

TO: Service Locations

FROM: Service Methods Development

SUBJECT: **DD Platform Heavy Duty Metal in the Oil and Oil Filter**

### ISSUE

Some engine component failures can cause metallic debris to circulate throughout the engine lubrication system. Although the oil filter will capture most of this debris, some debris may enter the clean side of the lubrication system during oil filter bypass.

Detroit has created a lubrication system cleaning and flushing procedure to address this problem. In addition, there are guidelines listed below related to the replacement of oil lubricated engine components. These components: oil coolant module, turbocharger, air compressor, gear train, camshaft housing, camshafts, and rocker arms, are flushed when following this process.

### REQUIRED ACTION



**WARNING:**

#### **PERSONAL INJURY**

To avoid injury from hot surfaces, wear protective gloves, or allow engine to cool before removing any component.



**WARNING:**

#### **PERSONAL INJURY**

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

**WARNING:****FIRE**

To avoid injury from fire, keep open flames, sparks, electrical resistance heating elements, or other potential ignition sources away when draining lubrication oil. Do not smoke when draining lubricating oil

1. Verify metallic debris is present in the oil pan and in the pleats of the oil filter.
2. Clean and flush the engine lubrication system. Refer to the section; “Flushing the Engine Lubrication System” in the appropriate Workshop Manual for the engine.
3. Replace the following components, in addition to the components listed in the flushing procedure:
  - Oil suction manifold
  - Oil pump
  - The Primary Failed Part (PFP) that led to the metal in the oil
4. Do not replace the following components unless damage is found during the time of this repair. Use the appropriate inspection sections in the workshop manual to determine if these components are damaged.
  - Oil coolant module
  - Turbocharger
  - Air compressor
  - Gear train components
  - Camshaft housing, camshafts, and rocker arms

**CONTACT INFORMATION**

Please contact the Detroit Diesel Customer Support Center at 800-445-1980 or email [csc@daimler.com](mailto:csc@daimler.com) if you have any questions.