



Bulletin: CLIB-0020

Date: June 6, 2011

Bulletin Type: Service

Topic: Effects from Improper Removal of the UltraShift® *PLUS* ECA Clutch

Issue Description:

The UltraShift *PLUS* ECA Clutch is being removed without being properly caged. This is either from no shipping (caging) bolts used or bolts not meeting length specifications. This will result in permanent damage to the clutch and it should not be reinstalled or reused. The intent of the shipping bolts is to retain the pressure plate in the installed position.

If appropriate shipping bolts are not utilized during the removal of the clutch, the following conditions or complaints may occur:

Performance Issues after a damaged ECA clutch is reinstalled

- Clutch release fault (fault code 27) (Drag)
- Improper engagement complaints
- Other shifting complaints and performance fault codes may occur

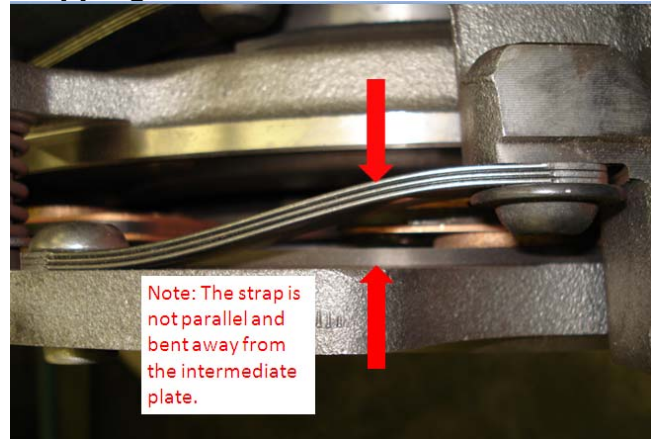
Warranty Inspection Indications

- May not be able to accurately validate the warranty claim complaint from clutch performance testing.
- Based on performance testing results, warranty technicians may also utilize housing surface near shipping bolt location to assist in determining if the bolts were installed prior to removal or after the removal of the clutch for reference (see pictures below).

Correctly Installed Shipping Bolts



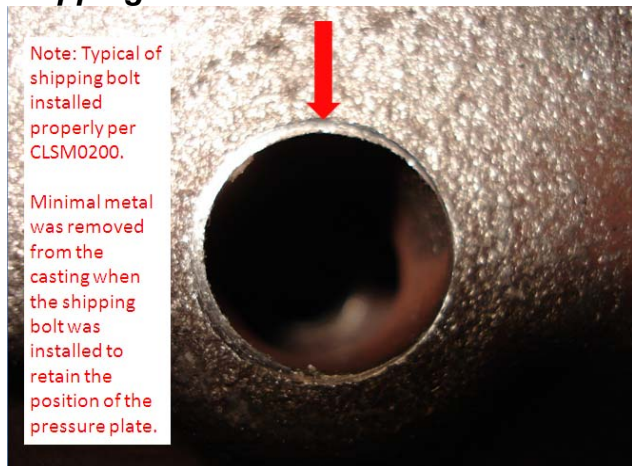
Shipping Bolts Not Installed



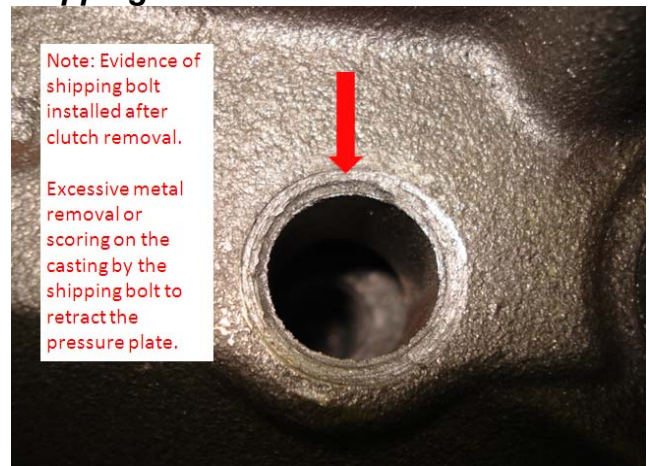
If the clutch is **ever** removed with the shipping bolts not installed, then permanent yielding of the strap will occur. Clutch performance testing may identify if the straps are permanently yielded.

Other possible evidence used to identify if the shipping bolts were installed prior to or after the clutch was removed, is relative to the amount of material removed from the housing by the shipping bolt.

Shipping Bolt Installed Prior to Removal



Shipping Bolts Installed After Removal



Containment / Correction:

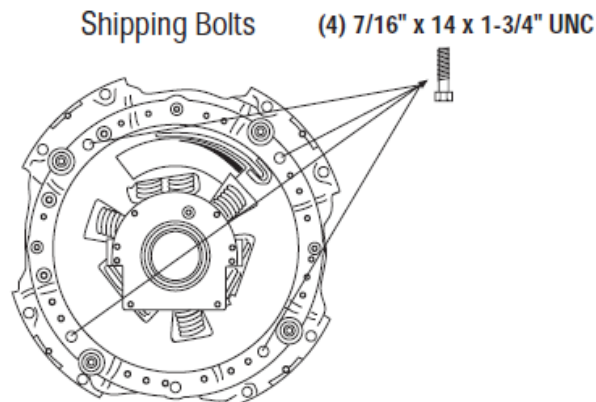
Updates to the CLMT1400 & CLSM0200 have been completed to include the following statements:

Corrective action to improve communication added comment within the CLMT1400.

Install shipping bolts ((4) 7/16"X14X1 3/4" UNC) prior to removal. Refer to CLSM0200 for clutch removal process.

Communication Containment – Refer to CLSM0200 for complete removal procedures.

Locate four (4) 7/16" x 14 x 1 3/4" UNC, hex head machine screws (See graphic below). Install them in the 4 cover holes hand tight then turn one full turn.



Note: Installation of the specified shipping bolt for caging the clutch prior to removal, from the engine flywheel, will prevent permanent yielding (bending) of the intermediate plate straps when the clutch removed.

Affected Models / Population:

UltraShift *PLUS* ECA Clutch part numbers 122002-##, 122002-##A, 122003-##, and 122003-##A.

Field Warranty Strategy:

Continue to communicate the need to utilize specified shipping bolts and proper clutch removal procedures for all UltraShift *PLUS* ECA clutches.

Current Process:

Refer to CLSM0200 for Heavy-Duty ECA Clutch removal procedures.

Warranty:

Improper removal or handling of the clutch may result in a rejected warranty claim in the situation where no other defect in material and workmanship is identified.

Reference Documents:

For proper Heavy-Duty ECA Clutch removal, refer to CLSM0200 Service Manual.

The material contained in this bulletin is process improvement information. Eaton and Dana Corporation are not committed to, or liable for, canvassing existing products. FSUD: 2011-FSUD-1590

Index:

- 1.
- 2.