



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

## Upper Valve Body • 6T70 (Gen. 1)

### Pressure Regulator Valve

- High/Low line pressure
- Slipping/Burnt clutches
- Harsh/Soft shifts/apply
- Transmission overheat
- Low/No cooler/lube flow

**Replace with Sonnax Part No.**  
**124740-12K** Requires F-124740-TL12 & VB-FIX

### 3-5 Reverse Clutch Regulator Valve

- Burnt 3-5 Reverse clutch
- Delayed Reverse
- 3rd & 5th Shift complaints
- 2-3 & 4-5 Shift flare

**Replace with Sonnax Part No.**  
**124740-26K** (1.35 Ratio) Requires F-124740-TL26 & VB-FIX  
**124740-21K** (1.83 Ratio) Requires F-124740-TL21 & VB-FIX

### 2-6 Clutch Regulator & Gain Valve

- Burnt 2-6 clutch
- 2nd & 6th Shift complaints
- 1-2 & 5-6 Shift flare

**Replace with Sonnax Part No.**  
**124740-17K**  
Requires F-124740-TL17 & VB-FIX

### Isolator Valve

- Low line pressure
- Slipping/Burnt clutches
- Soft shifts/apply

**Replace with Sonnax Part Nos.**  
**124740-16** (Spring Only)  
**124740-03K** (Isolator Valve Kit)

### TCC Control Valve

- Incorrect TCC apply/release
- Transmission overheat
- Low/No cooler/lube flow

**Replace with Sonnax Part No. 124740-14K**  
Requires F-124740-TL14 & VB-FIX

### TCC Regulator Apply Valve

- No TCC/slip, soft apply
- Harsh TCC apply

**Replace with Sonnax Part No.**  
**124740-24K**  
Requires F-124740-TL24 & VB-FIX

### Clutch Select Solenoid Valve #3

- Various shift complaints
- Shift related trouble codes

### L/R Overdrive Clutch Regulator Valve

- Burnt L/R and/or 4-5-6 clutch
- 4-5-6 Shift complaints
- Delayed Reverse
- 3-4 Shift flare

### Clutch Select Solenoid Valve #2

- Various shift complaints
- Shift related trouble codes

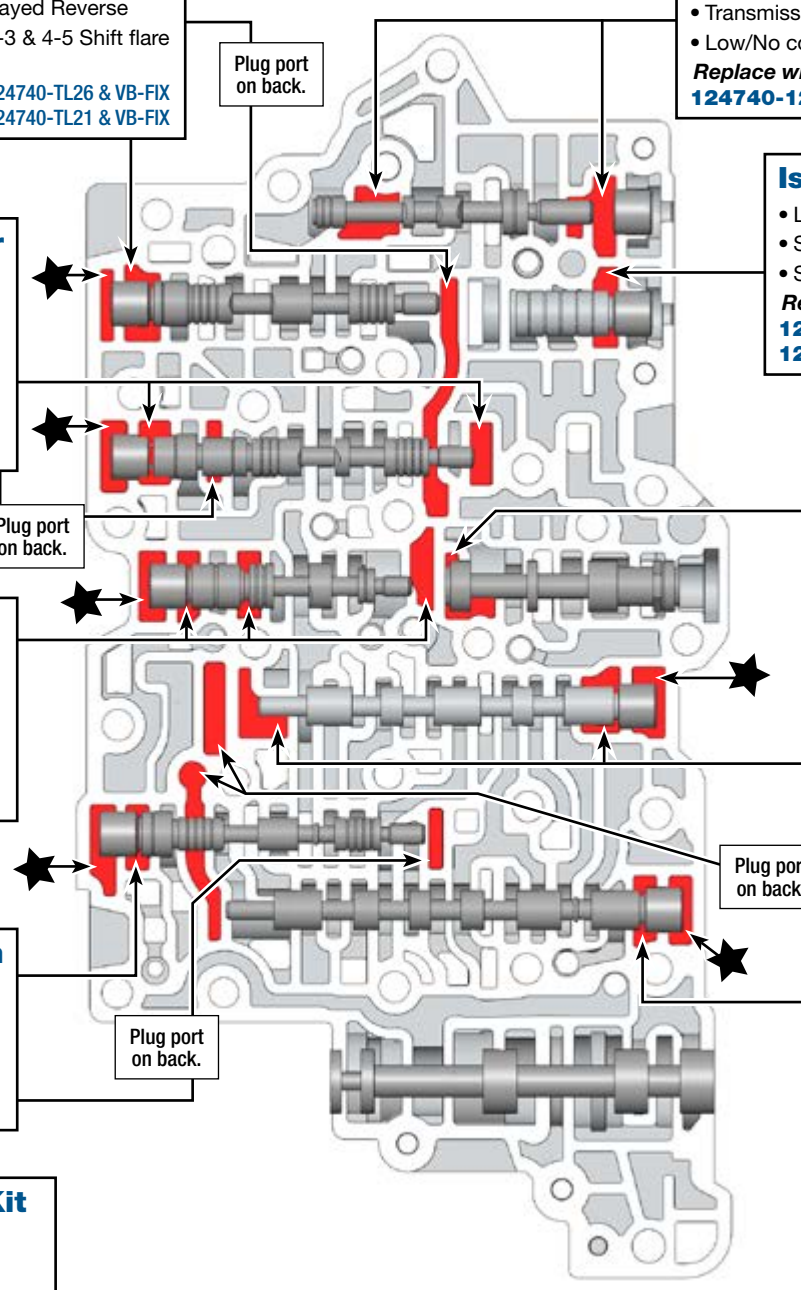
### O-Ringed End Plug Kit

- Burnt clutches/brakes
- Various shift complaints

**NOTE:** Vacuum test end plugs at outboard port while sealing bore opening with thumb.

**Replace with Sonnax Part No.**  
**124740-02K**

**NOTE:** Several Locations = ★



**Click on Sonnax part numbers to see more information.**



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## Lower Valve Body • 6T70 (Gen. 1)

**Click on Sonnax part numbers to see more information.**

**3-5 Reverse Clutch Boost Valve**

- Burned 3-5 Reverse clutch
- Delayed Reverse
- 3rd & 5th Shift complaints
- 2-3 & 4-5 Shift flare

**Replace with Sonnax Part No. 144740-23** Requires F-144740-TL22 & VB-FIX

**4-5-6 Clutch Accumulator Piston**

- Harsh 3-4
- 3-4 Flare
- Burned 4-5-6 clutch

**Replace with Sonnax Part No. 124740-04K**

**1-2-3-4 Clutch Boost Valve**

- Burned 1-2-3-4 clutch
- Delayed Forward
- 1-2-3-4 Shift complaints

**Replace with Sonnax Part No. 144740-23**  
Requires F-144740-TL22 & VB-FIX

**Actuator Feed Limit Valve**

- Harsh shifts
- Low clutch pressure
- No/Slipping shifts
- Solenoid cores

**Replace with Sonnax Part No. 124740-01** Requires F-104740-TL12 & VB-FIX

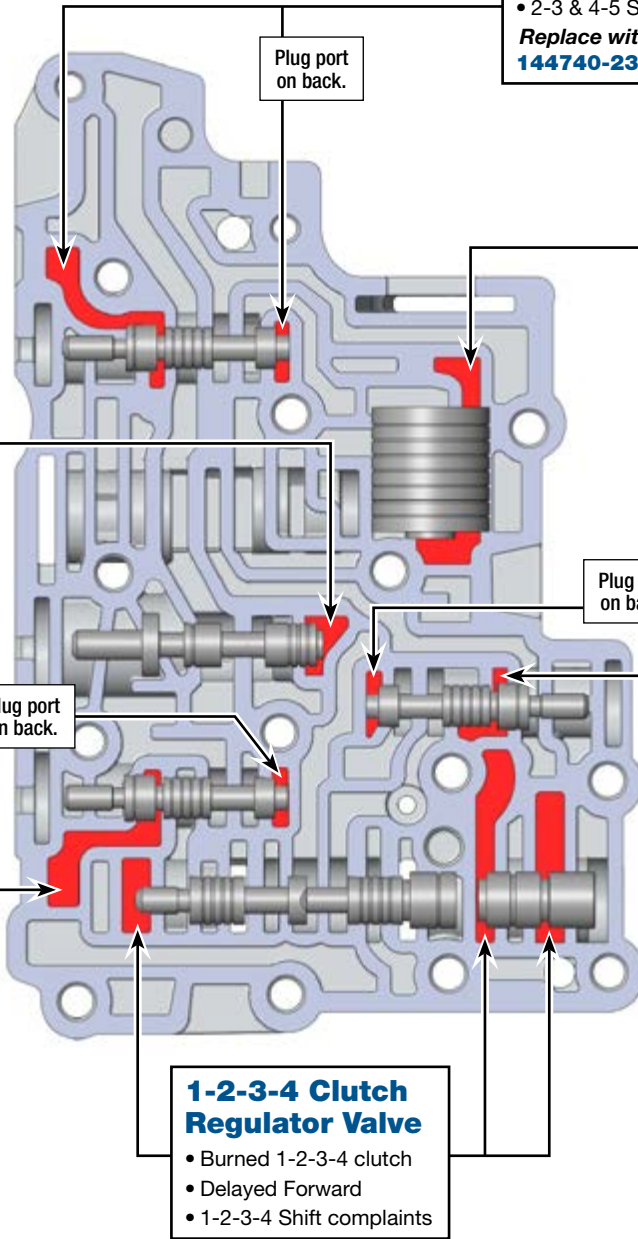
**4-5-6 Clutch Boost Valve**

- Burned 4-5-6 clutch
- 4-5-6 Shift complaints
- 3-4 Flare

**Replace with Sonnax Part No. 144740-23** Requires F-144740-TL22 & VB-FIX

**1-2-3-4 Clutch Regulator Valve**

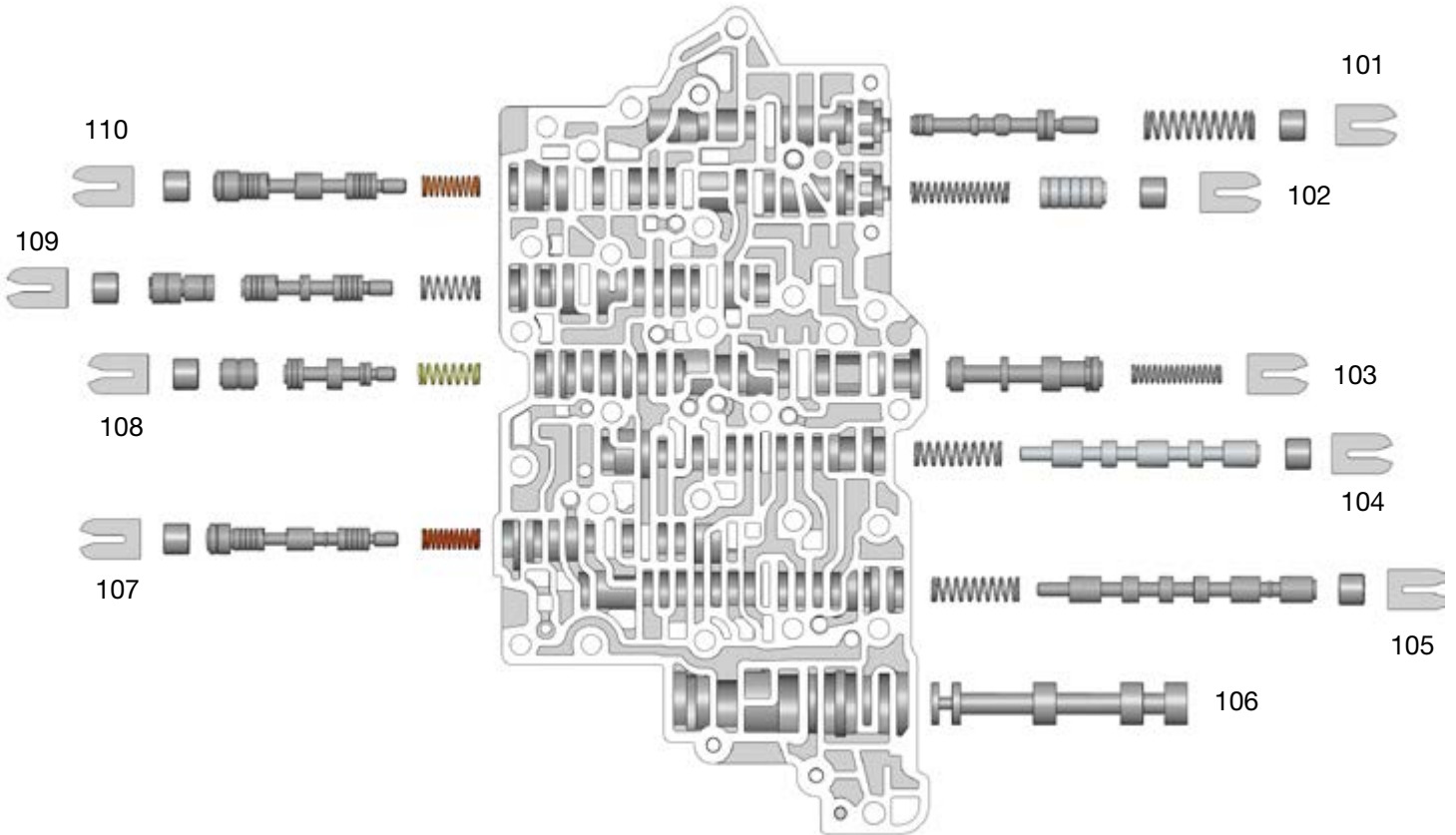
- Burned 1-2-3-4 clutch
- Delayed Forward
- 1-2-3-4 Shift complaints





## OE Exploded View

### Upper Valve Body • 6T70 (Gen. 1)



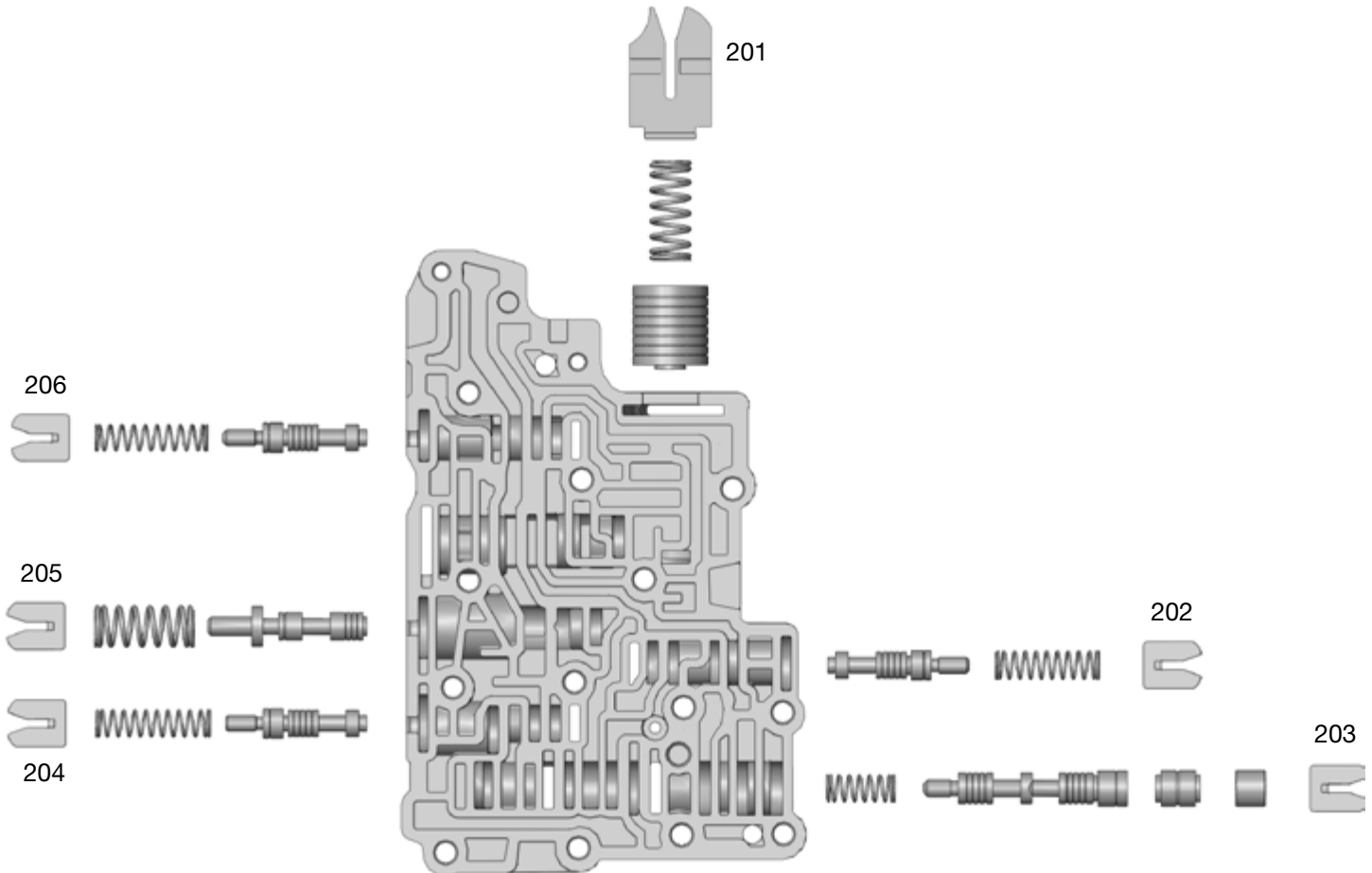
#### Upper Valve Body Descriptions

I.D. No.	6T70 Description
101	Pressure Regulator Valve
102	Isolator Valve
103	TCC Control Valve
104	Clutch Select Solenoid Valve #3
105	Clutch Select Solenoid Valve #2
106	Manual Valve
107	L/R 4-5-6 Clutch Regulator Valve
108	TCC Regulator Apply Valve
109	2-6 Clutch Regulator & Gain Valve
110	3-5 Reverse Clutch Regulator Valve



## OE Exploded View

### Lower Valve Body • 6T70 (Gen. 1)



#### Lower Valve Body Descriptions

I.D. No.	6T70 Description
201	4-5-6 Clutch Accumulator Piston
202	1-2-3-4 Clutch Boost Valve
203	1-2-3-4 Clutch Regulator Valve
204	4-5-6 Clutch Boost Valve
205	Actuator Feed Limit Valve
206	3-5 Reverse Clutch Boost Valve