QUICK REFERENCE GUIDE

Truck maintenance and operation

B6.7

For ease of identification, important characteristics of this engine are:

- Single camshaft
- High Pressure Common Rail (HPCR) fuel system
- Single Module DPF and SCR aftertreatment system
- ECM 2350 (this control module incorporates DEF dosing control)
- Variable Geometry Turbocharger (VGT)
- Exhaust Gas Recirculation system (EGR)

MAINTENANCE INTERVALS

	Severe Duty (<7 mpg or 40% idle) Miles/Hours/Months	Normal Duty (>7 mpg) Miles/Hours/Months
Oil drain intervals		
15 qt oil pan*	9,000/500/12	15,000/500/12
19 qt oil pan	12,000/550/12	20,000/550/12
Fuel filter	15,000/500/12	
Check coolant levels	60,000/2,000/NA	
Crank case ventilation filter	75,000/2,500/NA	
Overhead adjustment	150,000/5,000/48	
Diesel particulate filter[1]	200,000/6,500/NA	
Diesel exhaust fluid filter	200,000/6,500/NA	

*Standard oil pan

Electronic features

For best fuel economy and performance, take advantage of the following electronic engine features, setting the parameters to meet your needs:

- Road Speed Governor
- Cruise Control
- Idle Control
- Gear Down Protection

For guidance in parameter settings: https://www.cummins.com/support/digital-products-and-services-support/powerspec-support.

Maintenance information

CAUTION

- Never loosen a high pressure fuel line with the engine running. With the engine stopped, relieve pressure only at the fuel pump inlet line fitting on the side of the rail.
- Drain water from the fuel filter daily. Follow procedure 006-075 when the Water-In-Fuel (WIF) sensor is activated.
- When changing the engine mounted fuel filter, never pre-fill by pouring fuel in the center hole (clean side). Recommended procedure is to install filter dry and turn the key switch on and off 3-4 times and allow the priming pump to fill the filter.
- If you have to pre-fill the filter, use the smaller outside holes (dirty side) and let the fuel flow through the filter media to provide clean, filtered fuel to the clean side.
- Synthetic or Semi-Synthetic oils may be beneficial for extreme arctic or extreme heat conditions but DO NOT EXTEND Oil Drain Intervals with synthetic or semi-synthetic oils.
- Oils complying with CES 20086 or CES 20081 must be used, 10W30 or 15W40 is recommended. For areas with cooler ambient temperatures, please consult the owner's manual for additional information.

Check the oil pressure, coolant temperatures, water-in-fuel (WIF) sensor, DEF level, and other engine parameters daily via the OEM instrument panel or gauge cluster to make sure they are operational. Check the instrument panel regularly for any alarm messages. Take appropriate action to rectify the alarm condition or contact your nearest Cummins Service and Sales location.

[1]DPF cleaning or change interval

If the aftertreatment DPF has been removed for cleaning and is considered reusable (according to the Aftertreatment Diesel Oxidation Catalyst and Aftertreatment Diesel Particulate Filter Reuse Guidelines, Bulletin 4021600), the aftertreatment DPF should be returned to Cummins Inc. to be exchanged.

Cummins Inc. does not endorse localized air cleaning machines for ash removal. All DPFs requiring ash cleaning should be returned to a Cummins Inc. Authorized Repair Location in exchange for a New/Recon DPF. Unauthorized cleaning methods cannot be used to clean the DPF.

Lubricating oil system

SPECIFICATIONS

Oil pressure	
Low idle (min allowed)	69 kPa (10 psi)
At rated speed (min allowed)	207 kPa (30 psi)
Maximum oil temperature	280°F (137.7°C)
Oil capacity (standard pan)	
Pan only	14.2 liters (15 qt)
Total system	16.7 liters (17.6 qt)
High to low (on dipstick)	1.9 liters (2 qt)
Oil capacity (high capacity)	
Pan only	17.2 liters (18.5 qt)
Total system	19.7 liters (20.8 qt)
High to low (on dipstick)	2.8 liters (3 qt)
Oil filter capacity	0.95 liters (1 qt)

Cooling system

SPECIFICATIONS

Coolant capacity (engine only)	11.5 liters (3.0 gal)
Normal coolant temperature range	187 to 207°F (86 to 97.2°C)
Maximum allowed operating temperature	225°F (107.2°C)
Minimum recommended operating temperature	160°F (71.1°C)
Recommended pressure cap range	103 - 172 kPa (15-25 psi)

Fuel system

SPECIFICATIONS

Maximum fuel inlet temperature	176°F (80°C)
Maximum pressure drop across fuel filter	81 kPa (11.7 psi)
Maximum fuel drain line restriction	19 kPa (2.7 psi)

Cooling system information

Cummins Inc. recommends using either a 50/50 mixture of good quality water and fully formulated antifreeze, or fully formulated coolant when filling the cooling system. The fully formulated antifreeze or coolant must meet Cummins Engineering Standard (CES)14603 specifications.

Most coolants which meet American Society of Testing and Materials (ASTM) D6210 also meet CES14603.

However, some OAT coolants such as Shell™ Rotell ELC, Chevron™, Texaco™, and Delo ELC and their private label counterparts meet ASTM D6210, but do not meet the elastomer compatibility test of CES14603. These coolants are acceptable for use, assuming the OEM added silicate at initial fill. Refer to Bulletin 3666132, Cummins® Coolant Requirements and Maintenance, Section 3, Extended Service Interval, for more details.

Good-quality water is important for cooling system performance. Excessive levels of calcium and magnesium contribute to scaling problems, and excessive levels of chlorides and sulfates cause cooling system corrosion.

Diesel exhaust fluid

It is unlawful to tamper with or remove any component of the aftertreatment system. It is also unlawful to use a Diesel Exhaust Fluid (DEF) that does not meet the specifications provided or to operate the vehicle/equipment with no DEF. Cummins Inc. is not responsible for failures or damage resulting from what Cummins Inc. determines to be abuse or neglect.

In compliance with the regulatory agencies (EPA and CARB), the Cummins engine system incorporates on board diagnostics and electronic controls to monitor and ensure that tail pipe emissions requirements are met. A DEF lamp will notify the driver when the DEF tank level is running low and/or the quality of the DEF in the tank is not meeting specifications. Failure to promptly refill or replace DEF in the tank will trigger an inducement sequence, limiting engine torque and, eventually, vehicle speed to 5 mph.

For further details and discussion of DEF for Cummins engines, refer to Diesel Exhaust Fluid Specifications for Cummins Selective Catalytic Reduction Systems, Service Bulletin Number 4021566.

For engines using SCR operating in the United States and Canada, it is also strongly recommended that the DEF used be certified by the American Petroleum Institute (API). This would be indicated by a symbol on the container/dispensing system.

To ensure the correct DEF is used, Cummins Inc. recommends the use of Fleetguard® Diesel Exhaust Fluid. Fleetguard® carries different quantity options from small to bulk containers.

For complete maintenance recommendations and guidelines, refer to EPA 2017 B6.7 CM2350 Owner's Manual, Bulletin 5411225 and EPA 2017 B6.7 CM2350 Operation and Maintenance Manual, Bulletin 5411224.

Cummins Inc.
Box 3005
Columbus, IN 47202-3005
U.S.A.

cummins.com

Bulletin 5544259 Produced in U.S.A. Rev. 12/24