



Product Awareness Bulletin

Jed Routh

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#042

Memorandum

To: All Dealers

From: Jed Routh

Subject: 2013 EPA Engines

Date: October 16, 2012

We will soon be releasing 2013 engines for EFX and HDX. Cross-over option listings are attached.

For the Saf-T-Liner EFX, there are very few changes that will affect the driver or technician. Like all 2013 engine installations, there will be additional sensors that will detect performance of the emissions systems, but all other changes will be minor in nature.

As discussed at our 2012 regional meetings, the Saf-T-Liner HDX will experience some significant changes. The radiator and fan drive will be relocated to the street (left) side of the bus with our fan drive upgraded to a mechanical system, replacing the current Parker hydraulic system. In addition, a new service center will be included in the upgrade which will result in improve service access for most routine maintenance procedures . On the following pages, you'll find specifications for the cooling system, a features and benefits listing of the service center, a list of components that will undergo significant changes supported with a cross over list of options.

System	2010	2013	Notes
Fan Drive	Hydraulic –Parker	Mechanical – Linnig shaft with engine mounted pulleys and viscous clutch	Same system used on all FCCC shuttle buses and motorhomes with side mounted radiators. Three years history and 1800+ units in service

Air Cleaner	Donaldson Cyclopac	Donaldson Powercore	99.9% ISO 5011 Dust Removal Efficiency >10 gram/CFM dust holding capacity Optional pre-filter and secondary filter available
Radiator	Titan X	Titan X	No changes in Radiator itself – Cooling package moves to street side
Service Center	None	Standard service center	Easy access to pre-trip and monthly service items

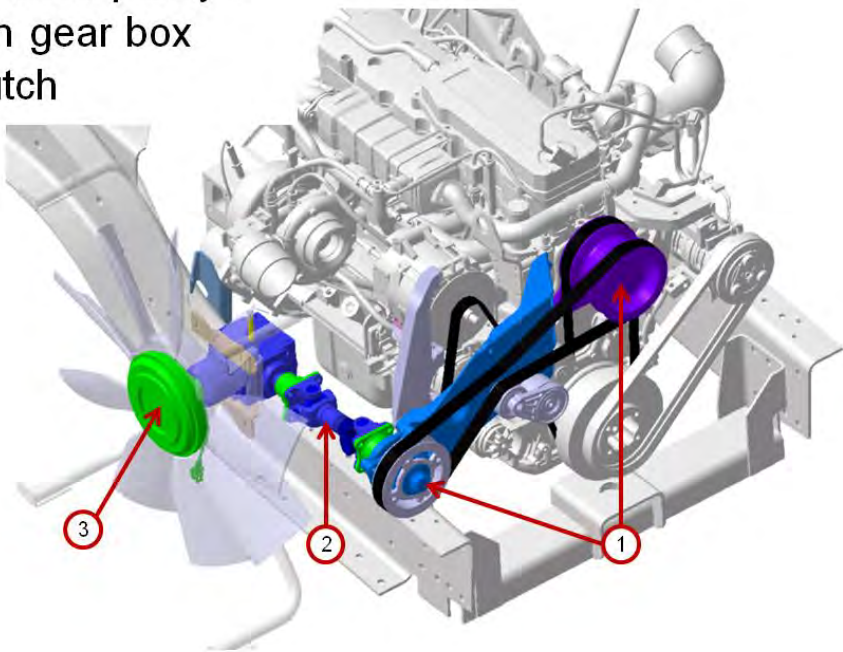
Engine Air Cleaner

- Donaldson Powercore Air Cleaner
 - 99.9% ISO 5011 Dust Removal Efficiency
 - >10 gram/CFM dust holding capacity
- Under Development
 - Optional Safety Filter – protects engine from dust and debris at filter change
 - Option Dual Stage Inlet – separates dust prior to main air filter



HDX Fan Drive

- 1. Engine mounted pulleys
- 2. Shaft driven gear box
- 3. Viscous clutch

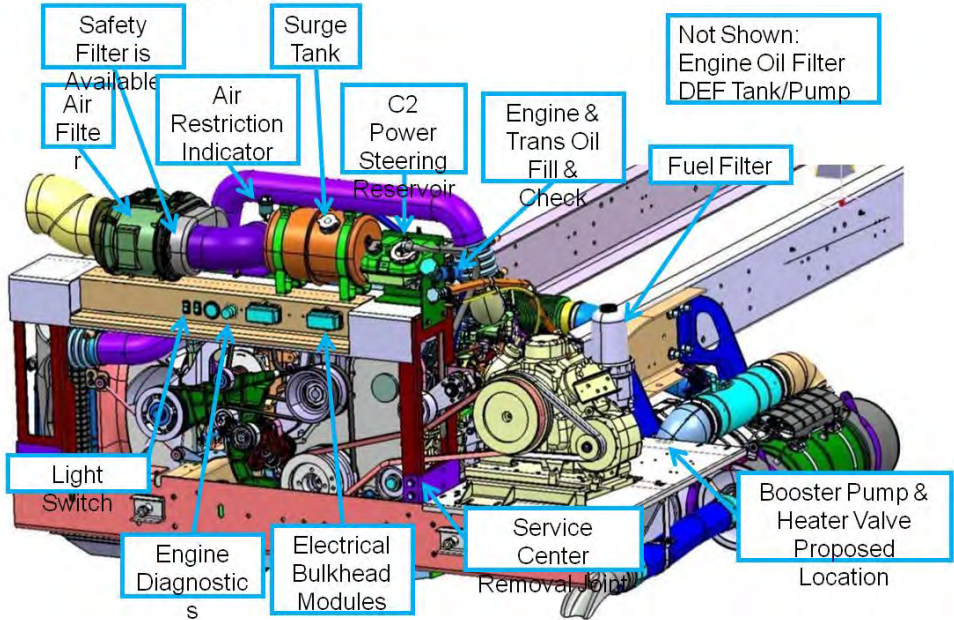


System

Source:
Department

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HDX Serviceability



2010 options	2013 options		Model
	Engines		
	ISB		
C241011220	C241013220	CUMMINS ISB-220 ENGINE (HDX) 2013 EPA	HDX
C241011240	C241013240	CUMMINS ISB-240 ENGINE (HDX) 2013 EPA	HDX
C241011250	C241013250	CUMMINS ISB-250 ENGINE (HDX)	HDX

		2013 EPA	
C241011260	C241013260	CUMMINS ISB-260 ENGINE (HDX) 2013 EPA	HDX
C241011280	C241013280	CUMMINS ISB-280 ENGINE (HDX) 2013 EPA	HDX
C241011300	C241013300	CUMMINS ISB-300 ENGINE (HDX) 2013 EPA	HDX
C241010200	C241014200	CUMMINS ISB-200 ENGINE (EFX) 2013 EPA	EFX
C241010220	C241014220	CUMMINS ISB-220 ENGINE (EFX) 2013 EPA	EFX
C241010240	C241014240	CUMMINS ISB-240 ENGINE (EFX) 2013 EPA	EFX
C241010250	C241014250	CUMMINS ISB-250 ENGINE (EFX) 2013 EPA	EFX
C241010260	C241014260	CUMMINS ISB-260 ENGINE (EFX) 2013 EPA	EFX
	ISL		
New for 2013	C242600260	CUMMINS ISL-260 ENGINE(HDX) 2013 EPA	HDX
New for 2013	C242600270	CUMMINS ISL-270 ENGINE(HDX) 2013 EPA	HDX
New for 2013	C242600300	CUMMINS ISL-300 ENGINE(HDX) 2013 EPA	HDX
	Body Adjustments		
New for 2013	B599348000	BODY ADJUSTMENT-HDX 2013 EPA	HDX
New for 2013	B599349000	BODY ADJUSTMENT-EFX 2013 EPA	EFX
	Transmissions		
C600301455	C600301125	ALLISON 2500PTS SERIES TRANS CUM ISB-200 2013 EPA	EFX
C600301456	C600301126	ALLISON 2500PTS SERIES TRANS CUM ISB-220 2013 EPA	EFX
C600301457	C600301127	ALLISON 2500PTS SERIES TRANS CUM ISB-240 2013 EPA	EFX
C600301459	C600301128	ALLISON 2500PTS SERIES TRANS CUM ISB-250 2013 EPA	EFX
C600301458	C600301129	ALLISON 2500PTS SERIES TRANS CUM ISB-260 2013 EPA	EFX
C600301447	C600301206	ALLISON 2500 PTS TRANS - CUM ISB- 220 (HDX) 2013	HDX
C600301448	C600301207	ALLISON 2500 PTS TRANS - CUM ISB- 240 (HDX) 2013	HDX
C600301463	C600301208	ALLISON 2500 PTS TRANS - CUM ISB- 250 (HDX) 2013	HDX
C600301449	C600301209	ALLISON 2500 PTS TRANS - CUM ISB- 260 (HDX) 2013	HDX
C600301462	C600301210	ALLISON 2500 PTS TRANS - CUM ISB- 280 (HDX) 2013	HDX
C600301637	C600301211	ALLISON 2500 PTS TRANS - CUM ISB- 300 (HDX) 2013	HDX
C602804457	C602804127	ALLISON 3000 PTS TRANS CUM ISB- 240 2013 EPA	EFX
C602804459	C602804128	ALLISON 3000 PTS TRANS CUM ISB- 250 2013 EPA	EFX

C602804458	C602804129	ALLISON 3000 PTS TRANS CUM ISB-260 2013 EPA	EFX
C602804448	C602804207	ALLISON 3000 PTS TRANS - CUM ISB-240 (HDX) 2013	HDX
C602804463	C602804208	ALLISON 3000 PTS TRANS - CUM ISB-250 (HDX) 2013	HDX
C602804449	C602804209	ALLISON 3000 PTS TRANS - CUM ISB-260 (HDX) 2013	HDX
C602804462	C602804210	ALLISON 3000 PTS TRANS - CUM ISB-280 (HDX) 2013	HDX
C602804637	C602804211	ALLISON 3000 PTS TRANS - CUM ISB-300 (HDX) 2013	HDX
New for 2013	C602804316	ALLISON 3000 PTS TRANS - CUM ISL-260 (HDX) 2013	HDX
New for 2013	C602804317	ALLISON 3000 PTS TRANS - CUM ISL-270 (HDX) 2014	HDX
New for 2013	C602804318	ALLISON 3000 PTS TRANS - CUM ISL-300 (HDX) 2015	HDX
New for 2013	C602805316	ALLISON 3000 PTS TRANS WITH RETARDER (HDX) ISL 260	HDX
New for 2013	C602805317	ALLISON 3000 PTS TRANS WITH RETARDER (HDX) ISL 270	HDX
New for 2013	C602805318	ALLISON 3000 PTS TRANS WITH RETARDER (HDX) ISL 300	HDX
C602806458	C602806129	ALLISON 3000 EVS TRANS CUM ISB-260 2013 EPA	EFX
C603009457	C603009127	ALLISON B300 TRANSMISSION ISB-240	EFX
New for 2013	C603009316	ALLISON B300 TRANSMISSION, ISL 260 HP 2013 EPA	HDX
C603009448	C603009207	ALLISON B300 TRANSMISSION, ISB 240 HP 2013 EPA	HDX
C603009463	C603009208	ALLISON B300 TRANSMISSION, ISB 250 HP 2013 EPA	HDX
C603009449	C603009209	ALLISON B300 TRANSMISSION, ISB 260 HP 2013 EPA	HDX
C603009462	C603009210	ALLISON B300 TRANSMISSION, ISB 280 HP 2013 EPA	HDX
	EFX Various Options - previously "Engine Related"		
C115800000	C115806000	AIR DRYER-BENDIX AD9 W/HEATER	EFX
C115801000	C115807000	AIR DRYER-BENDIX AD- IP W/HTR	EFX
C135400000	C135402000	LCE-NVLLE 200 AMP PAD-MTD ALT	EFX
C135401000	C135403000	LCE-NVLLE 270 AMP PAD-MTD ALT	EFX
C135700000	C135701000	LCE-NVLLE 320 AMP PAD-MTD ALT	EFX
C135800000	C135801000	LCE-NVL 185 AMP PM ALTERNATOR	EFX
C136201000	C136202000	DELCO 200 AMP PM ALTERNATOR	EFX
C181614000	C181618000	TRIPLE 12-VOLT BATTERIES ISB	EFX
C181615000	C181619000	TRIPLE 12-V DELPHI BATT ISB-EF	EFX
C181616000	C181620000	DUAL 12-VOLT BATTERIES ISB-EFX	EFX

C181617000	C183600000	TRIPLE12-V 31 DEKA BATT ISB-EF	EFX
C181817000	C183700000	DUAL12-V BATTERIES,8D ISB EFX	EFX
C235103000	C235104000	SILICONE HOSES & CT HOSE CLAMP	EFX
	HDX Various Options - previously "Engine Family Related"		
C116000000	C116400000	AIR DRYER-BNX AD9 W/HTR (HDX)	HDX
C116100000	C116500000	AIR DRYER-BNX AD-IP W/HTR-HDX	HDX
C116200000	C116600000	AIR DRYER-BNX AD9EP W/HTR-HDX	HDX
C135100000	C136600000	LCE-NVLLE 200 AMP ALT-PAD MTD	HDX
C135300000	C136700000	LCE-NVLLE 270 AMP ALT-PAD MTD	HDX
C135600000	C136800000	LCE-NVLLE 320 AMP ALT-PAD MTD	HDX
C136100000	C136900000	LCE-NVLE 185AMP H/O ALT-PAD MT	HDX
C136200000	C137000000	DELCO 200 AMP ALTERNATOR - HDX	HDX
C182100000	C182900000	TRIPLE 12-VLT GRP 31 BATTERIES	HDX
C182200000	C183000000	TRIPLE 12-VLT GRP 31 BATTERIES	HDX
C182300000	C183100000	DUAL 12-VOLT GROUP 31 BATTERIE	HDX
C182400000	C183200000	DUAL 12-VOLT 8D BATTERIES-HDX	HDX
C182700000	C183500000	DUAL 12-VOLT GRP 31 BATTERIES	HDX
C185500000	C185700000	BRKE/ACCLRTR INTERLOCK - HDX	HDX
C221900000	C222800000	ADJUSTABLE PEDAL SYSTEM - HDX	HDX
C235700000	C235720000	S/HOSES & CT HOSE CLAMPS-HDX	HDX
C235800000	C235820000	HOSES - GATES BLUE STRIPE, HDX	HDX
C236100000	C236120000	SS RADIATOR PIPES-UPPER&LOWER	HDX
C236900000	C236920000	HSES-GTSBLU STRP,CONST TQ CLMP	HDX
C380100000	C380120000	DAYTIME RUNNING LTS-D250 - HDX	HDX
C380220000	C380220000	DAYTIME RUNNING LTS (FL)-HDX	HDX
	HDX - Options created for ISL New Engine Family - 12-		
New for 2013	C207812000	EXHAUST BRAKE - HDX, CUM ISL	HDX
New for 2013	C221112000	CRUISE CONTROL-HDX(CUM ISL)	HDX
New for 2013	C221412000	AUTO FAST IDLE A/C(HDX)-FL	HDX
New for 2013	C221612000	AUTO FAST IDLE AC(P/BRAKE)	HDX
New for 2013	C222212000	HIGH IDLE ACTIVATION SW -GSA	HDX
New for 2013	C231812000	BLOCK HEATER - HDX (CUM ISL)	HDX
New for 2013	C232112000	WATER FILTER -HDX(CUMMINS ISL)	HDX
New for 2013	C232712000	CHS.A/C KIT-O5G/24V ALT.(HDX)	HDX
New for 2013	C237112000	CHS.A/C KIT-O5G/24V ALT.(GSA)	HDX
New for 2013	C250012000	CHASIS A/C KIT-05K,270AMP(HDX)	HDX
	New Battery Boxes, Hold Downs, Insulation		
New for 2013	B599063000	BATTERY BOX - SMALL	EFX, HDX
New for 2013	B599064000	BATTERY BOX - LARGE	EFX, HDX
New for 2013	B599065000	BATTERY BOX - LARGE W/SS TRAY	EFX, HDX
New for 2013	B599000001	BATT HLD DOWN BRCKT-STD 2 BATT	EFX, HDX
New for 2013	B599000002	BATT HLD DOWN BRCKT-STD 3 BATT	EFX, HDX
New for 2013	B599000003	BATT HLD DOWN BRCKT-DELX 2 BAT	EFX, HDX
New for 2013	B599000004	BATT HLD DOWN BRCKT-DELX 3 BAT	EFX, HDX
New for 2013	B599000005	BATT HLD DOWN BRCKT-8D BATTERY	EFX, HDX
New for 2013	B599001001	BATTERY BX INSULATION-SMALL BX	EFX, HDX

New for 2013	B599001002	BATTERY BX INSULATION-LARGE BX	EFX, HDX
	Fuel/Water Separators		
C230523000	C230534000	FUEL/WATR SEP W/HTR&WIF-CUMISL	HDX
C230524000	C230535000	FUEL/WATER SEP W/HTR-CUM ISL	HDX
C230525000	C230536000	FUEL/WTER SEP WOUT/HTR-CUM ISL	HDX
C230528000	C230537000	FUEL/WATER SEP W/HTR&PUMP-ISB	HDX
C230529000	C230538000	FUEL/WATER SEP W/O HTR,HDX-ISB	HDX
C230530000	C230539000	FUEL/WATER SEP W/HTR-EFX, ISB	EFX
C230532000	C230540000	FUELPRO382-C/DAVCO FUEL/WATER	EFX
C230533000	C230541000	FUELPRO382-C/DAVCO FUEL/WATER	HDX
	A/C Options		
B824201000	B824202000	CARRIER DC-10523 120K -GEN V	EFX, HDX
B824300000	B824302000	CARRIER DC-12175 120K BTU SYS.	HDX
B824600000	B824602000	CARRIER DC-12175KR4 120KBTU SY	HDX
B824601000	B824603000	CARRIER DC12175KR4 120KBTU GSA	HDX
B816003000	B816009000	CARRIER AC10W52 104K BTU-GEN V	EFX, HDX
B816004000	B816010000	CARR AC10W523 106K/120K-GEN V	EFX, HDX