



TRUCKS

TECHNICAL BULLETIN EN-27

DATE: APRIL 11, 2001
MODEL YEAR: 1999 AND AFTER
CHASSIS MODEL: UD1200/UD1400/UD1800CS
ENGINE MODEL: FD46TA
BULLETIN #: EN - 27
FILE IN THE ENGINE SECTION OF THE TECHNICAL BULLETIN BINDER

PASSING OIL COMPLAINTS IN FD46TA TURBOCHARGERS

PURPOSE

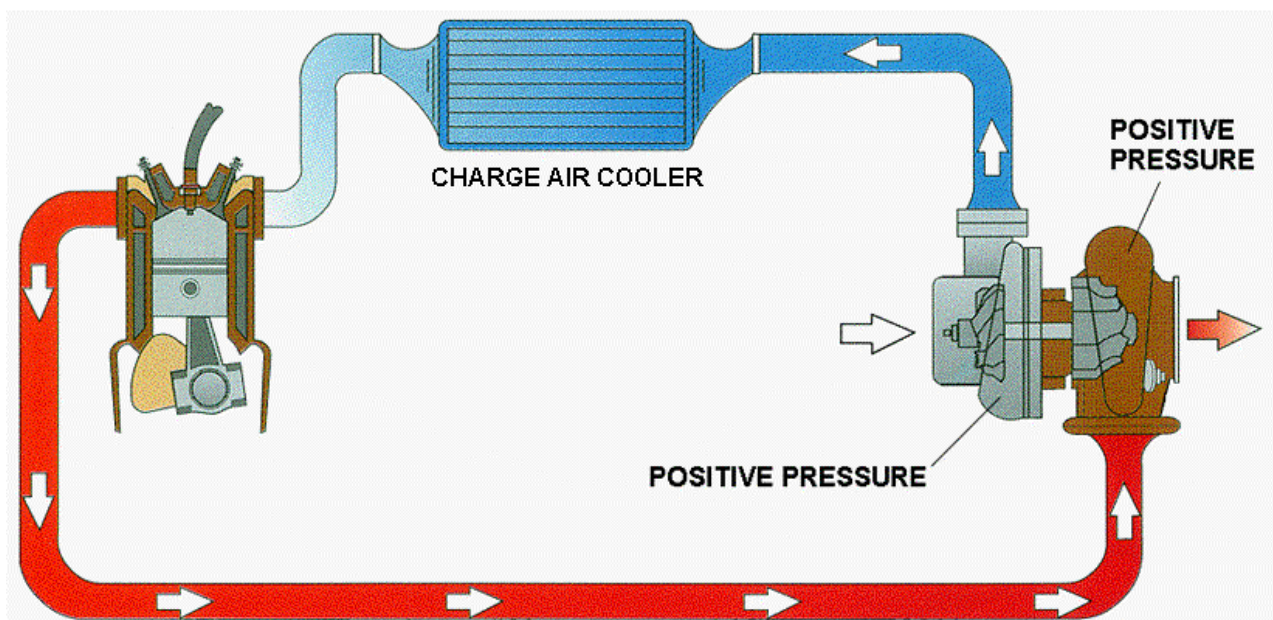
To advise Dealer Service Managers and UD Truck technicians about the unnecessary replacement of turbocharger assemblies for complaints of "passing oil" or "internal seal leaks."

SERVICE NOTICE

Analysis of replaced turbochargers with complaints of passing oil have found that a high percentage have no fault or defect and are being replaced unnecessarily.

A turbocharger that is passing oil through the shaft seals does not always indicate that the turbocharger is faulty. The absence of physical damage in the unit, such as worn bearings or fin damage, is an indication that the passing oil complaint may be caused by something other than the turbocharger itself.

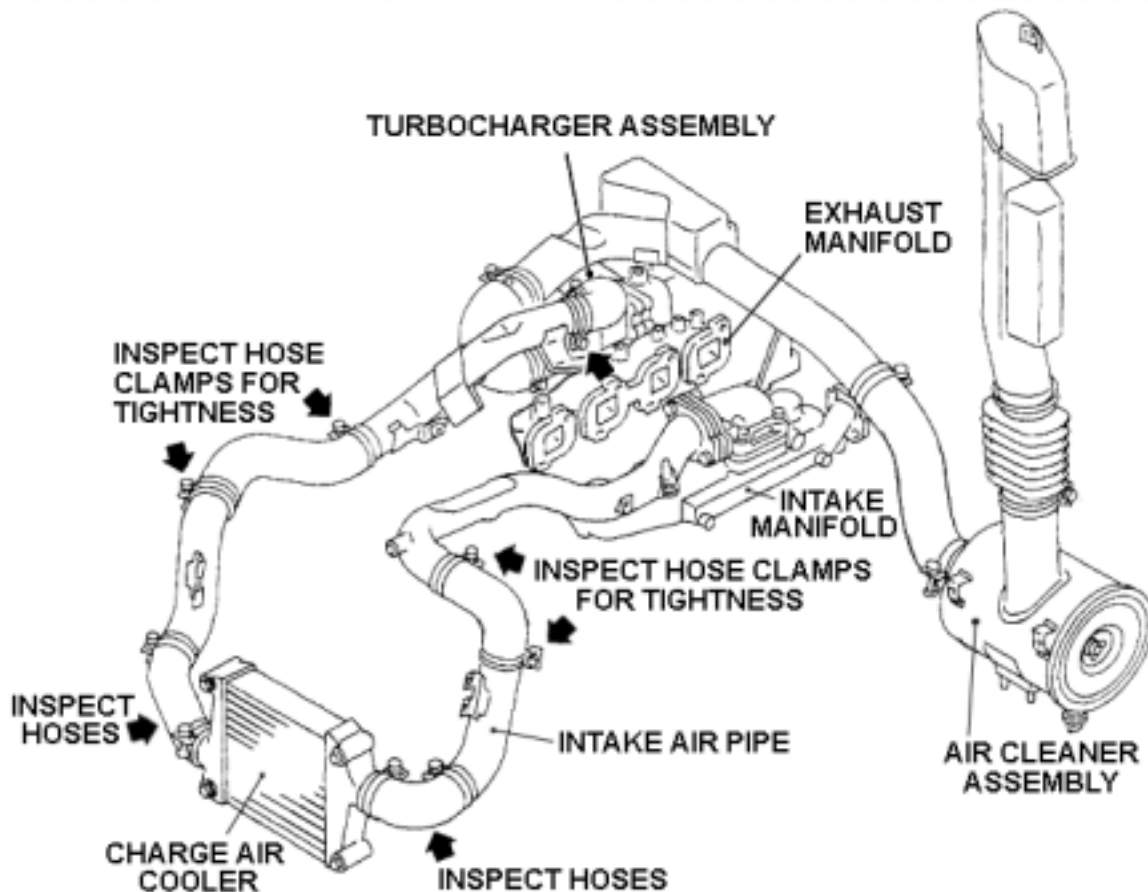
The turbocharger uses seal rings on the shaft to separate the center housing from the turbine and compressor housing. The ring sealing is activated when the turbo shaft rotates and turbine and compressor housing pressure develops. This pressure in the housings is directly involved with the proper operation of the turbocharger shaft seal rings.



Inspection of turbochargers with passing oil complaints revealed that the cause for this complaint was a positive pressure differential between the turbine housing (exhaust) and the compressor housing (intake). A pressure differential will allow oil to pass by the turbocharger shaft seal rings.

POSSIBLE CAUSES

- Clogged or restricted air cleaner elements
- Restricted intake system between the air cleaner assembly and the turbocharger
- Loose or missing intake duct clamps between the turbocharger, the charge air intercooler and the intake manifold
- Cracked or worn hoses between the turbocharger, the charge air intercooler and the intake manifold
- Pressure loss at the intake manifold or manifold gasket
- Turbochargers that are in need of servicing directly affect the operation and will lead to pressure imbalances (refer to the UD Truck Service Manual for turbocharger cleaning procedures)



RECOMMENDATION

If a turbocharger is found to be passing oil, inspect the turbocharger for obvious damage. If the turbocharger is found to be operational and free from damage, proceed with diagnosing the entire turbocharger system to locate the true cause of the oil passing complaint.

THE INFORMATION CONTAINED IN THIS BULLETIN SHOULD NOT BE INTERPRETED AS THE BASIS FOR WARRANTY CLAIMS