

Instruction Sheet

Turbo Oil Drain Tube Assembly Kit



1171910R1

Purpose

Removal and installation of new turbo oil drain tube assembly.

Kit Contents

Table 1 Turbo Oil Drain Tube Assembly Kit

Description	Quantity
Tube assembly, turbo oil drain	1
O-ring	2
Instruction sheet	1

Procedure

REMOVAL

WARNING: To prevent personal injury or death, read all safety instructions in the "Safety Information" section of the service manual.

WARNING: To prevent personal injury or death, shift transmission to park or neutral, set parking brake, and block wheels before doing diagnostic or service procedures.

WARNING: To prevent personal injury or death, make sure the engine and turbocharger have cooled before removing the turbocharger.

WARNING: To prevent personal injury or death, remove ground cable from negative terminal of main battery before disconnecting or connecting electrical components. Always connect ground cable last.

WARNING: To prevent personal injury or death, do not let engine fluids stay on your skin. Clean skin and nails using hand cleaner and wash with soap and water. Wash or discard clothing and rags contaminated with engine fluids.

See appropriate service manual listed below for removal of the turbocharger and turbo oil drain tube. Discard old turbo oil drain tube and O-rings.

- EGES 235-2 *Service Manual* (2002 and 2003 Model Years)
- EGES 295-2 *Service Manual* (2004 through 2006 Model Years)

INSTALLATION

CAUTION: To prevent engine damage, use a permanent marker when marking engine parts.

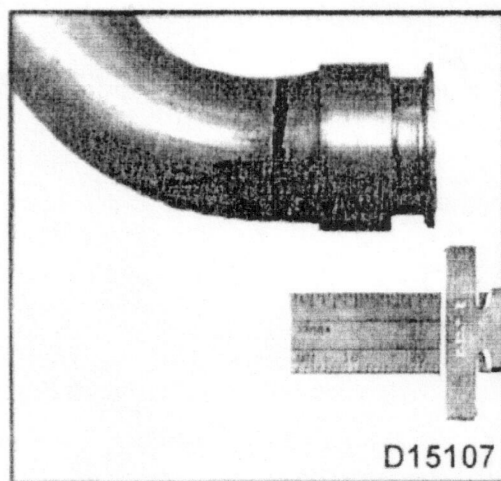


Figure 1 Marked turbo oil drain tube

Procedure (cont.)

1. Measure and mark the turbo oil drain tube 21.8mm (0.9 inches) from the pump cover end of the tube (Figure 1). This mark indicates where to stop inserting the tube into the pump cover.

2. Install two new O-rings onto the turbo oil drain tube.

CAUTION: To prevent engine damage, do not insert turbo oil drain tube further than the line drawn on tube. If the tube is inserted further than the recommended measurement and then pulled back to the mark, the O-ring can be cut or damaged allowing oil to leak.

3. Lubricate the O-rings with clean engine oil.

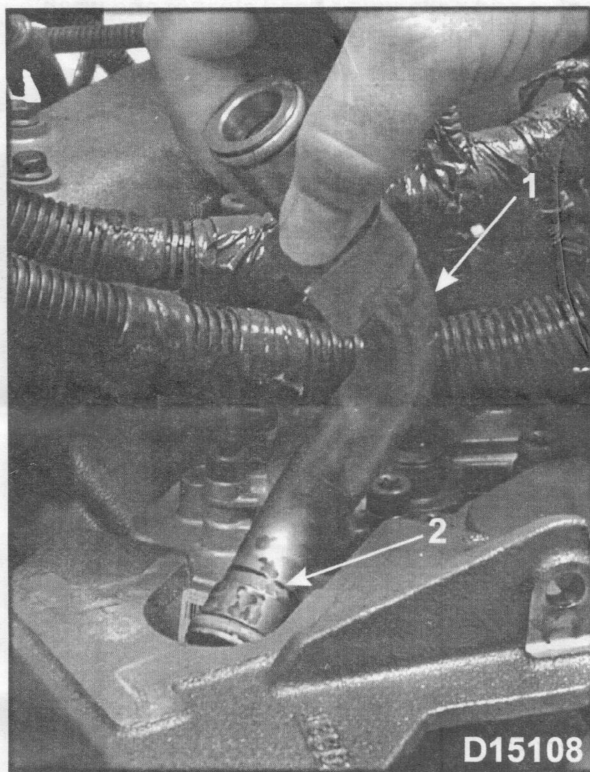


Figure 2 Installing turbo oil drain tube

1. Turbo oil drain tube
2. Stop mark

4. Install the turbocharger oil drain tube by inserting the tube into the pump cover. Push tube into the pump cover up to the mark made in step 1. The flanges of the turbo oil drain tube assembly should be resting on the turbo support bracket.

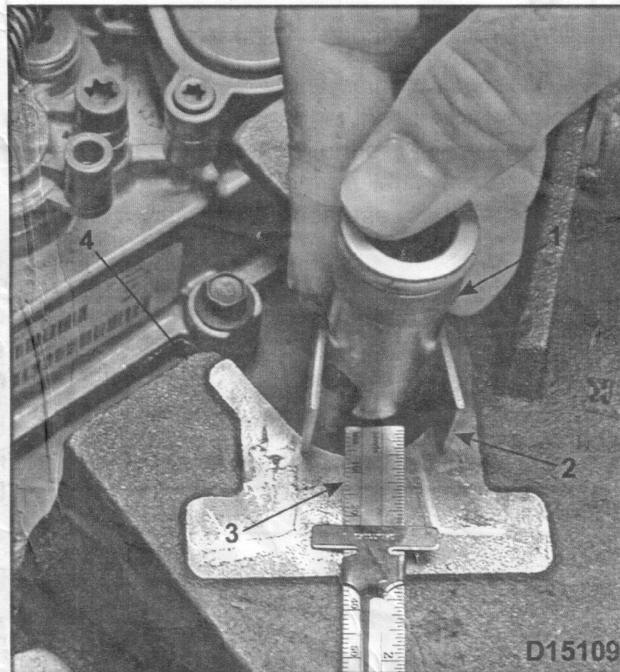


Figure 3 Verifying turbo oil drain tube position

1. Turbo oil drain tube assembly
2. Turbo oil drain tube flange
3. Metric scale
4. Turbo support bracket

5. Once the turbo oil drain tube assembly is positioned into the pump cover up to the stop mark and the flanges are resting on the turbo support bracket, measure the distance from the turbo support bracket to the tube assembly. The distance should measure 5 - 6mm (0.2 inches). This verifies the turbo oil drain tube is in the correct position.

6. Continue installation procedure per instructions in the appropriate diesel engine service manual.