Subject: Heavy Duty Clutch May Not Achieve Full Departure – Mechanical and Automated

Document Number: CLIB-0035

Date: December 12, 2018  Updated: April 13, 2020

Issue Description:
Customers may experience various fault codes and/or clutch release complaints due to broken clutch levers in self-adjust clutches used with automated and manual transmissions. Figures 1-3 below illustrate a failed clutch lever.

Automated Transmission Complaints:

- Transmission service lamp may or may not be illuminated.
- Active or Inactive fault codes may include:
  - 64/7, 27/7, 71/7, 71/11, 73/7, 45/7
  - Fault codes could be in various combinations, active or inactive, or no fault found.
- Transmission software 5569997 or greater will address fault code 71/11 – reference Service Bulletin CLIB0033. NHTSA 18E-102 has been made public on the NHTSA web site: www.nhtsa.gov/recalls.
Mechanical Transmission Complaints:
- Incomplete clutch departure
- Transmission may be difficult to shift:
  - Into gear position from Neutral
  - between gears
  - into Neutral from a gear position
- Harsh gear engagement
- Harsh launch
- Clutch slipping
- Clutch dragging

**NOTICE:** Refer to the Containment/Corrective Action section, Option 2 (Automated Transmission Complaints) of this Service Bulletin prior to troubleshooting fault codes.

**Containment/Corrective Action:**
There are three clutch service strategy options:

<table>
<thead>
<tr>
<th>Service Option</th>
<th>Description</th>
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</table>
| 1.             | If a vehicle is at a repair facility for any transmission or clutch related issue that requires transmission removal, request and record the installed clutch part number and serial number.  
  - **If the clutch serial number is between the Start and End indicated below, the repair facility is to replace the clutch:**  
    - **Start:** AU1711010001 / SL1711010001 – 17(Year) 11(Month) 01(Day)  
    - **End:** AU1804019999 / SL1804019999 – 18(Year) 04(Month) 01(Day).  
    - Replace clutch using the standard warranty process. |
| 2.             | Automated Transmission Complaints:  
  1. Request and record the installed clutch part number and serial number.  
  Download Service Activity Report (SAR) to Eaton ServiceRanger diagnostic tool and “Send to Eaton”.  
  **Note:** ServiceRanger must be connected to internet to successfully complete upload of the SAR.  
  2. If any combinations of fault codes 64/7, 27/7, 71/7, 71/11, 73/7, or 45/7 have set and the vehicle is exhibiting a “getting into gear from neutral” or “unable to achieve neutral when selected” complaint replace clutch using the standard warranty process if serial number is between the above Start and End descriptions.  
  3. If the above stated fault codes have not set and the vehicle is exhibiting the above symptoms or if the vehicle has secondary damage due to a clutch failure lever failure, please call 1-800-826-HELP (4357) for assistance. |
3. Mechanical Complaints:
   - Request and record the installed clutch part number and serial number.
   - Reference Mechanical Transmission Complaints in the Issue Description section, if complaint is confirmed refer to clutch serial numbers below.
     - If the clutch serial number is between the Start and End range, replace the clutch. Replace with no charge clutch if possible, if a no charge clutch will not be accepted, advise repair facility to replace clutch using the standard warranty process.

Affected Models/Population:

<table>
<thead>
<tr>
<th>Clutch Model</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECA Clutch</td>
<td>122002-35/35A, 122003-42/42A</td>
</tr>
<tr>
<td>ECA Clutches manufactured between 4/1/2017 through 6/20/2018 Clutch serial numbers:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Start: AU1704010001 / SL1704010001 – 17(Year) 04(Month) 01(Day)</td>
</tr>
<tr>
<td></td>
<td>End: AU1806139999 / SL1806209999 – 18(Year) 06(Month) 13 or 20(Day)</td>
</tr>
<tr>
<td>EverTough Self Adjust</td>
<td>109701-XX</td>
</tr>
<tr>
<td>Advantage Self Adjust</td>
<td>309701-XX, 309708-XX, 209701-XX, 209708-XX</td>
</tr>
<tr>
<td>Solo Reman</td>
<td>109400-5MO, 109404-5MO, 109500-10MO, 109500-22MO, 109503-10MO, 109504-24MO, 109700-61MO, 109700-20MO, 109700-74MO, 109700-82MO</td>
</tr>
</tbody>
</table>

Field Strategy:
   - Before the transmission is removed from the vehicle, record and verify the installed clutch part number and serial number is covered by this Service Bulletin.

Warranty Information:

Claim Inclusion:
   - Claim must include both old and new clutch serial numbers.
   - Claim must include both old and new installed clutch part numbers.
   - If installed original clutch is still within OEM warranty, a claim must be filed through the OEM.
   - If the installed original clutch is outside of OEM warranty, a claim must be filed directly to Eaton.
   - Claim may include parts and labor associated with progressive damage limited to ECA, clutch housing, speed sensors, engine flywheel housings, oil pan gasket, and flywheel resurfacing.
   - All clutches and approved progressive damaged parts claimed are to be returned to the Eaton Warranty Return Center (Auburn, IN.) “Collect” by LTL Carrier listed per TMIB0129. Follow packaging instructions per TCWY0600.
Warranty Parts:

- ECA Clutch Kit Part Number – 122002-35EX (1850 ft-lbs) or 122003-42 (2250 ft-lbs) minus LCIB should be utilized. Inspect LCIB for excessive heat, if heat is present use 122002-35A or 122003-42A, see Figure 4.

Figure 4.

- Clutch Kit Part Numbers as listed in Affected Models/Population section.

- Progressive damage coverage is limited to the ECA, clutch housing, speed sensors, engine flywheel housing.
  - Specific flywheel mounting bolts (torque to yield fasteners), rear crankshaft seal, engine oil pan gasket, and engine flywheel housing gaskets will be covered. Engine oil pan gasket coverage is maximum $200.
  - Parts outside of the above listed are not covered under this document. Example: Engine mounts, release bearing/cross shaft grease tubes, crank sensor, or u-joints.

- One 1 u-joint strap kit will be covered.

- Pilot Bearings will be covered. Replacement bearing must be a genuine Eaton pilot bearing #5566505 or one recommended in the Clutch Failure Analysis Guide (CLTS1271) available on www.roadranger.com. Maximum reimbursement is $50 USD.

- Gaskets related to exhaust and PTO removal/installation will be covered.

- If hot spots are identified (Figure 5), Flywheel resurfacing will be covered up to a maximum $130 USD charge.
• Note: If flywheel is replaced due to progressive damage beyond machining tolerances pictures of both front and back of flywheel must be attached to claim

Figure 5.

• Environmental and Shop supplies are not covered by this campaign

Warranty Labor:

| If transmission is out of the truck for another repair: | • OEM SRT for Clutch R&R SRTs + 1 hour for clutch R&R if an Eaton issue is being addressed. If an Eaton issue is not being addressed Eaton will only pay + 1 hour for clutch R&R.  
  o Example: Engine rear main seal – transmission R&R will not be covered.  
  • OEM installed obstructions will be an additional OEM SRT.  
  o Examples: Y-Exhaust, PTO, Air Tanks  
  • If flywheel resurfacing required, follow Engine Mfg.’s SRT for Flywheel R&R (with transmission and clutch removed) .5hr max.  
  • Any Progressive Damage components referenced in the Warranty Parts section will follow OEM or Engine Mfg.’s SRT Time unless indicated below:  
  o Engine flywheel housing 6.0hr max. (MX Engines, engine must be removed to change engine flywheel housing – 22.1hrs. max.)  
  o Examples of labor items not covered: front axle, engine mounts, crank sensor, starter, install driveline, front suspension, front bumper, or relocation of vehicle in service provider premises. Engine oil pan gasket replacement labor should be covered under flywheel housing replacement. |
If transmission has not been removed:

| | • Clutch R&R OEM SRTs (includes transmission R&R)  
| | • OEM installed obstructions will be an additional OEM SRT.  
| |   o Examples: Y-Exhaust, PTO, Air Tanks.  
| | • If flywheel resurfacing required, follow Engine MFG’s SRT for Flywheel R&R (with transmission and clutch removed) .5hr max.  
| | • Any Progressive Damage components referenced in the Warranty Parts section will follow OEM or Engine Mfg.’s SRT Time unless indicated below:  
| |   o Engine flywheel housing 6.0hr max. (MX Engines, engine must be removed to change engine flywheel housing – 22.1hrs. max.)  
| |   o Examples of labor items not covered: front axle, engine mounts, crank sensor, starter, install driveline, front suspension, front bumper, or relocation of vehicle in service provider premises. Engine oil pan gasket replacement labor should be covered under flywheel housing replacement. |

Automated transmission add:

| | • Diagnostic time 1.0 hour  
| | • Clutch Calibration 0.3 hour |

General Claim Coding:

| • Claim Type: Warranty or Parts Warranty (Aftermarket)  
| • Primary Causal Part #: 173C147  
| • Complaint Code: Based on driver complaint if failed  
| • Failure Mode Description: LEVER BROKEN (TFM-1017)  
| • Part Return Instructions: All clutches and approved progressive damaged parts claimed are to be returned to the Eaton Warranty Return Center (Auburn, IN.) “Collect” by LTL Carrier listed per TMIB0129. Follow packaging instructions per TCWY0600.  
| • Aftermarket stock Non-conformance clutch return: Aftermarket Non-conformance returns are to follow Service Bulletin CLIB0034. |

Note: If flywheel is replaced due to progressive damage beyond machining tolerances pictures of both front and back of flywheel must be attached to claim.
Warranty Coverage:

- **Clutch Replacements on or after May 1, 2019**
  - Clutches replaced per this document on or after May 1, 2019 will continue Warranty Coverage per the original warranty period / OEM warranty period or standard Aftermarket service part warranty.
  - All clutches that are registered for Extended Protection Plan that have a longer warranty period than 3yr/350,000 mile coverage will continue with the purchased extended protection plans original coverage.
  - Replacement clutches for Mexico, Latin America, and Rest of World will continue with the original warranty period / OEM warranty period or standard Aftermarket service part warranty for the designated region.

- **Clutch Replacements on or before April 30, 2019**
  - Clutches replaced per this document on or before April 30, 2019 for United States and Canada population stated within (production built and aftermarket installed) will have a warranty coverage reissued for 3yr/350,000 mile commencing from failed date on the claim which includes Aftermarket Clutches.
    - Claims or repair orders must have a failure and repair date that is on or before April 30, 2019
    - Repair order and claim must contain the original and replaced Clutches manufactured date codes per this document
  - All claims must be received on or before July 29, 2019 (90 days from Failed Date) to qualify for the reissued for 3yr/350,000-mile coverage.

Frequently Asked Questions:

**Does the service provider need to call the Roadranger Call Center for a claim number to guarantee claim payment?**
The service provider only needs to contact the Roadranger Call Center for troubleshooting or technical support not outlined in this document.

**If the original installed clutch is within the OEM Warranty period does the claim get filed to Eaton or the OEM?**
If the original installed clutch is within the OEM warranty period the claim will get filed to the OEM nameplate. If the clutch is outside of the OEM warranty period the claim will get filed direct to Eaton.

**Does this document cover towing to the service provider location?**
Towing is not covered under this document. Contact the local Eaton Representative for direction.
Does the failed clutch and any progressive components need to be returned to Eaton?
Yes, all clutches and approved progressive damaged parts claimed are to be returned to the Eaton Warranty Return Center (Auburn, IN.) “Collect” by LTL Carrier listed per TMIB0129.

What type of information needs to be supplied with the returned parts?
Claim documentation needs to be included in the returned clutch box i.e. Eaton Authorization number and Repair order number must be included on the Bill of Lading. A copy of claim or repair order (for direct pay) must be in or attached to the shipping container/box. The documents must be protected from any contaminants.

(TCWY0600)

The material contained in this bulletin is product improvement information. Eaton Corporation is not committed to, or liable for, canvassing existing products. FSUD: 2018-FSUD-2675

<table>
<thead>
<tr>
<th>Change Log</th>
<th></th>
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<tbody>
<tr>
<td>4/13/2020</td>
<td>Updated pilot bearing replacement portion of Warranty Parts</td>
</tr>
<tr>
<td>3/13/2020</td>
<td>Changed Service Option 1 Clutch Dates</td>
</tr>
<tr>
<td></td>
<td>Removed Warranty statement under Claim Inclusion section</td>
</tr>
<tr>
<td>12/18/2019</td>
<td>Added of oil pan gasket coverage.</td>
</tr>
<tr>
<td>11/11/2019</td>
<td>Updated affected date range in Containment/Corrective Action section.</td>
</tr>
<tr>
<td>10/17/2019</td>
<td>Updated affected date range, Clutch Serial Number range, Pilot Bearing maximum reimbursement, and flywheel claim note.</td>
</tr>
<tr>
<td>9/30/2019</td>
<td>Updated HELP phone number.</td>
</tr>
<tr>
<td>8/7/2019</td>
<td>Removed Note referencing 122002-35A under Warranty Parts.</td>
</tr>
<tr>
<td>5/1/2019</td>
<td>Added amended warranty statements, tables for Service Strategy Option, Models/population, and Warranty Labor</td>
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