

# Critical Wear Areas & Vacuum Test Locations



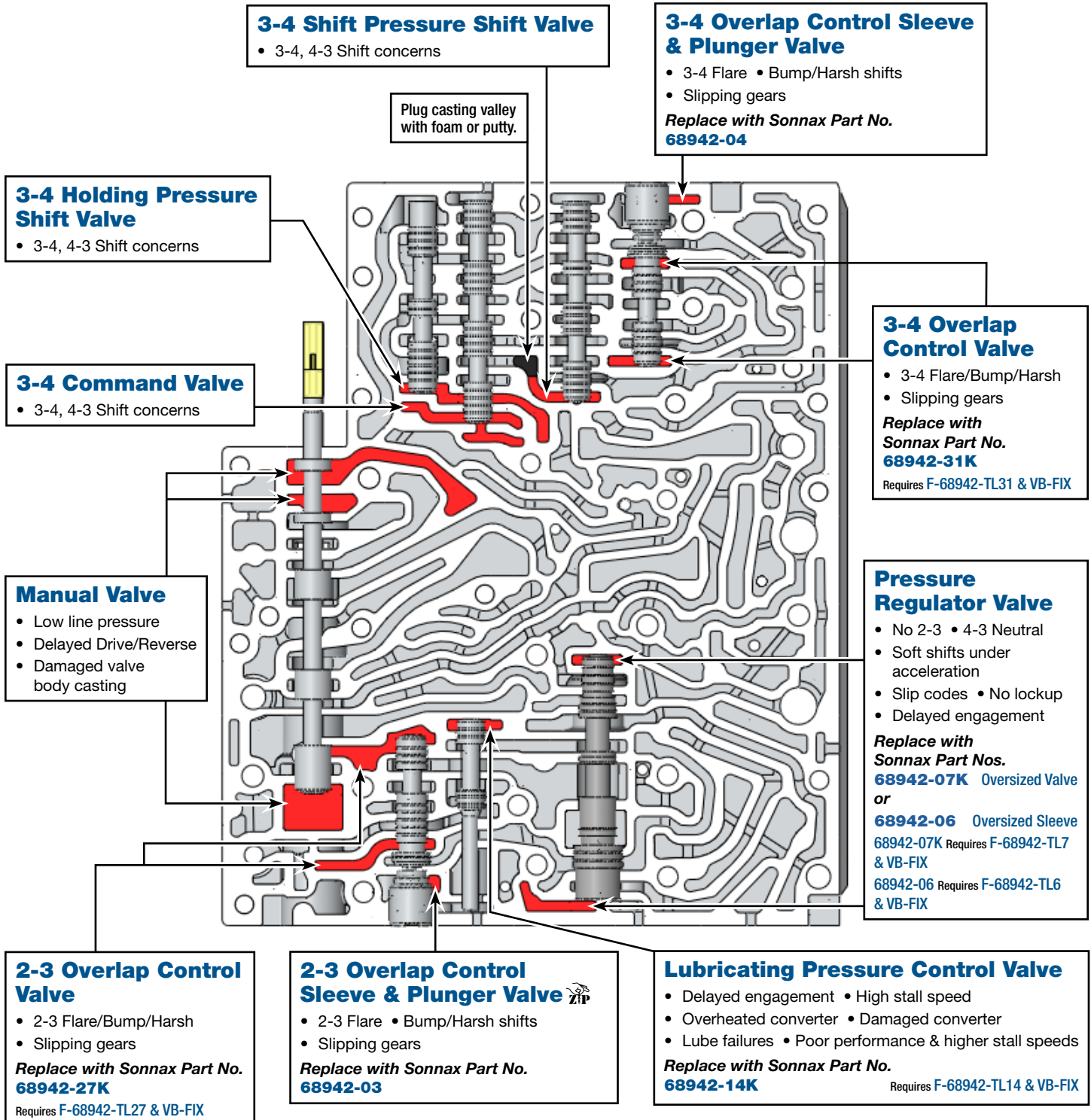
**NOTE:** OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts are noted for replacement.

## Upper Valve Body



For specific vacuum test information, refer to individual part instructions included in kits and available at [www.sonnax.com](http://www.sonnax.com).

Click on Sonnax part numbers to see more information.



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## Lower Valve Body



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### Shift Valve Pressure Regulating Valve

- Shift concerns, all Forward gears
- Shift codes

### Shift Pressure Regulating Valve

- Shift concerns, all Forward gears
- Shift codes

### 1-2/4-5 Overlap Control Sleeve & Plunger Valve ZIP

- 1-2 Flare/Bump/Harsh shifts
- Slipping gears

Replace with Sonnax Part No. **68942-02**

### 1-2/4-5 Overlap Control Valve

- 1-2 Flare/Bump/Harsh shifts
- Slipping gears

Replace with Sonnax Part No. **68942-19K**

Requires F-68942-TL19 & VB-FIX

### 1-2/4-5 Shift Pressure Shift Valve

- 1-2, 2-1 Shift concerns
- 4-5, 5-4 Shift concerns

### 1-2/4-5 Holding Pressure Shift Valve

- 1-2, 2-1 Shift concerns
- 4-5, 5-4 Shift concerns

■ = Plug casting valley with foam or putty.

### 1-2/4-5 Command Valve

- 1-2, 2-1 Shift concerns
- 4-5, 5-4 Shift concerns

### Regulating Valve Pressure Control

- Delayed engagement
- Shift flares & codes
- Low line rise & long shift duration

Replace with Sonnax Part No.

**68942-17K**

Requires F-68942-TL14 & VB-FIX

### B2 Shift Valve

- Burnt B2 brake
- Slipping 1st, 2nd, 3rd

### 2-3 Holding Pressure Shift Valve

- 2-3, 3-2 Shift concerns

### 2-3 Command Valve

- 2-3, 3-2 Shift concerns

### 2-3 Shift Pressure Shift Valve

- 2-3, 3-2 Shift concerns

### TCC Damper Valve (Late Only) ZIP

- Harsh lockup

Replace with Sonnax Part No. **68942-23K**

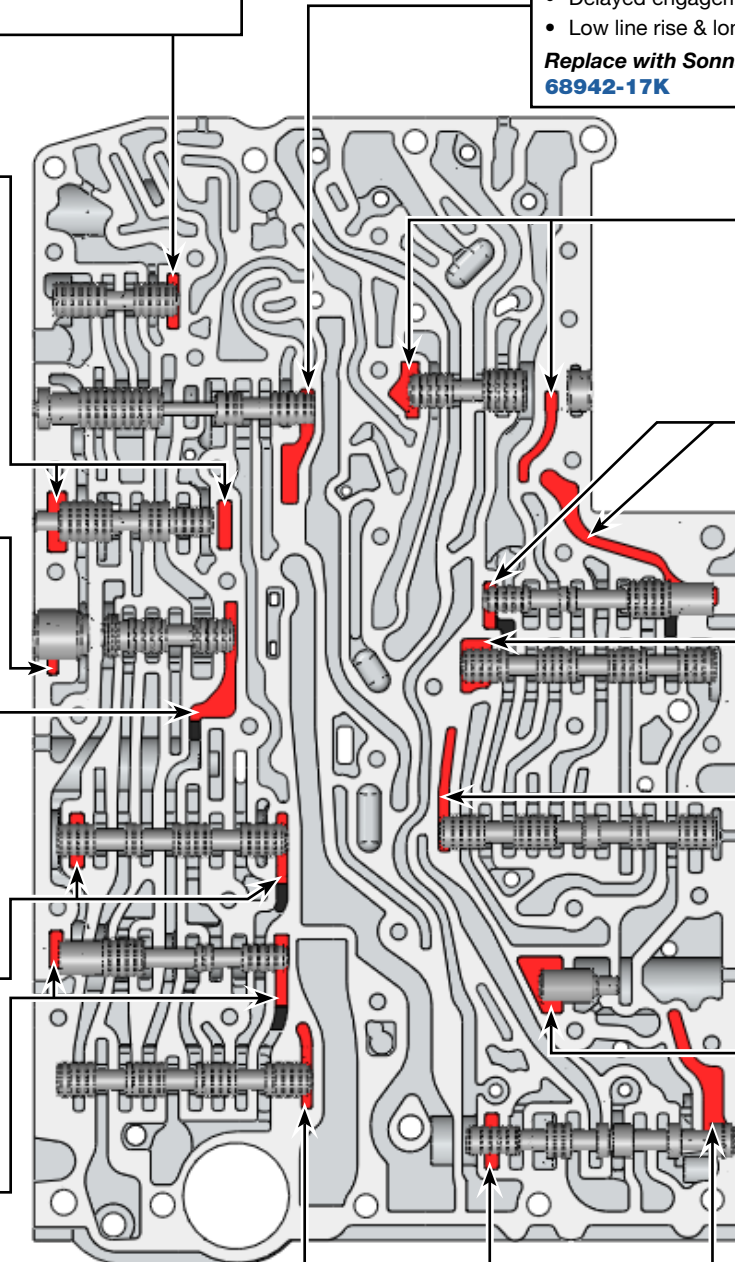
### TC Lockup Clutch Regulator Valve

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

Replace with Sonnax Part No.

**68942-10K**

Requires F-68942-TL10 & VB-FIX

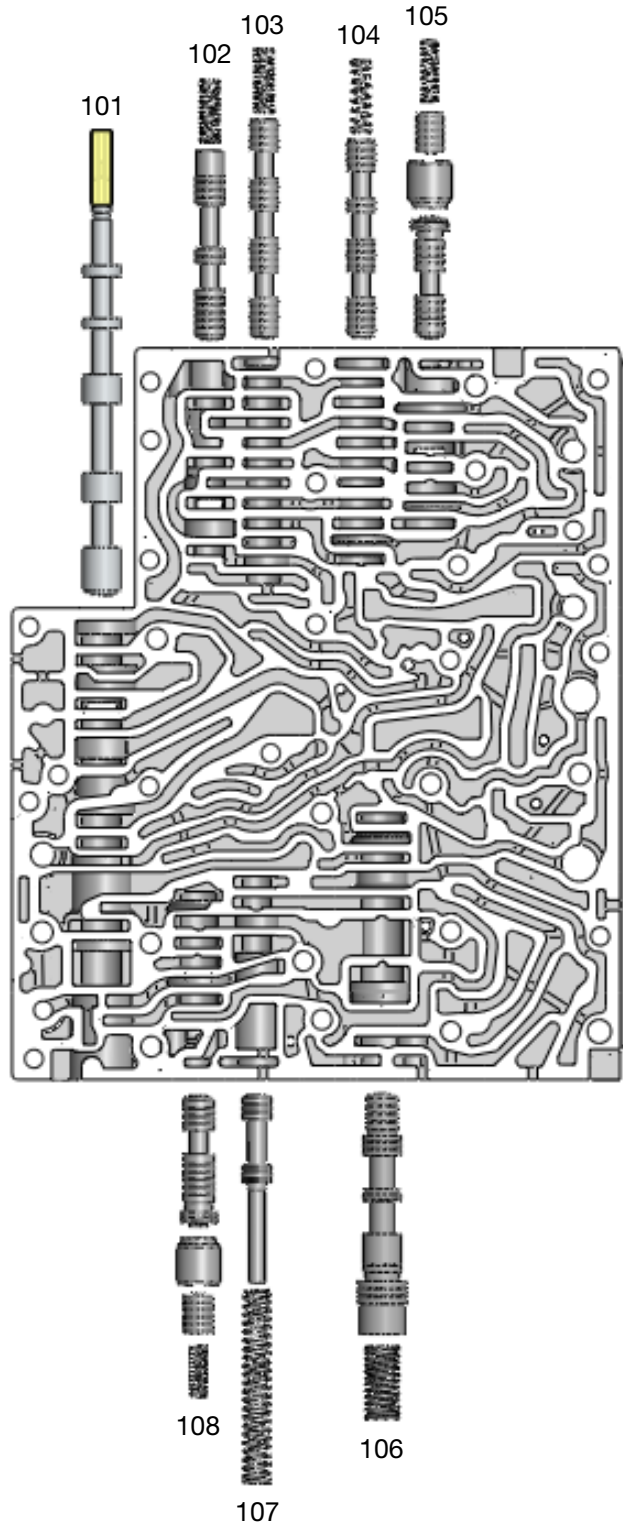


# OE Exploded View

## Upper Valve Body

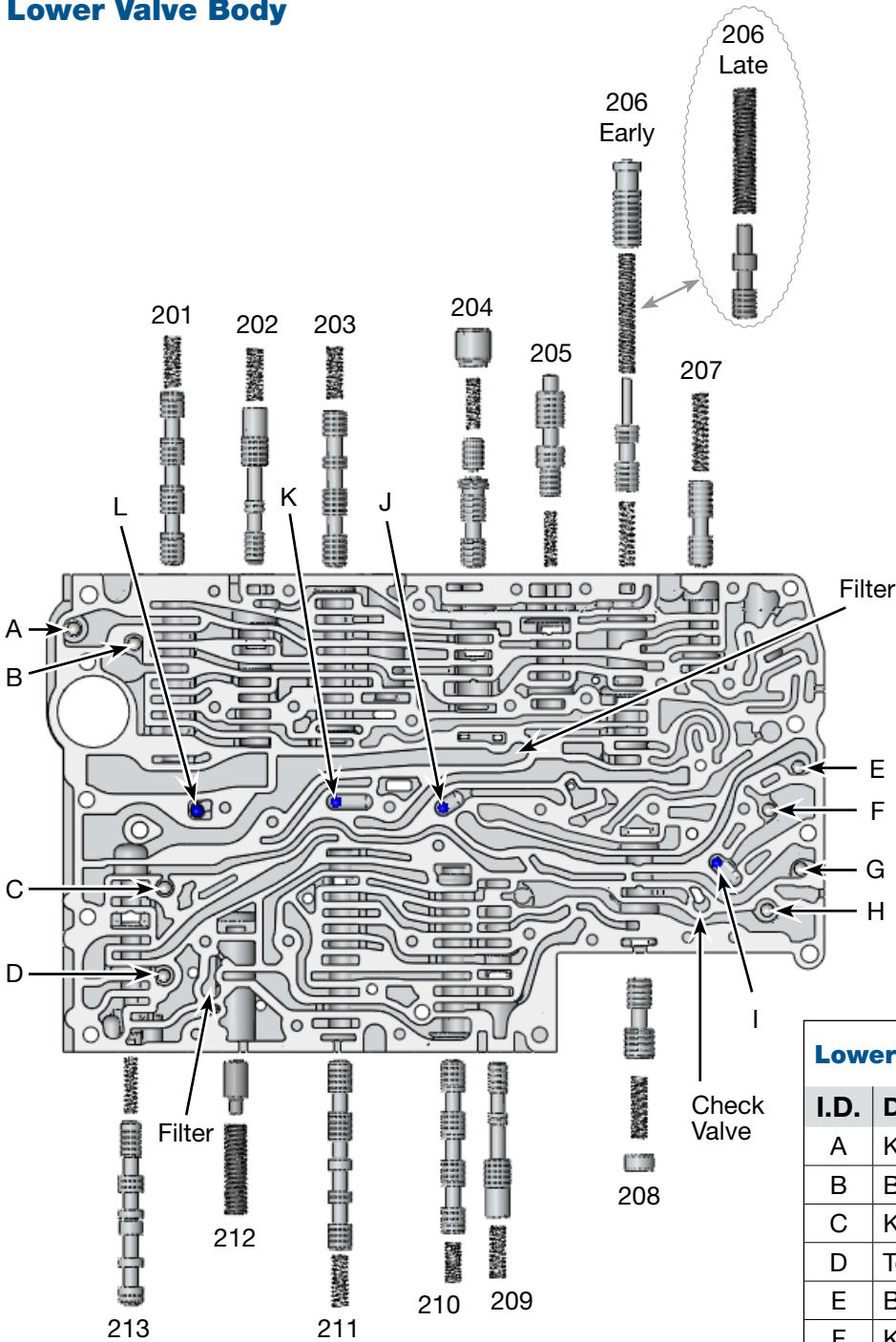
### Upper Valve Body Descriptions

I.D. No.	Description
101	Selector Valve
102	3-4 Holding Pressure Shift Valve
103	3-4 Command Valve
104	3-4 Shift Pressure Shift Valve
105	3-4 Overlap Control Valve (Inboard) Sleeve & Plunger Valve (Outboard)
106	Pressure Regulator Valve
107	Lubricating Pressure Control Valve
108	2-3 Overlap Control Valve (Inboard) Sleeve & Plunger Valve (Outboard)



# OE Exploded View

## Lower Valve Body



### Lower Valve Body Descriptions

I.D. No.	Description
201	1-2/4-5 Command Valve
202	1-2/4-5 Holding Pressure Shift Valve
203	1-2/4-5 Shift Pressure Shift Valve
204	1-2/4-5 Overlap Control Valve (Inboard) Sleeve & Plunger Valve (Outboard)
205	Shift Pressure Control Valve
206	Regulating Valve Pressure Control Valve(s) (Early & Late)
207	Shift Valve Pressure Control Valve
208	B2 Shift Valve
209	2-3 Holding Pressure Shift Valve
210	2-3 Command Valve
211	2-3 Shift Pressure Shift Valve
212	TCC Damper Valve (Late only)
213	TC Lockup Clutch Regulator Valve

### Lower Valve Body Checkball Locations

I.D.	Description	Material
A	K1 Clutch Exhaust	Steel
B	B1 Clutch Exhaust	Steel
C	K2 Clutch Exhaust	Steel
D	Torque Converter Clutch	Steel
E	B2 Clutch Exhaust	Steel
F	K3 Clutch Exhaust	Steel
G	B2 Clutch Counter Exhaust	Steel
H	B3 Clutch Exhaust	Steel
I	K3 Shuttle Ball	Plastic
J	3-4 Shift Group Shuttle Ball	Plastic
K	Pressure Reducing Shuttle Ball	Plastic
L	Modulator Pressure Shuttle Ball	Plastic