

AFL Valve Sleeve Kit

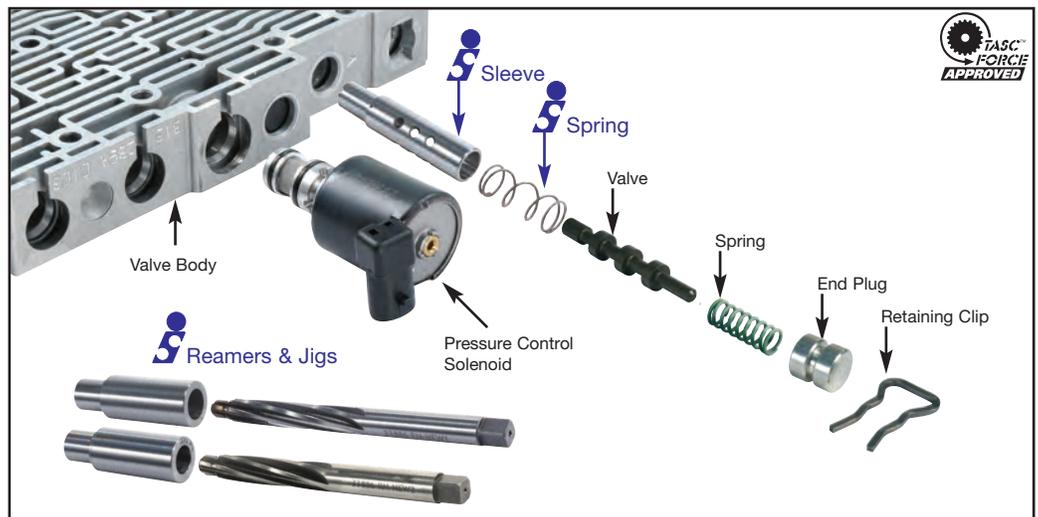
33886-01K

1 Sleeve
1 Spring



33886-TL

2 Reamer Jigs
2 Reamers

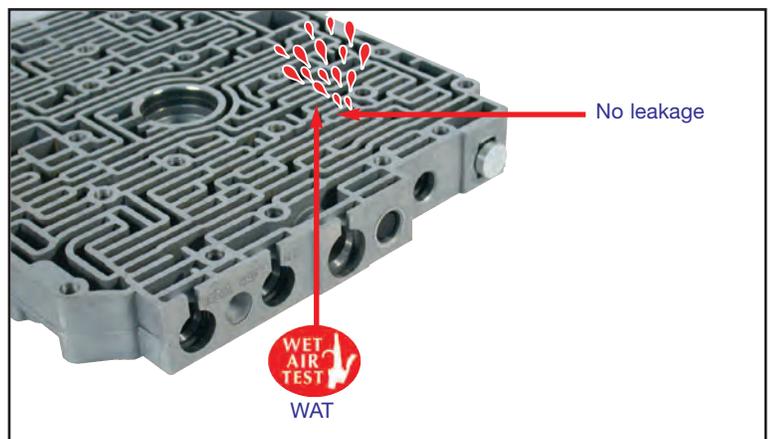


Wet Air Test:

Place a small amount of oil into the balance AFL port. Follow with low air pressure. If excessive air or oil leaks past the spool and out the exhaust port, the bore should be reamed and a sleeve installed.

DISASSEMBLY STEPS:

Remove and retain the OEM clip, plug, spring and valve.



REAMING INSTRUCTIONS:

Prep and Set-up

1. Remove all components from the bore. Save the entire line-up.
2. Clean the bore thoroughly in a solvent tank.
3. Securely clamp the housing to the bench, making sure not to clamp directly over the bore to be reamed.
4. Insert the Reamer Jig #1 (identified with one outside diameter groove) into the bore.
5. Soak the bore and reamer with cutting fluid (Mobilmet S-122, Lubgard Bio-Tap, Tap Magic™, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.
6. Gently insert Reamer #1 through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
7. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

Reaming

1. The reamer should be turned either by hand using a speed handle or by a low rpm, high torque air drill regulated to a maximum of 200 rpm.
2. The reaming action should be clockwise in a smooth and continuous motion, at 60-200 rpm. The reamer should actually pull itself through the bore, so little or no forward force should be applied.
3. Continue reaming until the reamer bottoms in the bore.
4. Using low air pressure, blow the chips free before removing the reamer.
5. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
6. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
7. Repeat reaming steps using Reamer Jig #2 (identified with two outside diameter grooves) and Reamer #2.

Finish and Clean-up

1. Using low air pressure, blow the chips free before removing the reamer.
2. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
3. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
4. Examine the bore after cleaning for surface finish, debris, and burrs. Flashing and burrs on the exit side of casting bores can be carefully removed with a small piece of Scotchbrite™ on the end of a long wire.
5. Clean the reamer after each use and store in its protective tube.

Cautions:

1. Turning the reamer backward will dull it prematurely.
2. Pushing on the reamer will result in poor surface finish, and inadequate and sporadic material removal.
3. Never use a crescent wrench, ratchet or pliers to turn the reamer.

INSTALLATION / ASSEMBLY STEPS:

After reaming and cleaning the valve body, lubricate the sleeve with ATF.

1. Using the shank end of a 7/16" drill, push the sleeve into the valve body bore, slotted end of the sleeve inboard, until the sleeve bottoms in the bore.
2. Place the enclosed spring into the bore so that it is butted against the end of the installed sleeve. It is used to secure the sleeve in the bore.
3. Push the OEM valve into the installed sleeve bore, with the long spring stem facing outboard.
4. Return the OEM spring to the valve, installing over the valve stem.
5. Return the end plug to the bore, and reinstall the OEM retaining clip.

Note: Always replace the o-rings on the pressure control solenoid and AFL filter o-rings while servicing this unit.