5R55N/W/S

PART NUMBERS 56361J-01K, S-56361J-TL

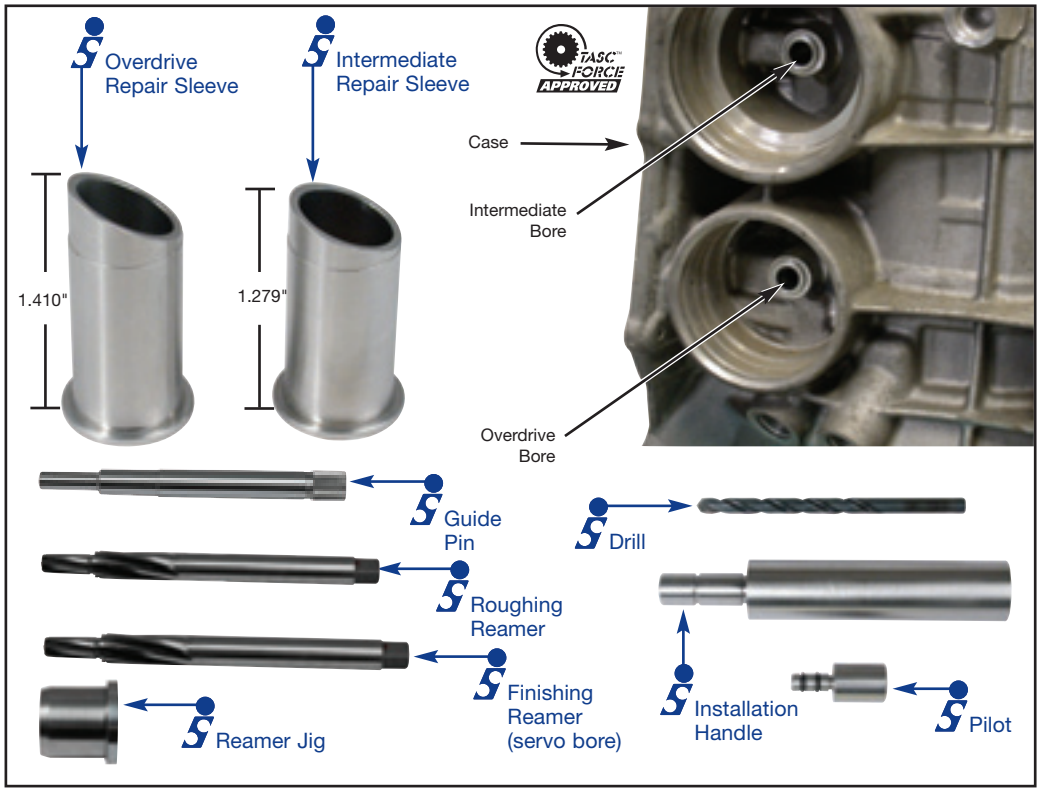
Overdrive & Intermediate Servo Pin Bore Sleeve Kit

56361J-01K

1 Overdrive Repair Sleeve
1 Intermediate Repair Sleeve

S-56361J-TL

1 Drill
1 Roughing Reamer
1 Finishing Reamer
1 Guide Pin
1 Reamer Jig
1 Installation Handle
1 Pilot
2 O-Rings
1 Flex Hone (not shown)



REAMING INSTRUCTIONS

Prep and Set-up

1. Remove servo assembly from case and thoroughly clean the servo pin bore.
2. Test-fit guide pin **S-56361J-GP** in the pin bore to be reamed. If the guide pin installs easily, proceed to next step. If the guide pin sticks in the bore, deburr the bore with the flex hone until the guide pin can be inserted.
3. To align the fixture to the servo pin bore, follow the **SERVO-FIX** set-up instructions. From tool kit **S-56361J-TL**, use reamer jig **S-56361J-RJ** and guide pin **S-56361J-GP**, then ream with the tool labeled "roughing reamer", followed by the tool labeled "Servo Bore".

Note: Once the servo pin bore is aligned with the **SERVO-FIX**, do not disturb or loosen the fixture or guide setting in any way until both reamers have been used and the reaming process is complete. Be sure to use plenty of continuously supplied cutting fluid while reaming the servo pin bore.

4. Gently insert the self-piloting roughing reamer into the servo pin bore until the cutting tip contacts the bore opening.
5. Use a speed handle to turn the reamer in the bore. The reaming action should be clockwise in a smooth and continuous motion, at 60-120 rpm.
6. Continue reaming until the reamer cuts completely though the bore. Remove the roughing reamer, using low air pressure to blow away chips. Insert the finishing reamer into the reamer jig and follow the steps above. Remove the reamer, then the reamer jig and finally the fixture. Clean the reamer and servo bore with low air pressure and solvent.

Figure 1

Figure 2

Figure 3

INSTALLATION

NOTE: Select the sleeve for the bore being serviced. The Intermidiate bore sleeve is the shorter of the two. Although the sleeve is designed as a press-fit, use of Loctite™ is highly recommended to aid in proper sleeve retention.

1. Remove the pilot from the installation tool by pulling gently.
2. Slide the sleeve over the small end of the installation tool handle, flanged end first (see figure 1).
3. Gently push the pilot back into the end of the installation tool, securing the sleeve on the tool. O-ring lubrication should be used to prevent shearing of the o-rings (see figure 2).
4. Carefully coat the upper half outside diameter of the sleeve with thin Loctite™ (603, 609, etc.).
5. Press the sleeve into the bore, small diameter first, by sliding the installation tool pilot into the case bore and then gently pressing/hammering the handle of the installation tool. Press just far enough to seat the sleeve flange against the case bore boss/face (see figures 3 and 4).
6. From the inside of the case, gently pull the pilot off the installation tool and remove.
7. After installing the sleeve, using the enclosed 15/64" bit, drill the apply hole into the wall of the sleeve, using the existing case apply hole as a guide. Take care not to allow the drill bit to hit the opposite wall of the sleeve (see figures 5 and 6).
8. Remove debris/burrs from the inside of the sleeve by using the installation tool WITHOUT the pilot attached. The annular groove on the small diameter of the installation tool can be used to deburr the inside diameter of the sleeve at the apply hole.
9. Reassemble the servo per OEM specifications.

Figure 4

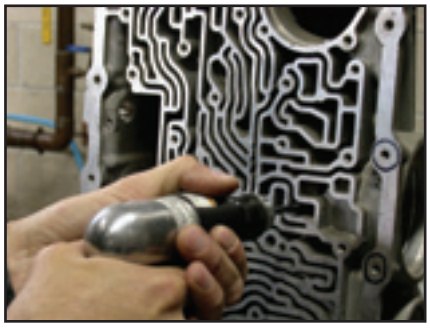


Figure 5 Drilling intermediate servo sleeve.

Figure 6 Drilling overdrive servo sleeve.