

# B6.7™

## Octane Key Product Features

### Base Engine

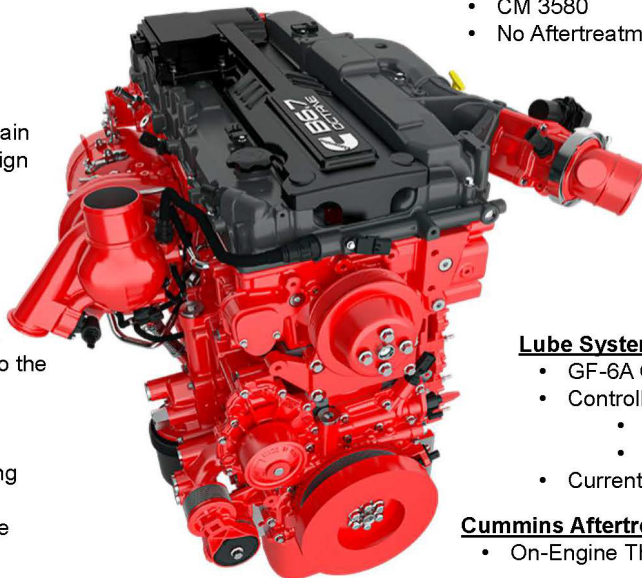
- 6.7L Displacement
- 107 mm Bore x 124 mm Stroke
- 4 Head Bolt Gray Iron Block
- 4 Valve Aluminum Cylinder Head
- Dual Overhead Camshaft Valve Train
- Type II Roller Finger Follower Design

### Air Handling System

- Dual Independent Cam Phasing
- Wastegate Turbocharger with Command WG Actuator
- Compressor By-pass Valve - Routes compressor out flow/pressure back to the compressor inlet to mitigate surge
- Non-EGR System
- Naturally aspirated air compressor – OEM supplied plumbing
- Positive Crank Case Ventilation
- Compression Release Exhaust Brake

### Vehicle Integration

- System Weight Improved Over B6.7 Diesel
- Customer Interfaces Similar to B6.7 Diesel



### Electronics/Controls

- CM 3580
- No Aftertreatment Control Module

### Fuel and Ignition System

- Direct Injection
- 350 bar Fuel Pressure
- M14 Spark Plug
- Coil-on-Plug Connection
- Single 3/8" Quick Fuel Disconnect OEM Connection
- EVAP Purge Valve 1/2" Quick Disconnect OEM Connection

### Lube System

- GF-6A Oil Required (10w30 and 15w40)
- Controllable Piston Cooling Nozzles
  - Solenoid actuated
  - Independent feed rifle
- Current Product Spin-On Oil Filter

### Cummins Aftertreatment System

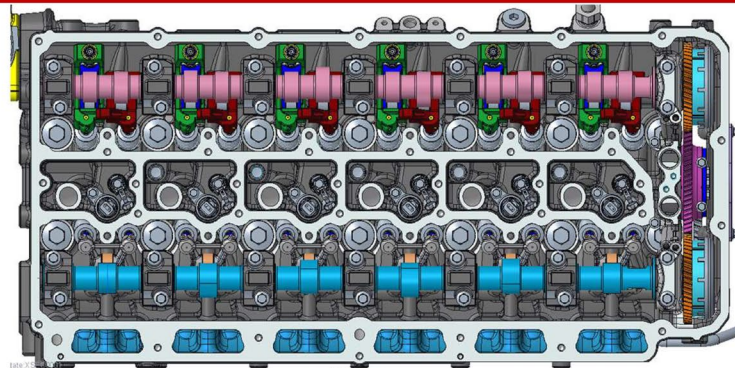
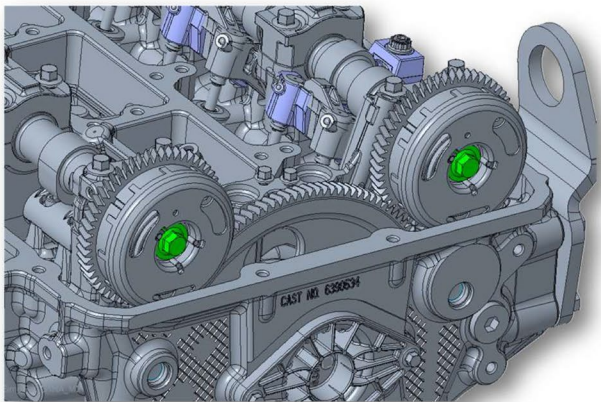
- On-Engine Three Way Catalyst (TWC)



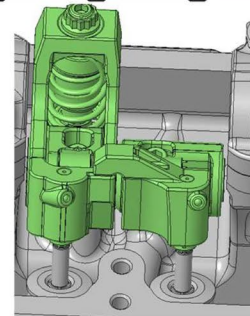
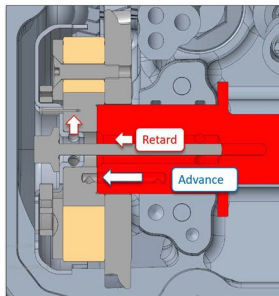
# Cam Phasing and Integrated Exhaust Brake

## Cam Phasers

- Same phaser PN on intake and exhaust with 50 crank degree phasing capability.
- Oil fed through two OCVs, 1 for intake cam 1 for exhaust cam to control phasing independently.
  - OCV – Oil Control Valve
- Unique cam cap#7 with oil circuit to provide oil supply from cylinder head → OCVs → Cam cap #7 → Cam Journal #7 → Oil drillings on the camshaft nose → Phasers



Oil Flow thru  
Cam to Phaser

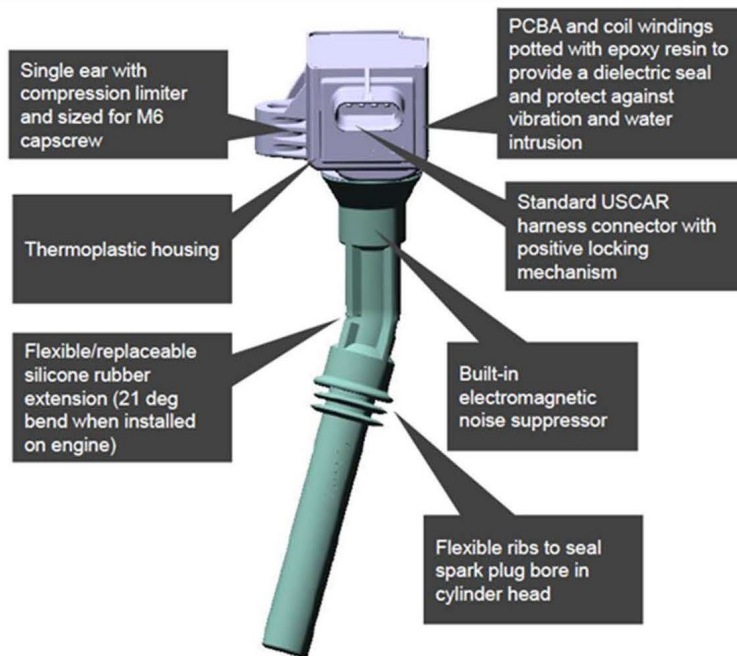
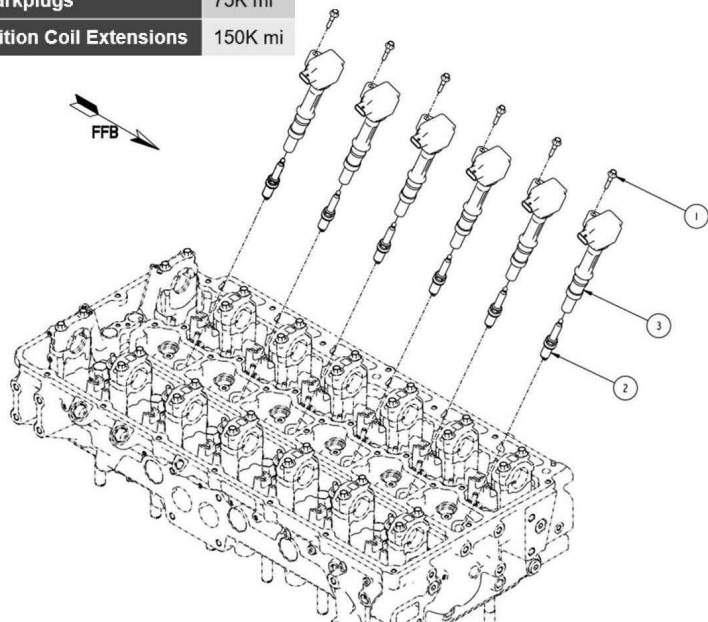


No lash  
adjustment  
required on  
engine brakes  
after leaving  
factory



# Spark Plugs, Coils, and Extensions

Sparkplugs	75K mi
Ignition Coil Extensions	150K mi



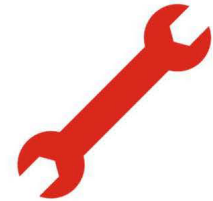
**B6.7 Octane**

B6.7 Octane details are preliminary and may be subject to change at any time without notice.



# Maintenance Targets - Preliminary

Maintenance Event	B6.7 Octane TARGET
Oil and Filter Change	Up to 15,000 mi / 600 hr. / 12 mo. (duty cycle dependent)
Fuel Filter Change	No Specified Interval (OEM supplied)
Crankcase Ventilation Filter ("Breather") Change	Maintenance Free
Valve Lash Adjust	N/A (HLA)
DPF Clean	N/A
DEF Filter Change	N/A
Spark Plugs	75K mi
Ignition Coil Extensions	150K mi



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# Oil and Filter

## Oil and Filter Change

Up to 15,000 mi / 600 hr. / 12 mo.  
(duty cycle dependent)

### • OIL

- **Valvoline Premium Blue™ One Solution Gen 2**
- GF6-A – 10W-30 or 15W-40
- GF6-B (Zero Weight Oils) are **not approved**
- 15 Quart Pan Capacity

### • FILTER - LF3970

- Existing location and filter

### • COOLANT

- Fleetguard ES COMPLEAT™ OAT or equivalent (CES 14636)



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