FUSO

Recall Information Bulletin

No: R3150410 **Issued:** 12/13/2005
Re: 4M50 Idler Shaft Bolt
Group: 11 **Models:** FE, FH

SUBJECT:
Safety Recall R3150410 - 4M50 Idler Shaft Bolt

MODELS:
FE640, FH210,

VEHICLES INVOLVED:
Certain 2001-2002 model year FE640 and 2003 model year FH210 vehicles produced from June 15, 2000 through December 18, 2002.

A list of vehicles your Dealership has sold that require this Recall can be found on the Dealer's "Open Campaigns" list supplied by MFTA via Fusonet. Some individual vehicles described above may not need the Recall. Always check the "VIN Inquiry" tab under "Service" or "Warranty" on Fusonet to verify that the VIN requires this Safety Recall.

Important note: It is a violation of Federal law for a dealer to deliver a new or used motor vehicle covered by this Recall Information Bulletin, under a sale or lease, until the Safety Recall has been completed.

OWNER NOTIFICATION:
Owners of affected vehicles will be notified by mail. A copy of the customer notification letter can be found on Fusonet.

CONDITION:
Mitsubishi Fuso Truck of America, Inc. has decided that a defect which relates to motor vehicle safety exists in the cylinder head idler shaft bolt. On affected vehicles, the cylinder head idler gear shaft bolt may have been insufficiently tightened during initial assembly. Continued operation in this condition could cause the bolt to loosen, resulting in abnormal noise from improper gear alignment. In the worst case, the bolt could break, causing the engine to stall and not restart.

MODIFICATION:
The cylinder head idler shaft bolt will be replaced with a modified component and tightened to a new torque specification. If the originally-installed bolt can be removed by hand, the cylinder head idler gear assembly will be replaced. The repair parts are available through normal parts channels in kit form. The contents of the kits (**part numbers LT-31-5, LT-31-F and LT-32-A**) are described below.

RECALL CLAIM SUBMITTAL:
Claim parts and labor via the DIN System using the Recall Claim Entry screen. Enter all requested information, including the Recall Number. Choose a Recall Number from the Recall Reimbursement table below that corresponds with the type of repair performed. The system will apply the labor allowance and parts pricing adjustment shown.

Recall Reimbursement					
Campaign Number	**Model**	**Allowances**		**Labor Description**	**Part Numbers**
R3150410	FE640,FH210	Labor Time	1.4 hours	Idler shaft bolt inspection and replacement	LT-31-5
		Parts Pricing	US$5.28		
R3150420	FE640,FH210	Labor Time	4.9 hours	Idler shaft bolt inspection and idler gear assembly replacement	LT-31-5 LT-31-F LT-32-A
		Parts Pricing	US$231.87		

RECALL PARTS RETENTION:
All parts that have been removed and replaced must be properly identified and retained, as outlined in the Warranty and Service Policy Manual, section 3.8. The Product Support Manager will inspect each part and authorize its scrapping.

REPAIR PROCEDURE:

1. Park the vehicle on a flat, level surface, shut off the engine, apply the parking brake, chock the wheels and disconnect the battery cables. **CAUTION! Do not remove the wheel chocks until all modification work has been completed!**

LT-31-5 Parts Kit Contents		
Item #	**Part Name**	**Qty.**
1	Water outlet case gasket	1
2	O-ring (22.1)	1
3	Flange bolt (10x62)	1
LT-31-F Parts Kit Contents		
Item #	**Part Name**	**Qty.**
4	Rocker Cover Gasket	1
LT-32-A Parts Kit Contents		
Item #	**Part Name**	**Qty.**
5	Fuel leak-off gasket	4
6	Gasket (10)	6
7	Gasket (12)	4
8	Circular Packing	4
9	Idler gear assembly	1
10	Idler gear shaft	1
11	Flange bolt (10x62)	1
12	Sealant	1

2. Allow the engine to cool completely, then drain the coolant into a clean container and save for reuse.

   Refer to the proper Service Manual section for detailed repair procedures:

   TWSE0101-A 2002 FE/FG Service Manual, Section 11A 4M50 (TWSE0101-11A)
   TWME0202-A 2002-2004 FH Service Manual, Section 11A 4M50 (TWME0202-11A)

3. Remove the water outlet case, as shown in **DIAGRAM 1**, and clean off all remaining gasket material from both the outlet case and cylinder head surfaces. Remove and discard the heater elbow o-ring **2**.

4. Attempt to loosen the idler gear shaft flange bolt **11** by hand (see **DIAGRAM 2**).

   - If the flange bolt CANNOT be loosened by hand, *the idler gear assembly is reusable.* Perform steps 5 - 8. DO NOT PROCEED TO STEPS 9 - 21.
   - If the flange bolt CAN be loosened by hand, *the idler gear assembly must be replaced.* SKIP STEPS 5 - 8. Proceed to steps 9 - 21.

DIAGRAM 1

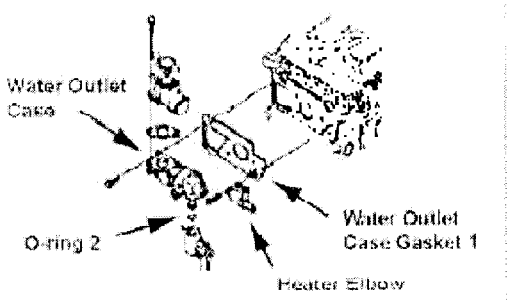


PHOTO 1

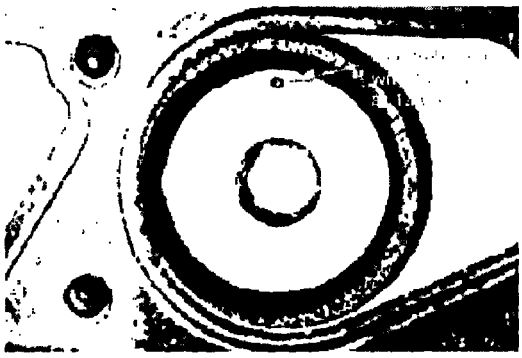
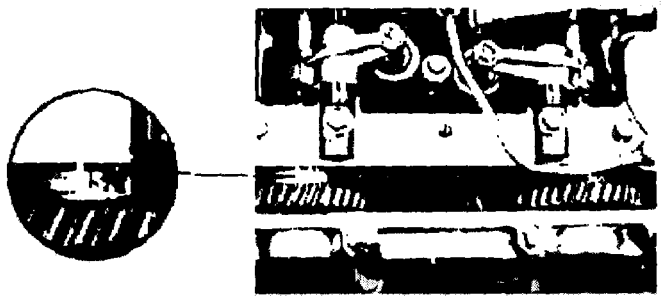


PHOTO 2



Reassembly procedure with reusable idler gear assembly:

5. Remove the existing idler gear shaft flange bolt **11**. **IMPORTANT! Keep light constant pressure on the idler gear shaft 10 toward the rear of the engine when replacing the flange bolt 3 to ensure that the thrust plate does not drop into the engine.**

6. Install a new idler gear shaft flange bolt **3**, ensuring that the mark on the idler gear shaft **10** remains in the 12:00 position as shown in **PHOTO 1**. Torque the flange bolt **11** to **38.0 ft.lbs.**

7. Reinstall the water outlet case with a new case gasket **1** and o-ring **2**. Torque the water outlet case attaching bolts to **17.4 ft.lbs.**

8. Refill the cooling system with the saved coolant.

Reassembly procedure with idler gear bushing replacement (DIAGRAMS 2 & 3 and PHOTOS 1 & 2):

9. Temporarily tighten the idler gear shaft flange bolt to ensure that the thrust washer remains in place.

10. Loosen and remove all engine accessory drive belts.

11. Remove the A/C compressor (if equipped).

12. Remove the injection pump to injection nozzle fuel pipes.

13. Remove the fuel leak-off pipe.

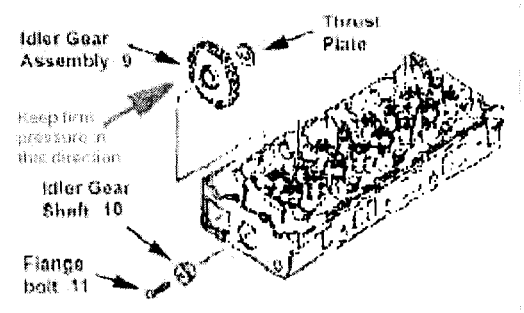
14. Remove the rocker cover and discard the rocker cover gasket **4**.

15. Remove both the intake and exhaust rocker shaft assemblies.

16. Remove the camshaft frame and both the intake and exhaust camshaft assemblies, and clean off all remaining gasket material from camshaft frame.

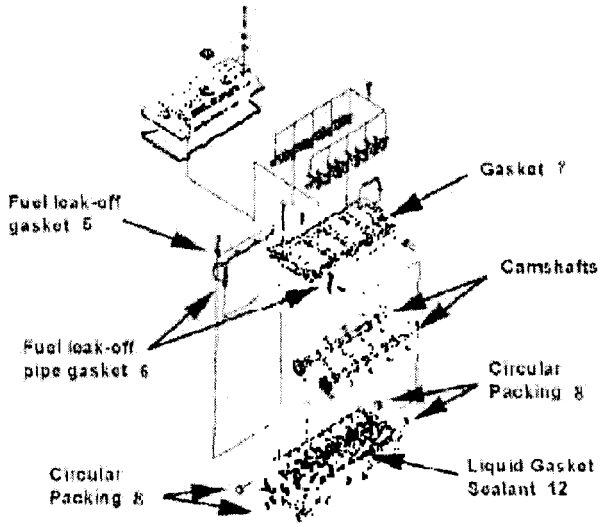
17. Remove the idler gear shaft flange bolt **11**, shaft **10** and gear assembly **9**.

DIAGRAM 2



REPAIR PROCEDURE (cont'd):

DIAGRAM 3



18. Install a new idler gear assembly **9**, idler gear shaft **10** and flange bolt **11**. Torque the flange bolt **11** to **38.0 ft.lbs.**

19. Reinstall all removed components in the reverse order of steps 3, 9 - 16 above.

20. When reinstalling the camshaft assemblies, place piston # 1 at top dead center on the compression stroke and align the camshafts with the alignment marks on the camshaft gear and the camshaft frame (refer to **PHOTO 2**). **NOTE: Review Service Information Bulletins 00-013 and 00-015 for more information concerning camshaft installation.**

21. Install new gaskets and sealants provided in parts kit **LT-32-A (Items 5,6,7,8 & 12)** and refill the cooling system with the saved coolant.

    Refer to the Tightening Torque table below for proper attaching hardware tightening specifications.

Tightening Torque Specifications	
Part Name	**Torque (ft-lbs.)**
Idler gear shaft flange bolt	38.0
Rocker cover attaching bolts (4 bolts)	14.0
Water outlet case attaching bolts (8 bolts)	17.4
Cam frame attaching bolts (8 x 45) (13 bolts) refer to Service Manual for tightening sequence.	20.0
Rocker shaft assembly attaching bolts (8 x 60) (10 bolts) refer to Service Manual for tightening sequence.	20.0
Cam frame attaching bolts (8 x 155) (2 bolts)	17.0
Injector return pipe (4 bolts)	15.0
Cam frame return pipe (10 x 20) (2 bolts)	15.0
Internal fuel line nuts	28.0
External fuel line nuts	28.0