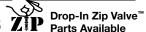


# Critical Wear Areas & Vacuum Test Locations Zip



NOTE: OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts are noted for replacement.



Plug casting valley with foam, putty or appropriately sized 0-ring coated in assembly lube to isolate circuits.

For specific vacuum test information, refer to individual part instructions included in kits and available at www.sonnax.com.

Click on Sonnax part numbers to see more information.

### **VFS1 Modulator Control Valve**

- Flare shifts Low line pressure
- · Pressure control out-of-range codes

Replace with Sonnax Part No. 56947J-19K Requires F-56947J-TL19 & VB-FIX

### **Pressure Regulator Valve**

- Delayed engagement Soft shifts
- Low line rise Erratic buzz
- Uncontrolled/High pressure in Reverse

Install Sonnax Part No. **56947J-09K** Requires 56947J-TL9

### **Reverse Servo Control Valve**

- No/Delayed Reverse
- Burnt Low/Reverse band

### **Reverse Engagement Valve**

- Delayed/No Reverse
- Slipping gears
- Direct clutch burned

Replace with Sonnax Part No. **56947J-29K** Requires F-27741-TL13 & VB-FIX

### **Reverse Modulator Valve**

- Delayed Reverse No 4th or 5th
- Direct clutch burned

Replace with Sonnax Part No. 56947J-23K Requires F-27741-TL13 & VB-FIX

### **Direct Clutch Control Valve**

- Delayed Reverse No 4th or 5th
- Direct clutch burned

### Intermediate Servo **Release Valve**

Burnt Intermediate band

### **VFS2 Modulator Control Valve**

- Flare shifts Low line pressure
- Pressure control out-of range codes

Replace with Sonnax Part No. 56947J-19K Requires F-56947J-TL19 & VB-FIX

#### **Coast Clutch Control Valve**

Burnt Coast clutch

### **Converter Clutch Back Pressure Valve**

- Excess TCC slip Converter codes
- · Burned converter

## **Boost Valve Assembly 2**

• Poor line rise • Slipping upshifts

Test these

together.

• Code P0741 • Excess TCC slip • TCC lining failure

• Overheated converter • Low cooler flow

**56947J-05K** Requires F-56947J-TL2 & VB-FIX

**TCC Control Valve** 

Damaged valve body casting

Replace with Sonnax Part No.

• Burnt bands/clutches

Replace with Sonnax Part No. 56947J-74K

### **Converter Feed Limit Valve**

- No lockup Delayed engagement
- Codes 731 to 741 Overheating
- Front lube failure

Replace with Sonnax Part No. 56947J-61K

Requires F-56947J-TL61 & VB-FIX

### **Solenoid Feed Limit Valve**

- No lockup Overheating
- Delayed engagement
- Codes 731 to 741
- Front lube failure

Replace with Sonnax Part No. 56947J-61K

Requires F-56947J-TL61 & VB-FIX

### VFS1 Port

- Low line pressure
- Slipping shifts

NOTE: Check for wear on end plugs.

### **Intermediate Servo** Select Valve

- Burnt Intermediate band
- Burnt Direct clutch

### **Forward Engagement Valve**

- Delayed Forward
  Loss of Forward
- Slipping gears Burnt Forward clutch

### Overdrive Servo Control Valve

Burnt Overdrive Band

### **TCC Modulator Valve**

- Code P0741 Excess TCC slip Code 1783
- High line pressure Overheated transmission

Replace with Sonnax Part No. **56947J-15K** Requires F-56947J-TL15 & VB-FIX

### TCC Modulator Sleeve & Plunger Assembly

- Slip codes Overheated fluid
- High TCC slip PRM at increased load m

Replace with Sonnax Part No. 56947J-01K

**OE Ratio** 

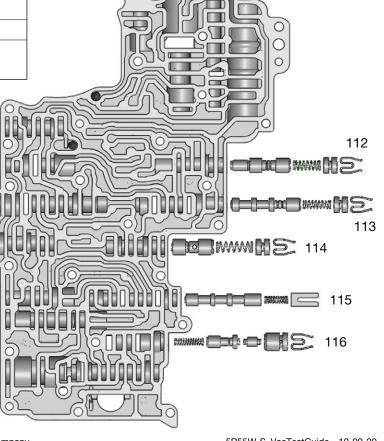
56947J-03K

**Increased Ratio** 



# **OE Exploded View**

### **Lower Valve Body Descriptions** I.D. No. **Description** TCC Control Valve (inboard) 101 Fluid Cooler Bypass & Thermo Valve (outboard) Converter Clutch Back Pressure Valve (inboard) 102 Coast Clutch Control Valve (outboard) 103 VFS2 Modulator Control Valve 104 Intermediate Servo Release Valve 105 Direct Clutch Control Valve 106 Reverse Modulator Valve 107 Reverse Engagement Valve 108 VFS1 Modulator Control Valve Main Regulator Valve (inboard) 109 Boost Valve & Sleeve (outboard) Solenoid Feed Limit Valve (inboard) 110 Coverter Feed Limit Valve (outboard) Manual Valve 111 112 Rear Servo Control Valve 113 Intermediate Servo Select Valve 114 Forward Engagement Control Valve 115 Overdrive Servo Control Valve TCC Modulator Valve (inboard) 116 TCC Plunger Valve & Sleeve (outboard)



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111

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