



Powering Business Worldwide

BACKED BY
Roadranger
SUPPORT

Subject: ECA Clutch Incompatible Lube Failures

Document Number: CLIB0030

Date: February 6, 2017

Issue Description: The ECA clutch (PN 122002-35, 122003-42) uses a sealed bearing in the release bearing housing. Testing has shown that some service greases used during maintenance intervals have ingested past the seals into the release bearing during normal operation. Ingested service grease mixes with the sealed bearing grease and may cause an incompatible lube failure.

Eaton has required that the service grease meet three requirements:

1. **Lithium Complex** (Base Thickener)
2. **NLGI #2 or #3** (Consistency)
3. **NLGI GC/LB** (Performance Rating)

Some greases meeting these recommendations have been found to suffer incompatible lube failures in the sealed release bearing.

Typical evidence of an incompatible lube failure is dry or hard clumped material inside the release bearing and/or the release bearing housing. The unit may or may not have fresh grease in the bearing area. See Figure 1.



Figure 1: Incompatible Grease Failure

Symptoms of the failure in Eaton Automated product are Fault Code 27 FMI 7 for Inertia Brake Touch Point < 16°. As the bearing fails due to lack of lubrication, it seizes. The now spinning outer race wears into the bearing housing stand offs, or the release bearing sleeve wears into the spring retainer of the clutch. This wear reduces the distance between the back of the release bearing and the LCIB. This is a latching fault that cannot be cleared. The clutch must be replaced.

Follow Fault Code 27 troubleshooting diagnostics in the UltraShift *PLUS* (TRTS0940) Fuller Advantage (TRTS0980) troubleshooting guides. IBKTP can be found using ServiceRanger 4 these steps:

1. Key on with engine off.
2. With ServiceRanger connected, select “Vehicle Data Monitor.”
3. Select “J1939 Clutch Actuator” and review figure under “Clutch Inertia Brake TP Delta.” Record this figure in table.
4. Upload Service Activity Report (SAR) to the Eaton website.

Field Strategy: Fix as fail. Work with fleets suffering failures to use recommended grease. (See service bulletin CLIB0029.)

Containment/Corrective Action:

1. Replace clutch with correct part number. Use Heavy-Duty Clutch Service Manual (CLSM0200) for proper installation procedures.
2. Clutch replacement will be covered under warranty.
3. Requirements for coverage are:
 - SAR Showing FC 27 FMI 7 with IBKTP < 16°
 - Photographic evidence of release bearing housing
4. Eaton will educate fleet to use grease that is appropriate for release bearing applications. (See Service Bulletin CLIB0029.)
5. Repeat release bearing failures after incompatible lube failure identification on the same vehicle (VIN) will be considered non-warrantable.

Affected Models/Population: UltraShift *PLUS*, Fuller Advantage Automated, 122002-35, 122002-35A, 122003-42, 122003-42A

Warranty Information:

Warranty Parts:

- Warranty replacement cost of the clutch
- 122002-35A, 122003-42A

Warranty Labor:

- Clutch R&R OEM SRT time

Warranty Coverage:

Eaton standard warranty and Extended warranty periods