

Service Parts Instructions

Replacing the Input Shaft Using Kit 5367



WARNING

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

Removing the Input Shaft



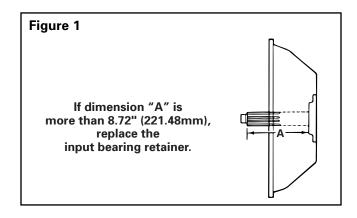
WARNING

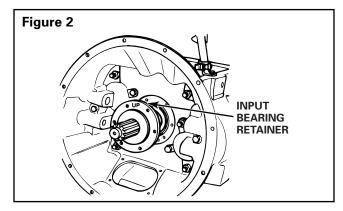
Make sure the transmission is securely supported on the overhead hoist or jack. If not securely supported, the transmission may fall and cause serious personal injury or damage.

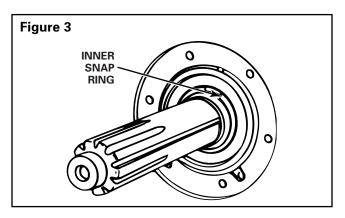
- Remove the transmission from the vehicle.
 See the procedure of the manufacturer of the vehicle.
- Measure the distance from the top of the splines on the input shaft to the top of the input bearing retainer as shown in Figure 1. If the distance is more than 8.72 inches (221.48 mm), the input bearing retainer must be replaced.
- Remove the capscrews and the washers that fasten the input bearing retainer to the main case. Remove the input bearing retainer.
 Figure 2.
- 4. Use a scraper to remove the sealant material between the input bearing retainer and the main case.

NOTE: A black shipping seal may be on the input shaft. Remove and discard the seal.

5. Remove and discard the snap ring that holds the bearing on the input shaft. **Figure 3**.



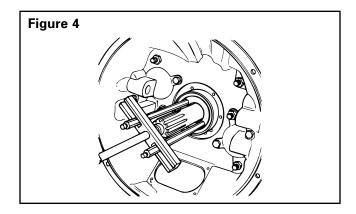


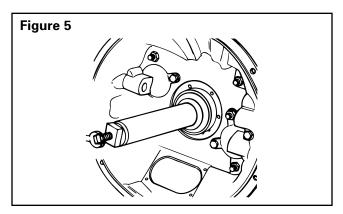


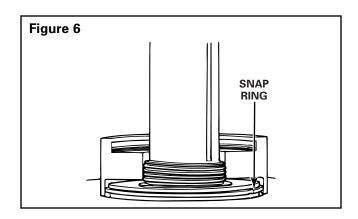
6. Remove the bearing from the shaft. Use Owatonna tool set, Bearing Service Set, OTC-7070A (**Figure 4**) or G & W tool, Input Shaft Bearing Puller, G-38 (**Figure 5**) or equivalent to remove the bearing from the shaft. The tool is attached to the outer snap ring on the bearing to pull the bearing from the shaft.

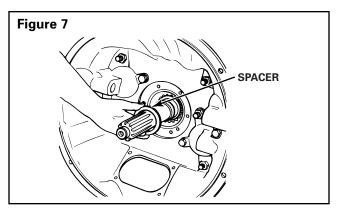
If the snap ring is not out far enough for the tool to grip, pull the input shaft out until the tool can be installed on the snap ring. **Figure 6**.

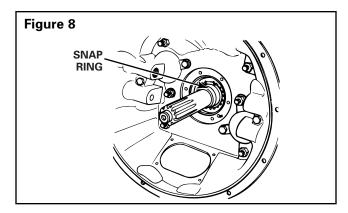
- 7. Remove and discard the spacer from the input shaft. **Figure 7**.
- 8. Remove the snap ring that holds the input shaft in the gear. **Figure 8**.
- 9. Remove the input shaft. Figure 9.

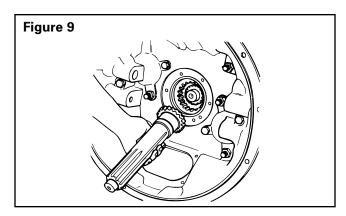










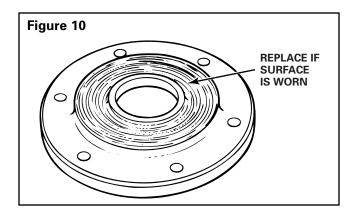


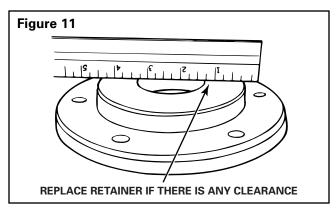
Inspecting the Parts

Inspecting the Input Bearing Retainer

Inspect the input bearing retainer on the area where the clutch brake touches the retainer. Replace worn or damaged retainers. **Figure 10**.

Put a straightedge across the retainer where the clutch brake is installed. If there is any clearance between the straightedge and the retainer, replace the retainer. **Figure 11**.





Installing the Input Shaft

NOTE: The input shaft is a "high backlash" design. "High backlash" refers to the increased clearance between the teeth on the end of the shaft and the teeth inside the main drive gear. This increased clearance is due to the reduced size of the teeth on the end of the shaft and does not affect the strength of the shaft.

NOTE: Clean the threads of the fasteners. Put a new application of Loctite® #222 or equivalent sealant on the threads.

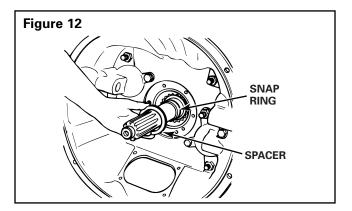
1. Align the splines of the input shaft with the splines inside the main drive gear. Install the input shaft in the main drive gear. Install a new snap ring that holds the input shaft in the main drive gear.

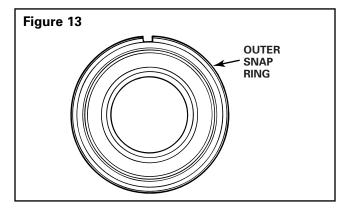


CAUTION

Install the correct spacer on the input shaft, part number 1229-J-2194. If the correct spacer is not used, the transmission will not operate correctly.

- Install a new spacer on the input shaft. Figure 12.
- 3. Install the outer snap ring in the groove on the bearing. **Figure 13**.



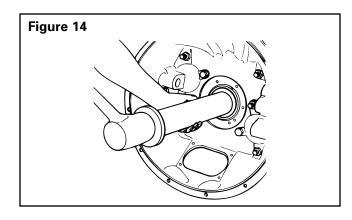


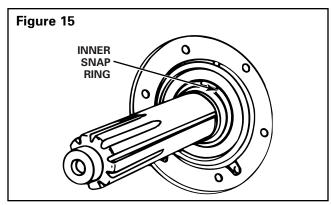


CAUTION

Put the tool or tube on the inner race of the bearing. If tools are used in any other place on the bearing, the bearing will be damaged.

- 4. Put the bearing over the input shaft and in the case. Use G & W tool, Input Shaft Bearing Driver, G-35 or equivalent to install the bearing on the input shaft. The bearing is correctly installed when the snap ring touches the case. Figure 14.
- 5. Install a new snap ring that fastens the bearing on the input shaft. **Figure 15**.
- 6. Clean the mounting surface on the input bearing retainer and the transmission base with a chlorinated solvent such as Loctite® Safety Solvent or equivalent.







CAUTION

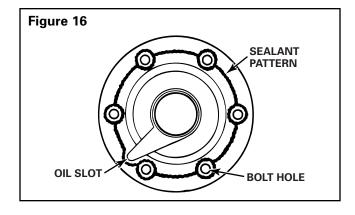
Apply the sealant in a 1/8-inch (3 mm) bead. If too much sealant is used, the sealant extends over the edges can break off and plug the oil passages.

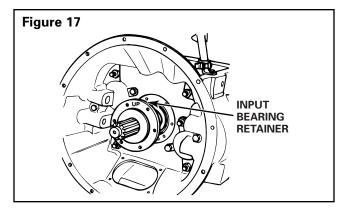
7. Use Loctite® Master Gasket Sealant™ #00203 (Meritor Part Number 2297-C-5905) or Loctite® #5699 (Meritor Part Number 2297-A-7021) or equivalent, to put a new sealant pattern for the input bearing retainer on the case in the pattern shown in **Figure 16**.

Apply the sealant to one surface in a continuous pattern with an 1/8-inch (3 mm) bead. Make sure the bead encircles any fastener holes.

- 8. Install the bearing retainer on the case. Make sure the oil passage in the retainer is aligned with the oil hole in the case. **Figure 17**.
- Install the capscrews and washers for the retainer. Tighten the capscrews to 25-35 lb-ft (34-47 N·m). Figure 17.

 Install the transmission. See the procedure of the manufacturer of the vehicle. Check for correct operation.





Kit 5367

Description	Part Number	Quantity
Input Shaft	A-3297-B-1380	1
Spacer	1244-J-2194	1
Snap Ring	1229-W-4339	1
Snap Ring	1229-X-4418	1

Special Tools

Tool Description	Tool Number	Tool Manufacturer
Bearing Service Set	OTC-7070A	Owatonna ①
Input Shaft Bearing Puller	G-38	G & W ②
Input Shaft Bearing Driver	G-35	G & W ②

- ① Order Owatonna tools from OTC Tool and Equipment Division, 655 Eisenhower Drive, Owatonna, Minnesota 55060, 1-800-533-6127.
- ② Order G & W tools from G & W Tool Company, 1105 E. Louisville, Broken Arrow, Oklahoma 74467, 1-800-247-5882.



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