBTOTAL:</p> <p>MISC SUBTOTAL.:</p> <p>COUPON SUBTOTAL.:</p> <p>EPA FEE SUBTOTAL.:</p> <p>SHOP SUPPLIES FEE.:</p> <p>MACHINE CHARGE.:</p> <p>JOB SUBTOTAL.:</p>					

Job 2 CEL is Always on,w/out Drivability Issue

Sales Qty	UOM	Item number	Item description	COR Unit rate	Per Extension
1.000	EA	4358939:CE	SENSOR,PRESSURE		
2.000	EA	5417859:CE	GASKET,AFM DEVICE		
1.000	EA	2880215:CE	GASKET, AFM DEVICE		
1.000	EA	2871960:CE	SENSOR,DFN PRESSURE		

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1.000 EA	3689649RX: CX	COMPRESSOR,1 CYL AIR	EXC	
1.000 EA	4318219D-C1: CX	KIT,AIR COMPRESSOR-CORE	CHG	
1.000 EA	5679573: CE	BREATHER,CRANKCASE		
1.000 EA	3104392: CE	GASKET,VALVE COVER		
24.000 EA	9811: NRY	RGT NON-CHLORINATED BRAKE CLEANER		
4.000 EA	3163075: CE	PAINT		
1.000 EA	82194PTXUSA: PTX	GASKET MAKER-ULTRA GRY 3.5OZ TUBE		
1.000 EA	105FBC: PB	GREASE-MOTOR ASSY 10 OZ L0034-094		
16.000 EA	ZXEDRU1: VLV	ZX HD EXTENDED LIFE 50/50 AFC 6/1 GA		
54.000 EA	105816EXX: MBL	DELVAC 1300 SUPER 15W40 CK4 (BULK		
1.000 EA	51813PTX: PTX	GASKET MAKER-ANAEROBIC 50ML TUBE		
1.000 EA	5693832: CE	KIT,OVERHAUL		
1.000 EA	3691250D-C1: CX	HEAD,CYLINDER-CORE	CHG	
1.000 EA	5658309RX: CX	HEAD,CYLINDER-CORE	EXC	
1.000 EA	5459710RX: CX	KIT,TURBOCHARGER	EXC	
1.000 EA	5351486D-C1: CX	KIT,TURBOCHARGER-CORE	CHG	
10.000 EA	3678506: CE	SCREW,HEX FLANGE HEAD CAP		
1.000 EA	3687051: CE	CARRIER,SEAL		
1.000 EA	3104392: CE	GASKET,VALVE COVER		
1.000 EA	5440813: CE	GASKET,ACC DRIVE SUPPORT		
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1.000 EA	4988280:CE	GASKET, HYDRAULIC PUMP
40.000 EA	6406004:R18	CABLE TIES 4.6X200 MM
1.000 EA	3163075:CE	PAINT
1.000 EA	2866636:CE	GASKET, AFM DEVICE
1.000 EA	3687051:CE	CARRIER, SEAL
1.000 EA	3943885:CE	SCREW, HEX FLANGE HEAD CAP
2.000 EA	X011622:DF	PACCAR 15" PRF FIT AIR-STANDARD

LABOR SUBTOTAL:
 PARTS SUBTOTAL:
 MISC SUBTOTAL.:
 COUPON SUBTOTAL.:
 EPA FEE SUBTOTAL.:
 SHOP SUPPLIES FEE.:
 MACHINE CHARGE.:
 JOB SUBTOTAL.:

Job 140 CORES

CORES

Sales Qty	UOM	Item number	Item description	COR Unit rate	Per Extension
- 1.000	EA	5351486D-C1:CX	KIT, TURBOCHARGER-CORE	RET	

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LABOR SUBTOTAL:
 PARTS SUBTOTAL:
 MISC SUBTOTAL.:
 COUPON SUBTOTAL.:
 EPA FEE SUBTOTAL.:
 SHOP SUPPLIES FEE.:
 MACHINE CHARGE.:
 JOB SUBTOTAL.:

Job 170 CORES

CORES

Sales Qty UOM	Item number	Item description	COR Unit rate	Per Extension
- 1.000 EA	4318219D-C1:CX	KIT,AIR COMPRESSOR-CORE	RET	

LABOR SUBTOTAL:
 PARTS SUBTOTAL:
 MISC SUBTOTAL.:
 COUPON SUBTOTAL.:
 EPA FEE SUBTOTAL.:
 SHOP SUPPLIES FEE.:
 MACHINE CHARGE.:
 JOB SUBTOTAL.:

Job 200 CORES

CORES

Sales Qty UOM	Item number	Item description	COR Unit rate	Per Extension
- 1.000 EA	3691250D-C1:CX	HEAD,CYLINDER-CORE	RET	

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LABOR SUBTOTAL: PARTS SUBTOTAL: MISC SUBTOTAL.: COUPON SUBTOTAL.: EPA FEE SUBTOTAL.: SHOP SUPPLIES FEE.: MACHINE CHARGE.: JOB SUBTOTAL.:				
*TOTAL LABOR: *TOTAL PARTS: *TOTAL MISC.: *TOTAL COUPON.: *TOTAL EPA.: *TOTAL SHOP.: *TOTAL MACHINE:				
SUBTOTAL		TAX STATUS/STATE		SALES TAX
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07/06/2023 09:34:21CST	
INVOICE NUMBER/ACCT DOC NUMBER	
CUSTOMER NO. BRANCH	
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SUBTOTAL	TAX STATUS/STATE	SALES TAX	PLEASE PAY (USD)
			33219.94
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