



Engine Type	Very Severe*	Severe*	Heavy*	Medium*
MP10 (US2010)**	15,000 miles	25,000 miles	35,000 miles	50,000 miles
MP8 (US2010)**	10,000 miles	15,000 miles	25,000 miles	35,000 miles
MP7 (US2010)**	10,000 miles	15,000 miles	25,000 miles	35,000 miles
MP10 (US07)***	Not defined for these model engines	25,000 miles	35,000 miles	50,000 miles
MP8 (US07)***	Not defined for these model engines	15,000 miles	25,000 miles	35,000 miles
MP7 (US07)***	Not defined for these model engines	15,000 miles	25,000 miles	35,000 miles

* Very Severe service is for fuel consumption of 3.7 mpg or less; Severe service is for fuel consumption of 3.7 to 4.7 mpg; Heavy service is for fuel consumption of more than 4.7 to 6.0 mpg and medium service for fuel consumption greater than 6.0 mpg.

** Oil quality must meet both Volvo VDS-4 and Mack EO-O Premium Plus required - like Delo® 400 LE 15W-40.

*** Oil quality must meet both API CJ-4 and Mack EO-O Premium Plus - like Delo 400 LE 15W-40.

Caterpillar – On-Highway

(Caterpillar Used truck Engine Brochure – Oil Drain Recommendations – also reference SEBU 7695)



Engine Type	Severe*	Normal*	Light*
EPA07 C15 ACERT®	20,000 miles	30,000 miles	40,000 miles
EPA07 C13 ACERT®	20,000 miles	30,000 miles	40,000 miles
EPA07 C11 ACERT®	20,000 miles	30,000 miles	40,000 miles
EPA04 C15 ACERT®	20,000 miles	30,000 miles	40,000 miles
EPA04 C13 ACERT®	20,000 miles	30,000 miles	40,000 miles
EPA04 C11 ACERT®	20,000 miles	30,000 miles	40,000 miles

*C15 Standard (Deep) Sumps Light Duty is > 6.5 mpg, Medium Duty is 5.5 to 6.5 mpg, and Severe is < 5.5 mpg

**C13 Standard (Deep) Sumps Light Duty is > 7 mpg, Medium Duty is 6 to 7 mpg and Severe is < 6 mpg

***C11 Standard (Deep) Sumps Light Duty is > 7 mpg, Medium Duty is 6 to 7 mpg and Severe is < 6 mpg

Must Use ECF-3 engine oil quality for all US 07 compliant engines – like Delo 400 LE 15W-40; Use ECF-3 or ECF-2 for all 04 compliant engine models – like Delo 400 Multigrade 15W-40

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ON-HIGHWAY HEAVY DUTY ENGINE MANUFACTURER'S RECOMMENDED OIL DRAIN INTERVALS

Engine Oil Performance Requirements:

- Major U.S. On-Highway Engine Manufacturers recommend the following:
 - For ULSD all Manufacturers recommend API CJ-4 or API CI-4 Plus oils
 - 1.0% ash or less is key to maintaining emission control treatment systems

- Cummins allows for following per TSB 101040:
 - 5,000 extra miles for drain with use of any API CI-4 Plus oil meeting CES 20078
 - An additional 5,000 mile drains for light and normal duty operations when using Cummins Premium Blue Engine Oil

- Always follow OEM recommendations and utilize used oil analysis testing when extending oil drain intervals.

- OEM recommendations contained in this brochure are current at the time of publication (February 2012) but may change at any time. Check with each respective OEM for any information updates.



Detroit Diesel

(Detroit Diesel Service and Maintenance Intervals Bulletin)



Engine Type	Severe*	Short-Haul*	Long-Haul*
DD15**	25,000 miles 640 hours	35,000 miles 895 hours	50,000 miles 1,280 hours
DD13**	25,000 miles 640 hours	35,000 miles 895 hours	50,000 miles 1,280 hours
DD16**	25,000 miles 640 hours	35,000 miles 895 hours	50,000 miles 1,280 hours
Series 60***	Check with Detroit Diesel	Check with Detroit Diesel	30,000 miles
MBE 4000***	10,000 miles	15,000 miles	30,000 miles
MBE 900***	6,000 miles	15,000 miles	20,000 miles

*Severe Duty is up to 30,000 miles annually and for vehicles that average 5 mpg or less; Short Haul is between 30,001 and 60,000 miles annually and average between 5.1 and 5.9 mpg; Long Haul is over 60,001 miles annually and average greater than 6 mpg.

** Use engine oils approved against DD 93K218 – API CJ-4 oils like Delo® 400 LE 15W-40

***Use Engine Oils approved against DD 93K214 – API CI-4 Plus Oils like Delo 400 Multigrade 15W-40

Cummins***

(Cummins TSB101040 – Heavy Duty Product Oil Drain Intervals - 24 Aug-2010)



Engine Type	Severe*	Normal*	Light*
EPA 2010 ISX 15**	15,000 miles – CES 20081 20,000 miles – CES 20078	25,000 miles – CES 20081 30,000 miles – CES 20078	35,000 miles – CES 20081 40,000 miles – CES 20078
EPA 2010 ISX 11.9**	15,000 miles – CES 20081 20,000 miles – CES 20078	25,000 miles – CES 20081 30,000 miles – CES 20078	35,000 miles – CES 20081 40,000 miles – CES 20078
EPA 2010 ISL 9**	Check with Cummins	20,000 miles 500 Hours	Check with Cummins
EPA 2010 ISC 8.3**	Check with Cummins	20,000 miles 500 Hours	Check with Cummins
EPA 2010 ISB 6.7**	Check with Cummins	20,000 miles 500 Hours	Check with Cummins
EPA 07 ISX**	15,000 miles – CES 20081 20,000 miles – CES 20078	25,000 miles – CES 20081 30,000 miles – CES 20078	35,000 miles – CES 20081 40,000 miles – CES 20078
EPA 07 ISM**	15,000 miles – CES 20081 20,000 miles – CES 20078	25,000 miles – CES 20081 30,000 miles – CES 20078	35,000 miles – CES 20081 40,000 miles – CES 20078
EPA 07 ISC**	Check with Cummins	15,000 miles 500 Hours	Check with Cummins

*Light Duty > 6.5 mpg or < 70,000 lbs gross weight; Normal Duty = 5.5 to 6.5 mpg or 80,000 lbs gross weight; Severe Duty < 5.5 mpg or > 80,000 lbs gross weight

**CES 20081 refers to an API CJ-4 approved oil like Delo 400 LE 15W-40; CES 20078 refers to an API CI-4 Plus Oil like Delo 400 Multigrade 15W-40

*** For any Cummins engine models with light or normal service duty; Cummins allows an additional 5,000 mile drains when using Cummins Premium Blue & Valvoline Premium Blue Extreme

Navistar

(MAXXFORCE® Engine Brochure Drain Recommendations – 2010)



Engine Type	General*
2010 MAXXFORCE® 13	25,000 miles
2010 MAXXFORCE® 11	25,000 miles
2010 MAXXFORCE® 10	15,000 miles
2010 MAXXFORCE® 9	15,000 miles
2010 MAXXFORCE® DT	15,000 miles
2010 MAXXFORCE® 7	10,000 miles

* These are general guidelines and consult Navistar or their dealers for any severe or light duty service.

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PACCAR

(PACCAR Engine Specifications Sheets for PX-6, PX-8 & MX)



Engine Type	Severe*	Linehaul**
MX **	25,000 miles 800 hours	40,000 miles
PX-8**	N/A	15,000 miles 500 hours
PX-6**	N/A	15,000 miles 500 Hours

* Severe Duty - Vocational vehicle applications include: Agriculture, Concrete Mixers, Construction, Crane, Dumps, Emergency/Fire, Heavy Equipment, Loggers, Oil Field, Refuse, Pick up & Delivery, Snowplows, and Wrecker

** Use API CJ-4 or CI-4 Plus oils – like Delo® 400 LE 15W-40 or Delo 400 Multigrade 15W-40 respectively

Volvo Trucks NA

(Volvo Trucks Service Bulletin 175-60 dated 4.2010)



Engine Type	Very Severe*	Severe*	Heavy*	Medium*
D16H**	15,000 miles	25,000 miles	35,000 miles	50,000 miles
D13H**	10,000 miles	15,000 miles	25,000 miles	35,000 miles
D11H**	10,000 miles	15,000 miles	25,000 miles	35,000 miles
D16F**	Not defined for these model engines	25,000 miles	35,000 miles	50,000 miles
D13F**	Not defined for these model engines	15,000 miles	25,000 miles	35,000 miles
D11F**	Not defined for these model engines	15,000 miles	25,000 miles	35,000 miles

* Very Severe service is for fuel consumption of 3.7 mpg or less; Severe service is for fuel consumption of 3.7 to 4.7 mpg; Heavy service is for fuel consumption of more than 4.7 to 6.0 mpg and medium service for fuel consumption greater than 6.0 mpg.

** Oil quality of Volvo VDS-4 and Mack EO-O Premium Plus required. Drain intervals for D16H and 16F are based on 55 quart sumps. For sumps that are 44 quarts follow the drain guidelines for the D13H or D13F engine models.

Chevron Delo 400 LE 15W-40 meets the requirements of both Volvo VDS-4 and Mack EO-O Premium Plus.