

Critical Wear Areas & Vacuum Test Locations



Drop-In Zip Valve™
Parts Available



4R44E-5R55E-ZIP
Zip Kit® 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.



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.

Boost Valve Assembly

- Delayed Reverse • Soft shifts
- Low line pressure • Poor modulator control

Replace with **Sonnax Part No.**
37947-01K OE Ratio
37947-03K Increased Ratio

EPC Boost Valve, Forward Modulator Valve & Reverse Modulator Valve

- 2nd Gear starts • No Reverse • Poor shift quality
- Flare on 1-2 or 2-3 shift on 4R, or 2-3, 3-4 on a 5R
- Delayed Forward • TCC slip • Code P0741

Replace with **Sonnax Part No.**
37947-11K Requires 37947-TL11

Pressure Regulator Valve

- Delayed engagement • Poor shift quality
- Low/High line pressure • Overheating
- Low cooler flow at idle

Replace with **Sonnax Part No.**
37947-54 or
37947-05K Requires 37947-TL5

Reverse Modulator Valve, Outer

- Delayed Reverse
- Burnt Reverse band
- Direct Clutch burned
- No Reverse

Replace with **Sonnax Part No.**
37947-52

Reverse Modulator Valve, Inner

- Delayed Reverse
- Burnt Reverse band
- Direct Clutch burned
- No Reverse

Replace with **Sonnax Part No.**
37947-53

Remove solenoid and plug bore opening. Turn valve body over and plug 3 openings on back side of casting. Foam or putty can be used to plug both areas. Return valve body to side with exposed worm tracks and cover both locations indicated with test plate to achieve vacuum results.

TCC Modulator Valve

- Code 1741
- No lockup
- Low cooler flow
- Engine stall on FWD engagement
- Poor converter fill & delayed engagements

Replace with **Sonnax Part No.**
37947-07K
Requires 37947-TL5

TCC Regulator Valve

- TCC Regulator Sleeve • Code 628, 1741
- TCC surge • TCC apply concerns
- TCC cycling • High TCC slip RPM
- Overheated fluid • Overheated converter

Replace with **Sonnax Part No.**
37947-09K Requires 37947-TL9

Coast Clutch Valve

- No engine braking in D3 to low
- No 4th, 2nd or 5th (4R44E/55E)
- No coast clutch apply

Replace with **Sonnax Part No.**
37947-33K Requires 37947-TL33

To vacuum test this port: invert valve and prop outboard with a Torlon checkball.

OE Exploded View

Valve Body Descriptions

I.D. No.	Description
101	Forward Engagement Control Valve
102	Boost Valve Assembly & Pressure Regulator Valve
103	EPC Boost Valve & Forward Modulator Valve
104	Manual Valve
105	Reverse Modulation Valves
106	2-3 or 3-4 Shift Valve
107	1-2 or 2-3 Shift Valve
108	Solenoid Regulator Valve
109	Coast Clutch Valve & Converter Regulator Valve
110	Converter Clutch Modulator Valve
111	Cooler Limit Valve, Bypass Valve & Thermostat Bypass Valve
112	3-4 or 1-2 & 4-5 Shift Valve
113	Throttle Downshift Control Valve
114	Manual Low Valve
115	Kick Downshift Control Valve

