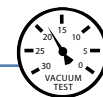




Critical Wear Areas & Vacuum Test Locations



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 gear
- Burned UD/C3 clutch
- Delayed or no 5th gear

B2 (Low/Reverse) Switch Valve

- Burned B2 brake
- Delayed reverse
- Loss of engine braking in manual low

B2 (Low/Reverse) Apply Control Plunger

- Burned B2 brake
- Delayed reverse
- Loss of engine braking in manual low

Replace with **Sonnax Part No. 27741-06K**

B1 (2nd) Apply Control Plunger

- Burned B1 brake
- 2-3 or 4-3 Bind-up
- Harsh 1-4 shifts

Replace with **Sonnax Part No. 27741-04K**

NOTE: Seal port on opposite side when testing.

Boost Valve

- Insufficient line rise in drive ranges
- Soft shifts
- Higher than normal reverse pressure

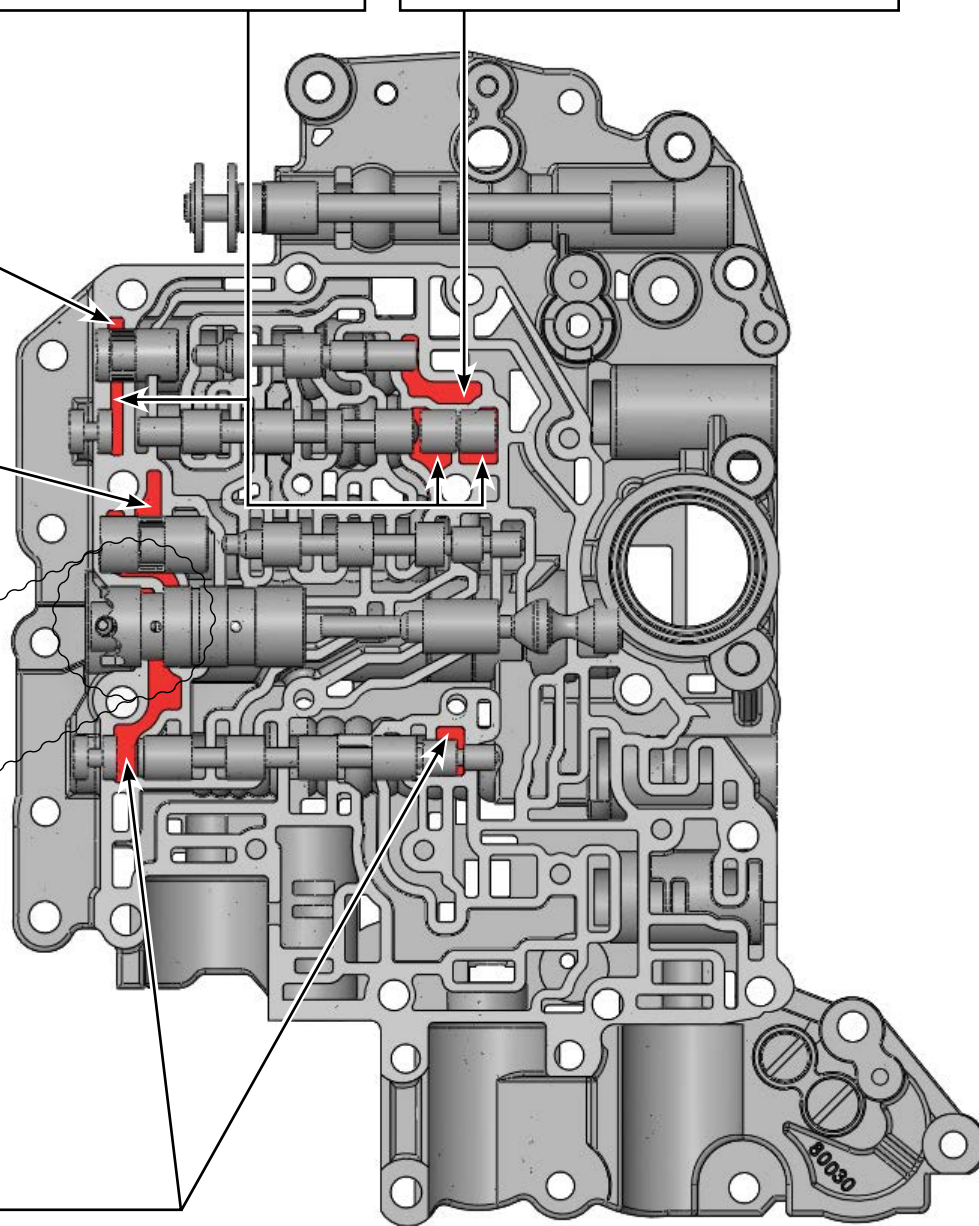
Replace with **Sonnax Part No. 27741-01K**

Clutch Apply Control Valve

- Shift flares & bind-ups
- Burned forward/C1 clutch, direct/C0 clutch & 2nd/B1 brake

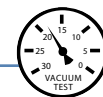
Replace with **Sonnax Part No. 27741-18K** Requires **F-27741-TL18 & VB-FIX**

NOTE: Stroke valve to ensure it is not stuck.





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

- Oil pressure loss
- Shift, engagement & converter complaints

Replace with Sonnax Part No. 27741-20K

NOTE: Two Locations = ★

Pressure Regulator Valve

- Low/High line pressure
- Soft/Harsh shifts
- Clutch & brake failures
- Higher than normal reverse pressure
- Low converter pressure

Replace with Sonnax Part No. 27741-08K Requires 57917E-TL8

Clutch Apply Control Valve

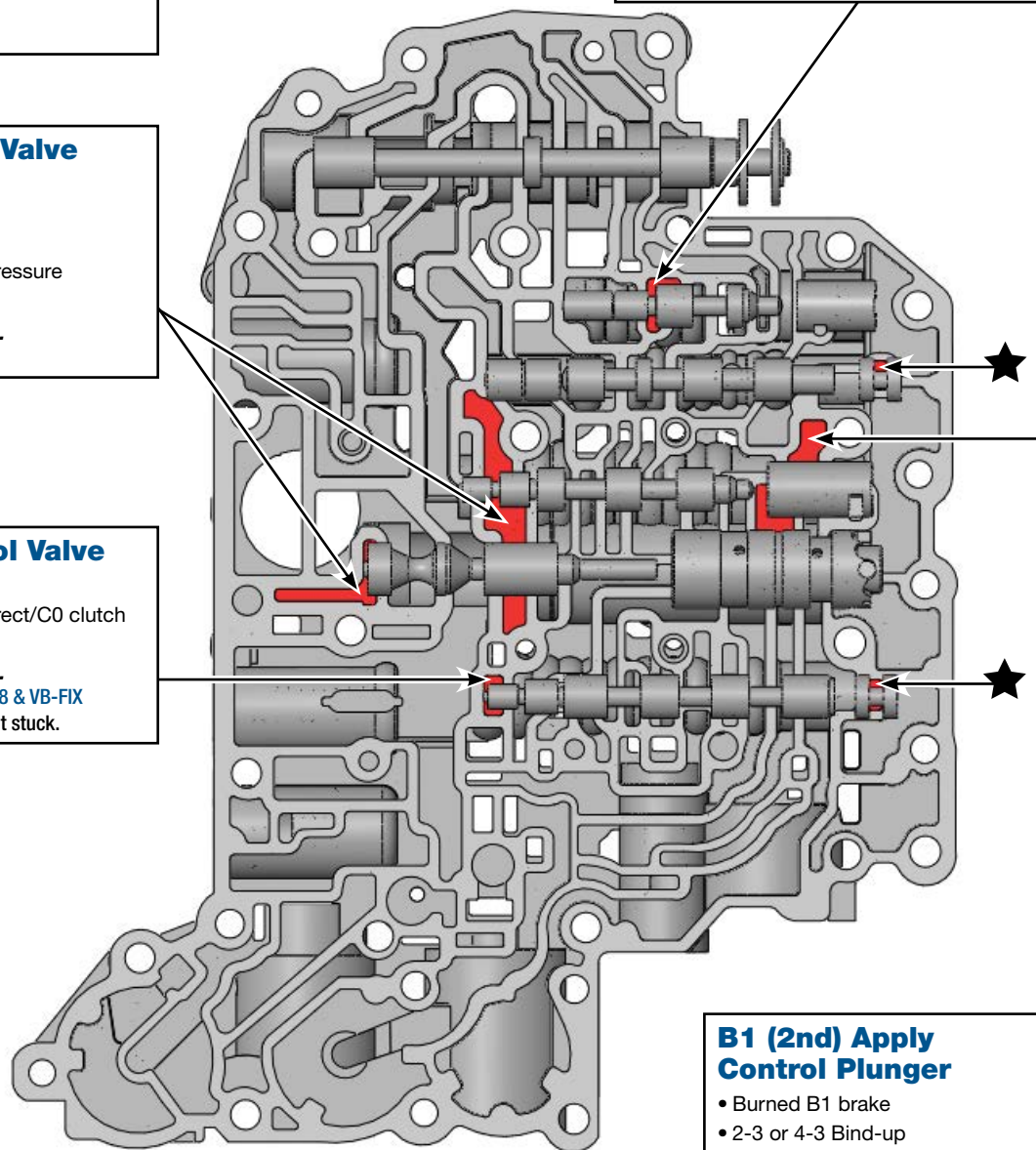
- Shift flares and bind-ups
- Burned forward/C1 clutch, direct/C0 clutch & 2nd/B1 brake

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

- Burned B2 brake
- Delayed reverse
- Loss of engine braking in manual low



B1 (2nd) Apply Control Plunger

- Burned B1 brake
- 2-3 or 4-3 Bind-up
- Harsh 1-4 shifts

Replace with Sonnax Part No. 27741-04K

NOTE: Seal this port and test on opposite side.



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 – Bottom Side • U250E Shown Here

Click on Sonnax part numbers to see more information.

Solenoid Modulator Valve

- Harsh/Flare upshifts
- TCC slip or RPM cycling
- Loss of cooler flow/overheating

Replace with Sonnax Part No. **27741-13K**

Requires F-27741-TL13 & VB-FIX

B2 (Low/Reverse) Control Valve

- Burned B2 brake
- Delayed reverse
- Delayed engagement in manual 1st

B3 Orifice Control Valve

- Burned UD/B3 brake
- Shift complaints

Replace with Sonnax Part No. **27741-16K**

Requires F-15741-TL18 & VB-FIX

NOTE: Stroke valve to ensure it is not stuck.

Accumulator Control Valve

- Shift complaints
- Burned clutches/brakes

C0 (Direct) Control Valve

- Burned C0 clutch
- Slipping/Flares in 3rd, 4th & 5th

C0 (Direct) Accumulator Piston

- Burned C0 clutch
- Slipping/Flares in 3rd, 4th & 5th

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

B1 (2nd) Accumulator Piston

- Burned B1 brake
- Slipping/Flares in 2nd, 4th & 5th

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

End Plugs, Multiple Locations

- Oil pressure loss
- Shift, engagement & converter complaints

Replace with Sonnax Part No. **27741-20K**

NOTE: Eight locations = ★

Lockup Relay Valve

- TCC apply/release problems
- Converter codes
- Burnt converters/overheating

B1 (2nd) Control Valve

- Burned B1 brake
- Slipping/Flares in 2nd, 4th & 5th

Secondary Pressure Regulator Valve

- Harsh lockup
- Converter apply/release complaints
- Burnt converters

Replace with Sonnax Part No. **57917E-16K** Requires F-57917E-TL16 & VB-FIX

C1 (Forward) Control Valve

- Burned C1 clutch
- Delayed engagements
- Slipping/Flares in 1st, 2nd & 3rd

NOTE: Seal these ports and test on opposite side.

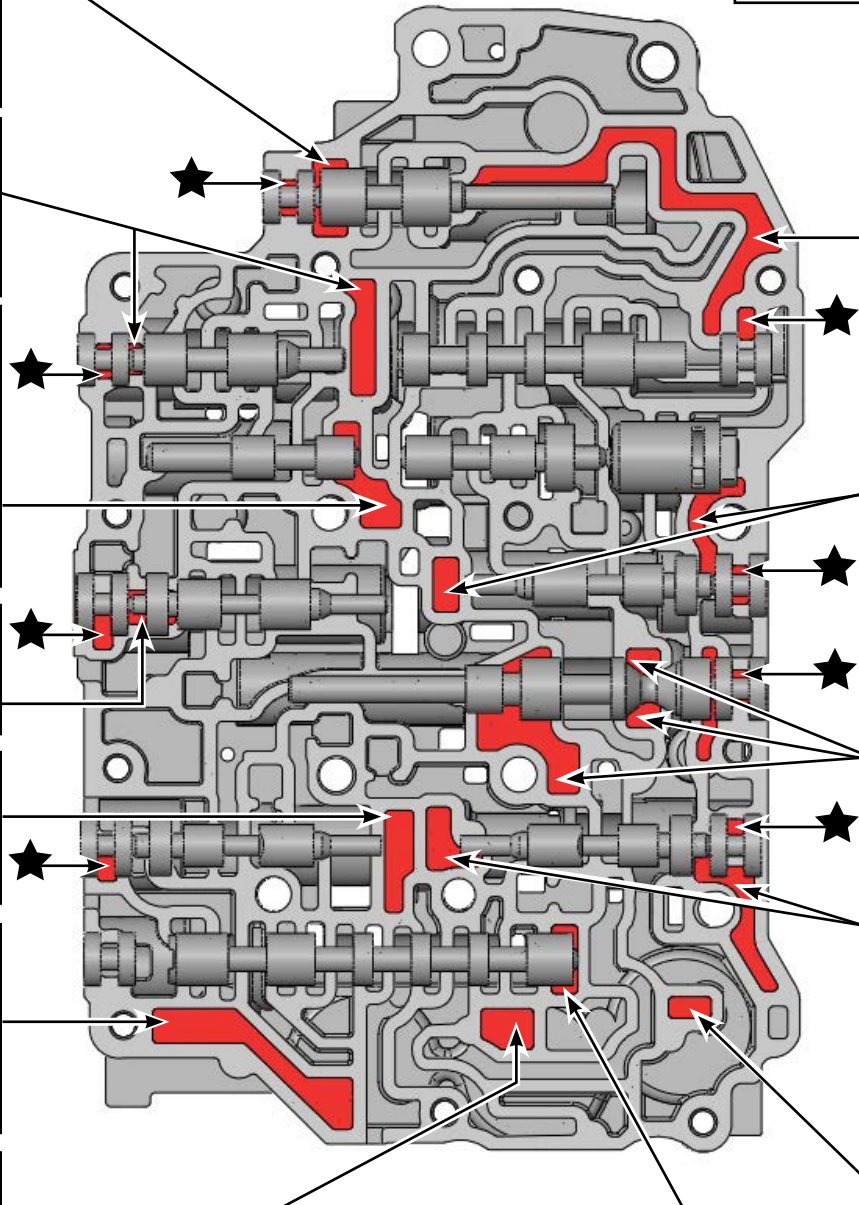
C1 (Forward) Accumulator Piston

- Burned C1 clutch
- Delayed engagements
- Slipping/Flares in 1st, 2nd & 3rd

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

Solenoid Relay Valve

- Shift complaints



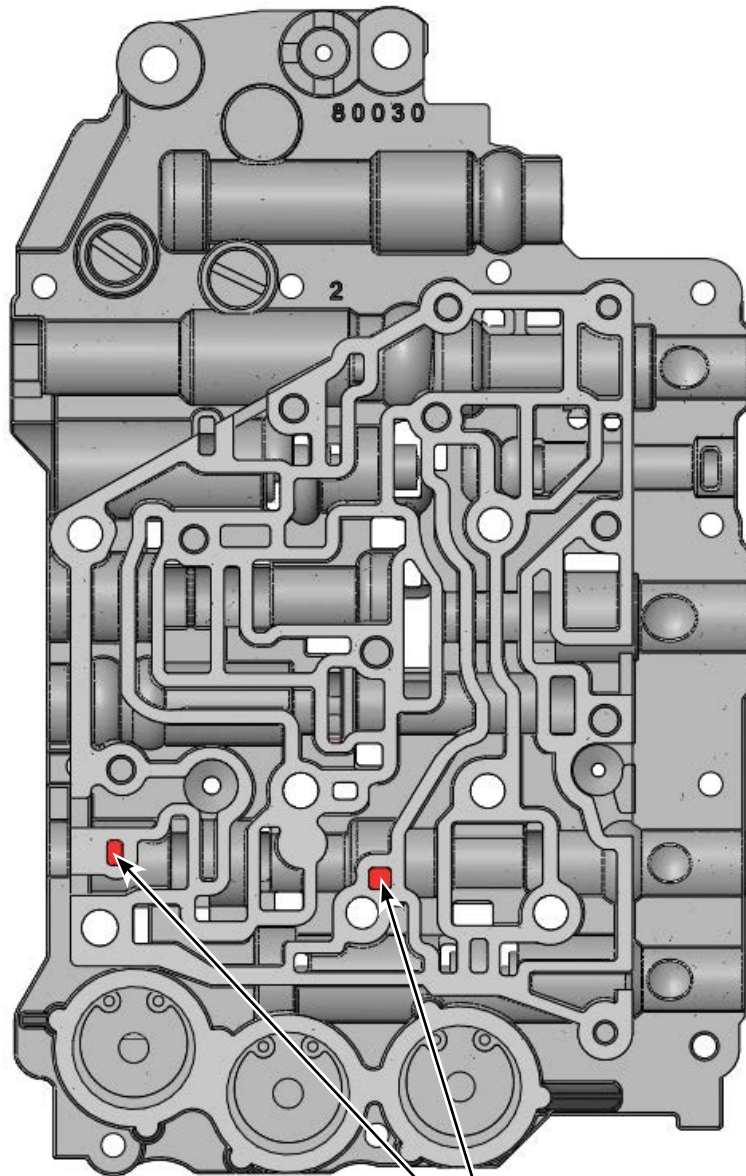


Critical Wear Areas & Vacuum Test Locations



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



C1 (Forward) Control Valve

- Burned C1 clutch
- Delayed engagements
- Slipping/Flares in 1st, 2nd and 3rd

NOTE: Seal ports on opposite side when testing.

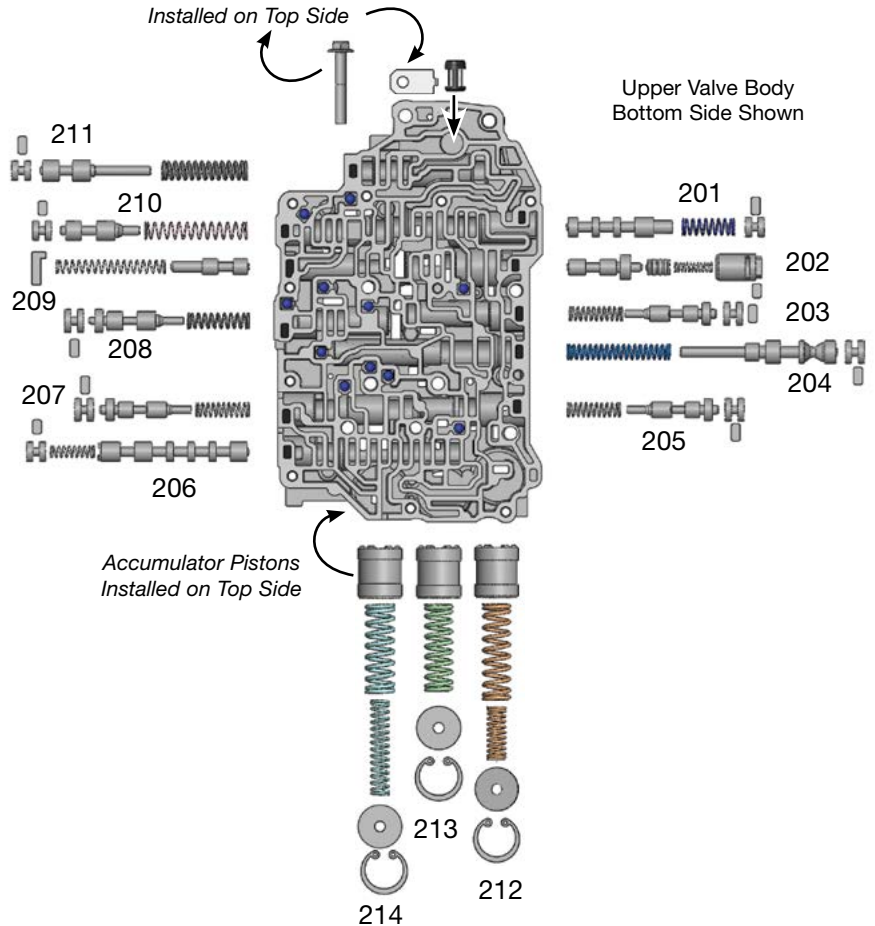


OE Exploded View

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

