

**BLACK
SERIES**

S799 Servo Bore Repair System:

A4LD



This tool is for use on **FORD C3, A4LD, 4R44E, 4R55E** and **5R55E** transmissions.

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

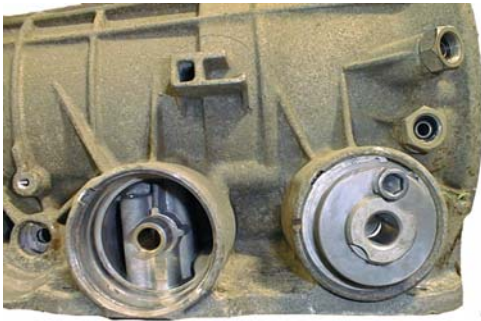
Northland Transmission Inc.

105 E. Poplar Ave Phone: (715) 458-2617
Cameron, WI 54822 Fax: (715) 458-2611

www.servobore.com

U.S. Patent # 6,192,567

Master: 1411
Sub: 2411



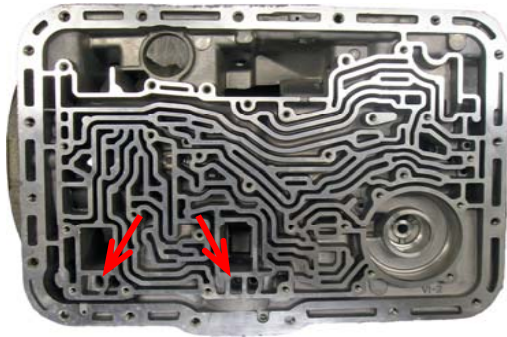
1. Install the drill jig into the case by setting the jig into the servo. Retain the jig in the case with the servo's snap-ring.
2. Drop the 9/16" guide into the jig. It doesn't matter which one of the lands on the guide you use, as long as one of the lands is under the 3/8" Allen screw.
3. Ream out 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 19/32" guide, and the 9/16" reamer with the 19/32" reamer.
5. Ream the bore out using the 19/32" 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.

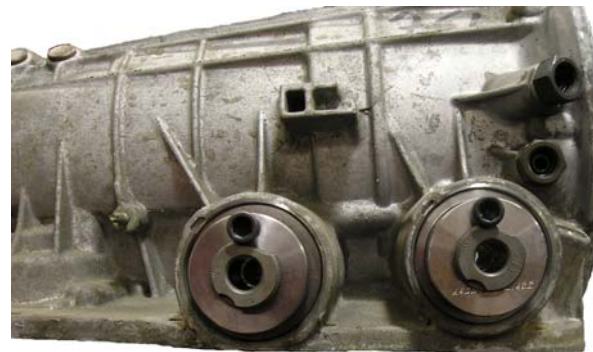
Loctite® is a registered trademark of the Loctite Corporation of Rocky Hill, CT



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 A4LD kit uses the smaller pilot installation tool with an id groove cut in the handle.
8. After installing the bushing, using a $17/64$ " bit, drill a hole in the side of the bushing by following the holes in the case (use the picture to the left as a map). Take care not to make the passage oblong.
9. 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. The included sizing pin is larger than the factory servo pin, so repeat until the factory servo pin moves freely through the bushing.

Time Is Money

**So why not save yourself a little of both?
Buy a second jig for \$59.00 and cut the amount of time needed to install both bushings in half.**



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.

We offer a stone to remove these build-ups and maintain the reamers.

Thirty Seconds of maintenance saves hours of aggravation.



We Recommend Tap Magic for Lubrication.

MSC #00261933

Phone: 800-645-7270

Fixing servos in these transmissions:

- CD4E (LA4A-EL)
- AX0D/E/AX4S/N/4F50N
- C3/A4LD/4R44E/4R55E/5R55E
- 5R55W/5R55S/5R55N
- A0D/A0DE/4R70W/4R75W/4R75E
- 180/4L30E
- 700/4L60E
- 375/400/425/4L80E
- 4T60/65E
- 4T80E
- 4F27E (FN4A-EL)/FNR5 (FS5A-EL)
- 4EAT-F (F4A-EL)
- 4EAT-G (G4A-EL)
- AW55-50SN/AW55-51SN
- TF-80/81SC (AF20/21)

Also available:

Torque Flight Throttle Valve
48RE Transfer Case Plate

Torque Flight Rooster Comb Detent
46RE/H Steel Reverse Servo Pin

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