



Subject: Fault Code 73 FMI 7 After Recent Input Shaft Replacement – USP/FAA

Document Number: TAIB-0997

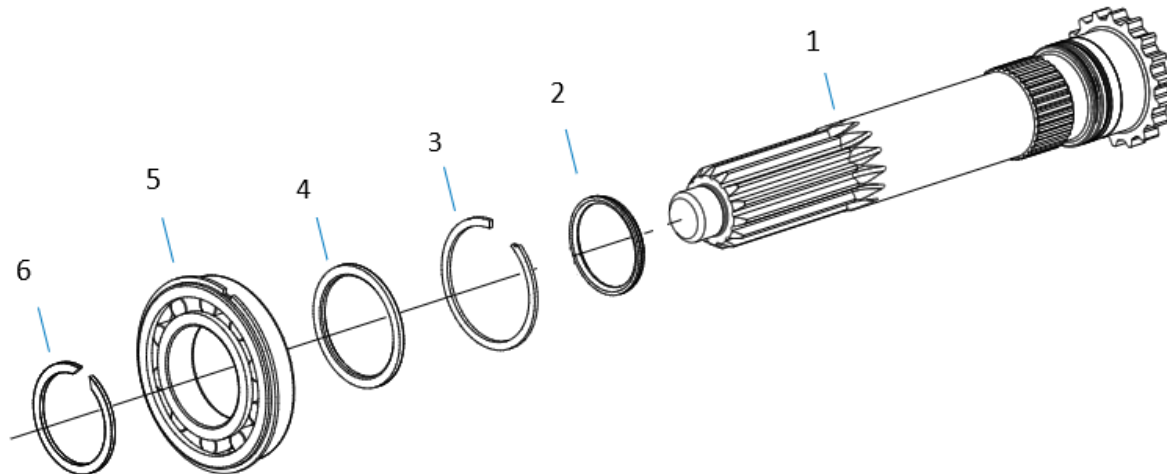
Date: February 21, 2022

Issue Description:

Customers may experience Fault Code 73 FMI 7 in the Transmission Electronic Control Unit (TECU) after a recent input shaft installation or replacement.

During the Input Shaft Installation procedure, the Input Shaft Spacer (Item 4) may have been installed before (or underneath) the snap ring (Item 3). This forces the Main Drive Gear rearward not allowing full engagement of the front sliding clutch into the Main Drive Gear. When the vehicle is driven the XY Shifter Actuator position sensor indicates minimum gear engagement was **not** achieved and the TECU sets Fault Code 73 FMI 7.

Image below indicates order of installation for Input Shaft Spacer (Item 4):



Item	Description	Part Number
1	Input Shaft	-
2	Seal	-
3	Snap Ring	14750
4	Spacer	16463
5	Roller Bearing	-
6	Snap Ring	-

Containment/Corrective Action:

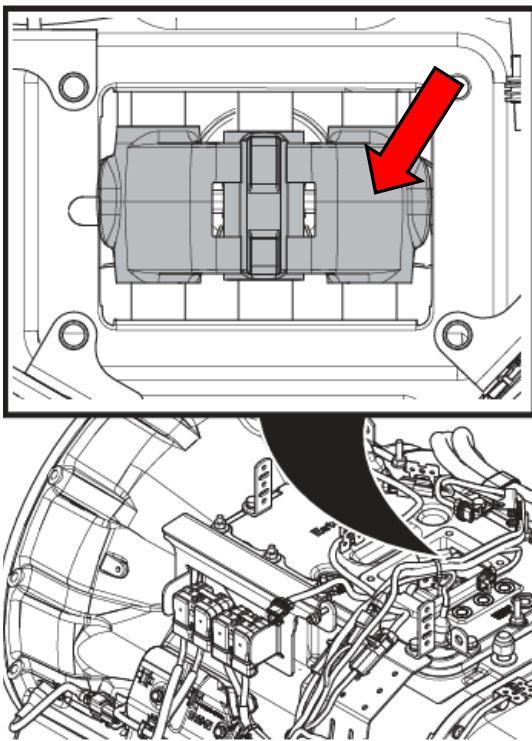
If the Input Shaft was recently installed or replaced and Fault Code 73 FMI 7 sets Active during a gear shift of the front sliding clutch into the Main Drive Gear, perform the Field Strategy outlined below and check for proper installation of the Input Shaft Spacer (Item 4).

Affected Models/Population:

- UltraShift *PLUS*
- Fuller Advantage Automated
- SmartAdvantage Automated

Field Strategy:

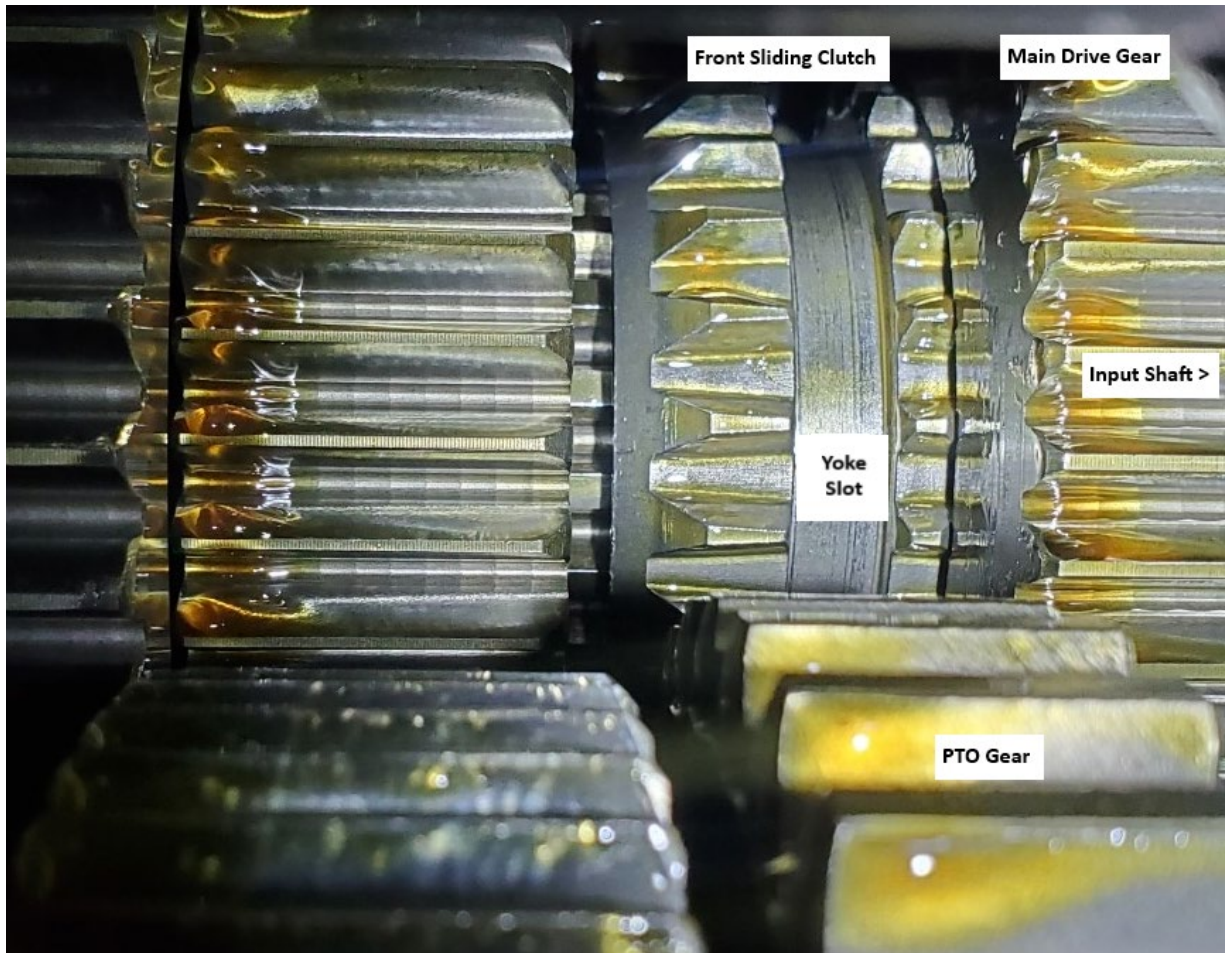
1. Key off.
2. Set parking brake and chock wheels.
3. Remove XY Shift Actuator.
4. Manually move the rightmost (4th/5th) shift rail forward to engage front sliding clutch into Main Drive Gear.



5. Drain transmission oil into a suitable clean container.
6. Remove the 8-bolt PTO cover.

7. Inspect position of front sliding clutch yoke slot in relationship to Main Drive Gear.
 - a. If sliding clutch yoke slot is **not** flush with Main Drive Gear sidewall, suspect incorrect installation of Input Shaft Spacer. Go to appropriate service manual and complete Input Shaft Removal and Installation service procedure.
 - b. If sliding clutch yoke slot is flush with Main Drive Gear, go to appropriate troubleshooting guide and complete Fault Code Isolation Procedure.

Note: Image below is through PTO opening. Sliding clutch is **not** fully engaged into Main Drive Gear:

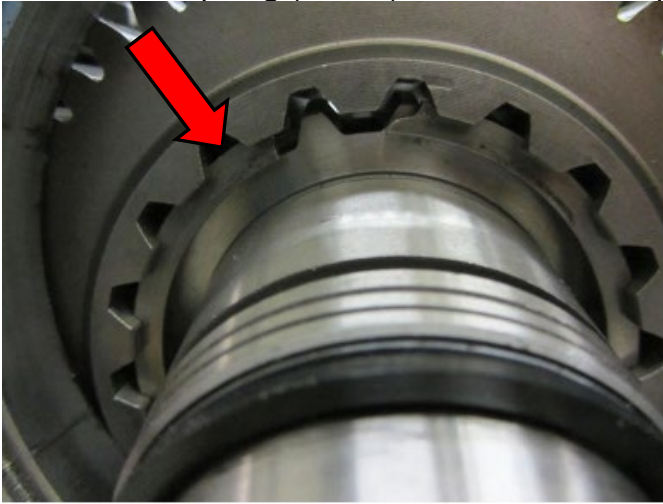


Input Shaft Installation Procedure:

Note: Partial procedure, see appropriate service manual for complete procedure:

1. If necessary, complete installation of the Input Shaft Bushing.
2. Install the Input Shaft into the Main Drive Gear splines.

3. Install the snap ring (14750) that retains the Input Shaft to the Main Drive Gear.



4. Install the Input Shaft Spacer (16463).



Warranty Information: Information only

The material contained in this bulletin is product improvement information. Eaton Corporation is not committed to, or liable for, canvassing existing products. FSUD: 2022-FSUD-4361