# sonnax

### **Critical Wear Areas & Vacuum Test Locations Zip**

**NOTE:** Insert internal end

plugs with hole

facing outboard.

**Drop-In Zip Valve**™ **Parts Available** 



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.

**Lower Valve Body** 

**053 Separator Plate Version** 

Vacuum test these plugs at the retainer slot. This checks both diameters of the plua.

### **Internal End** Plugs 🔏

· Inconsistent shift quality

Replace with Sonnax Part No. 95740-30K



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.

### Solenoid Pressure Regulator Valve %

- Flare/Harsh shifts Harsh upshifts/downshifts
- Gear ratio codes Solenoid performance codes
- Delayed Forward/Reverse Wrong gear starts

Replace with Sonnax Part Nos. 95740-17A or 95740-17K Requires F-95740-TL17 & VB-FIX

#### Shift Valve 2 %

- No Forward
- Wrong gear starts

Replace with Sonnax Part No. 95740-04A

#### Clutch B Latch Valve

- Burnt B clutch
- 3rd or 5th Shift concerns

#### **Clutch A Latch Valve**

- Burnt A clutch
- 4th or 5th Shift concerns

### Clutch **D1** Brake **Latch Valve**

- 1st or 2nd Shift concerns
- EDS 6 codes
- Burnt D brake

### Clutch B Control **PR Valve**

- Burnt B clutch
- 3rd or 5th Shift concerns

### Shift Valve 1 🛣

- Reverse engagement concerns
- Wrong gear starts

Replace with Sonnax Part No. 95740-04A

### **Clutch A Control Pressure** Regulator Valve

- 5-4 Flare/Neutral No 4-5
- VFS 1/A solenoid control code
- Delayed/Harsh Forward

Replace with Sonnax Part Nos. 95740-21K or

### Clutch E **Latch Valve**

- 4th, 5th, 6th Gear shift concerns
- EDS 4 control code

Test 1: In Rest

### **Parking Lock** Valve

 Park release and engagement concerns

# 95740-09K Requires

F-95740-TL8 & VB-FIX

### Lubrication **Control Valve**

- Planetary/Bushing/ Lube failures
- Overheating
- Low converter pressure
- Bump/Flare shifts

Replace with Sonnax Part No. 95740-11K Requires F-95740-TL11 & VB-FIX

### Clutch E Control **Pressure** Regulator **Valve**

- Bumpy 1-2 upshift
- EDS 4 control code
- 2-1 Downshift flare or Neutral
- VFS 1/A solenoid control code

### **Bypass Clutch Control Regulator Valve**

- TCC codes Excess TCC slip Cycling RPM
- Flare/Harsh shifts Low TCC release pressure
- Rough idle in Reverse Overheated converter

Replace with Sonnax Part No. 95740-13K Requires F-95740-TL13 & VB-FIX

### **Main Pressure Regulator Valve**

- Broken parts due to excessive line pressure
- Erratic line pressure Harsh shifts
- High line pressure Soft/Flare shifts

Replace with Sonnax Part Nos.

95740-79 Pressure Regulator Sleeve Or

**95740-78K** Oversized PR Valve Kit Requires F-95740-TL78 & VB-FIX

Test 2: Test this port with valve in inverted position. Hold valve and spring in place with enclosed testina end plug. **Use Test** End Plug

Regulator Valve • Excessive TCC slip RPM & related codes • Harsh TCC apply & release

**Converter Release** 

• Low TCC release pressure

Replace with Sonnax Part Nos. 95740-05A or 95740-05K Requires

F-95740-TL5 & VB-FIX

ZF6-053\_VacTestGuide 07-13-23



## **Critical Wear Areas & Vacuum Test Locations Zip**

Drop-In Zip Valve™ **Parts Available** 



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.

### **Upper Valve Body 053 Separator Plate Version**



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.

OE accumulator pistons Accumulator Pistons i should be flush with or • Downshift clunk • Firm shifts approximately .030" lower than the casting Erratic EDS solenoid control and/or EDS codes surface. It is common for Replace with Sonnax Part No. the rubber insert to lose 95740-15K\* Patent No. 8,794,108 tension. Each of these pistons can be vacuum tested from the exhaust hole Clutch D2 on the opposite side of the casting. **Latch Valve** • Bumpy 1-2 upshift • 2-1 Downshift flare or Neutral • EDS 3 control code Clutch D1 **Regulator Valve** • Bumpy 1-2 upshift • 2-1 Downshift flare or Neutral EDS 3 control code Clutch D2 Regulator Clutch C **Valve Regulator Valve** • Bumpy 1-2 upshift • 2-1 Downshift flare • 2nd & 6th Shift concerns or Neutral • EDS 3 control code **Position Valve D**  Shift concerns A Clutch burned • B Clutch burned C Clutch burned Replace with Sonnax Part No. **95740-75K** Requires F-95740-TL75 & VB-FIX

<sup>\*</sup>Part numbers with an asterisk (\*) are included in this Zip Kit. Other part numbers are available separately.

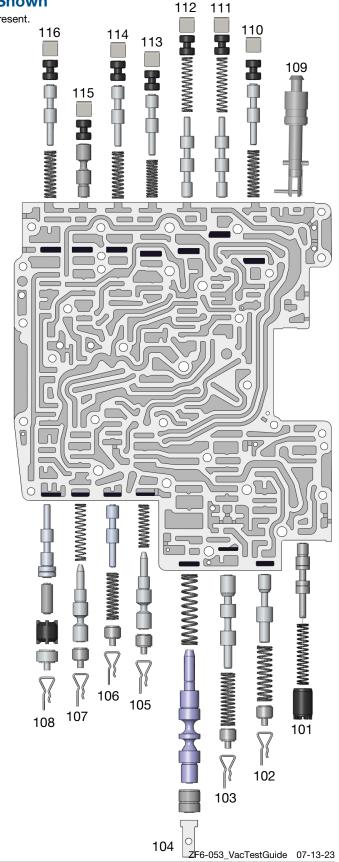


# **OE Exploded View**

### **Lower Valve Body • 053 Separator Plate Version Shown**

NOTE: Depending upon vehicle application, the OE springs shown may not be present.

Lower Valve Body Descriptions		
I.D No.	Description	
101	Parking Lock Valve	
102	Lubrication Control Valve	
103	Converter Release Regulator Valve	
104	Main Pressure Regulator Valve	
105	Bypass Clutch Control Regulator Valve	
106	Clutch E Latch Valve	
107	Clutch E Control Pressure Regulator Valve	
108	Clutch A Control Pressure Regulator Valve	
109	Park Lock Cylinder	
110	Clutch D1 Brake Latch Valve	
111	Shift Valve 2	
112	Shift Valve 1	
113	Solenoid Pressure Regulator Valve	
114	Clutch B Latch Valve	
115	Clutch B Control Pressure Regulator Valve	
116	Clutch A Latch Valve	

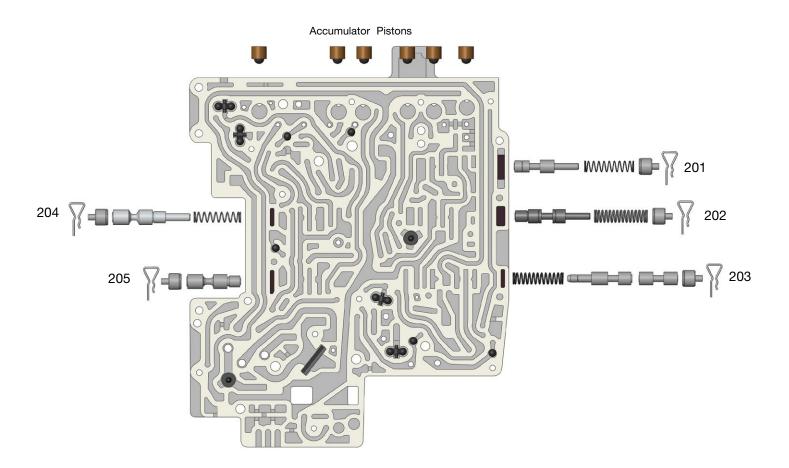




# **OE Exploded View**

### **Upper Valve Body • 053 Separator Plate Version Shown**

**NOTE:** Depending upon vehicle application, the OE springs shown may not be present.



Upper Valve Body Descriptions		
I.D. No.	Description	
201	Clutch D2 Latch Valve	
202	Clutch D2 Regulator Valve	
203	Position Valve D	
204	Clutch D1 Regulator Valve	
205	Clutch C Regulator Valve	