

Drop-In Zip Valve<sup>™</sup> 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 – Bottom Side** U250E Shown Here



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.

### 4-5 Shift Valve

- Delayed 3rd
- UD/C3 Clutch burned
- Delayed or no 5th gear

### **B2 (Low/Reverse) Switch Valve**

- B2 Brake clutches burned
- Delayed Reverse
- No engine braking in manual low

# B2 (Low/Reverse) Apply in Control Plunger

- Delayed Reverse
- B2 Brake clutches burned
- No engine braking in manual low
- Erratic shift timing

Replace with Sonnax Part No. 27741-06K

# B1 (2nd) Apply m Control Plunger

- 2-3 or 4-3 Bind-up
- B1 brake clutches burned
- Harsh 1 through 4 maneuver shifts
- · Erratic shift timing

Replace with Sonnax Part No. 27741-04K

**NOTE:** Seal port on opposite side when testing.

### **Boost Valve**

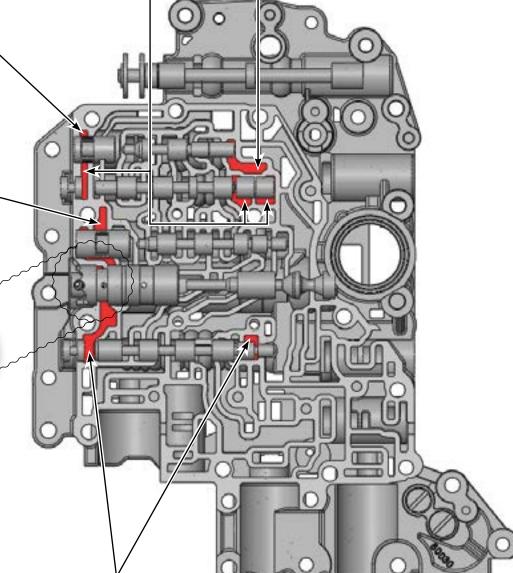
- Soft shifts
- Low line rise in Drive
- High line pressure in Reverse

Replace with Sonnax Part No. 27741-01K

# Clutch Apply Control Valve

- Burnt Forward/C1 Clutch, Direct/C0 Clutch and 2nd/B1 Brake
- Flare shifts Bind-ups

**NOTE:** Stroke valve to ensure it is not stuck.





**B2 (Low/Reverse) Switch Valve** 

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

NOTE: OF valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test local

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B2 Brake clutches burnedDelayed Reverse

# End Plugs, M Multiple Locations

- Inconsistent shift quality Flare shifts
- Clutch failure Bump shifts Bang shifts
- Shift codes

Replace with Sonnax Part No. 27741-20K

**NOTE:** Two Locations =

# **Pressure Regulator Valve**

- Soft shifts Low line pressure Harsh shifts
- High line pressure in Reverse
- · Clutch & band failures
- Low converter pressure High line pressure

Replace with Sonnax Part No.

27741-08K Requires 57917E-TL8

### **Clutch Apply Control Valve**

- Burnt Forward/C1 Clutch, Direct/C0 Clutch
   2nd/B1 Brake
- Flare shifts Bind-ups

**NOTE:** Stroke valve to ensure it is not stuck.

# • No engine braking in manual low **B1** (2nd) Apply 🛣 **Control Plunger** • 2-3 or 4-3 Bind-up • B1 brake clutches burned

• Harsh 1 through 4 maneuver shifts

NOTE: Seal this port and test on opposite side.

Replace with Sonnax Part No.

Erratic shift timing

27741-04K



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End Plugs, 2

**NOTE:** Eight locations =  $\bigstar$ 

**Multiple Locations** 

Replace with Sonnax Part No. 27741-20K

# **Upper Valve Body - Bottom Side** U250E Shown Here



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 Modulator Valve**

- Slips & flares
- Erratic shift feel & engagements
- · Harsh upshifts

Replace with Sonnax Part No. 27741-13K

Requires F-27741-TL13 & VB-FIX

# **B2 (Low/Reverse) Control Valve**

- B2 Brake clutches burned
- Delayed Reverse
- Delayed engagement in manual 1st

# **B3 Orifice Control Valve**

- Shift concerns
- UD/B3 Brake clutches burned

Replace with Sonnax Part No. 27741-16K

Requires F-15741-TL18 & VB-FIX

NOTE: Stroke valve to ensure it's not stuck.

# Accumulator Control Valve

- Shift concerns
- Burnt clutches & brakes

# C0 (Direct) Control Valve

- C0 Clutch burned
- Slipping/Flares in 3rd, 4th & 5th

# C0 (Direct) Accumulator Piston

- Delayed engagement
- Flare shifts Forward slip
- Burnt clutches

Replace with Sonnax Part No. **57917E-19K** 

# on 🖟 Solenoid

Relay Valve
• Shift concerns

# **Lockup Relay Valve**

- TCC apply & release concerns
- TCC codes
- Burnt converter/overheating

# Lockup Control Plunger Assembly

- TCC apply & release concerns
- TCC codes Burnt converter

# Replace with Sonnax Part No. **57917E-03K**

NOTE: Vacuum testing of lockup control plunger assembly not possible while in casting. Perform visual inspection to identify wear.

### B1 (2nd) Control Valve

- B1 Brake clutches burned
- Slipping/Flares in 2nd, 4th & 5th

### Secondary Pressure Regulator Valve

- TCC apply & release concerns
- TCC codes Lube failures
- Burnt converter

Replace with Sonnax Part No. **57917E-16K** 

Requires F-57917E-TL16 & VB-FIX

### C1 (Forward) Control Valve

- C1 Clutch burned
- Delayed engagement
- Slipping/Flares in 1st, 2nd & 3rd

**NOTE:** Seal these ports and test on opposite side.

### B1 (2nd) Accumulator Piston 2

- Delayed engagement Flare shifts
- Forward slip Burnt clutches

Replace with Sonnax Part No. 57917E-19K

### C1 (Forward) Accumulator Piston 2

- Delayed engagement Flare shifts
- Forward slip Burnt clutches

Replace with Sonnax Part No. 57917E-19K

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U151E-U250E-VacTestGuide 10-02-20



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

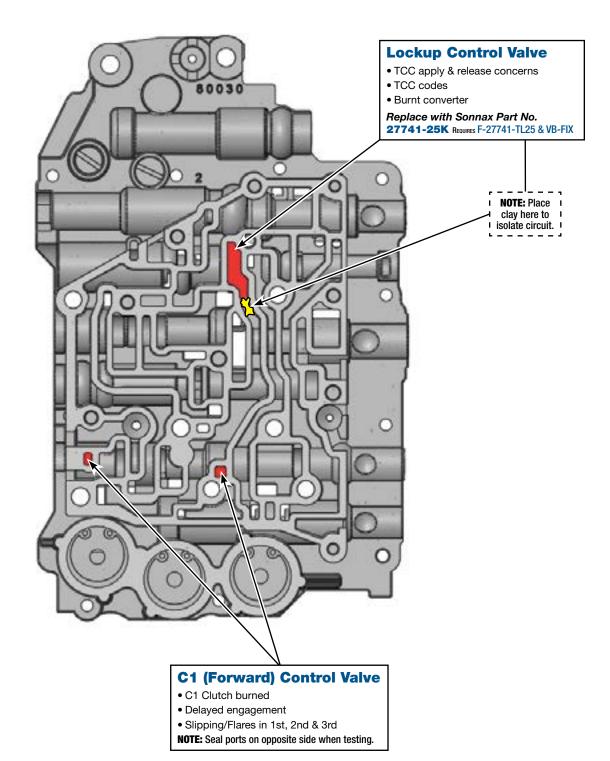
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**Upper Valve Body - Top Side** U250E Shown Here



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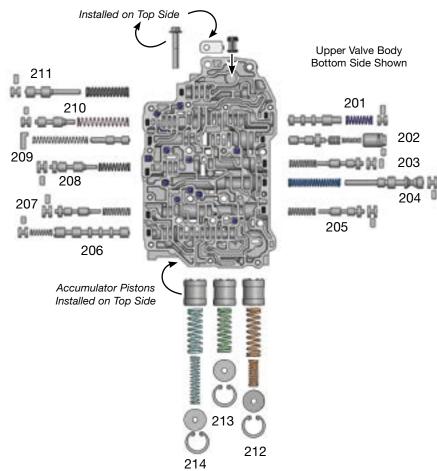




# **OE Exploded View**

# **Upper & Lower Valve Body • U250E Shown Here**

| Upper Valve Body Descriptions |   |  |
|-------------------------------|---|--|
| I.D. No.                      | Description                                   |  |
| 201                           | Lockup Relay Valve                            |  |
| 202                           | Lockup Control Valve & Plunger Valve Assembly |  |
| 203                           | B1 Control Valve                              |  |
| 204                           | Secondary Regulator Valve                     |  |
| 205                           | C1 Control Valve                              |  |
| 206                           | Solenoid Relay Valve                          |  |
| 207                           | C0 Control Valve                              |  |
| 208                           | Accumulator Control Valve                     |  |
| 209                           | B3 Orifice Control Valve                      |  |
| 210                           | B2 Control Valve                              |  |
| 211                           | Solenoid Modulator Valve                      |  |
| 212                           | C0 Accumulator Piston                         |  |
| 213                           | B1 Accumulator Piston                         |  |
| 214                           | C1 Accumulator Piston                         |  |



| Lower Valve Body Descriptions |   |  |
|-------------------------------|---|--|
| I.D. No.                      | Description   |  |
| 101                           | Manual Valve  |  |
| 102                           | B2 Switch Valve & Plunger Valve                         |  |
| 103                           | 4-5 Shift Valve   |  |
| 104                           | B1 Switch Valve & Plunger Valve Assembly                |  |
| 105                           | Main Pressure Regulator Valve<br>& Boost Valve Assembly |  |
| 106                           | Clutch Apply Control Valve                              |  |

