PART NUMBERS 56947J-15K, F-56947J-TL15

## TCC Modulator Valve & Sleeve

#### 56947J-15K

1 Valve

1 Sleeve

1 Spring (White)

1 Spring (Plain)



5R55W/S 5R55N

#### F-56947J-TL15

1 Reamer

1 Reamer Jig

1 Guide Pin



Also Available

# TCC Modulator Control Plunger & Sleeve

56947J-01K

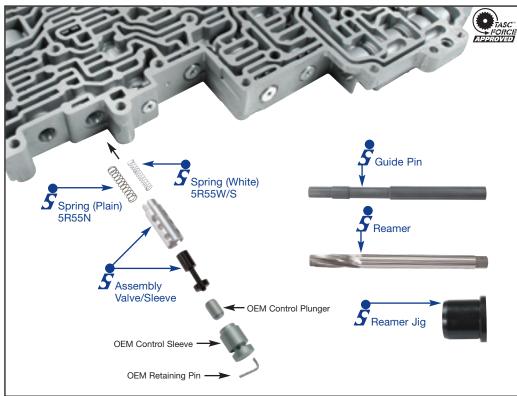
5R55W/S OEM Ratio

**56947J-03K** 5R55W/S Increased Ratio

Each kit includes the following

1 Sleeve

1 Valve



## **INSPECTION:**

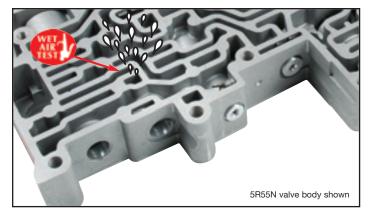
Place a small amount of oil into the line pressure circuit, and follow with low air pressure. There should be little or no leakage past the valve spool and out the converter apply circuit or the exhaust circuit on the back of the valve body casting.

The OE valve should not have side movement or wiggle room at the largest spool. Remove valve and inspect valve and bore for wear as shown in photo below.

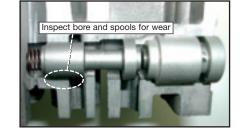
#### **DISASSEMBLY**

- 1. Remove all components from the bore.
- 2. Discard the OEM TCC modulator valve and spring. Retain the TCC plunger and sleeve assembly, and the retaining clip/pin.

**Note**: The TCC plunger and sleeve assembly should be checked for wear and replaced if necessary. Wear is indicated by shiny aluminum patches on the internal diameter of the sleeve. **5R55W/S with worn plunger or sleeve can be serviced with 56947J-01K or 56947J-03K assemblies.** 







PART NUMBERS 56947J-15K, F-56947J-TL15

#### **REAMING INSTRUCTIONS:**

## **Prep and Set-up**

- 1. Remove all components from the bore.
- 2. Clean the bore thoroughly.
- 3. To align the TCC modulator valve bore in the fixture, follow the **VB-FIX** instructions.
- 4. From tool kit F-56947J-TL15, use Jig F-56947J-RJ15; Reamer F-56947J-RM15; and Guide Pin F-56947J-GP15.
- 5. Extra attention should be paid to alignment and securing the valve body to the fixture on this bore. A very smooth action to insert and remove the guide pin after final securing is a must to provide easy, on-center reaming.
- 6. Soak the bore and reamer with cutting fluid (Mobilmet S-122, Lubegard Bio-Tap, Tap Magic<sup>TM</sup>, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (e.g. Mobilemet S-122) during the reaming process.
- 7. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
- 8. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

## **Reaming**

**Note:** Once valve body alignment has been established on the **VB-FIX**, do not disturb or loosen the valve body setting or guide setting in any way until the reaming process is complete. Be sure to use plenty of continuously supplied cutting fluid while reaming these bores.

- 1. The reamer should be turned 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.

## **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<sup>TM</sup> 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:**

- 1. Place the valve into the sleeve, referencing the photo on Page 1 for correct orientation.
- 2. Place the spring into the valve pocket.
  - For 5R55W/S units, use the white spring
  - For 5R55N units, use the plain spring
- 3. Push the spring/valve/sleeve assembly into the reamed bore, spring end first.
- 4. Reinstall the TCC modulator plunger valve assembly and secure with the OEM clip.

