



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 • Type 3, EPC Style Shown Here

Click on Sonnax part numbers to see more information.

Low Coast Modulator Valve

- Burned 1st/reverse brake (B3)
- Loss of manual low

2-3 Shift Valve

2-3 Shift complaints

Secondary Regulator Valve

- TCC complaints
- Lockup codes
- Loss of lube
- Burnt clutches & brakes

Replace with **Sonnax Part No. 97741-18K** Requires F-39741-TL18 & VB-FIX

2nd Coast Modulator Valve

- Burned 2nd brake (B2)
- Loss of manual second

3-4 Shift Valve

3-4 Shift complaints

Lockup Relay Valve & Plunger Assembly

Lockup complaints/codes

Replace with **Sonnax Part No.**

77741-02K

Lockup Relay Valve Kit

97741-20K

Oversized Lockup Relay Valve Kit

97741-20K: Requires F-97741-TL20 & VB-FIX

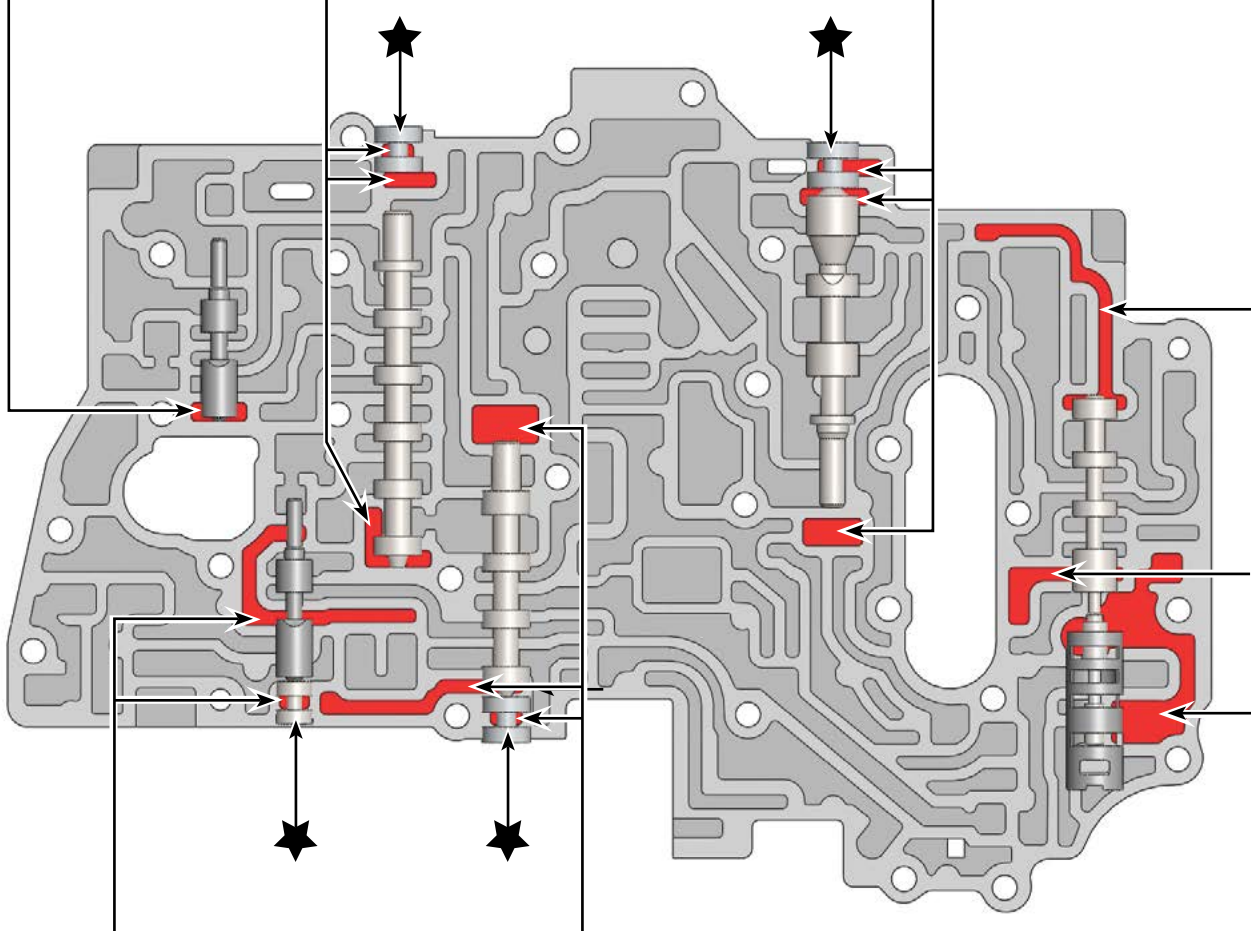
End Plugs

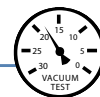
- Slips & flared shifts
- Soft shifts
- Low line pressure

Replace with **Sonnax Part No.**

97741-19K

NOTE: Several Locations = ★





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Lower Valve Body • Type 3, EPC Style Shown Here

Click on Sonnax part numbers to see more information.

Primary Regulator Valve

- Delayed Shifts
- Poor Shift Quality
- Burnt clutches & brakes
- Delayed engagements

Replace with Sonnax Part No.

97741-06K EPC valve spool .426" dia.; replaces OE 2-dot boost sleeve

97741-10K EPC valve spool .353" dia.; replaces OE 3-dot or no-dot boost sleeve

97741-06K & 97741-10K: Requires F-97741-TL6 & VB-FIX

End Plugs

- Slips & flared shifts
- Soft shifts
- Low line pressure

Replace with Sonnax Part No.

97741-19K **NOTE:** Several Locations = ★

1-2 Shift Valve

1-2 Shift complaints

Boost Assembly

- Delayed forward/reverse engagement
- Soft shifts
- No kickdown
- Burnt clutches & brakes

Replace with Sonnax Part No.

97741-01K

Cutback Valve

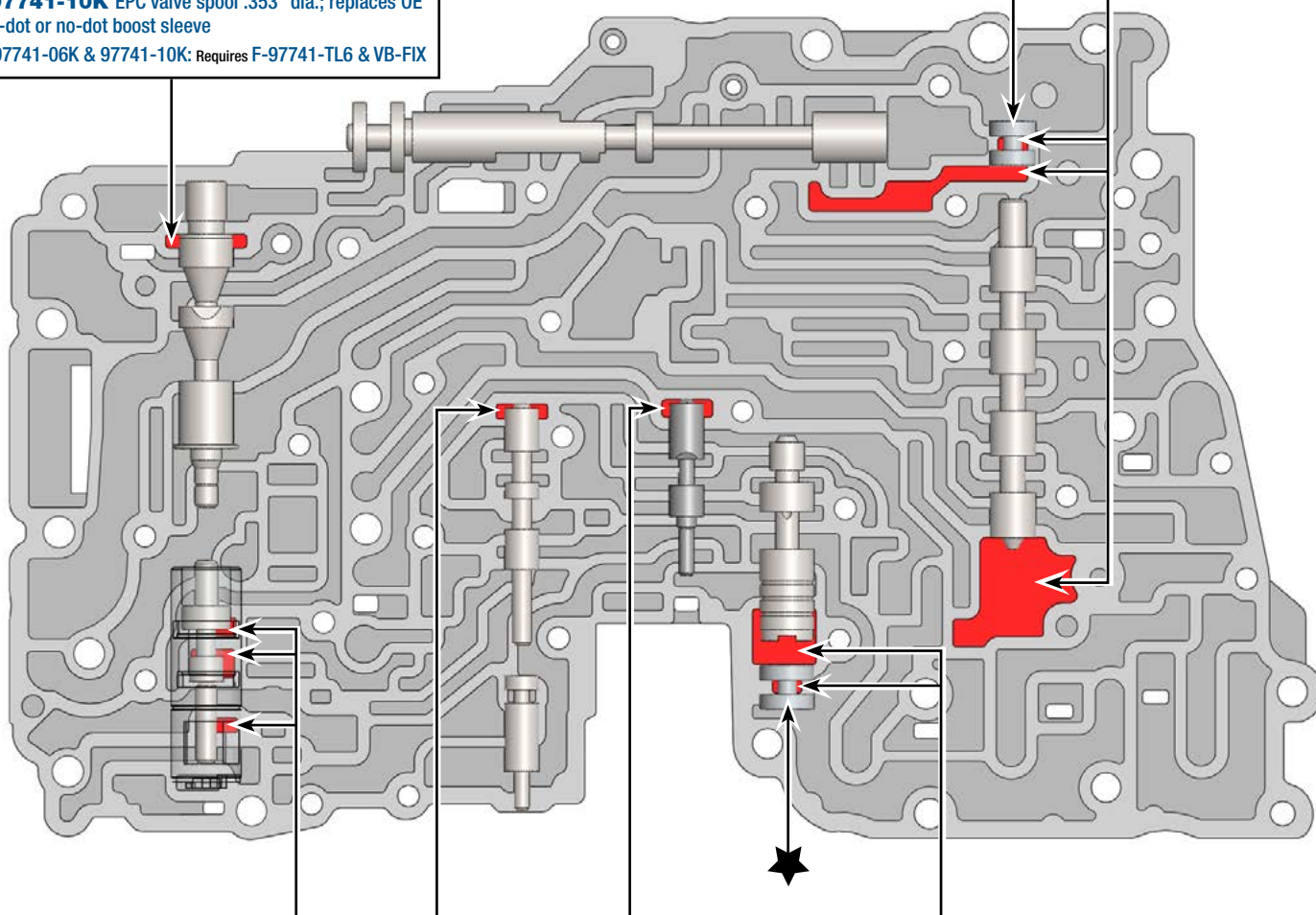
- No kickdown
- Loss of throttle pressure

Secondary Modulator Valve

- Shift complaints
- Solenoid codes

Accumulator Control Valve

- Shift complaints
- Solenoid codes
- Loss of throttle/line pressure





Critical Wear Areas & Vacuum Test Locations



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Upper Valve Body • Type 4, EPC Style Shown Here

Click on Sonnax part numbers to see more information.

Reverse Control Valve

- Delayed reverse
- No reverse

2-3 Shift Valve

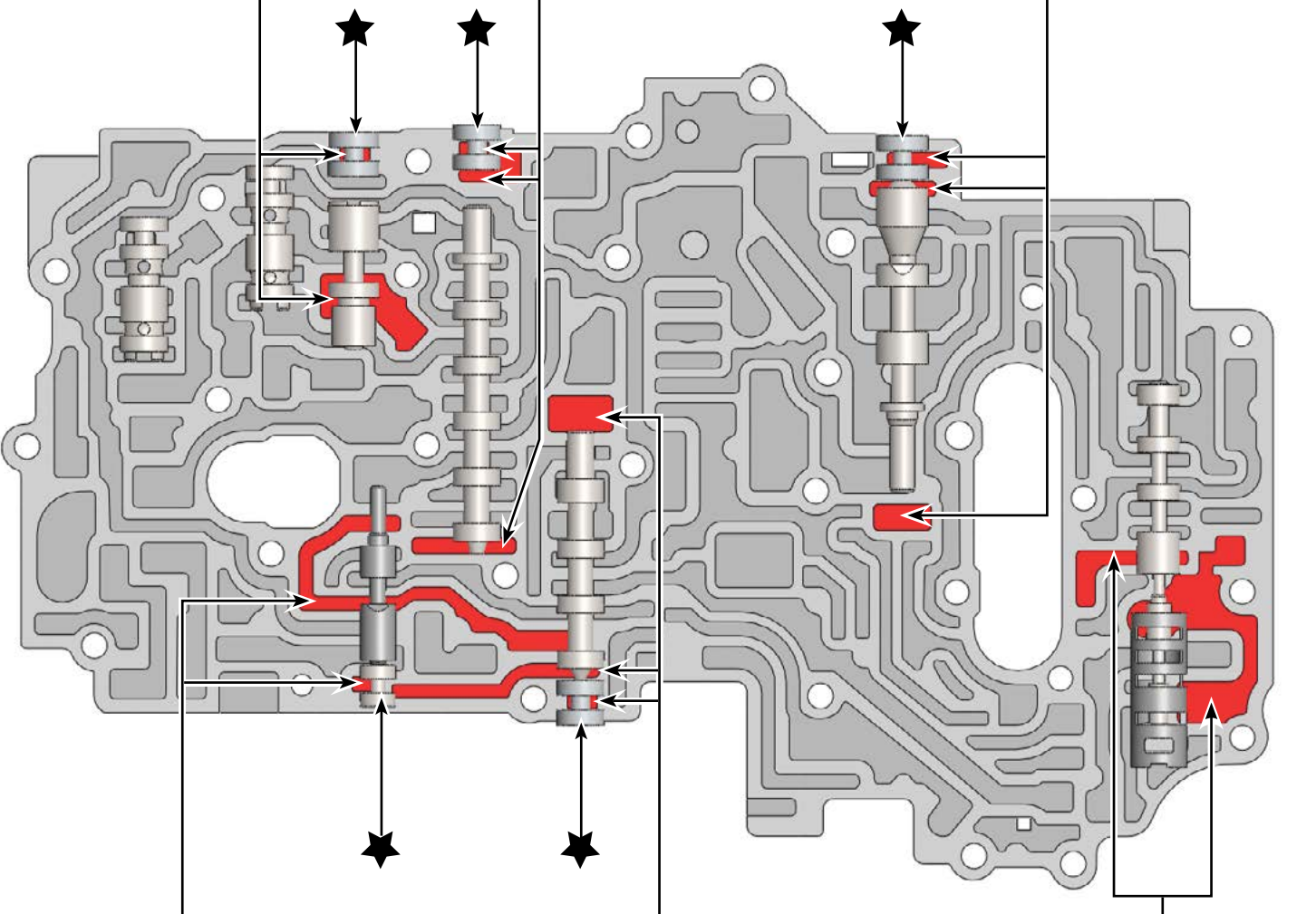
2-3 Shift complaints

Secondary Regulator Valve

- TCC complaints
- Lockup codes
- Loss of lube
- Burnt clutches & brakes

Replace with **Sonnax Part No.**

97741-18K Requires F-39741-TL18 & VB-FIX



2nd Coast Modulator Valve

- Burned 2nd brake (B2)
- Loss of manual second

3-4 Shift Valve

3-4 Shift complaints

End Plugs

- Slips & flared shifts
- Soft shifts
- Low line pressure

Replace with **Sonnax Part No.**

97741-19K

NOTE: Several Locations = ★

Lockup Relay Valve & Plunger Assembly

Lockup complaints/codes

Replace with **Sonnax Part No.**

77741-02K

Lockup Relay Valve Kit

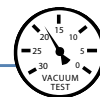
97741-20K

Oversized Lockup Relay Valve Kit

97741-20K: Requires F-97741-TL20 & VB-FIX



Critical Wear Areas & Vacuum Test Locations



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Lower Valve Body • Type 4, EPC Style Shown Here

Click on Sonnax part numbers to see more information.

Primary Regulator Valve

- Delayed Shifts
- Poor Shift Quality
- Burnt clutches & brakes
- Delayed engagements

Replace with Sonnax Part No.

97741-06K EPC valve spool .426" dia.; replaces OE 2-dot boost sleeve

97741-10K EPC valve spool .353" dia.; replaces OE 3-dot or no-dot boost sleeve

97741-06K & 97741-10K: Requires F-97741-TL6 & VB-FIX

TCC Control Valve & Plunger Assembly

- Loss of lockup
- Converter slips/shudder/codes

Replace with Sonnax Part No.
19741-01K

1-2 Shift Valve

1-2 Shift complaints

Low Coast Modulator Valve

- Burned 1st/reverse brake (B3)
- Loss of manual low

Boost Assembly

- Delayed forward/reverse engagement
- Soft shifts
- No kickdown
- Burnt clutches & brakes

Replace with Sonnax Part No.
97741-01K

Cutback Valve

- No kickdown
- Loss of throttle pressure

Secondary Modulator Valve

- Shift complaints
- Solenoid codes

Accumulator Control Valve

- Shift complaints
- Solenoid codes
- Loss of throttle/line pressure

End Plugs

- Slips & flared shifts
- Soft shifts
- Low line pressure

Replace with Sonnax Part No.
97741-19K

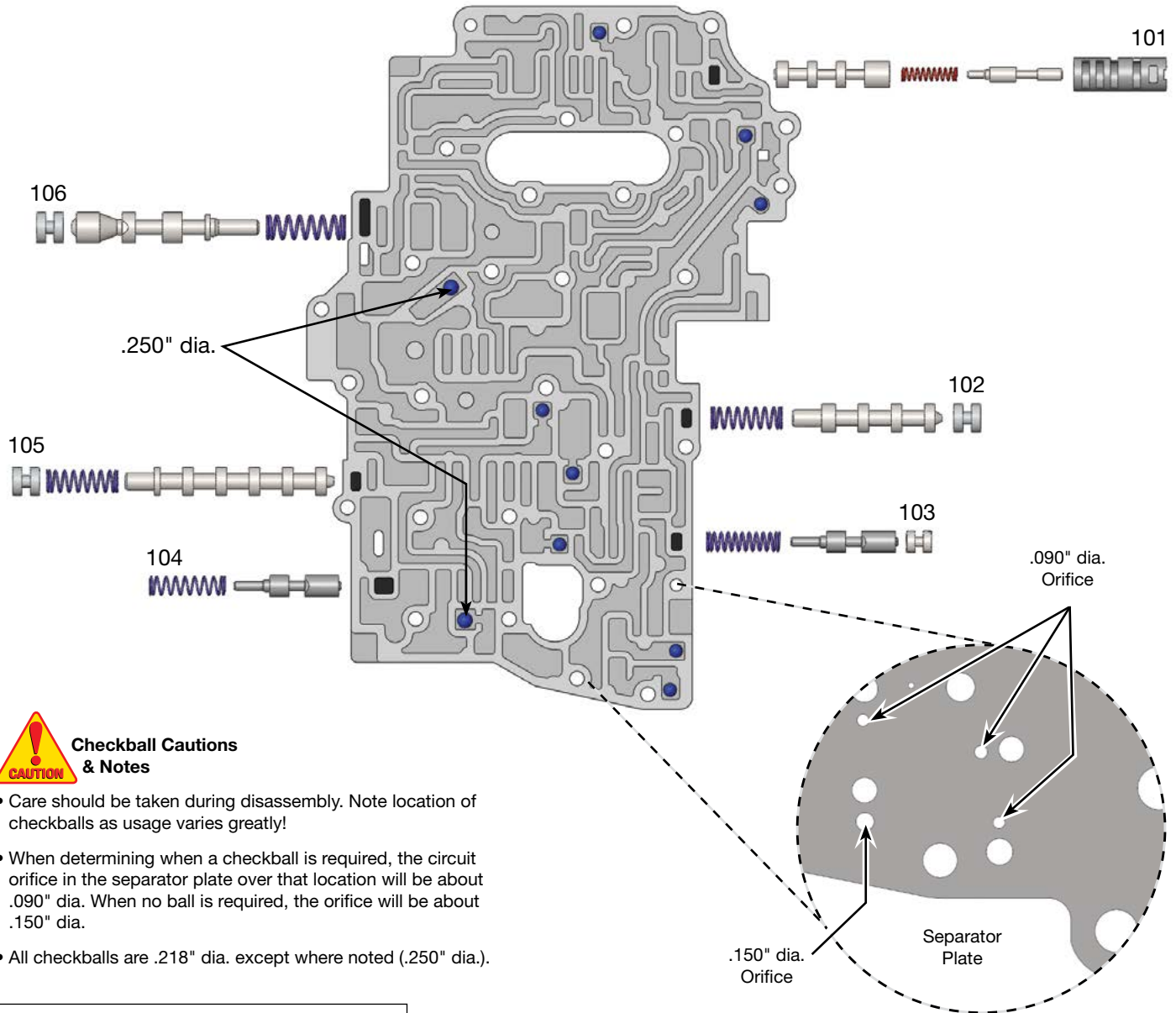
NOTE: Several Locations = ★



OE Exploded View

Upper Valve Body • Type 3, EPC Style Shown Here

NOTE: Depending upon vehicle application, the OE springs shown may not be present.



Checkball Cautions & Notes

- Care should be taken during disassembly. Note location of checkballs as usage varies greatly!
- When determining when a checkball is required, the circuit orifice in the separator plate over that location will be about .090" dia. When no ball is required, the orifice will be about .150" dia.
- All checkballs are .218" dia. except where noted (.250" dia.).

Upper Valve Body Descriptions

I.D. No.	Description
101	Lockup Relay Valve & Plunger Assembly
102	3-4 Shift Valve
103	2nd Coast Modulator Valve
104	Low Coast Modulator Valve
105	2-3 Shift Valve
106	Secondary Regulator Valve



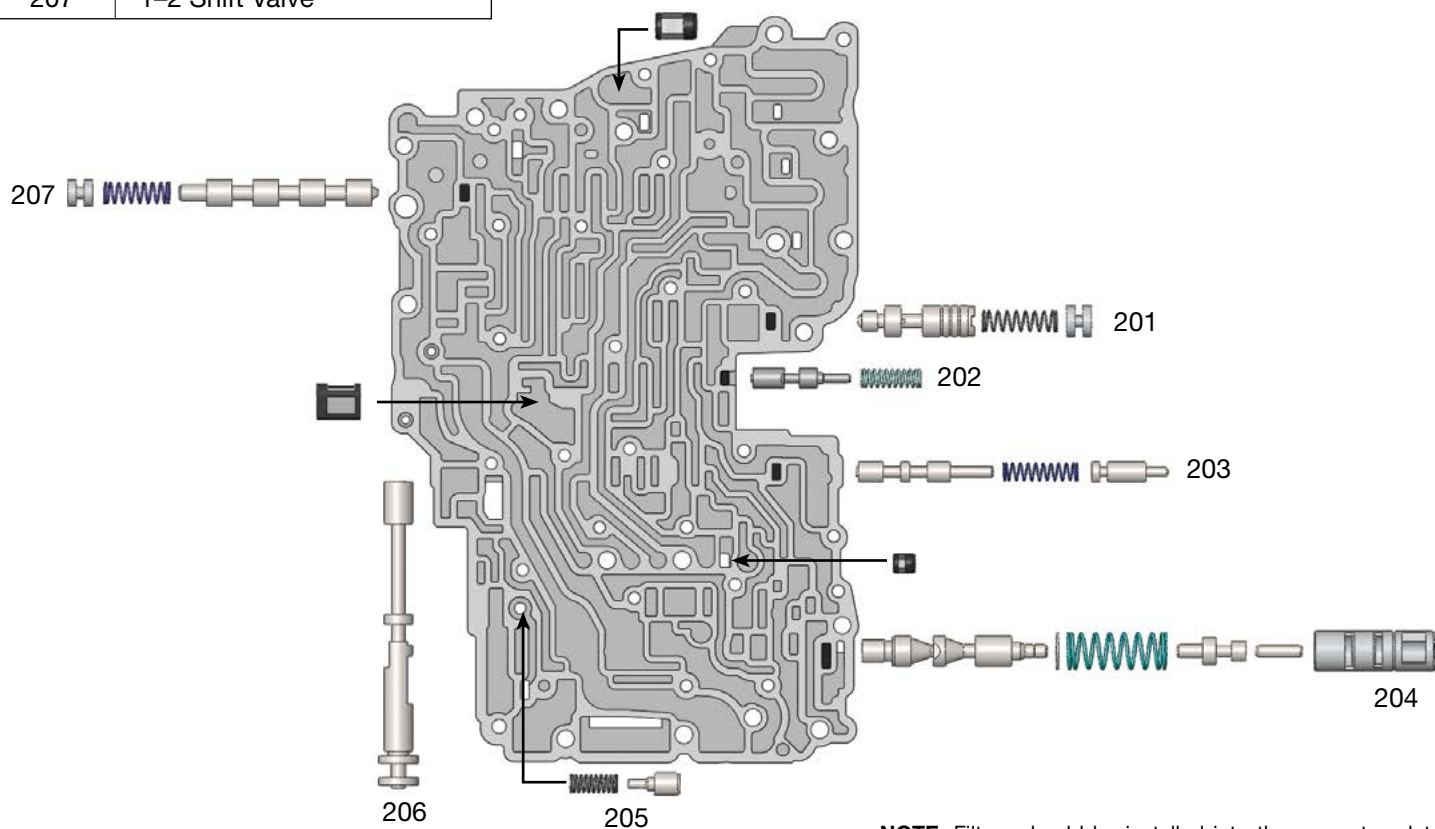
OE Exploded View

Lower Valve Body • Type 3, EPC Style Shown Here

NOTE: Depending upon vehicle application, the OE springs shown may not be present.

Lower Valve Body Descriptions

I.D. No.	Description
201	Accumulator Control Valve
202	Secondary Modulator Valve
203	Cutback Valve
204	Primary Regulator Valve & Boost Assembly
205	Converter Limit Valve
206	Manual Valve
207	1-2 Shift Valve



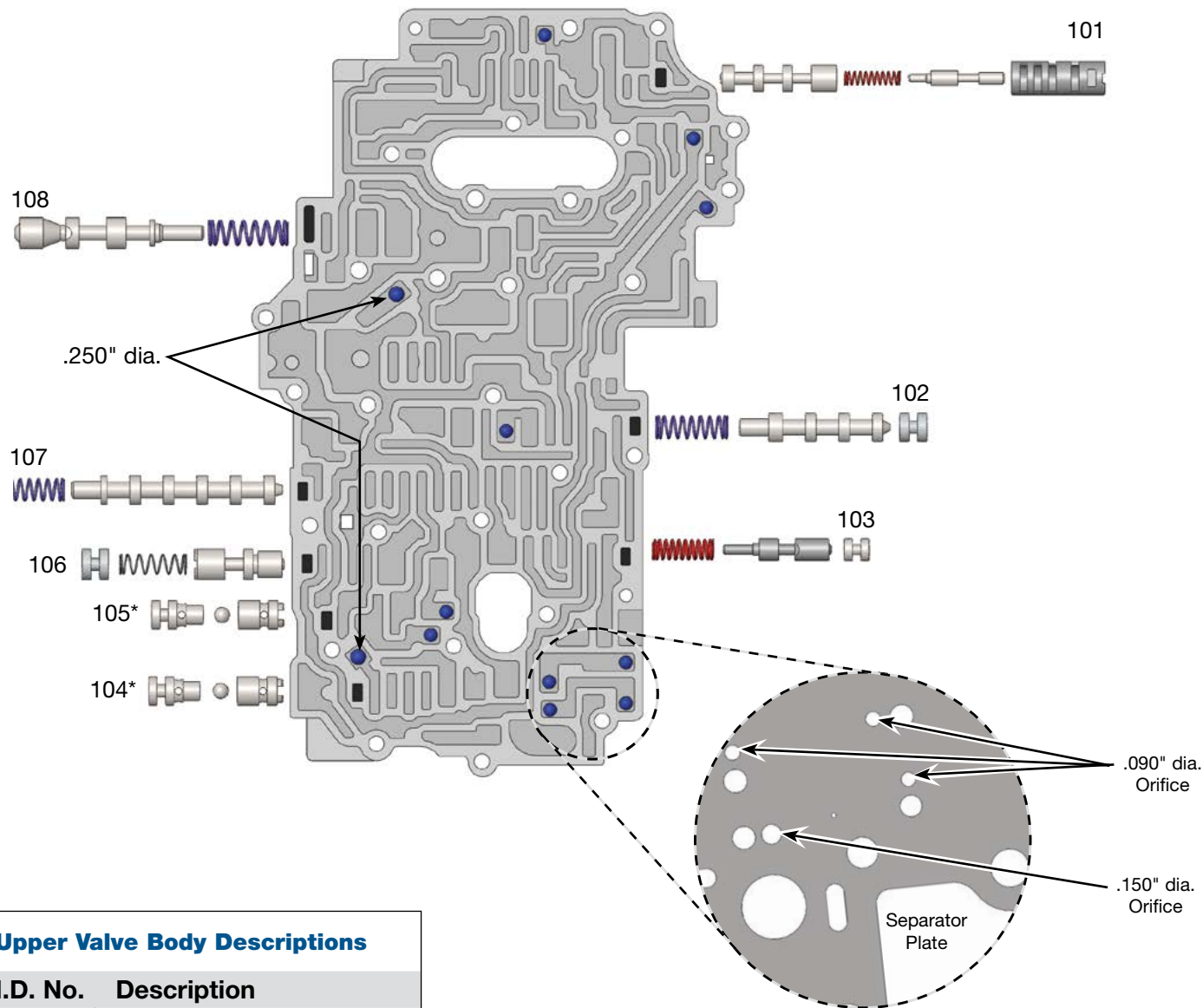
NOTE: Filters should be installed into the separator plate during assembly. The open end of the filter snaps into the plate opening.



OE Exploded View

Upper Valve Body • Type 4, EPC Style Shown Here

NOTE: Depending upon vehicle application, the OE springs shown may not be present.



Upper Valve Body Descriptions

I.D. No.	Description
101	Lockup Relay Valve & Plunger Assembly
102	3-4 Shift Valve
103	2nd Coast Modulator Valve
104*	Check Valve
105*	Check Valve
106	Reverse Control Valve
107	2-3 Shift Valve
108	Secondary Regulator Valve
*Not in throttle cable style.	



Checkball Cautions & Notes

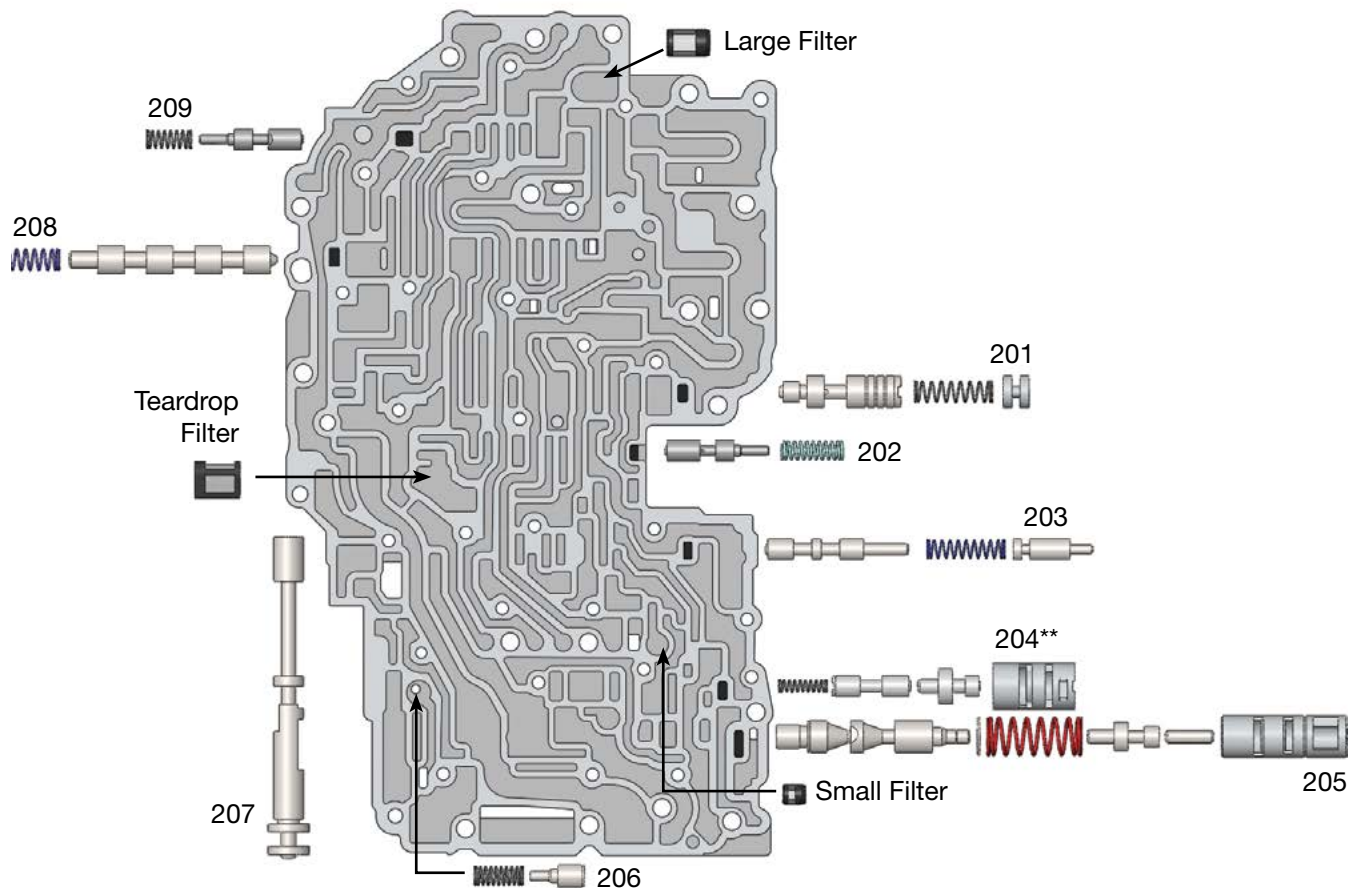
- Care should be taken during disassembly. Note location of checkballs as usage varies greatly!
- When determining when a checkball is required, the circuit orifice in the separator plate over that location will be about .090" dia. When no ball is required, the orifice will be about .150" dia.
- All checkballs are .218" dia. except where noted (.250" dia.).



OE Exploded View

Lower Valve Body • Type 4, EPC Style Shown Here

NOTE: Depending upon vehicle application, the OE springs shown may not be present.



Lower Valve Body Descriptions

I.D. No.	Description
201	Accumulator Control Valve
202	Secondary Modulator Valve
203	Cutback Valve
204**	TCC Control Valve & Plunger Assembly
205	Primary Regulator Valve & Boost Assembly
206	Converter Limit Valve
207	Manual Valve
208	1-2 Shift Valve
209	Low Coast Modulator Valve
**Not in all applications	