

**No.: 05 TS - 45**  
October 24, 2005

TO: DDC Distributors, FLLC Dealers

FROM: Technical Service

SUBJECT: **MBE4000 Fuel Line Inspections**

**ISSUE**

There are two fuel line issues on MBE4000 engines:

- Fuel injector spill line rubbing on rear engine cover on units prior to engine S/N 460805219.
- Main fuel return line leakage on left side of engine on units prior to engine S/N 460801977.

**CAUSE**

- Fuel line interference with rear engine cover.
- Improper installation of tie straps.

**REQUIRED ACTION**

- Remove rear engine cover and grind or cut down inside support ribs. Inspect fuel line for leaks, cracks, etc.
  - Grinding of the rear engine cover became effective with engine S/N 460805219 in January, 2005.
- Remove side engine covers and tie straps and inspect fuel line for leaks, cracks, etc.
  - Elimination of tie straps on the main fuel return line became effective with engine S/N 460801977 in January, 2005.

 **WARNING:****FIRE**

**To avoid injury from fire caused by heated diesel-fuel vapors:**

- **Keep those people who are not directly involved in servicing away from the engine.**
- **Stop the engine immediately if a fuel leak is detected.**
- **Do not smoke or allow open flames when working on an operating engine.**
- **Wear adequate protective clothing (face shield, insulated gloves and apron, etc.).**
- **To prevent a buildup of potentially volatile vapors, keep the engine area well ventilated during operation.**

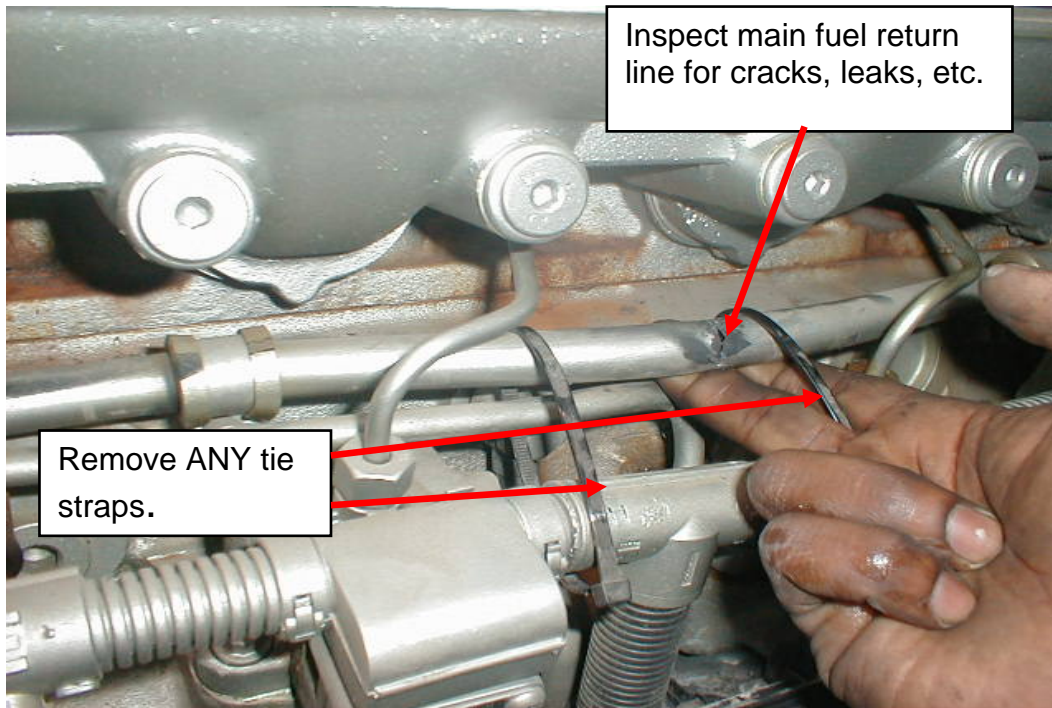
**REPAIR PROCEDURE****Figure 1 Rear Engine Cover (Stock)**

1. Remove rear engine cover p/n 4600100290. (See Figure 1)

**Figure 2 Rear Engine Cover (Modified)**

2. Gently grind or cut down the support ribs on the inside of the cover. Make sure there are no sharp edges and that the cover is not damaged. (See Figure 2)

3. Inspect the fuel injector spill line for leaks, cracks, etc. Replace if necessary. Reference the *MBE4000 Service Manual* (6SE412).
4. Reinstall the rear engine cover.
5. Remove side engine covers and cut off ANY tie straps that may be present on the main fuel return line on the left side of the engine. (See Figure 3)



**Figure 3** Cutting of Tie Straps

6. Inspect the main fuel return line for leaks, cracks, etc. Replace if necessary.
7. Reinstall side engine covers.

#### **CONTACT INFORMATION**

Please contact the DDC Customer Support Center at 313-592-5800 if you have any questions.