

**BLUE  
SERIES**

*S799 Servo Bore Repair System:*

**AF21**



This tool is for use on **Aisin TF-80SC and TF-81SC (AF20, AF21)** transaxles.

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

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U.S. Patent # 6,192,567

Master: 1262  
Sub: 2262



1. Install the drill jig into the case by setting the jig into the servo. Install the transmission's servo snap-ring above the jig.
2. Drop the 7/16" 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 7/16" reamer, applying ample lubrication. \* **DO NOT REAM ABOVE 500 RPM.**
4. Replace the 7/16" reamer guide with the 1/2" guide, and the 7/16" reamer with the 1/2" reamer.



5. Ream the bore out using the 1/2" 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.

\*- **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 bushing and drive the bushing in by hitting the driver until the bushing bottoms.



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.

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

# 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