

**BLACK  
SERIES**

*S799 Servo Bore Repair System:*

**4L80**



This tool is for use on **GM 375, 400, 425,** and **4L80E** transmissions.

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

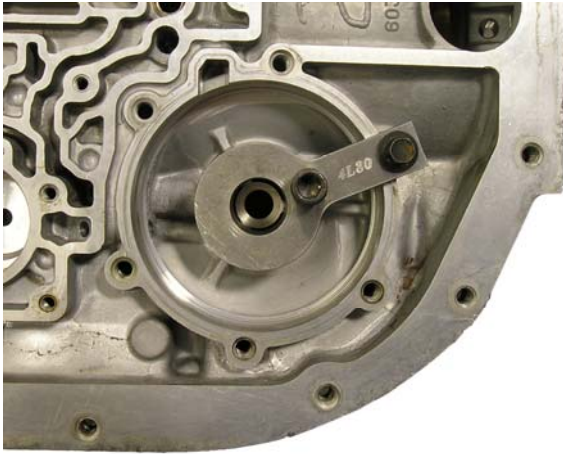
**Northland Transmission Inc.**

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

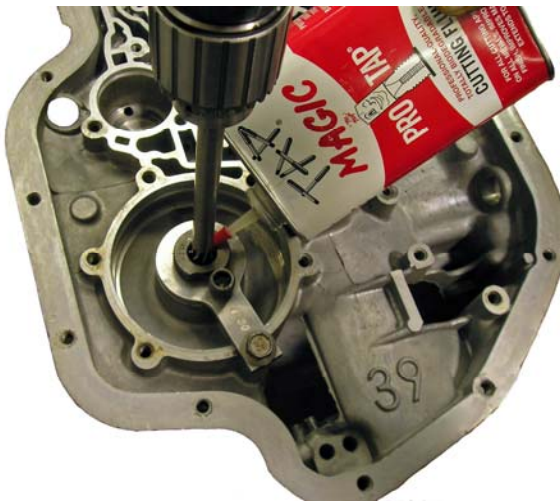
[www.servobore.com](http://www.servobore.com)

U.S. Patent # 6,192,567

Master: 1122  
Sub: 2122



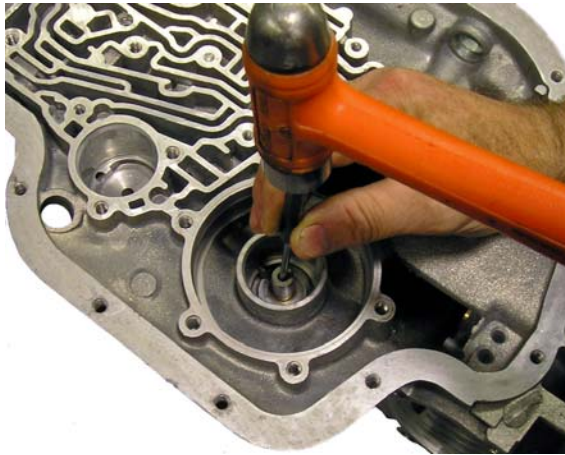
1. Install the drill jig into the case by setting the jig into the servo. Retain the jig in the case with the servo's snap-ring.
2. Drop the 9/16" guide into the jig. It doesn't matter which one of the lands on the guide you use, as long as one of the lands is under the 3/8" Allen screw.
3. Ream out 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 4L80 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. The included sizing pin is larger than the factory servo pin, so repeat until the factory servo pin moves freely through the bushing.
9. Remove the stock Spring Seat (stamped steel) from the Reverse Servo pin and install the new Spring Seat (solid steel). The new spring seat is shorter than the original seat. This is because the area of the case where the seat originally contacted is now covered by the "hat" of the bushing. The new seat has been shortened to provide the correct seat height and made wider to protect the bushing.

# 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](http://www.servobore.com) or call us at 715-458-2617