



No.: 07 TS-59
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TO: Service Locations

FROM: Technical Support Development

SUBJECT: **EPA98 and EPA04 MBE 4000 Flywheel Housing Mounting Bolts**

ISSUE

Changes in fastener length, installation procedures, and bolt torque have been implemented in production to address rear engine mount fasteners loosening in service. Engines built prior to engine serial number 0460750202 on May 13, 2003, use a flywheel housing that only accommodates 40 mm M16 x 1.5 bolts in the upper and lower tapped mounting bracket attachment holes in the flywheel housing. Engines built after this serial number require 50 mm bolts.

All remanufactured MBE 4000 reliabilt[®] products with a serial number greater than 460000R3001044 (built in July, 2004) must also use 50 mm bolts, even if the vehicle was originally equipped with 40 mm bolts.

See Figure 1 below.

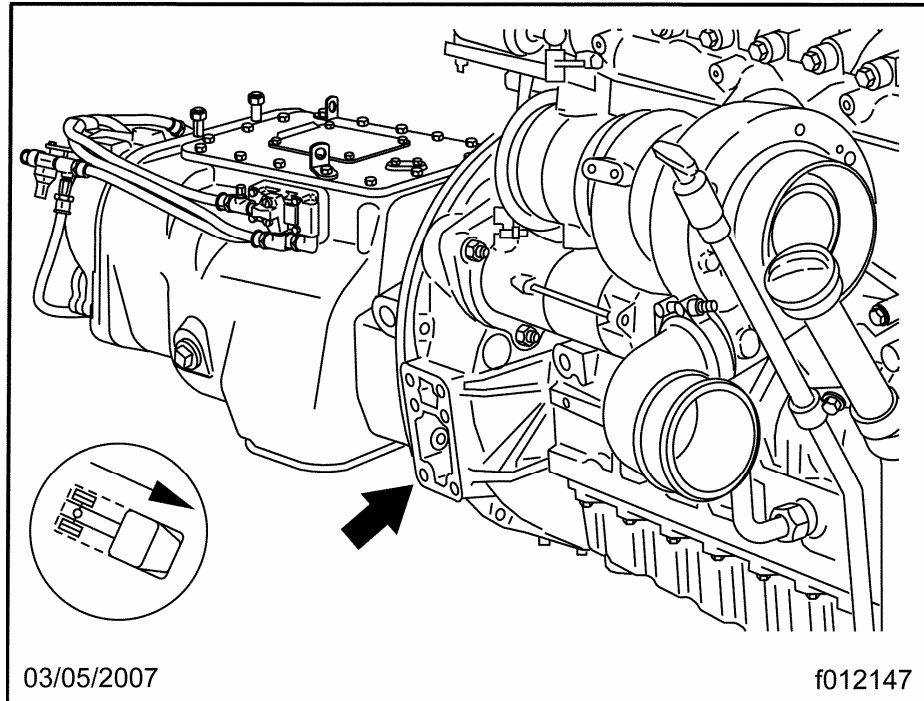


Figure 1 – Flywheel Housing Engine Mount Holes

REQUIRED ACTION

The correct length bolts must be used with the correct flywheel housing when repairs are made.

REQUIRED MATERIAL

Table 1 provides a list of the correct Freightliner part numbers for the bolts. Detroit Diesel Distributors should source equivalent bolts locally or purchase them from a Freightliner dealer.

| Part Number | Description |
|--------------|------------------------|
| 23-12799-050 | Bolt - 50 mm M16 x 1.5 |
| 23-12799-040 | Bolt - 40 mm M16 x 1.5 |

Table 1 – Freightliner Flywheel Housing Mounting Bolt Part Numbers

REPAIR PROCEDURE

Refer to the *MBE 4000 Service Manual (6SE412)* and the appropriate vehicle service manual for complete repair information.

1. Use the engine serial number and a measurement to determine the correct flywheel housing bolts needed.
 - a. If the engine serial number is less than 0460750202 (built before May 13, 2003), 40 mm bolts must be used.
 - b. If the engine serial number is 0460750202 or greater (built on or after May 13, 2003), 50 mm bolts must be used.
 - c. Double check the depth of the hole by using a suitable dowel rod or bolt.
2. Support the engine/transmission assembly with a suitable device.
3. Visually inspect the four fasteners on each side and the flywheel housing for signs of torque loss or flywheel housing damage. If housing damage is apparent, it must be replaced.
4. Clean any oil and Loctite® residue from the threads.
5. Run an M16 x 1.5 bottoming tap to its full depth, then clean out debris using Brake Clean or an equivalent cleaner.
6. Apply Loctite 271 or Permatex® High Strength Threadlocker RED to the bolts specified for the housing.
7. Torque all bolts to 264 N·m (195 lb·ft).

CONTACT INFORMATION

Please contact the Detroit Diesel Customer Support Center at 313-592-5800 or email csc@detroitdiesel.com if you have any questions.