

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 and solenoids are not shown for visual clarity. Low vacuum reading indicates wear.

4L60-E - Valve Body Click on Sonnax part numbers to see more information.

3-4 Shift Valve

- 2nd Gear starts • 3rd Clutch failure
- Low AFL pressure • 3-4 Concerns

Replace with Sonnax Part No. 77754-42K

Requires F-77754-TL42 & VB-FIX

4-3 Sequence Valve & 3-4 Relay Valve

- No 4th • 2-4 Band burned
- Low 4th gear pressure

Replace with Sonnax Part No. 77964-04K Requires 77964-RM2

End Plugs

- Loss of D3 oil • No 4th
- Loss of 4th signal oil
- Drops out of 4th

Replace with Sonnax Part No. 77964-08K

NOTE: Check for visual wear on plugs.

TCC Regulator Valve*

- Code 894, 1870 • Low line pressure
- Overheated converter • 1-2 Harsh
- Low TCC apply pressure
- 3-4 Clutch burned

Replace with Sonnax Part No. 77754-03K Non EC3 '97-Earlier
77754-04K EC3 '98-Later
77754-ISO

Requires varying combinations of tools**

Reverse Abuse Bore Plug

- Delayed Reverse
- 3-4 Clutch burned
- Burnt Low/Reverse clutch
- 2-4 Band burned • 3-2 Bind-up

Replace with Sonnax Part No. 77754-21

3-2 Control Valve*

- 3-2 Concerns

Reverse Abuse Valve

- Delayed Reverse
- Low/Reverse clutch distress
- Damaged valve body casting
- Low line pressure upon engagement

Replace with Sonnax Part No. 77754-35K

Forward Abuse Valve

- Delayed Forward
- Forward clutch distress
- Damaged valve body casting
- Low line pressure upon engagement

Replace with Sonnax Part No. 77754-35K

NOTE: Check for visual bore wear.

Forward Abuse Bore Plug

- 3-4 Clutch burned
- Burnt Low/Reverse clutch
- 2-4 Band burned
- 3-2 Bind-up

Replace with Sonnax Part No. 77754-21

Low Overrun Valve

- No engine braking in manual low
- Burnt Low/Reverse clutch

1-2 Shift Valve

- Wrong gear starts
- Gear ratio codes

2-3 Shift & 2-3 Shuttle Valves

- Wrong gear starts
- Gear ratio codes

Actuator Feed Limit Valve

- Wrong gear starts • Clutch failure
- Solenoid performance codes
- Erratic line pressure • Band failure
- No 4th • Harsh shifts • 2nd Gear starts

Replace with Sonnax Part No. 77754-09K Requires 77754-TL

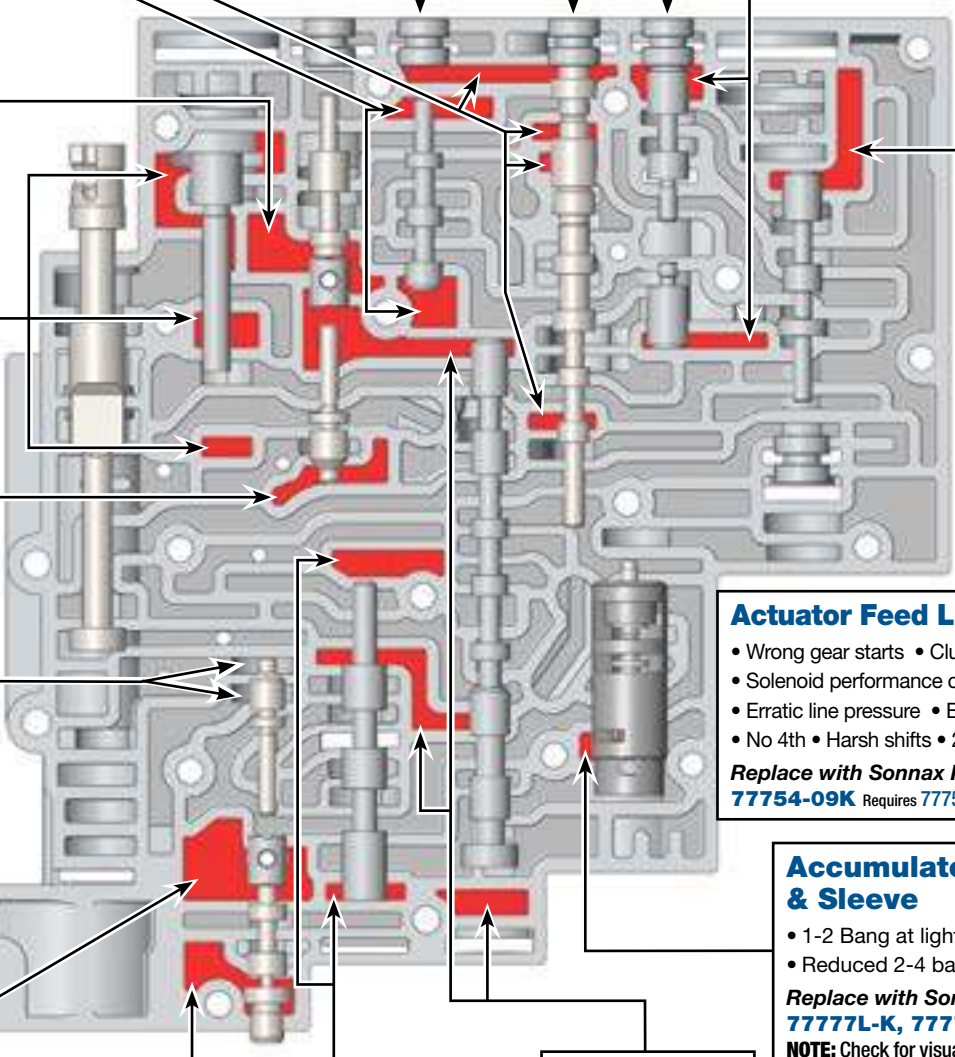
Accumulator Valve & Sleeve

- 1-2 Bang at light throttle
- Reduced 2-4 band life

Replace with Sonnax Part No. 77777L-K, 77777M-K

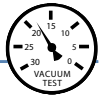
NOTE: Check for visual wear in sleeve.

**Tool Combinations Required for TCC Regulator Valve: F-77754-TL4, F-77754-SERV, 77754-R2, 77754-SERV, & VB-FIX depending on particular valve body; SEE INSTRUCTIONS TO DETERMINE



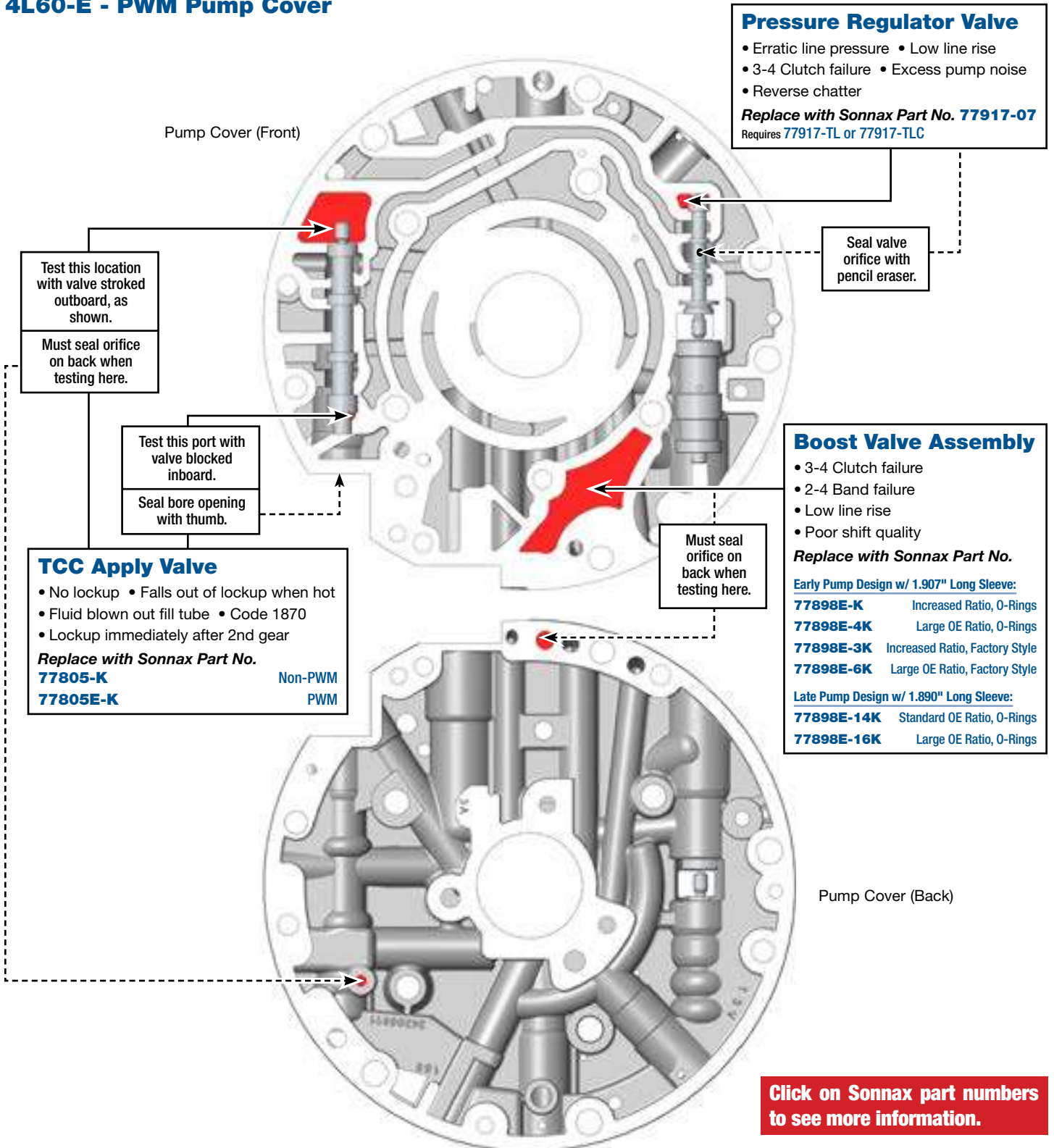
*NOTE: Valve designs vary by year, however all port locations for vacuum testing are the same.

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. Worm tracks will vary slightly on non-PWM pump covers, but locations for vacuum testing are identical.

4L60-E - PWM Pump Cover



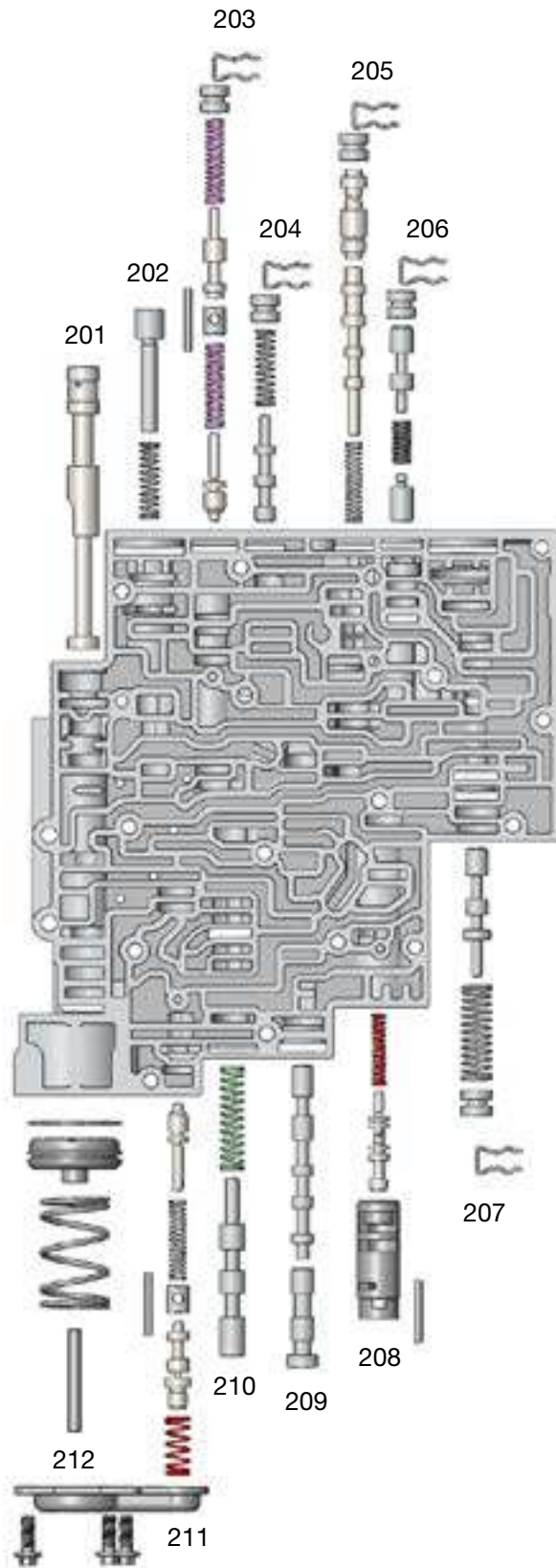
Click on Sonnax part numbers to see more information.

OE Exploded View

NOTE: Solenoids not shown.

4L60-E • Valve Body

Valve Body Descriptions	
I.D. No.	Description
201	Manual Valve
202	3-2 Control Valve
203	Reverse Abuse Valve (Inboard), 3-2 Downshift Valve (Outboard)
204	3-4 Shift Valve
205	4-3 Sequence Valve (Inboard), 3-4 Relay Valve (Outboard)
206	TCC Regulator Valve
207	Actuator Feed Limit Valve
208	Accumulator Valve & Sleeve
209	2-3 Shift Valve (Inboard), 2-3 Shuttle Valve (Outboard)
210	1-2 Shift Valve
211	Forward Abuse Valve (Inboard), Low Overrun Valve (Outboard)
212	Forward Accumulator Piston



OE Exploded View

NOTE: Worm tracks will vary on non-PWM pump covers.

4L60-E • PWM Pump Cover

PWM Pump Cover Descriptions

I.D. No.	Description
101	Pressure Regulator Valve & Boost Valve Assembly
102	TCC Apply Valve
103	Pressure Relief Ball & Spring

