BACKED BY
Roadranger
SUPPORT

Subject: Insufficient Clutch Departure May Cause Unintended Vehicle Movement, Software Update – Automated Transmissions

Document Number: CLIB-0033

Date: December 18, 2018   **Updated:** May 13, 2019

Issue Description:
Transmission Electronic Control Unit (TECU) software 5569997 has been released to mitigate the possibility of unintended vehicle movement due to insufficient clutch departure. This notification is associated to National Highway Traffic Safety Administration (NHTSA) Campaign Number: 18E-102.

Containment/Corrective Action:
If the installed clutch meets the Affected Models/Population requirements listed below, and the TECU software is less than 5569997, update software to 5569997 or greater.

NOTICE: After updating the TECU software (**STEP C**), complete the instructions in **STEP D** based on the vehicle's engine make and model:

   STEP D: Identify engine make and model installed in the vehicle:
   - If **PACCAR MX11** or **MX13** engine, process is complete.
   - If **Cummins X15** engine, go to **STEP E**.
   - If **Navistar A26** engine, go to **STEP F**.
   - If the engine is **NOT** a PACCAR MX11, MX13, Cummins X15 or Navistar A26, go to **STEP G**.

Affected Models/Population:
   - Automated transmission models:
     - UltraShift PLUS
     - Fuller Advantage
     - SmartAdvantage
   - Clutch part number: 122002-35/35A or 122003-42/42A
     - Clutches manufactured between 4/1/2017 through 6/5/2018
     - Clutch Serial Numbers:
       - Start: AU1704010001 / SL1704010001 - 17(Year) 04(Month) 01(Day)
       - End: AU1806019999 / SL1806059999 - 18(Year) 06(Month) 01 or 05(Day)
   - OEM vehicle build dates containing the above clutch serial numbers will vary due to OEM production build schedules.

Field Strategy:
TECU software 5569997 is available in ServiceRanger 1901-01-SCB-2682 Data release or greater at a PRO license.

NOTICE: Ensure the computer with ServiceRanger is connected to the Internet after updating the TECU software to record the update event(s) in the ServiceRanger database. Warranty claims may not be paid if the internet connection for software update validation in ServiceRanger is not completed.

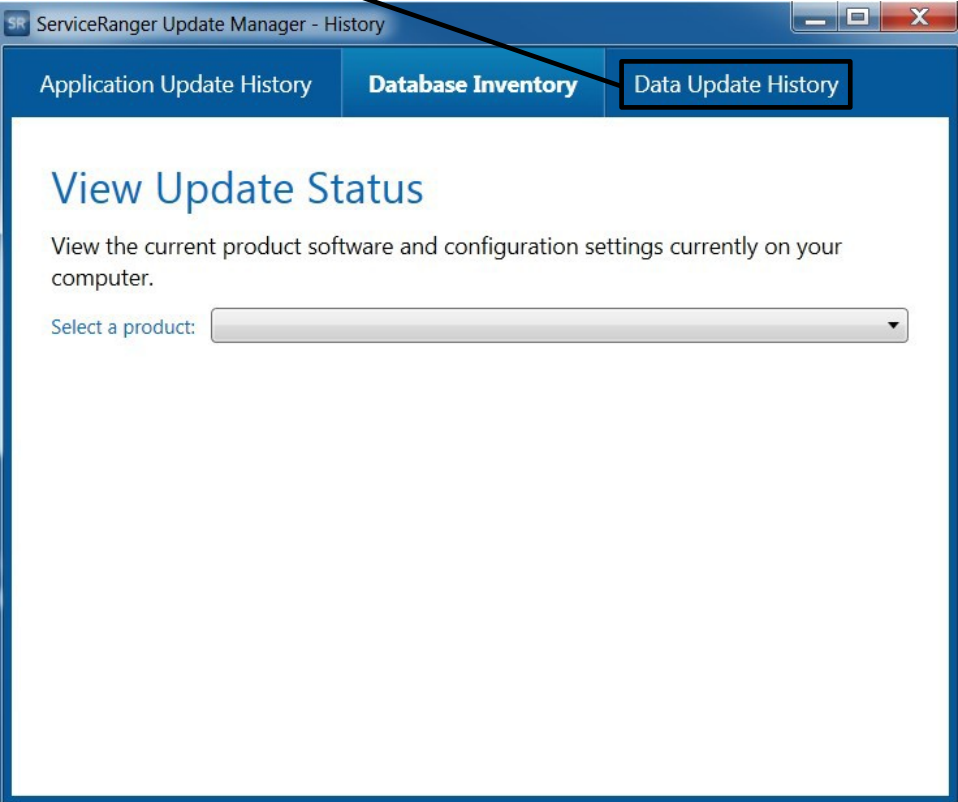**STEP A:** Verify ServiceRanger Data release is at the latest version.

1. Left click the "SR" icon to open the ServiceRanger Update Manager.
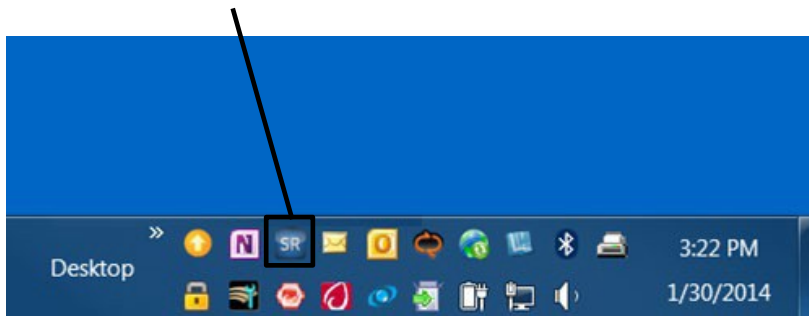
2. Select "View update history".
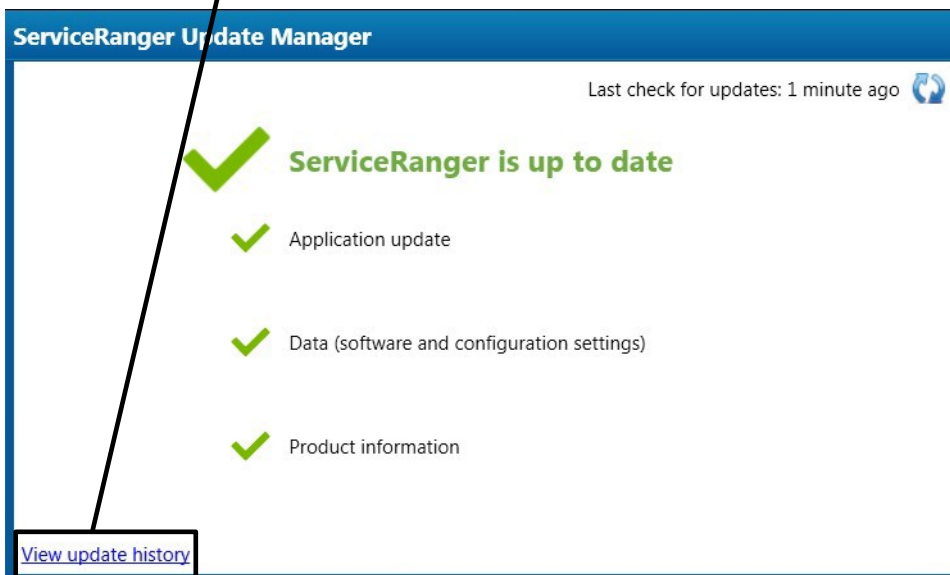
3. Select "Data Update History" tab.

4. Verify **1901**-01-SCB-**2682** Data release or greater is Applied.

- If Data release Applied is **less than** 1901-01-SCB-2682, go to **STEP B**.
- If Data release Applied is **equal to or greater than** 1901-01-SCB-2682, go to **STEP C**.

STEP B: Update ServiceRanger Data release to latest version.

1. Connect computer to the internet.
2. Left click the "SR" icon to open the ServiceRanger Update Manager.
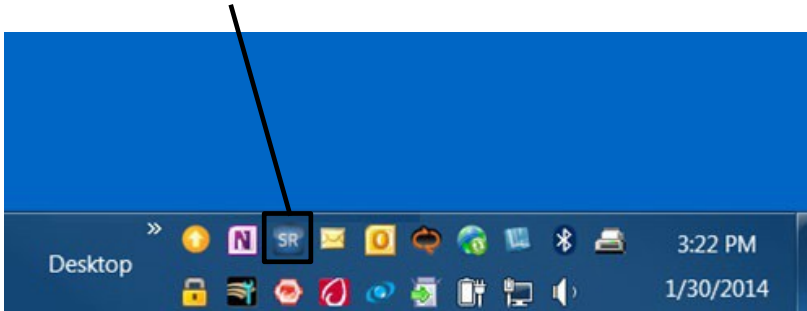
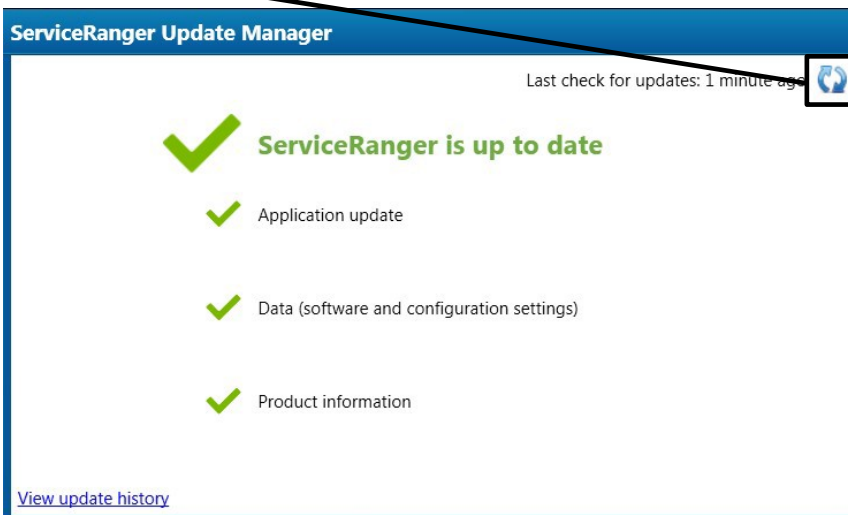3. Select icon to "Check for updates".

4. After the update is complete, go to **Step A**.

STEP C: Update Transmission Software to 5569997 or greater.

1. Close vehicle cab doors.
   Note: This limits activity of vehicle/component modules on the vehicle data link.
2. Key on.
3. Connect ServiceRanger.
4. Go To "Programming".
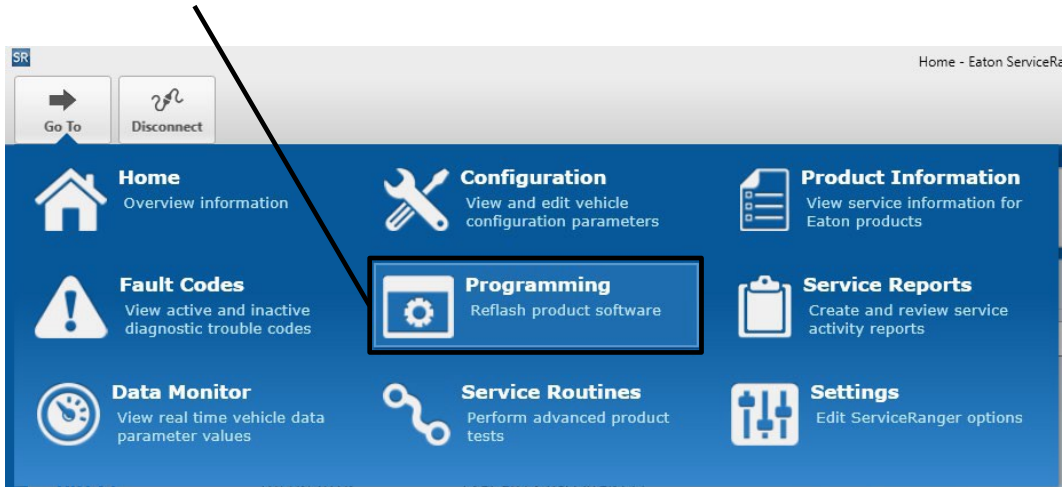
5. Select Available Updates – SW-18338-D (5569997) or greater.
   Note: If software is 5569997 or greater, no update is required. Go to **Step 13** of **STEP C**.
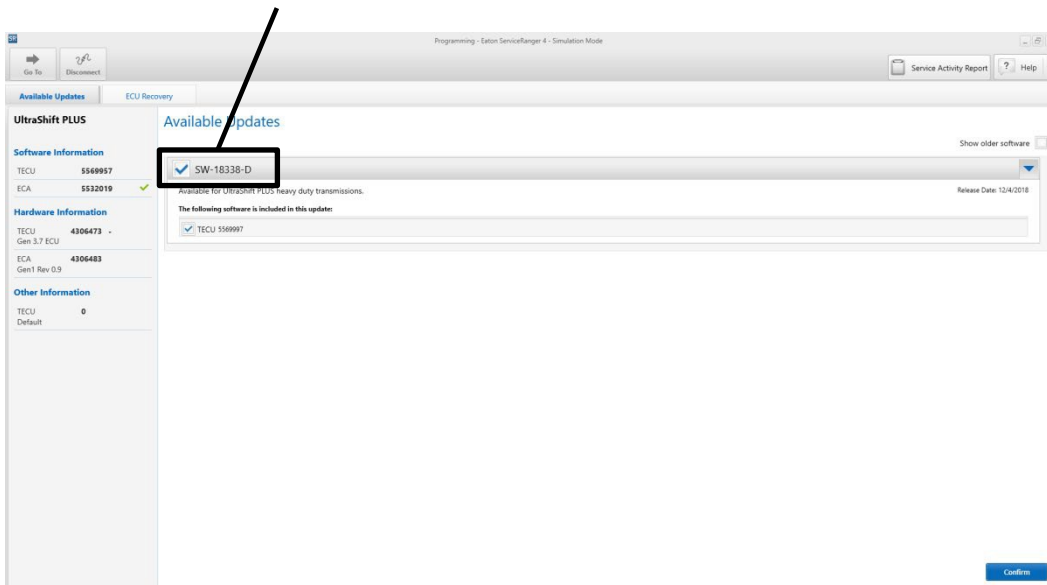
6. Select "Confirm".
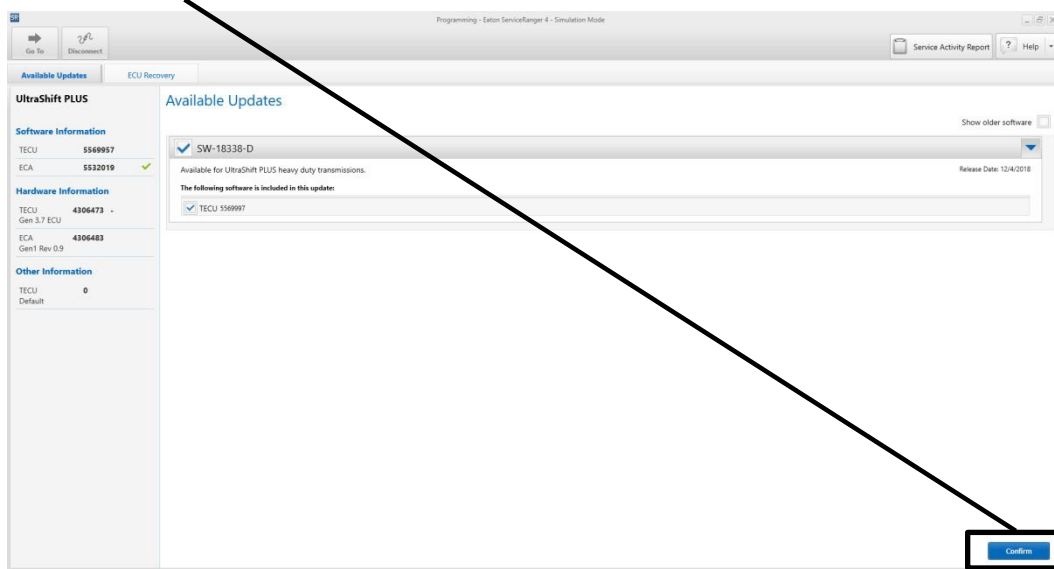
7. Select "Download".
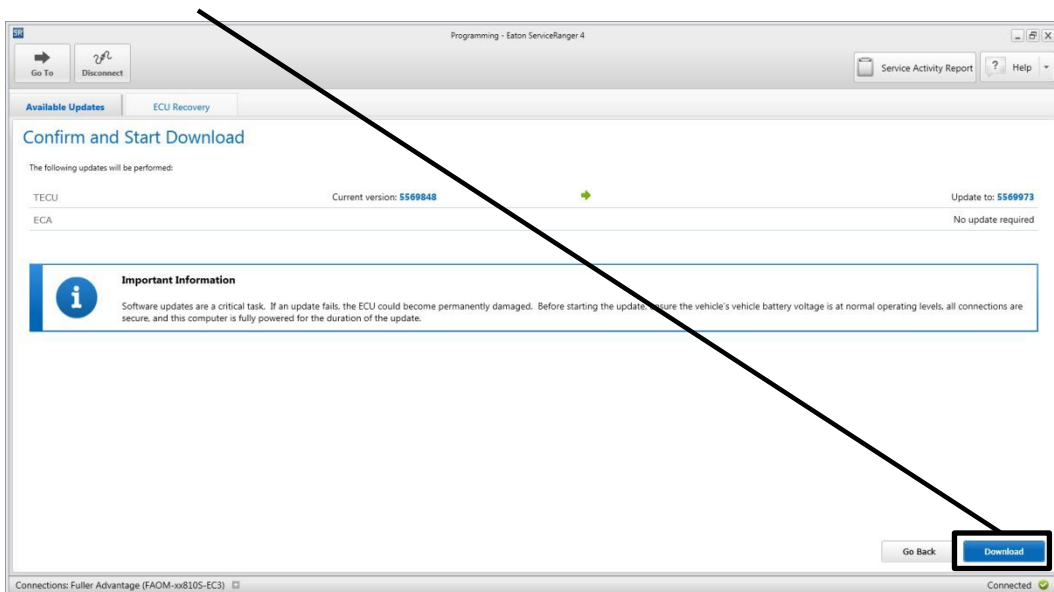
8. Turn Ignition Off when prompted and wait 2 minutes.
Note: This limits activity of vehicle/component modules on the vehicle data link.

9. After waiting 2 minutes, select "OK".

10. Turn Ignition On when prompted.
11. Select "OK".

12. Select "Finish" when prompted.

13. Select "Disconnect".
14. Key off and allow 2-3 minutes for the TECU to perform a complete power-down.
15. Go to **STEP D**.

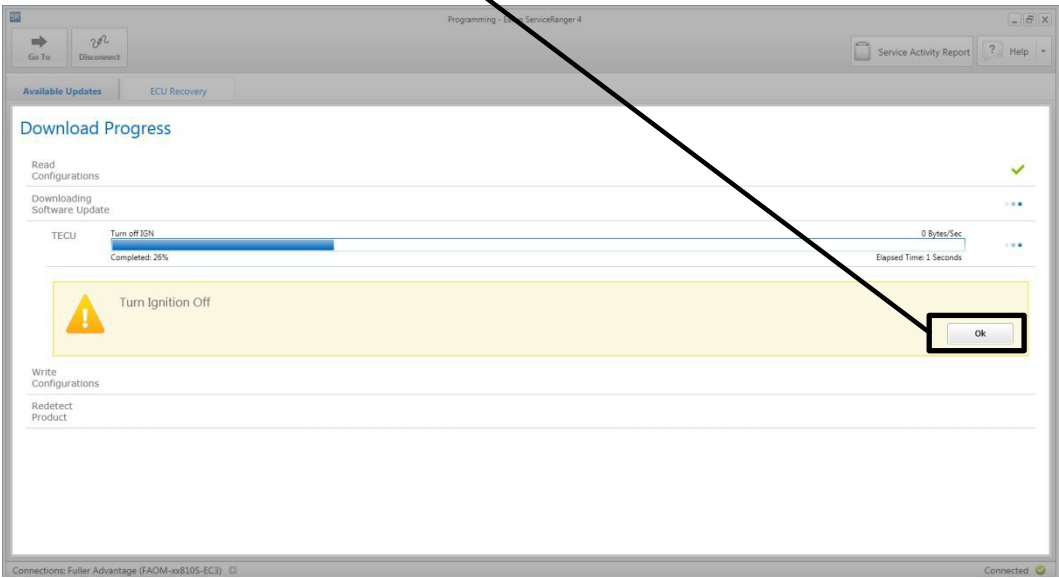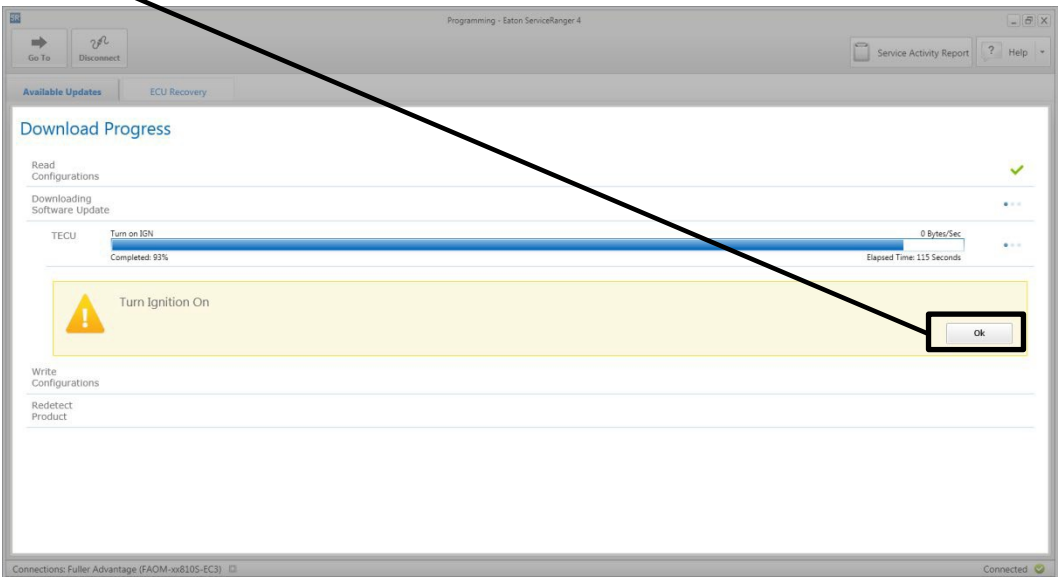> **NOTICE:** Ensure the computer with ServiceRanger is connected to the Internet after updating the TECU software to record the update event(s) in the ServiceRanger database. Warranty claims may not be paid if the internet connection for software update validation in ServiceRanger is not completed.

STEP D: Identify engine make and model installed in the vehicle.

1. Record the engine make and model:
- If **PACCAR MX11** or **MX13** engine, process is complete.
- If **Cummins X15** engine, go to **STEP E**.
- If **Navistar A26** engine, go to **STEP F**.
- If the engine is **NOT** a PACCAR MX11, MX13, Cummins X15 or Navistar A26, go to **STEP G**.

STEP E: Identify the **Cummins X15** Engine Serial Number (ESN) and Engine ECM Code.

1. Record the Engine Serial Number (ESN).
- If the ESN is **equal to or greater than** 80012737, process is complete.
- If the ESN is **less than** 80012737, go to **Step 2**.
2. Connect Cummins INSITE and record the current Engine ECM Code (Calibration Revision) installed in the ECM.
- If the Engine ECM Code revision is **equal to or greater than** the code revision indicated below, process is complete.
- If the Engine ECM Code revision is **less than** the code revision indicated below, record and update to the latest available Engine ECM Code revision. Process is complete.

Cummins X15 Engine ECM Codes:

HD10001.11	HD10050.07	HD10089.07	HD10147.07	HD10181.05	HD10201.04
HD10002.10	HD10054.07	HD10091.06	HD10148.07	HD10182.05	HD10202.04
HD10005.10	HD10055.07	HD10094.06	HD10149.07	HD10183.05	HD10203.04
HD10008.09	HD10056.07	HD10097.06	HD10150.07	HD10184.05	HD10204.04
HD10009.09	HD10057.07	HD10100.06	HD10151.07	HD10185.04	HD10205.04
HD10011.08	HD10058.07	HD10103.06	HD10152.07	HD10186.04	HD10206.04
HD10012.08	HD10059.07	HD10114.06	HD10162.07	HD10187.04	HD10207.04
HD10014.08	HD10060.07	HD10115.06	HD10164.07	HD10188.04	HD10208.04
HD10024.07	HD10061.07	HD10126.07	HD10169.05	HD10189.04	HD10209.05
HD10025.07	HD10062.07	HD10127.07	HD10170.05	HD10190.04	HD10210.05
HD10030.08	HD10072.07	HD10128.07	HD10171.05	HD10191.04	HD10211.05
HD10031.08	HD10073.07	HD10129.07	HD10172.05	HD10192.04	HD10212.05
HD10032.08	HD10074.07	HD10130.07	HD10173.05	HD10193.04	HD10213.05
HD10036.08	HD10075.07	HD10131.07	HD10174.05	HD10194.04	HD10214.05
HD10037.08	HD10076.07	HD10132.07	HD10175.05	HD10195.04	HD10215.05
HD10038.08	HD10077.07	HD10133.07	HD10176.05	HD10196.04	HD10216.05
HD10043.07	HD10078.07	HD10134.07	HD10177.05	HD10197.04	HD10217.04
HD10044.07	HD10079.07	HD10144.07	HD10178.05	HD10198.04	HD10218.04
HD10045.07	HD10080.07	HD10145.07	HD10179.05	HD10199.04	HD10219.04
HD10048.07	HD10087.07	HD10146.07	HD10180.05	HD10200.04	HD10220.04

STEP F: Identify the **Navistar A26** Engine calibration.

1. Using the Navistar Service Portal, select the Summary tab and verify the Calibration Status.
    1. If the status indicates **"Calibration is Current"**, process is complete
    2. If the status indicates **"Not Current – Needs Calibration Update. For Navistar engines use NavKal Campaign tab"**, update the ECM to the latest Engine calibration. Process is complete.

STEP G: Identify the installed clutch part number and clutch serial number installed in the vehicle.

NOTICE: This step only applies to vehicles **NOT** equipped with a PACCAR MX11, MX13, Cummins X15, or Navistar A26 engine.

1. Record the installed clutch part number and serial number, and compare the installed clutch serial number with the tables below:

Range	Clutch Serial Number	Year	Month	Day
Start	AU1704010001	17	04	01
End	AU1806019999	18	06	01

or

Range	Clutch Serial Number	Year	Month	Day
Start	SL1704010001	17	04	01
End	SL1806059999	18	06	05

- If the installed clutch serial number **is between** the Start and End range, replace the clutch with part number:
    - 122002-35EX (1850 ft-lbs.). If the EX is not available use 122002-35A.
  or
    - 122003-42A (2250 ft-lbs.).

- If the installed clutch serial number **is NOT between** the Start and End range, process is complete.

Warranty Information:
This service bulletin only applies to the Affected Models/Population outlined above.

Warranty Parts:
- Software part number 5569997 or greater
- If clutch replacement is required per **STEP G**:
    - Clutch Kit Part Number: 122002-35EX (without LCIB, if EX is not available use 122002-35A with LCIB) or 122003-42A
    - Pilot bearing (up to $35.00) – Refer to OEM, engine manufacturer or CLTS1271 for pilot bearing recommendations.
    - U-Joint Strap Kit (quantity 1)
    - Exhaust and PTO gaskets (if required)

Warranty Labor:
- TECU software update only (PACCAR MX11/13):
    - TECU software update - 0.5 hour (total 0.5 hour).
      Required: Record and submit the engine make and model with the warranty claim.

Warranty Labor Description	SRT
TECU software update	0.5

- TECU software update and **STEP E** – Cummins X15 Engine ECM Code update (if necessary):
    - TECU software update and Engine Serial Number (ESN) is **equal to or greater than** 80012737 - 0.5 hour (total 0.5 hour).
    - ECM Code did **NOT** require an update, the ESN was less than 80012737, and Cummins INSITE was connected - 0.3 hour (total 0.8 hour).
    - ECM Code required an update - 0.5 hour (total 1.0 hour).
      Required: Record and submit the engine make and model, and ESN with the warranty claim.

Warranty Labor Description (Choose the single SRT that applies)	SRT
TECU software update and Cummins X15 ESN ≥ 80012737	0.5
TECU software update, Cummins X15 ESN < 80012737, connect INSITE and ECM code update NOT required	0.8
TECU software update, Cummins X15 ESN < 80012737, connect INSITE and ECM code update required	1.0

- TECU software update and **STEP F** – Navistar A26 Engine calibration update (if necessary):
  - TECU software update and Navistar Service Portal indicated "**Calibration is Current**" - 0.5 hour (total 0.5 hour).
  - Engine calibration required an update - 0.5 hour (total 1.0 hour).
    Required: Record and submit the engine make and model, and Engine calibration status with the warranty claim.

Warranty Labor Description (Choose the single SRT that applies)	SRT
TECU software update and Navistar A26 engine calibration is current	0.5
TECU software update and Navistar A26 engine calibration update required	1.0

- TECU software update and **STEP G** – clutch inspection (if necessary):
  - Clutch serial number recorded in **STEP G** indicates clutch replacement is **NOT** required and the engine is **NOT** a PACCAR MX11, MX13, Cummins X15 or Navistar A26:
    - TECU software update - 0.5 hour.
    - Clutch inspection - 0.3 hour (total 0.8 hour).
    Required: Record and submit the engine make and model and the installed clutch part number and serial number with the warranty claim.

Warranty Labor Description	SRT
TECU software update, clutch inspection and clutch replacement NOT required	0.8

- TECU software update and **STEP G** – clutch replacement (if necessary):
  - Clutch serial number recorded in **STEP G** indicates clutch replacement is required and the engine is **NOT** a PACCAR MX11, MX13, Cummins X15 or Navistar A26:
    Note: Warranty does not cover expedited shipping of clutch, flywheel resurface or progressive damage.
    - TECU software update - 0.5 hour.
    - Clutch R&R - (OEM SRTs, includes transmission R&R)
    - OEM installed obstructions R&R - (OEM SRTs)
      - Example: Y-Exhaust, PTO, Air Tanks
    - Clutch Calibration - 0.3 hour (total 0.8 plus OEM SRTs).
    Required: Record and submit the engine make and model and both the installed and replaced clutch part number and serial number with the warranty claim.

Warranty Labor Description	SRT
TECU software update, clutch calibration and OEM SRTs for clutch replacement and obstructions – if required	0.8 + OEM SRTs

Note: Warranty claims may not be paid if the internet connection for software update validation in ServiceRanger is not completed.

General Claim Coding:
- Line item tab – Repair list
    - Primary Causal Part #: 173C147
    - Campaign #: 18E-102
    - Complaint code: NO COMPLAINT (4)
    - Failure Mode Description: LEVER BROKEN (TFM-1017)
    - Responsibility Code: VENDOR PART (418)
    - Cover Organization: Vehicle
    - Part Return Instructions: If the clutch is replaced, return "collect" (LTL Carrier) per TMIB0129.

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 quality for the reissued for 3yr/350,000 mile coverage.

The material contained in this bulletin is product improvement information. Eaton is not committed to, or liable for, canvassing existing products.

Change Log	
Date	**Description**
5/13/2019	Updated Warranty Labor section
5/1/2019	Added pilot bearing for clutch replacement claims. Updated Cummins X15 warranty information and added SRT tables to warranty labor section. Updated warranty coverage section. Added change log.
3/20/2019	Added Navistar A26 engine information. Added 122002-35EX replacement clutch part number. Added miscellaneous parts for clutch replacement claims.
2/11/2019	Added PACCAR MX11/13 and Cummins X15 engine information and clutch replacement instructions. Added warranty information.
1/28/2019	Added requirement to connect ServiceRanger to the internet after software downloads.
1/7/2019	5569997 software released at PRO.