

## AFL VALVE & SLEEVE KIT

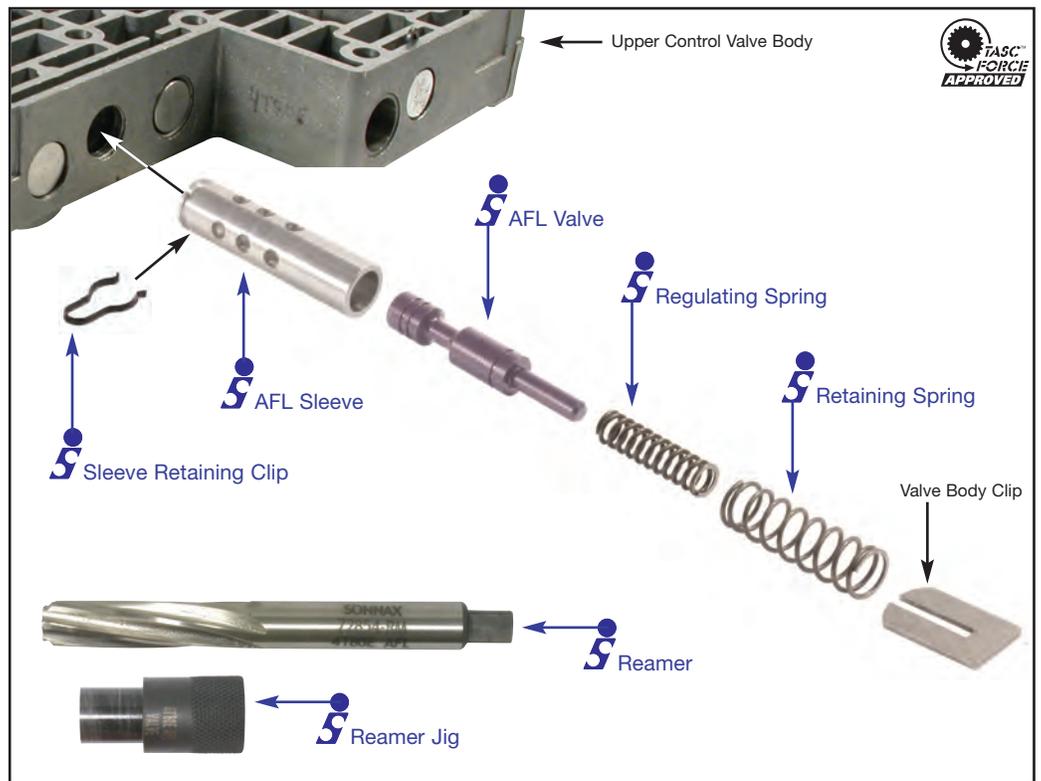
### 72854-01K

- 1 AFL Sleeve
- 1 AFL Valve
- 1 Regulating Spring
- 1 Retaining Spring
- 1 Sleeve Retaining Clip



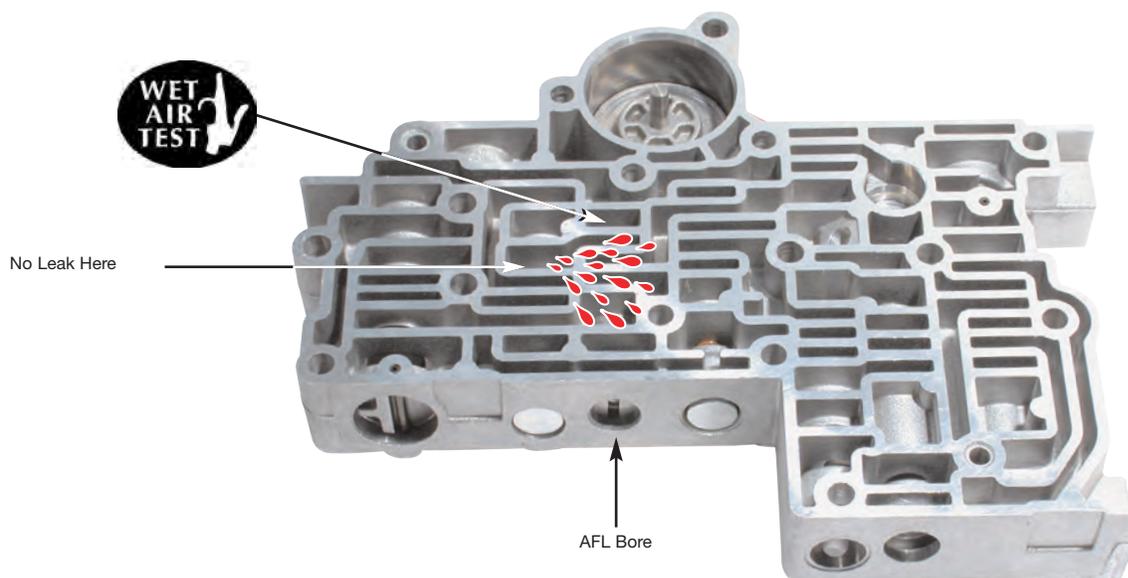
### 72854-TL

- 1 Reamer
- 1 Reamer Jig



### Wet Air Test

Place a small amount of oil into the balance AFL port. While preventing the valve from stroking, follow with low air pressure. If excessive air or oil leaks past the spool and out the line port, the bore should be reamed and a sleeve and valve installed.



PART NUMBERS 72854-01K, -TL

### Prep and Set-up

1. Remove all components from the bore.
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 into the bore.
5. Soak the bore and reamer with cutting fluid (Mobilmet S-122, Lubegard 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 the reamer 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.

### 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 and Suggestions

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 Instructions

1. Ream and clean valve body per instructions.
2. Lubricate the sleeve with ATF.
3. Insert valve into sleeve, referencing photo for proper orientation.
4. Push the sleeve/valve assembly into the bore, grooved and notched end of the sleeve inboard, until the sleeve bottoms in the bore. (Hint: A 7/16" drill shank can be used to help.)
5. Secure the sleeve by placing the sleeve retaining clip into the sleeve groove at the balance AFL port.
6. Place the regulating spring over the valve stem.
7. Place the retention spring into the bore over the regulating spring, flush with the outboard end of the sleeve.
8. Reinstall the OEM valve body clip. A flat-head screwdriver can be used to compress the springs.
9. Ensure the two springs are not contacting each other, or coil binding could occur during application.