



Recall Information Bulletin

No: C1000010 **Issued:** 9/20/2005

Re: AISIN A/T Shift Linkage

Group: 23 **Models:** FE,FG,FH

SUBJECT:

Safety Recall C1000010 - AISIN Automatic Transmission Shift Linkage

MODELS:

FE639, FE640, FE649, FG639 and FH210 equipped with an AISIN automatic transmission.

VEHICLES INVOLVED:

Certain 1999-2004 model year FE639, FE640, FE649, FG639 and FH210 vehicles produced from February 27, 1998 through January 20, 2004.

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 AISIN automatic transmission (A/T) shift linkage. On affected vehicles, rust buildup on the A/T shift linkage, due to an insufficient corrosion inhibiting ability, may cause the linkage to bind. Rust buildup is accelerated in geographic locations that are situated near large bodies of salt water, or in regions with heavy snow/ice melting compound usage in winter months. The effort required to operate the A/T shift control lever may increase if the linkage binds due to rust buildup. In the worst case, the shift control lever may become inoperative, or the physical shift lever position on the shift lever housing gear indicator may not match the actual gear selection at the transmission. Please note that the electronic gear selection indicator on the instrument panel is unaffected by this failure and will continue to indicate the actual gear selected at the transmission.

MODIFICATION:

Replace the A/T shift control lever with a modified assembly. Additionally, a Maintenance Supplement Manual indicating the required inspection and maintenance intervals for the modified parts will be placed in each vehicle.

PARTS TO BE REPLACED:

The A/T shift lever assembly and its attaching hardware will be replaced, and a Maintenance Supplement Manual will be placed in each truck. The replacement parts kit and maintenance supplements are available through normal parts channels. The applicable part numbers for this Safety Recall are listed 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 correct truck model. The system will apply the labor allowance and parts pricing adjustment shown.

Recall Reimbursement					
Campaign Number	Model(s)	Allowances		Labor Description	Part Numbers
C1000010	FE639, FE640 FE649, FG639	Labor Time	1.9 hours	Disassembly, shift linkage assembly replacement, reassembly and adjustment, maintenance manual placement	LT-G05
		Parts Pricing	\$129.65		MH998870
C1000020	FH210	Labor Time	1.9 hours	Disassembly, shift linkage assembly replacement, reassembly and adjustment, maintenance manual placement	LT-G05
		Parts Pricing	\$134.20		MH998871

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-05G Parts Kit Contents			
Item #	Description	Part Number	Quantity
1	A/T Control Lever Assembly	LT-05G	1
2	Coated Flange Nut (M6)		1
3	Nut (M8)		2
4	Flange Bolt (M12X30)		2
Maintenance Supplement Manuals			
	FE/FG Maintenance Supplement	MH998870	1
	FH210 Maintenance Supplement	MH998871	1

2. Lubricate the two shift lever nuts (at 3, DIAGRAM 2) with penetrating oil.
3. Remove and discard the shift cable ball joint nut (at 2, DIAGRAM 1) and disconnect the A/T control cable from the A/T control lever assembly (1).

DIAGRAM 1

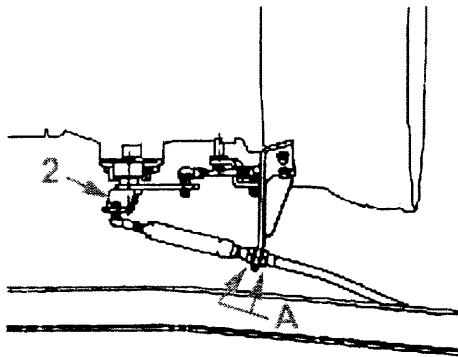


DIAGRAM 2

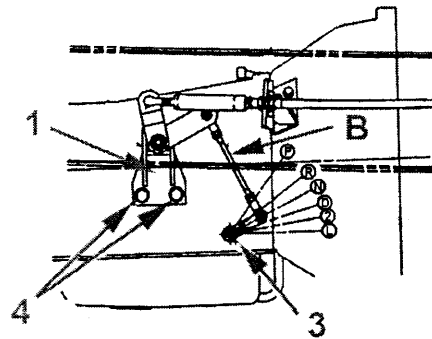


DIAGRAM 3

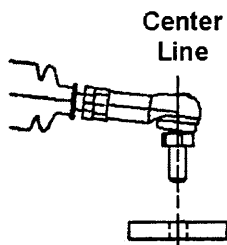
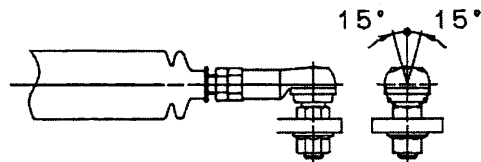


DIAGRAM 4



4. Remove and discard the inner and outer shift lever nuts (at 3, DIAGRAM 2) and the A/T control lever assembly flange bolts (at 4, DIAGRAM 2). Then, remove the shift lever assembly (at 1, DIAGRAM 2). **NOTE: Use extreme caution when removing the shift lever nuts if heavy corrosion is present, as damage to the A/T shift lever shaft could occur.**
5. Affix the new A/T control lever assembly (1) to the side of the transmission using two new flange bolts (4). Torque the flange bolts to 28-39.8 ft.lbs. (38-54 N m).

6. Install a new inner shift lever nut (3) and torque to 9.6 ft.lbs (13 Nm).
7. While holding the inner nut in place, install a new outer shift lever nut (3) and torque to 11.1 ft.lbs. (15 Nm).
8. Place both the gear shift range selector in the cab and the shift lever at the transmission in the Neutral "N" position.
9. Ensure that the center of shift cable ball joint is properly aligned with the center of the hole in the new A/T control lever (DIAGRAM 3).
10. If the ball joint and control lever are misaligned, loosen the two shift cable nuts (at A, DIAGRAM 1), and slide the shift cable forward or rearward to align the ball joint and lever hole.
11. Confirm that both levers have remained in the Neutral "N" position, then torque the two shift cable nuts to 43.5-61.2 ft. lbs. (59-83 Nm).
12. If the ball joint of the A/T control cable is twisted beyond its limit (DIAGRAM 4), correct the torsional angle to $\pm 15^\circ$ of perpendicular.
13. Install a new adhesive-coated flange nut on the A/T control cable (at 2, DIAGRAM 1) and torque to 3-4.4 ft. lbs. (4-6 Nm).
14. Place the A/T shifter in the cab into each gear selection, confirming that the lever moves smoothly from Park "P" through Low "L" with no discrepancy between the gear shift indicator on the floor of the cab, the electronic gear indicator on the instrument panel and the actual gear selected at the transmission. Note: While moving through the gear selection, ensure that there are no abnormalities, such as binding while moving the shifter.
15. Confirm that the shift lever remains securely in Park "P" position and that the ignition key can be easily removed from its switch.
16. If any problems during steps 14 or 15 are encountered, the A/T control rod (at B, DIAGRAM 2) must be adjusted.
17. Loosen the A/T control rod ball joint nuts (at C, DIAGRAM 5) and adjust the length by turning the rod.

DIAGRAM 5



18. Resecure the ball joint nuts and torque to 7.4-11.0 ft.lbs. (10-15 Nm).
19. If either A/T control rod ball joint cable is twisted beyond its limit (DIAGRAM 5), correct the torsional angle to within $\pm 15^\circ$ of perpendicular.
20. After performing this adjustment, repeat steps 14 through 19 until no shifting problems exist.
21. Reconnect the battery cables and remove the wheel chocks.