

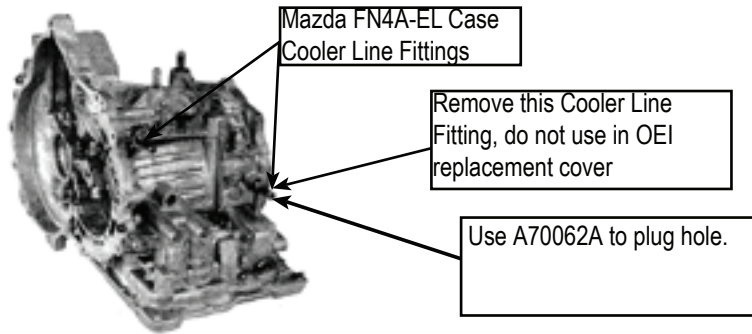


Mazda FN4A-EL / Ford 4F27E End Cover Replacement

The Mazda FN4A-EL transaxle has been plagued with oil starvation of the reverse and direct clutch drums. Ford and Mazda developed this transaxle together; the Ford end cover incorporates a steel sleeve, while the Mazda did not. (See picture) Also the Ford end cover has the cooler line fitting in the cover and the Mazda has both cooler line fittings in the case.

Mazda Installation:

1. Remove cooler line fitting from rear of case, plug hole.
"Do Not Use Case Fitting in OEI Cover)
 2. Use fitting supplied in 133350 kit.
 3. Torque end cover bolts to service manual specifications.
- Tightening torque 19—25 N•m {1.9—2.6 kgf•m, 14—18 ft•lbf}



Ford 4F27E End Cover



Ford 4F27E End Cover Brass Cooler Line Fitting

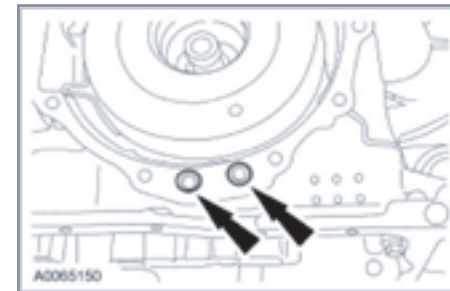
Ford 4F27E End Cover Steel Sleeve



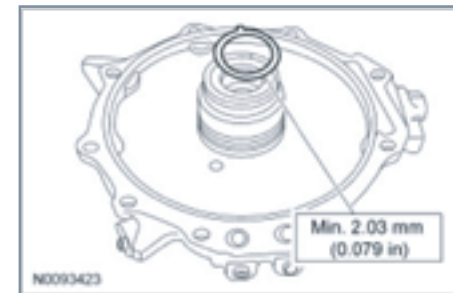
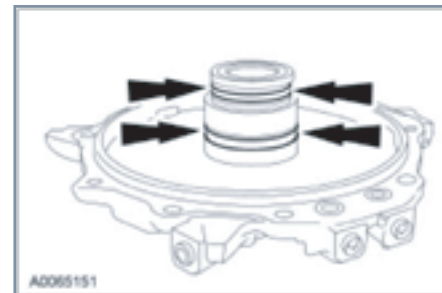
133 Series 4F27E Transaxle Rear Cover with Fitting

Alto Part # 133350

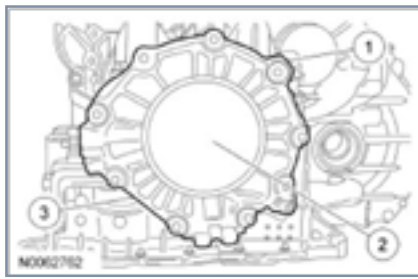
- (1) A70008 Rear Cover
- (1) A70007 Brass Fitting
- (1) A70062A Plug & Rubber Seal



Install new end cover-to-case seals



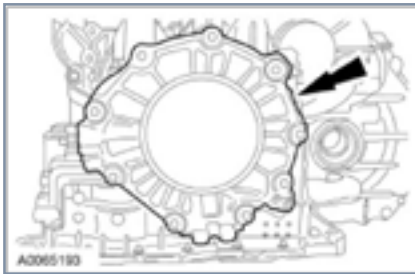
Install the direct clutch hub bearing shim and an additional shim to increase the total shim thickness to specification shown or greater.



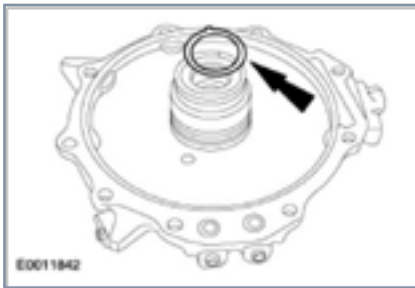
NOTICE: Failure to support the transaxle end cover in the center can result in inaccurate measurements causing damage to the transaxle.

Measure the gap between the transaxle end cover and the transaxle assembly.

1. Position the transaxle end cover on the transaxle assembly.
2. Support the transaxle end cover in the center.
3. Measure the gap between the transaxle end cover and the transaxle assembly



Remove the transaxle end cover

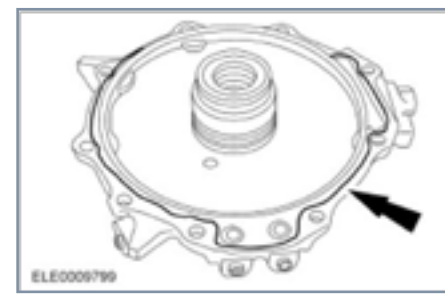


NOTE: The clearance for the direct clutch bearing shim is 0.25-0.50 mm (0.009-0.019 in).

NOTE: The correct shim thickness is between minimum and maximum.

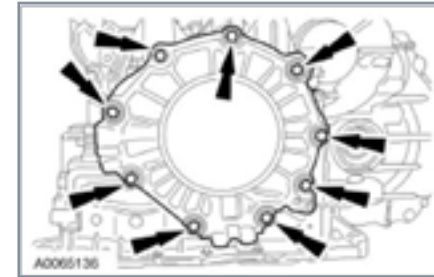
Choose and install the correct direct clutch hub bearing shim:

- Line 1: total amount of shim thickness used during transaxle end cover mock up.
- Line 2: measure the gap between transaxle end cover and transaxle case.
- Line 3: subtract Line 2 from Line 1 to obtain the actual clearance.
- Line 4: subtract 0.25 mm (0.009 in) from Line 3 for maximum shim thickness.
- Subtract 0.50 mm (0.019 in) from Line 3 for the minimum thickness shim.



NOTICE: Applying too much silicone sealer in the area of the fluid return holes may cause the fluid return holes to become blocked and cause a transmission failure.

Apply a 1 mm (0.039 in) bead of silicone sealer to the transaxle end cover.



Install the transaxle end cover.

- Tighten to 22 Nm (16 lb-ft).

FORD	
2000	Festiva
2008 – 2011	Fiesta
2000 – 2011	Focus / Focus C-Max
2004 – 2005	Ixion
2007 – 2010	I-Max
2000 – 2005	Laser
2000 – 2005	Lynx
2000	Telstar
2000 – 2007	Terra
HONGQI	
2006 – 2008	Mingshi

MAZDA	
2007 – 2011	2
2004 – 2011	3
2000 – 2007	323
2005 – 2011	5
2002 – 2008	6
2002 – 2005	Atenza / 5HB / Wagon
2003 – 2011	Axela / Wagon
2008 – 2011	Biante
2000 – 2011	Demio
2002 – 2005	Familia
2006 – 2007	MPV
2000 – 2010	Premacy
1999 – 2004	Protégé
2003 – 2008	Tribute
2004 – 2009	Verisa