

*S799 Servo Bore Repair System:*  
**5RW**

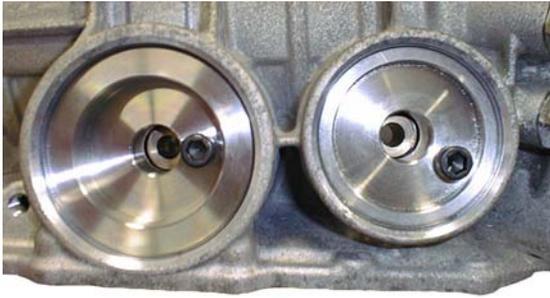
Rotunda Tool# NRL5RW



This tool is for use on **FORD 5R55W, 5R55S, and 5R55N** transmissions.

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

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.

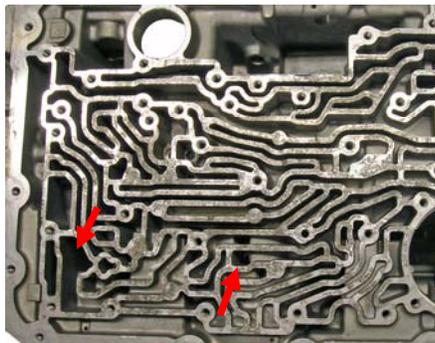
**\*\* ALWAYS CHECK PIN FINISH FOR \*\***  
**\*\* BURS AND COARSNESS \*\***

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

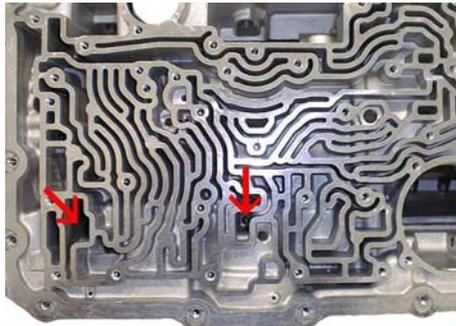
Loctite® is a registered trademark of the Loctite Corporation of Rocky Hill, CT



5R55W/S



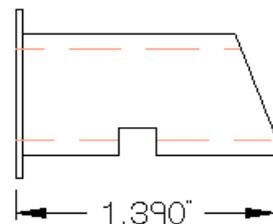
5R55N



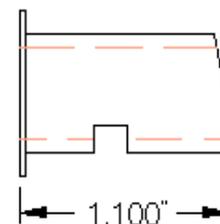
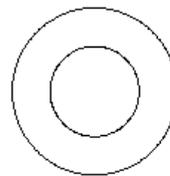
- Apply Loctite® (preferably **green #680**) or equivalent to the bushing, and drive the bushing in by hitting the driver until the bushing bottoms. Orient the bushing so that the chamfer on the end of the bushing follows the contour of the inside of the case. When installed correctly, the slot machined in the side of the bushing will align with the apply hole (use the appropriate map to the left to find the apply hole).
- Insert the provided sizing pin into the bore. 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.

**NOTICE:**

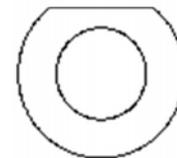
In our instructions, when we refer to the **Overdrive Bore**, we are talking about the smaller bore located closest to the **Bell Housing**.  
 When we refer to the **Intermediate Bore**, we are talking about the larger bore located next to the **Line Pressure Tap**.



Overdrive Bushing



Intermediate Bushing



**NOTICE:**  
 Notch not necessarily oriented with chamfer

Note: This kit utilizes two different bushings. The shorter bushing is for the Intermediate Servo and is identified by a flat ground in the bushing's hat. Both bushings are chamfered and need to be installed with the recessed edge up (away from the valve body).

# 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.



You must use a cutting oil, i.e. Tap Magic, for Lubrication when reaming.  
**DO NOT SUBSTITUTE WITH ATF!!!**

Replacement bushings are available through Rotunda, Part # NRL3411.

Transmission re-assembly procedure is located in WSM Section 307-01

Rotunda Technician Tool Program  
1-800-ROTUNDA (768-8632)  
Option #6