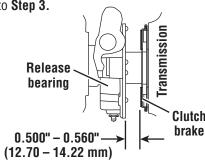
#### **Adjust Bearing Position**

Measure the distance between the release bearing and the clutch brake. The correct distance should be 0.500" – 0.560" (12.70 – 14.22 mm). If correct go to **Step 3**.



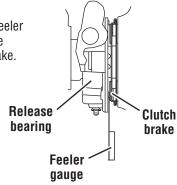
2 To change bearing position, you must internally adjust the clutch. Push pedal and hold pedal down when adjusting. Push and turn adjusting nut. Turning the adjusting nut clockwise moves the bearing toward the transmission.

#### **Adjusting Nut**

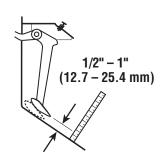


#### **Verify Clutch Brake Squeeze**

- 3 Insert 0.010" (0.25 mm) feeler gauge between the release bearing and the clutch brake. Press the pedal down to clamp the gauge.
  - If the gauge does not clamp, adjust linkage to achieve clutch brake squeeze then recheck Step 3.



- 4 Slowly let up on the pedal and check the pedal position at the moment the gauge can be removed.
  - If the pedal is less than 1/2" (12.7 mm) or more than 1" (25.4 mm) from the floor when the gauge can be removed, readjust the linkage. (Repeat **Steps 3** and **4**.)

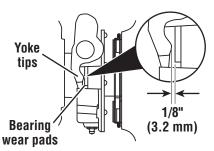


#### Verify Free-Play

Check distance between yoke tips and bearing wear pads. This distance should be 1/8" (3.2 mm).



Do not change bearing position.



To change the yoke finger and bearing wear pads clearance, adjust the upper pedal stop to raise or lower the pedal in the cab.

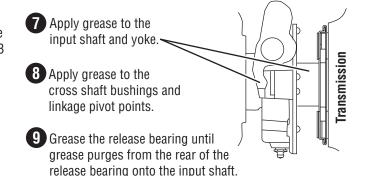


#### Lubricate



**Important:** Eaton recommends the use of Roadranger EP2 for release bearing lubrication, or an equivalent Lithium Complex , NLGI #2 or #3 grease with a 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 the opening and contacts the transmission shaft. This will lube the clutch brake when pedal is pressed.



# Eaton 15.5" Advantage Series Manual Adjust Clutch CLMT1353 EN-US

October 2017



Roadranger
SUPPORT

#### Eaton

Vehicle Group P.O. Box 4103 Kalamazoo, MI 49003 USA 800-826-HELP (4357) www.eaton.com/roadranger Copyright Eaton, 2017. Printed in USA

**Note:** Refer to CLSM0200 and CLSL1511



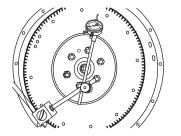
## **Measure**

#### 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:

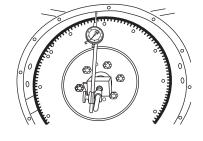
#### Flywheel Face Runout

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



### Flywheel Housing I.D. Runout

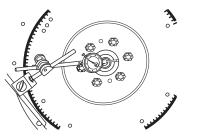
Secure dial indicator base to crankshaft. Put gauge finger against flywheel housing pilot I.D. Rotate flywheel one revolution. Maximum runout is 0.008" (0.20 mm).



#### 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.

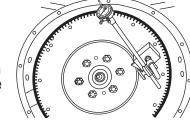
Maximum runout is 0.005" (0.13 mm).



#### 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).



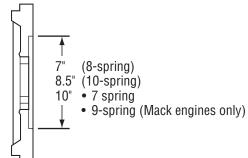
## Install Clutch to Flywheel

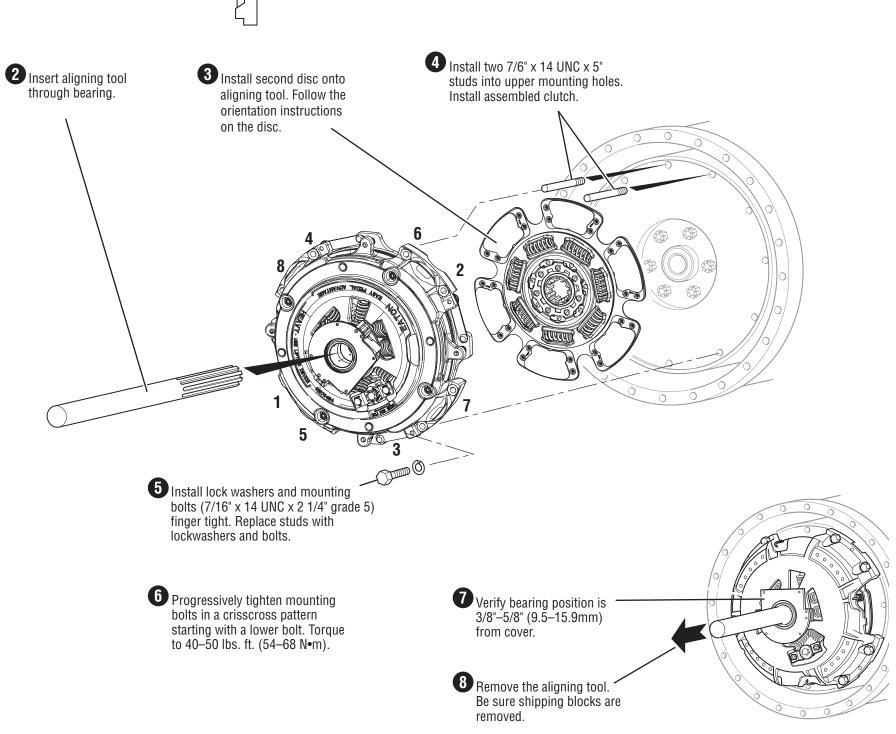
**NOTICE:** Use the Eaton Clutch Selector Guide (CLSL1511) to make ensure you have the correct clutch.



**WARNING:** An assembled clutch weighs about 150 lbs (68 kg). Avoid the risk of injury. Use proper equipment when lifting a clutch.

Measure the flywheel bore. Use the Eaton Clutch Selector Guide (CLSL1511)to verify that the damper will fit into the flywheel bore.





## 3 Install Transmission

#### **Check Transmission For Wear**

Replace any worn components. **Cross Shaft and Bushings** Excessive wear at these points can cause side loading on the sleeve bushing, **Transmission** bushing failures and voke bridge contact **Bearing Retainer** with the clutch when the pedal is down. Cap A worn/rough bearing retainer cap may cause the **Input Shaft Splines** clutch brake to Any wear on the splines wear prematurely. will prevent the driven discs from sliding freely, causing poor clutch release (clutch drag). Slide Release Yoke discs full length of shaft to Worn fingers can check for twisted shaft cause bushing wear and yoke splines. interference when the pedal is down. **Clutch Brake** Replace. Measure Input Shaft **Input Shaft** Length should be 8.657" (219.89 mm) Wear (roughness)

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

Length should be 8.657" (219.89 mm) nominal, and not greater than 8.71" (221.23 mm). Ref. 1990 SAE handbook 4:36.106. Replace transmission bearing retainer cap if length is greater than 8.71" (221.23 mm).

#### **Fasten Transmission To Flywheel Housing**



**CAUTION:** Rotate the release fork fingers around the release bearing as the transmission is installed. Clutch damage may occur if the yoke is improperly installed.

