

**BLACK
SERIES**

S799 Servo Bore Repair System:

AODE



This tool is for use on **FORD AODE, 4R70W** and **4R70E** transmissions.

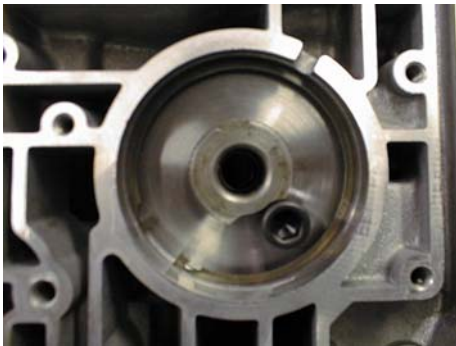
**READ ALL APPLICABLE INSTRUCTIONS
BEFORE ATTEMPTING TO USE THE TOOL**

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U.S. Patent # 6,192,567



1. Install the drill jig into the case by setting the jig into the servo. Retain the jig in the case with the servo's snap-ring.
2. Drop the 9/16" guide into the jig. It doesn't matter which one of the lands on the guide you use, as long as one of the lands is under the 3/8" Allen screw.
3. Ream out the bore using the 9/16" reamer, applying ample lubrication.* **DO NOT REAM ABOVE 500 RPM.**
4. Replace the 9/16" reamer guide with the 5/8" guide, and the 9/16" reamer with the 5/8" reamer.
5. Ream the bore out using the 5/8" reamer with ample lubrication.* Take care not to either push too hard on the reamer or turn the reamer faster than 500 RPM when reaming. Either one can overly enlarge the bore, causing a loose bushing.
6. Clean the case before proceeding to step number seven.



****ALWAYS CHECK PIN FINISH FOR **
BURS AND COARSNESS**

* - **CUTTING OIL** must be used for lubrication. The use of substitutes, particularly ATF, may result in an over-sized bore.

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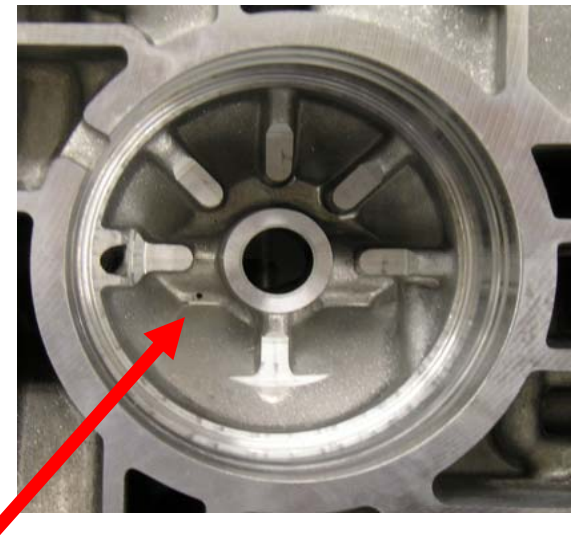


7. Apply Loctite® (preferably **green #680**) or equivalent to the bushings and drive the bushings in by hitting the driver until the bushing bottoms. The AODE kit uses the larger diameter installation tool without an id groove cut in the handle.
8. Insert the provided sizing pin into the bore, chamfer first. It may be necessary to start the pin in the bushing with a rubber mallet. Once the pin is inside the bushing, use a punch to drive the pin all the way through the bushing. Repeat as necessary.

CONFUSION

About Bushings?

If you also have an AODE or an AOD Kit, you may have noticed that the bushings for those kits are remarkably similar to the bushings for the 4L30E Kit. The reason for the similarity is that they're actually the same bushing.



Always inspect the case here. This hole goes all the way through the case and has the same effect as a worn servo bore. Field testing has shown that PLUGGING IT DOES NOT AFFECT SHIFT QUALITY.

Important Reamer Info



Inspect for aluminum buildups on the cutting edges as pictured left.



Reamers are like drills, if you use them repeatedly in aluminum they develop build-ups on the cutting edges. These build-ups effectively make the reamer larger, causing a larger hole. This larger hole then robs the bushing you're installing of interference needed to properly crush the bushing. This causes the pin to be loose in the bushing, which defeats the entire purpose. To prevent this, you need to (1) keep your reamers sharp and (2) use plenty of CUTTING OIL when reaming.

To clean the reamers, we offer a stone for \$17.

Thirty Seconds of maintenance saves hours of aggravation.



We Recommend Tap Magic for Lubrication.

MSC #00261933

Phone: 800-645-7270

Fixing servos in these other transmissions:

- A0D
- 4F27E/FNR5
- 5R55W/5R55S/5R55N
- C3/A4LD/4R44E/4R55E/5R55E
- 180/4L30E
- 700/4L60E
- 375/400/425/4L80E
- 4T60/65E
- 4EAT-G (G4A-EL)
- CD4E
- 4EAT-F (F4A-EL)
- AX0D/E/AX4S/N/4F50N
- 4T80E

Also available: Torque Flight Throttle Valve repair kit & TorqShift Spanner Socket.

For pricing, availability, and other information, check us out on the web at www.servobore.com or call us at 715-458-2617