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## Service Information Bulletin

SUBJECT	DATE
Check for Excessive Oil Consumption	January 2013

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform – All Years	Check for Excessive Oil Consumption	Changed step 5.



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## 2 Check for Excessive Oil Consumption

Check as follows:

1. Check first for external oil leaks.
  - a. If external leaks are found, repair as needed.
  - b. If no external leaks are found, Go to step 2.
2. Perform a crankcase pressure test. Refer to section "Crankcase Pressure Test".
  - a. Is excessive crankcase pressure is found, Go to step 3.
  - b. Is excessive crankcase pressure is not found, Go to step 4.
3. Perform the relative compression test with DDDL 7.X or newer. Refer to section "Relative Cylinder Compression Test".
  - a. If relative compression test shows no cylinders with low compression, inspect the air compressor.
  - b. If relative compression test reveals a cylinder with low compression, inspect for a worn or damaged cylinder kit. Repair as necessary.
4. Check the interior of the exhaust S-pipe (Turbo Compound DD15 and DD16) or the exhaust flanged manifold (DD13 and GHG14 DD15 Asymmetrical Turbo DD15) for oil.
  - a. If oil is found, Go to step 5.
  - b. If no oil is found, Go to step 6.



### **WARNING: PERSONAL INJURY**

To avoid injury, never remove any engine component while the engine is running.

5. Remove the turbocharger and inter-stage duct (if equipped), inspect for oil in the exhaust manifold.
 

For the DD13, Refer to section "Removal of the DD13 Turbocharger".

For the DD15 and DD16, Refer to section "Removal of the DD15 and the DD16 Turbocharger".

  - a. If oil is found in the inter-stage duct (DD15), or the exhaust flanged manifold (DD13), and none is found in the exhaust manifold, Go to step 6.
  - b. If no oil is found in the inter-stage duct (if equipped), Go to step 7.
  - c. If oil is found in the exhaust manifold, Go to step 8.
6. Inspect the turbocharger for damage.
 

For the DD13, Refer to section "Inspection of the Turbocharger".

For the DD15 and DD16, Refer to section "Inspection of the DD15 and DD16 Turbocharger".

  - a. If the turbocharger is OK, check for air inlet restrictions.
  - b. If the turbocharger appears to be defective, replace the turbocharger.
 

For the DD13, Refer to section "Removal of the DD13 Turbocharger".

For the DD15 and DD16, Refer to section "Removal of the DD15 and the DD16 Turbocharger".
7. Check pressure output of the Axial Power Turbine (APT) air solenoid using an air pressure gauge. Is the APT air pressure 21 to 48 kPa (3 to 7 psi)?
  - a. Yes; replace the APT. Refer to section "Removal of the DD15 and DD16 Axial Power Turbine".
  - b. No; if the air pressure is out of specification, change the APT air solenoid.
8. Remove the exhaust manifold to determine if the oil is coming from one cylinder or multiple cylinders. Refer to section "Removal of the Exhaust Manifold".
  - a. If oil is coming out of a particular cylinder, check the valve seals, stems, and guides for wear. If the valve seals, stems, and guides are OK, Go to step 9.
  - b. If oil is coming from multiple cylinders, look in the air inlet and Charge Air Cooler (CAC) pipes for oil from the compressor side of the turbocharger. If no oil is found, Go to step 9.
9. Remove the cylinder head and inspect cylinder(s) for damage. Repair as necessary.
 

For DD13, Refer to section "Removal of the DD13 Cylinder Head".

For DD15 and DD16, Refer to section "Removal of the DD15 and DD16 Cylinder Head".