

## TCC Regulator Valve & Sleeve Kit

### 34994-18K

- 1 TCC Regulator Valve
- 1 TCC Regulator Valve Sleeve
- 2 Springs
- 1 Retaining Pin



### F-34994-TL18

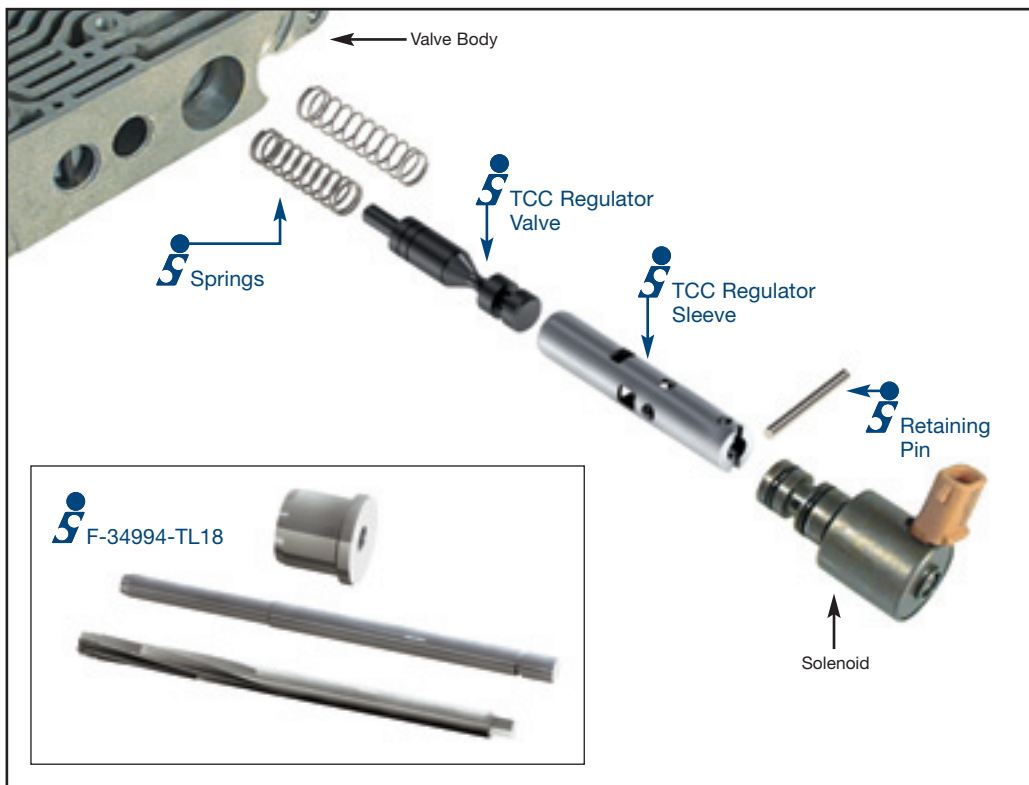
- 1 Reamer
- 1 Reamer Jig
- 1 Guide Pin



Also Available:

### 34994-01K

- 1 TCC Regulator Valve
- 1 Scarf Cut Seal
- 2 Springs



### Wet Air Test

To Wet Air Test the assembly, place a small amount of oil into the line circuit. Follow with low air pressure. There should be little or no leakage from the regulator apply or exhaust ports.

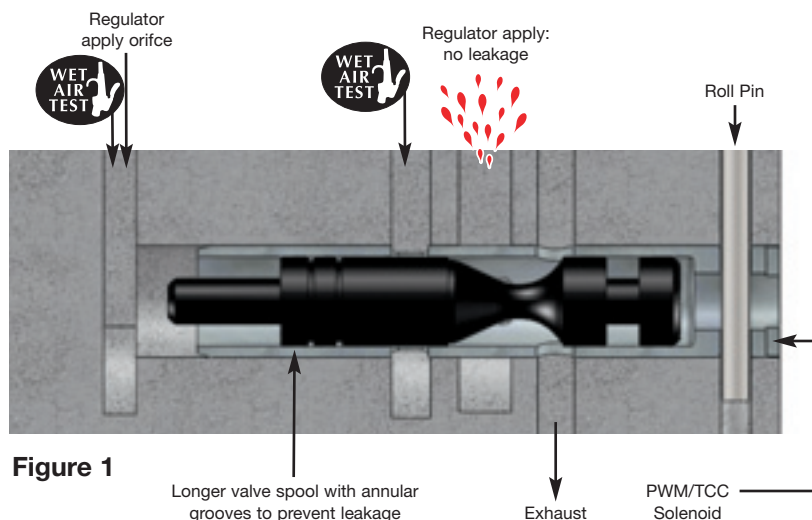
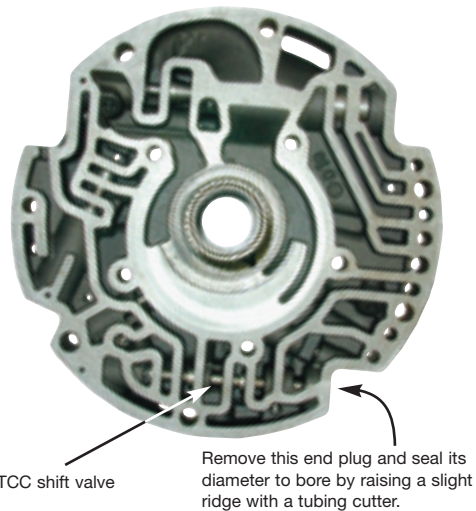


Figure 1

**Tech Tip:** Similar complaints can be caused by a leak in the pump.



## Reaming Instructions

### Prep and Set-up

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Place the valve body on the reaming fixture (**VB-FIX**). Align and secure the valve body to the fixture according to the **VB-FIX** instructions, using the guide pin and reamer jig from the **F-34994-TL18** tool kit.

**Note:** Do not loosen wing nuts or clamp, once position has been established until, the entire reaming process is complete.

4. Remove the guide pin.
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.
3. Continue reaming until the reamer stop is reached.

### 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

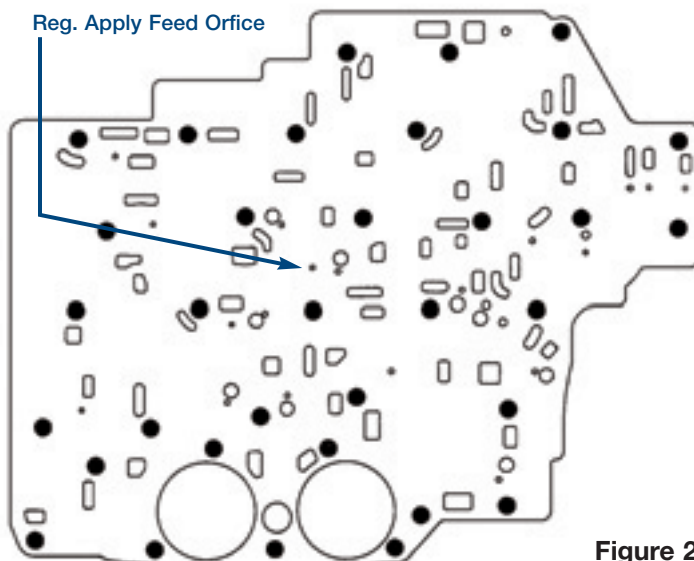
1. Turning the reamer backward will dull it prematurely.
2. Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.
3. Never use a crescent wrench, ratchet or pliers to turn the reamer.
4. A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional tool sharpener. Actual life of a reamer before resharpener or replacing averages 50-70 bores.

## Installation Instructions

### 1. Spring selection

- a) For OEM shift feel, select the **HEAVIER** (.034" wire diameter, 1.23 free length) spring.
- b) For a firmer lockup (best suited for towing applications), select the **LIGHTER** spring (.026" wire diameter, 1.50 free length) and restrict the feed orifice to .025" by peening closed and redrilling (see Figure 2).

2. Place the selected replacement spring over the long stem on the TCC valve.
3. Carefully push the spring/valve/sleeve assembly into the valve bore, spring end first.
4. Use the enclosed steel dowel pin to secure the assembly. A screwdriver may be used in the sleeve end-grooves to help position it for the pin.
5. Return the PWM solenoid to the valve body.



**Figure 2**