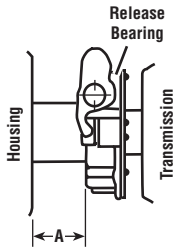
4b Set Up (No Clutch Brake)

Set Bearing Position
For clutches with clutch brake, see 4a on previous page.

1. With clutch pedal UP, measure distance between release bearing and housing.

   The distance (A) must be:
   - **One plate: 1.75" (44 mm)**
   - **Two plate: 0.75" (19 mm)**



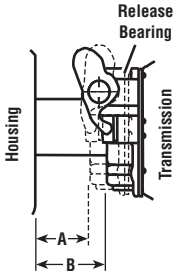
2. If distance is incorrect, adjust bearing position:
   - Hold clutch pedal DOWN
   - Push and turn adjusting nut

(Turning adjusting nut clockwise moves bearing toward transmission.)

Verify Bearing Travel

3. Measure distance between release bearing and housing with clutch pedal UP (A) and DOWN (B).

   The total release bearing travel distance (B minus A) for both one plate and two plate must be **0.500" to 0.562" (13 to 14 mm)**

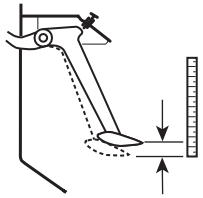


- If the bearing contacts the transmission before moving 0.500" to 0.562" (13 to 14 mm), slightly reduce the "A" dimension to allow more bearing pull.
- If the linkage does not move the bearing 0.500" (13 mm) or more, adjust the fork fingers slightly closer. The release bearing must move over 0.500" (13 mm) for the clutch to release.

5 Verify Free-Play and Lubricate

Verify Free-Play

If there is not at least 1" of free-play in the cab, the truck linkage does not have enough stroke capability. Do not replace the clutch. The linkage must be repaired or the pedal stroke increased.



5. Measure clutch pedal free-play in cab. The free-play distance should be **1" to 3" (25.4 to 76.2 mm)**.

   Note: If distance is incorrect, your linkage may be deficient.

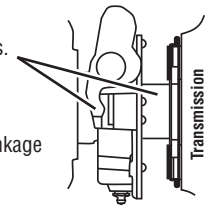
⚠ **Important:** Do not reset clutch. Do not try to change free-play by changing bearing position.

Lubricate

⚠ **Important:** Eaton recommends the use of **Roadranger EP2** for release bearing lubrication, or an equivalent Lithium Complex, NLGI #2 or #3 grease with an NLGI LB/GC performance rating and a dropping point temperature of 220 °C (428 °F) or higher. Failure to use the proper grease may affect bearing life and void the warranty coverage on your Eaton product.

Apply ample grease that visibly exits opening and contacts the transmission shaft. This will lube clutch brake when pedal is pressed.

6. Apply grease to input shaft and yoke fingers.
7. Apply grease to cross shaft bushings and linkage pivot points.
8. Grease release bearing



Eaton Stamped Angle Spring Clutch CLMT1707 EN-US

May 2016

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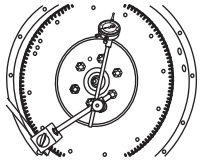
Reference Materials
CLSM0200 and CLSL1310

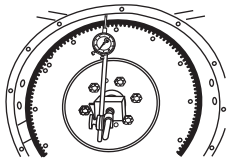
1 Measure

Measure Engine Flywheel Housing and Flywheel
Engine flywheel housing and flywheel must meet these specifications or there will be premature clutch wear. Remove old Pilot Bearing. All gauge contact surfaces must be clean and dry. Use a dial indicator and check the following:

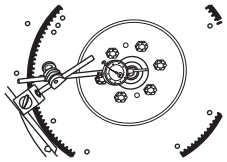
Flywheel Face Runout
Secure dial indicator base to flywheel housing face. Put gauge finger in contact with flywheel face near outer edge. Rotate flywheel one revolution. Maximum runout is **0.007" (0.18 mm)**



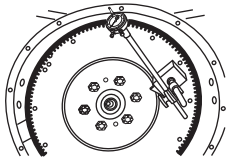
Flywheel Housing I.D. Runout
Secure dial indicator base to crankshaft. Put gauge finger against flywheel housing pilot I.D. Rotate flywheel one revolution. Maximum runout is **0.008" (0.20 mm)**



Pilot Bearing Bore Runout
Secure dial indicator base to flywheel housing face. Position gauge finger so that it contacts pilot bearing bore. Rotate flywheel one revolution. Maximum runout is **0.005" (0.13mm)**



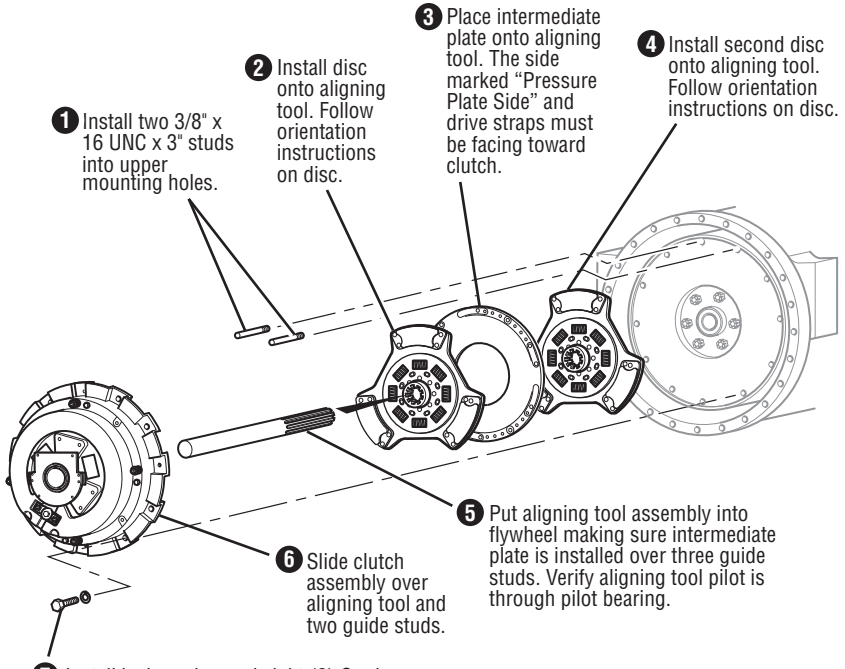
Flywheel Housing Face Runout
Secure dial indicator base to flywheel near the outer edge. Put gauge finger in contact with face of flywheel housing. Rotate flywheel one revolution. Maximum runout is **0.008" (0.20 mm)**



2 Install Clutch to Flywheel

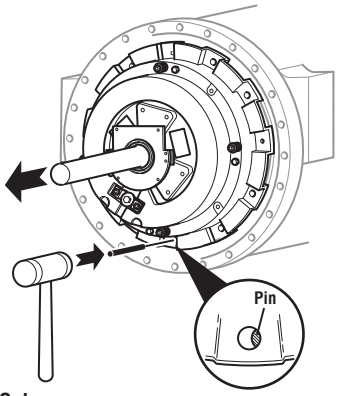
Important: Use Eaton Fuller Clutch Selector Guide (CLSL1310) to make sure you have the right clutch.

Caution: An assembled clutch can weigh up to 120 lbs. (54 kg). Avoid risk of injury. Use proper equipment when lifting a clutch.



7 Install lock washer and eight (8) Grade 5 or better mounting bolts finger tight. Replace studs with lockwashers and bolts:
- 1-Plate: Use 3/8" - 16 UNC x 1" bolts
- 2-Plate: Use 3/8" - 16 UNC x 2.25" bolts

Progressively tighten mounting bolts in a crisscross pattern starting with a lower bolt. Torque to 30-35 lbs. ft. (40-47 N•m).



8 Remove aligning tool.

9 **For 2-Plate Only:** Use a 1/4" flat nose punch to lightly tap four intermediate plate pins toward the flywheel. Only part of the pin should be visible.

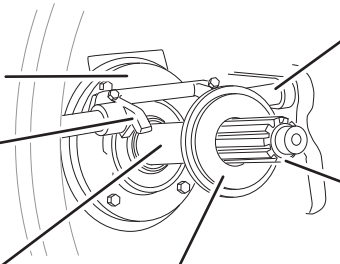
3 Install Transmission

Check Transmission For Wear
Replace any worn components.

Transmission Bearing Retainer Cap
A worn/rough bearing retainer cap may cause clutch brake to wear prematurely.

Release Yoke
Worn fingers can cause bushing wear and yoke interference when pedal is down.

Input Shaft
Wear (roughness) can reduce sleeve bushing life and cause it to come out.

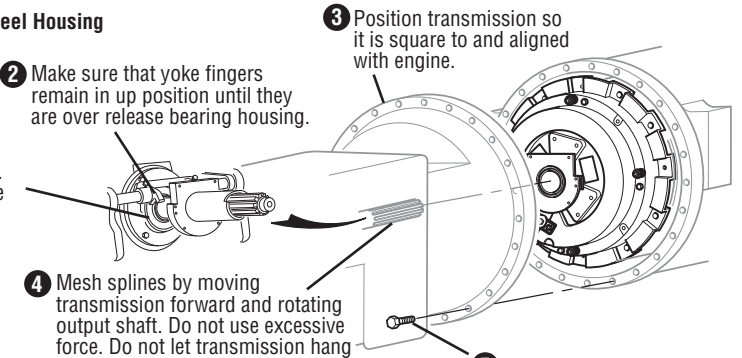


Clutch Brake
Replace if equipped.

Cross Shaft And Bushings
Excessive wear at these points can cause side loading on sleeve bushing, bushing failures and yoke bridge contact with clutch when pedal is down.

Input Shaft Splines
Any wear on splines will prevent driven discs from sliding freely, causing poor clutch release (clutch drag). Slide discs full length of shaft to check for twisted shaft splines.

Fasten Transmission To Flywheel Housing



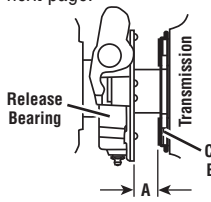
Caution: Do not pull on release arm to install transmission. This will cause clutch to over adjust.

4a Set Up (With Clutch Brake)

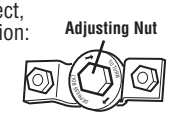
Set Bearing Position
For clutches with no clutch brake, see 4b on next page.

1 With clutch pedal UP, measure distance between release bearing and clutch brake.

The distance (A) must be **0.500" to 0.560" (12.70 to 14.22 mm)**



2 If distance is incorrect, adjust bearing position:
- Hold clutch pedal DOWN
- Push and turn adjusting nut

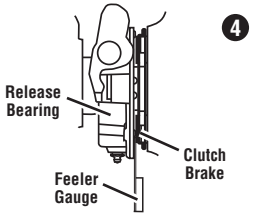


(Turning adjusting nut clockwise moves bearing toward transmission.)

Verify Clutch Brake Squeeze

3 Insert 0.010" (0.25 mm) feeler gauge between release bearing and clutch brake. Press pedal DOWN to clamp gauge.

Note: If release bearing does not clamp feeler gauge, adjust linkage.



4 Slowly raise clutch pedal. Measure clutch pedal position at the moment gauge can be removed.

The distance (A) between clutch pedal and floor must be **0.5" to 1" (12.7 to 25.4 mm)**

Note: If distance is incorrect, adjust linkage.