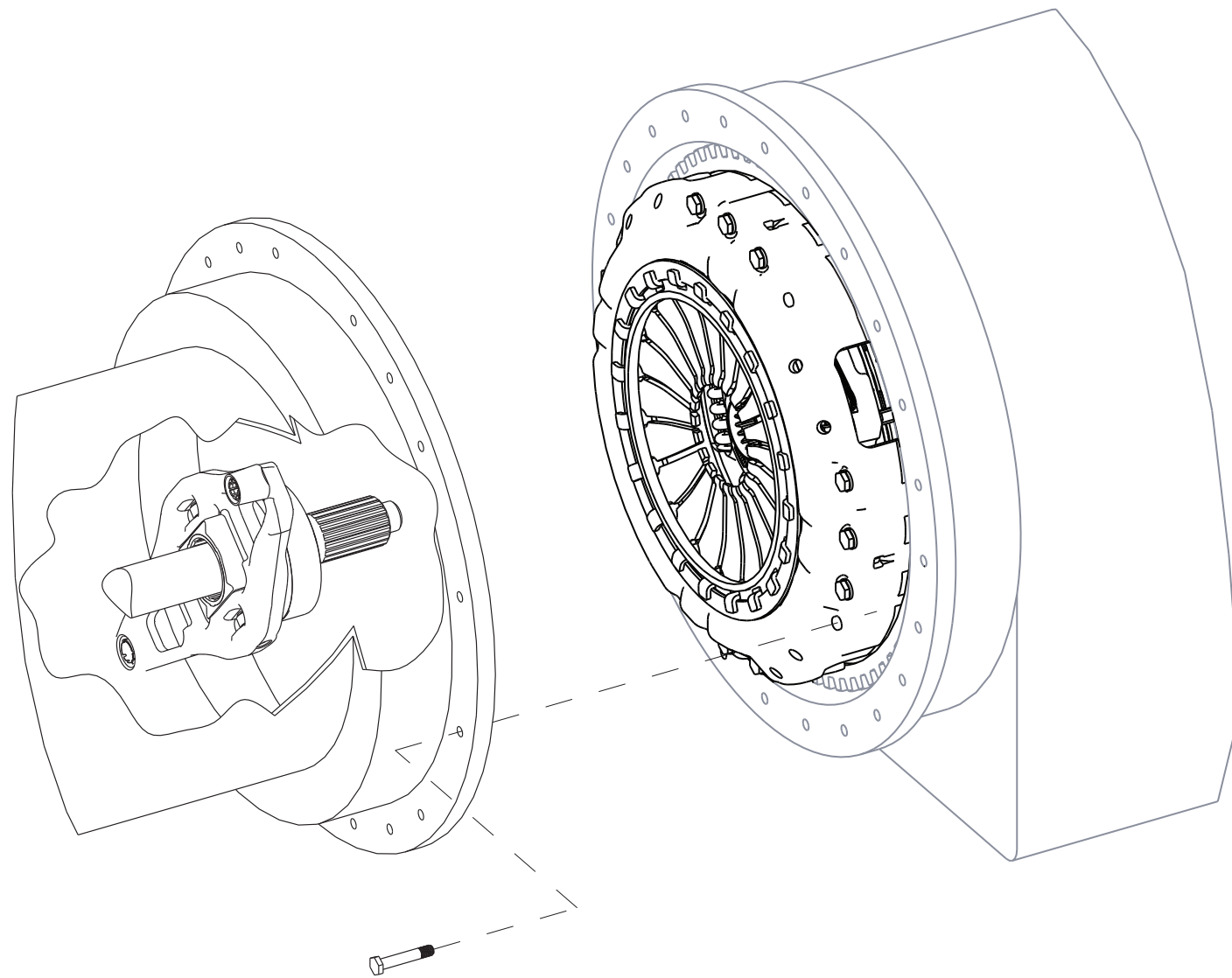


4 Install Transmission per OEM Guidelines



Note: Reference Endurant 12-Speed Automated Transmission Service Manual TRSM0950.

- 1 Replace Release Bearing, refer to TRSM0950 Release Bearing and Clutch Release Yoke Removal and Installation.
- 2 Replace Input Shaft Pilot Bearing Wear Sleeve, refer to TRSM0950 Input Shaft Pilot Bearing Wear Sleeve Disassembly/Assembly.
- 3 Push the upper end of the Release Yoke back until it locks to reset the Linear Clutch Actuator (LCA).
- 4 Refer to OEM Guidelines for transmission installation.
- 5 Refer to OEM and/or transmission manufacturer regarding clutch calibration requirements after transmission installation.

NOTICE: Ensure to perform the clutch calibration requirements or transmission performance will be degraded.

Installation Procedure

Eaton 430 mm Push Type Self-Adjusting Clutch CLMT4309 EN-US

January 2019

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

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Reference Materials
CLSM200 and CLSL1511

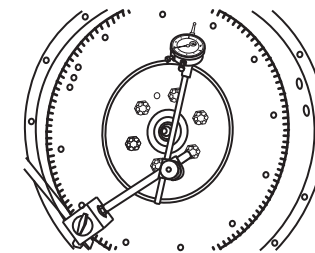
1 Measure

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:

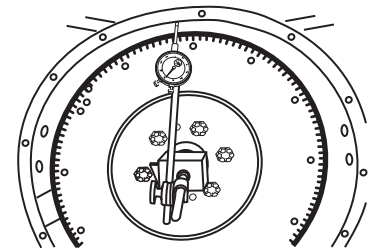
Flywheel Face Runout

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



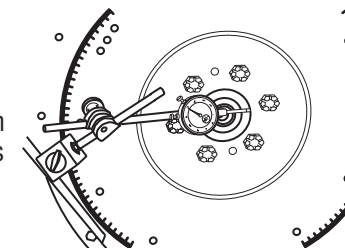
Flywheel Housing I.D. Runout

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).



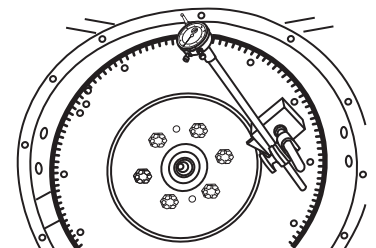
Pilot Bearing Bore Runout

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).



2 Assemble Clutch

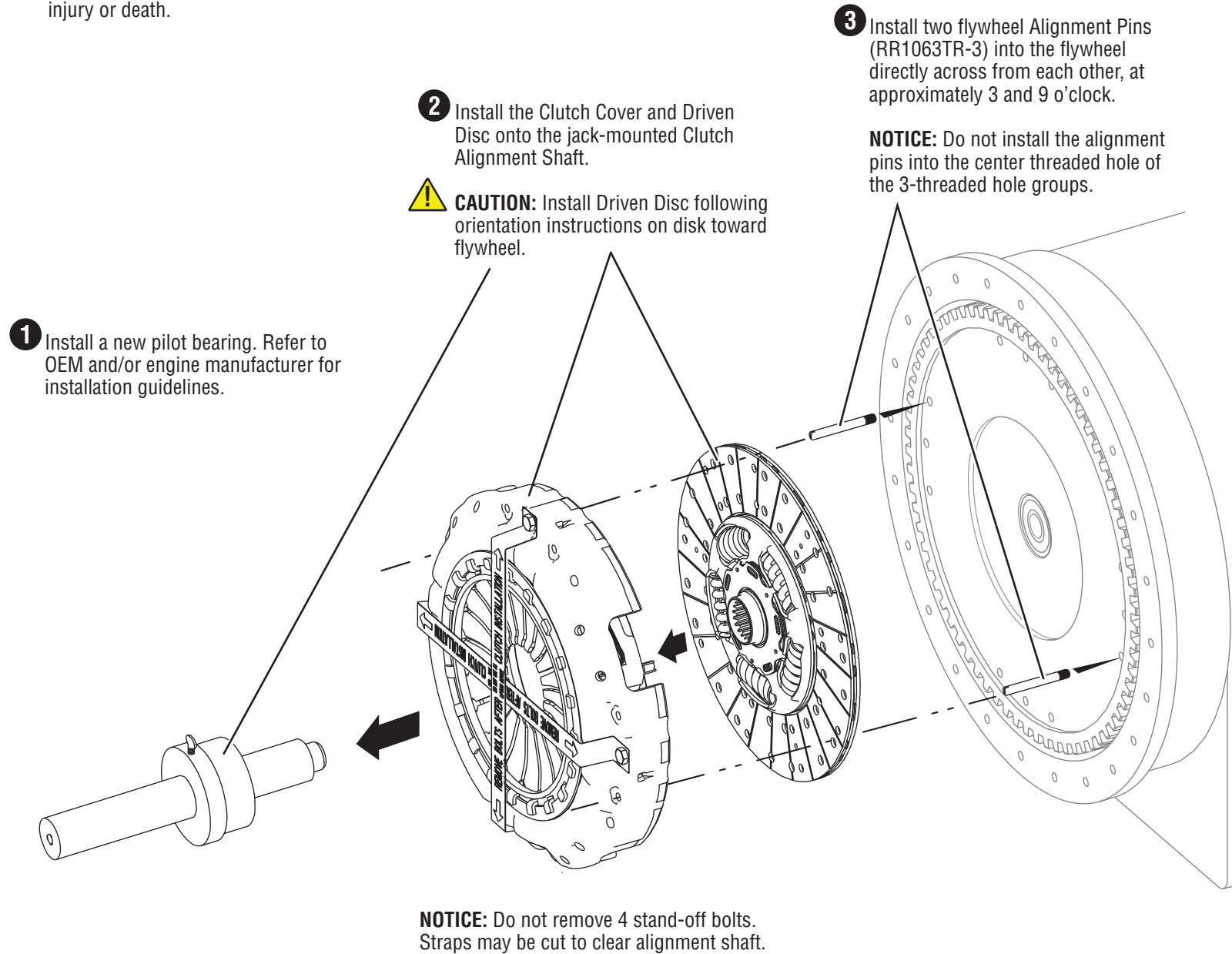
Special Instructions

Install Clutch Alignment Shaft (RR1087TR) onto a clutch jack. Refer to clutch jack manufacturer guidelines for proper installation instructions.

WARNING: Clutch weighs approximately 125 lbs. Failure to properly secure the Clutch Alignment Shaft to the clutch jack may result in component damage, severe injury or death.

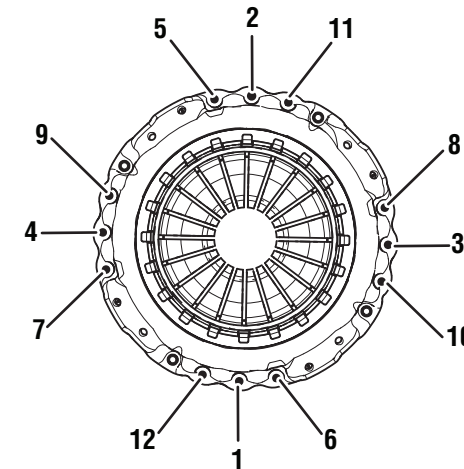
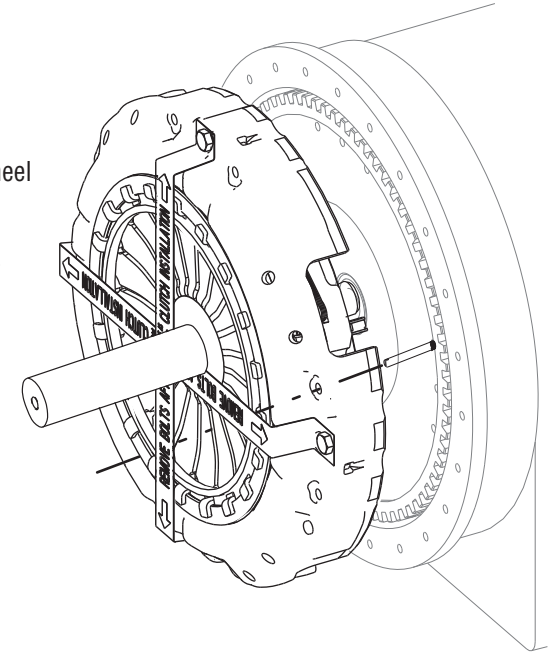
Special Tools

- Clutch Installation Tool Kit (RR2000CL)
- 6 ounce (170 gram) hammer
- 3/8 inch (9.525 mm) brass pin punch (Starrett® B248E Pin Punch, Brass Drive 3/8" or equivalent)



3 Install Assembled Clutch

- 1** Align the Clutch Cover to the flywheel Alignment Pins and insert the Clutch Alignment Shaft into the pilot bearing.
- 2** Slide the Clutch Cover (and Driven Disc) on to the flywheel and install 6 Clutch Cover cap screws finger tight.
- CAUTION:** Use only M10 x 1.5 x 80mm, minimum class 10.9, flange type fasteners for the Clutch Cover cap screws
- 3** Remove the 2 flywheel Alignment Pins and 4 stand-off bolts with straps from the clutch cover.
- 4** Install 6 remaining Clutch Cover cap screws finger tight.



CAUTION: Reference cap screw callout image for proper torque sequence used in steps 5 through 8. Failure to follow the torque sequence may result in flywheel and Clutch Cover damage.

- 5** Torque cap screws 1 through 4 to 30 N•m (23 lb-ft.).
- 6** Torque cap screws 5 through 12 to 30 N•m (23 lb-ft.).
- 7** Torque cap screws 1 through 12 to 57-67 N•m (42-50 lb-ft.).
- 8** Re-torque cap screws 1 through 12 to 57-67 N•m (42-50 lb-ft.) to ensure Clutch Cover is fully seated to flywheel.

- 9** Remove the Clutch Alignment Shaft.

- 10** Locate the 4 Control Fingers in the Clutch Cover.

- 11** Use a 6 ounce (170g) hammer and a 3/8 inch (9.525mm) brass pin punch and lightly tap the 4 control fingers until they contact the flywheel.

CAUTION: Keep fingers clear to avoid personal injury.

CAUTION: Only use tools specified and do not use excessive force to seat the control fingers to the flywheel. If control fingers are damaged during installation the clutch will not properly adjust and will require replacement.

