



### Critical Wear Areas & Vacuum Test Locations



**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.

### **Lower Valve Body - Bottom Side • U250E Shown Here**

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 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 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

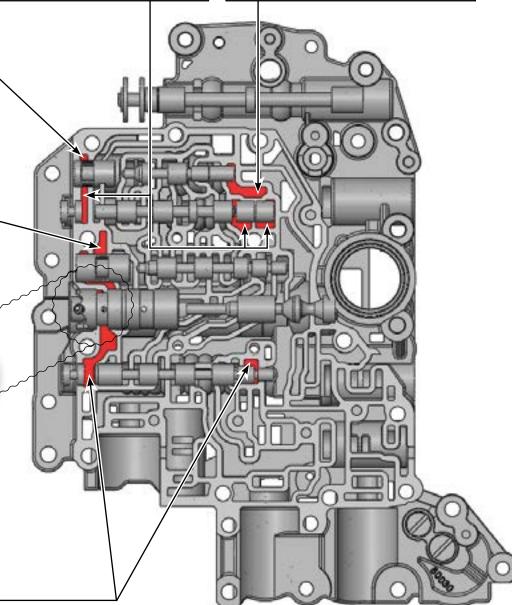
### **Clutch Apply Control Valve**

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

Replace with Sonnax Part No.

27741-18K Requires F-27741-TL18 & VB-FIX

NOTE: Stroke valve to ensure it is not stuck.



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



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 noted for replacement.

### **Lower Valve Body - Bottom Side • U250E Shown Here**

Click on Sonnax part numbers to see more information.

### **End Plugs, 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

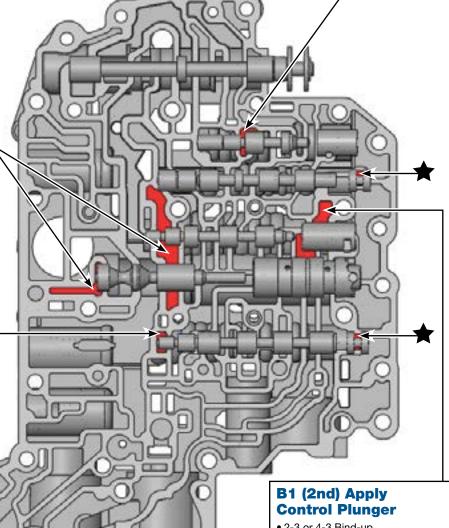
Replace with Sonnax Part No.

27741-18K Requires F-27741-TL18 & VB-FIX

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

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

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



- 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 this port and test on opposite side.



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



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

**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.



### Solenoid Modulator

Slips & flares

**Valve** 

- 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** 

### End Plugs, Multiple Locations

• Shift concerns • Clutch failure

Replace with Sonnax Part No. 27741-20K

NOTE: Eight locations = 🛊

# Click on Sonnax part numbers to see more information.

### **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**

- Delayed engagement Flare shifts
- Forward slip Burnt clutches

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

# Solenoid Relay Valve

• Shift concerns

### C1 (Forward) Accumulator Piston

- Delayed engagement Flare shifts
- Forward slip Burnt clutches

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

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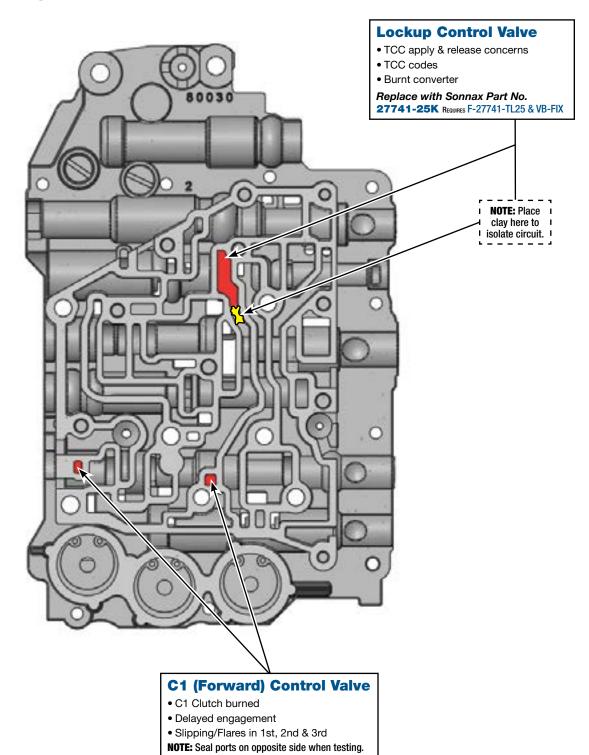


### **Critical Wear Areas & Vacuum Test Locations**



**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.

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



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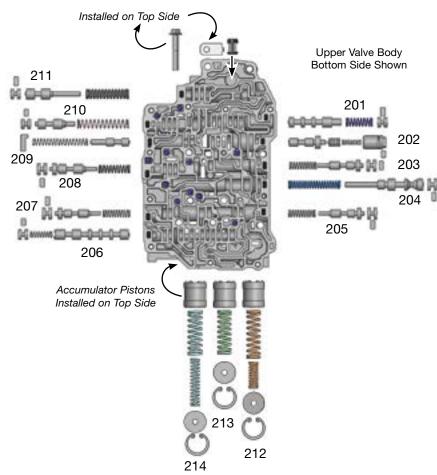
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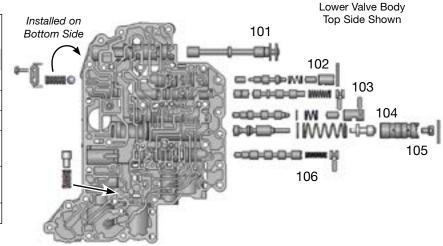
### **OE Exploded View**

### **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 & Boost Valve Assembly	
106	Clutch Apply Control Valve	



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