

Servo Pin Bore Sleeve



Part No.
96872-01K

Tool Kit



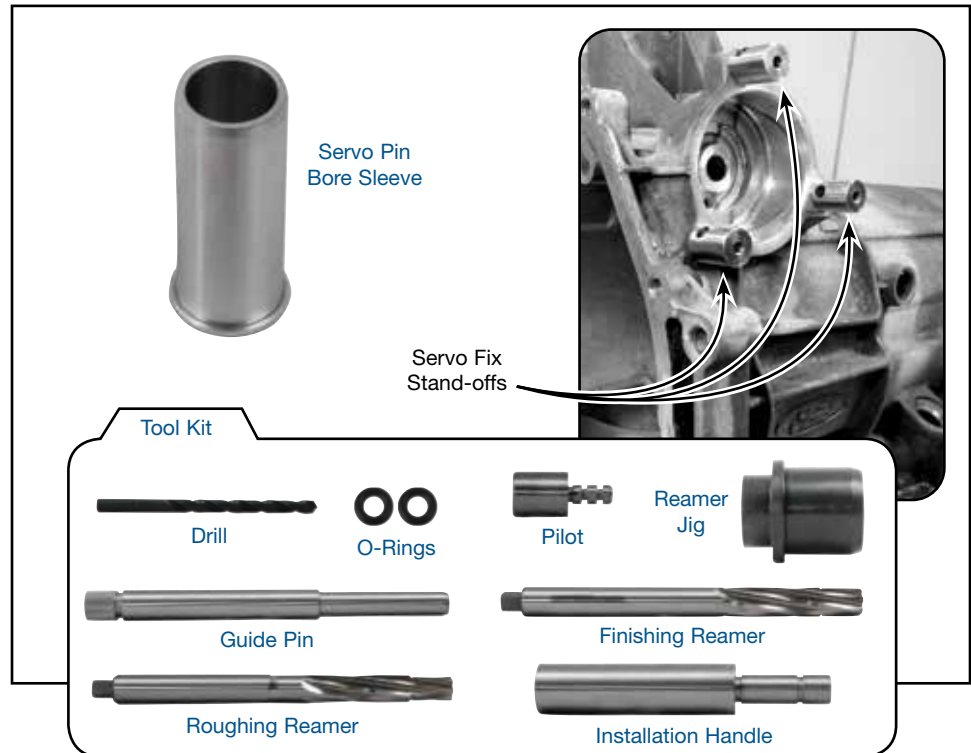
Part No.
S-96872-TL

- Drill
- Roughing Reamer
- Finishing Reamer
- Guide Pin
- Reamer Jig
- Installation Handle
- Pilot
- O-Rings (2)

NOTE: Special tool kits have been designed to service a specific servo pin bore, and must be used in conjunction with the servo pin bore reaming fixture **SERVO-FIX**. Part numbers for these kits begin with an "S" to distinguish them from the traditional Sonnax tool kits that can be used as stand-alone tools.

WARNING: Required tool kit **S-96872-TL** is no longer in production. Check with your distributor for availability.

Ford 4F50N, AX4N, AX4S, AXOD, AXODE

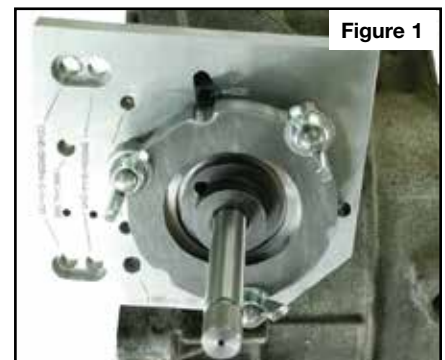


1. Prep & Set-up

- Remove servo assembly from case and thoroughly clean the servo pin bore.
- Make sure the guide pin fits into the bore. Remove bore ridges if necessary.
- To align the fixture to the servo pin bore, follow the **SERVO-FIX** setup instructions. From the **S-96872-TL** tool kit, use the reamer jig and guide pin (**Figure 1**).

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.

- Gently insert the self-piloting roughing reamer into the servo pin bore until the cutting tip contacts the bore opening.
- 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.
- Continue reaming until the reamer cuts completely through the bore. Remove the roughing reamer. Using low air pressure, 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.



2. Installation & Assembly

NOTE: Although the sleeve is designed as a press-fit, use of Loctite® is highly recommended to aid in proper sleeve retention.

- a. Remove the pilot from the installation tool by pulling gently.
- b. Slide the sleeve over the small end of the installation tool handle, flanged end first.
- c. 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.
- d. Carefully coat the outer half O.D. of the sleeve with thin Loctite® 603, 609, etc. (**Figure 2**).
- e. 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.
- f. From the inside of the case, gently pull the pilot off the installation tool and remove.
- g. Use the appropriate drill bit and drill the apply hole into the wall of the sleeve, using the existing case lube hole as a guide. Take care not to allow the drill bit to hit the opposite wall of the sleeve.
- h. 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 I.D. of the sleeve at the apply hole.
- i. Reassemble the servo per OE specifications. Verify servo pin moves free in sleeved bore.

