

# 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.

## Main 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.

### Primary Pressure Regulator Valve

- Chatter on acceleration
- Damaged valve body casting
- Slips in Forward & Reverse
- Pulley breakage
- High line pressure
- Low line pressure

Replace with Sonnax Part No. **113741-09K**

Requires F-113741-TL9 & VB-FIX

### Secondary Pressure Regulator Valve

- Push belt slippage & pulley fracture
- Chatter on acceleration
- RPM surge on acceleration

Replace with Sonnax Part No. **113741-21K**

Requires F-113741-TL21 & VB-FIX

### Torque Converter Pressure Regulator Valve

- Converter shudder & TCC slip
- TCC apply & release concerns
- TCC codes
- Overheating

Replace with Sonnax Part No. **113741-13K**

Requires F-113741-TL13 & VB-FIX

### Torque Converter Lube Regulator Valve

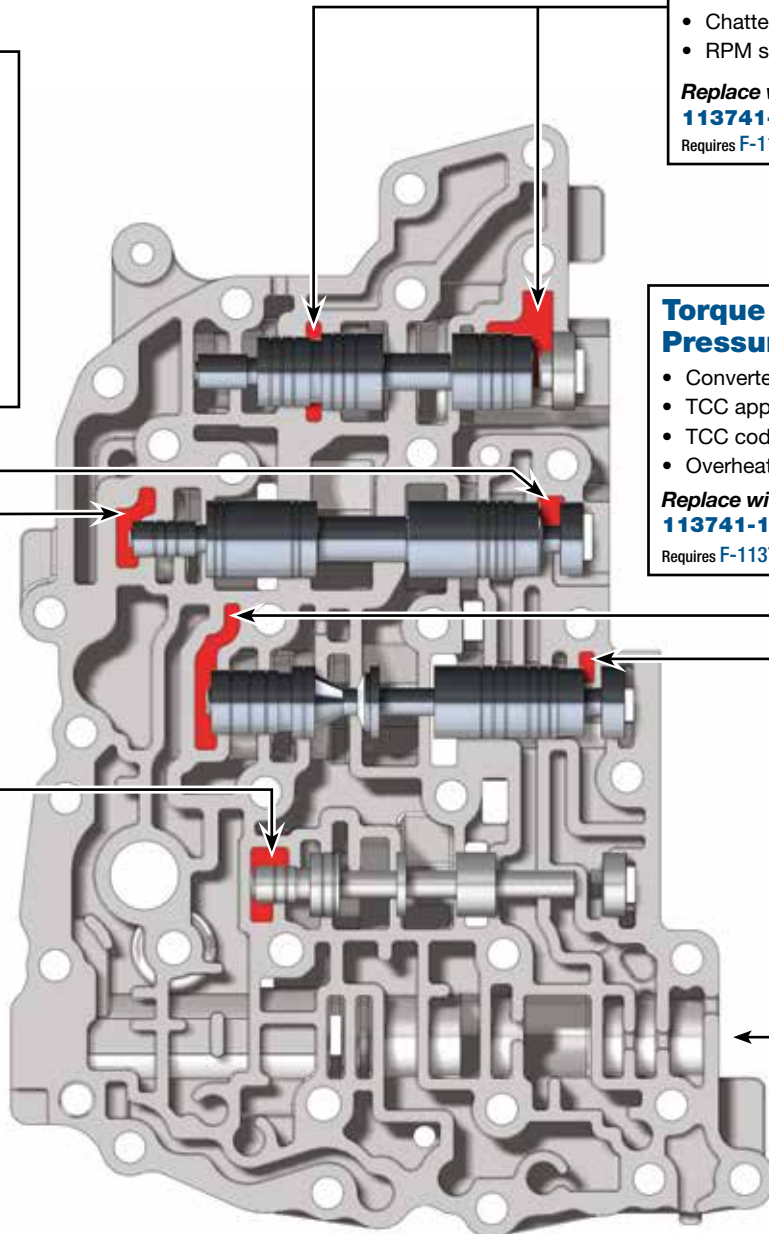
- Engine stall on engagement
- No lockup
- Increased RPM during acceleration
- Ratio Codes
- Poor Performance

Replace with Sonnax Part No. **113741-04K**

Requires F-113741-TL4 & VB-FIX

### Manual Valve

- Delayed engagement
- Low pressure



# Critical Wear Areas & Vacuum Test Locations



Drop-In Zip Valve™  
Parts Available

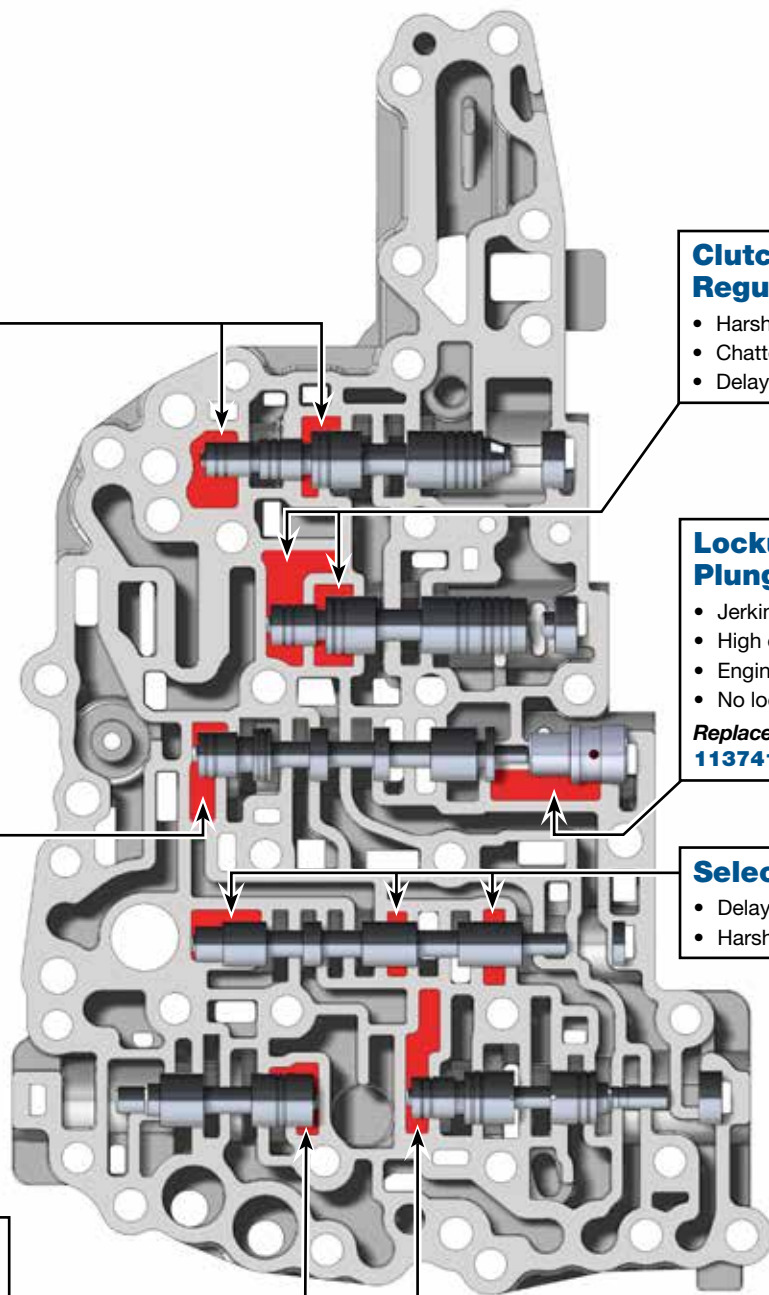
**NOTE:** OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts are noted for replacement.

## Middle Valve Body (Front)



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.



### Secondary Pulley Control Valve

- RPM surge or chatter on acceleration
- Push belt slippage & pulley fracture

Replace with Sonnax Part No.

**113741-19K**

Requires F-113741-TL17 & VB-FIX

### Clutch Reducing Regulator Valve

- Harsh engagements
- Chatter on acceleration
- Delayed engagement

### Lockup Control Plunger Valve

- Jerking on coastdown
- High engine RPM
- Engine stall on engagement
- No lockup

Replace with Sonnax Part No.

**113741-11K**

### Lockup Control Valve

- Jerking on coastdown
- Harsh engagement
- High engine RPM
- No lockup

Replace with Sonnax Part No.

**113741-22K**

Requires F-113741-TL22 & VB-FIX

### Select Switch Valve

- Delayed engagement
- Harsh engagement

### Solenoid Regulator Valve

- Chatter on acceleration
- No ratio change
- Noise on acceleration
- Low solenoid feed pressure

Replace with Sonnax Part No.

**113741-01K**

### Select Control Valve

- Delayed engagement
- Harsh engagement

# Critical Wear Areas & Vacuum Test Locations

**ZIP** Drop-In Zip Valve™  
Parts 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.

## Middle Valve Body (Back)



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.

### Secondary Pulley Control Valve

- RPM surge or chatter on acceleration
- Push belt slippage & pulley fracture

Replace with **Sonnax Part No. 113741-19K**

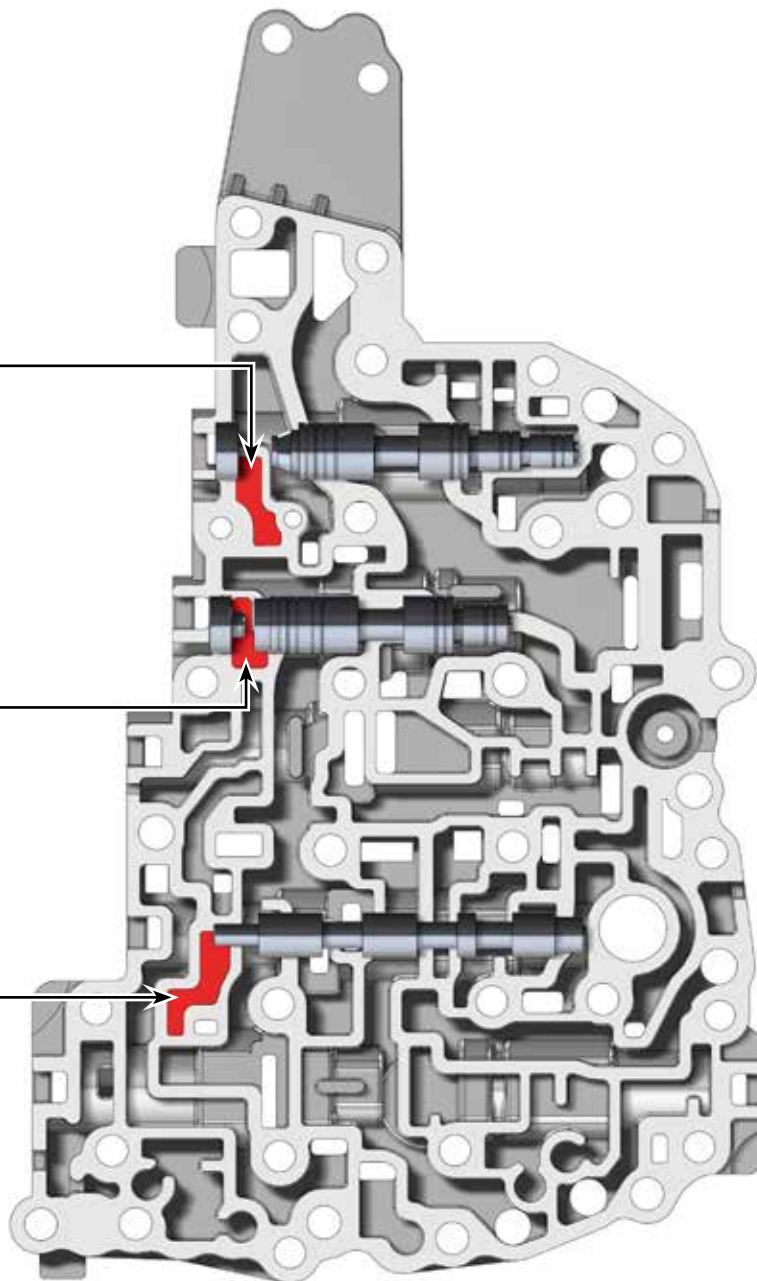
Requires F-113741-TL17 & VB-FIX

### Clutch Reducing Regulator Valve

- Harsh engagements
- Chatter on acceleration
- Delayed engagement

### Select Switch Valve

- Delayed engagement
- Harsh engagement



## Critical Wear Areas & Vacuum Test Locations



Drop-In Zip Valve™  
Parts Available

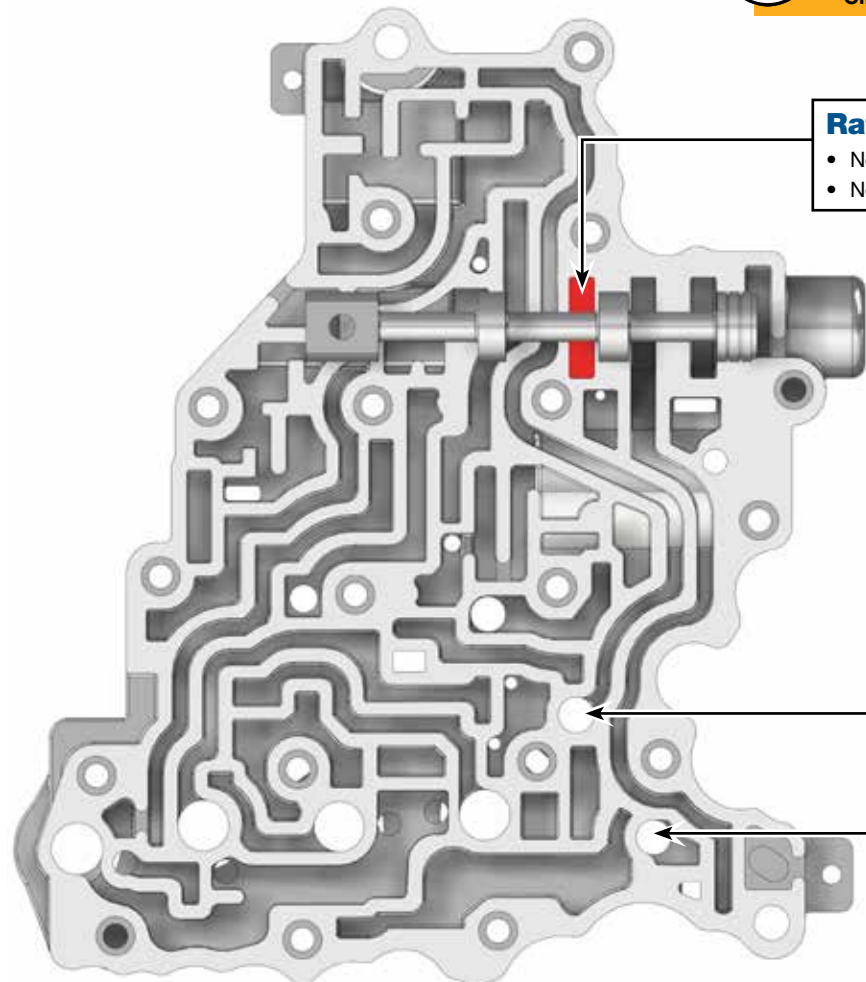
**NOTE:** OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts are noted for replacement.

### 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.



#### Ratio Control Valve

- No ratio change
- No high ratio

#### Primary & Secondary Pressure Sensor

Shift concerns  
**33417N**

### Pump Body

#### Pump Flow Control Valve

- Push belt slippage
- Delayed engagement
- Low pump volume

Replace with Sonnax Part Nos.

**33510N-02** or

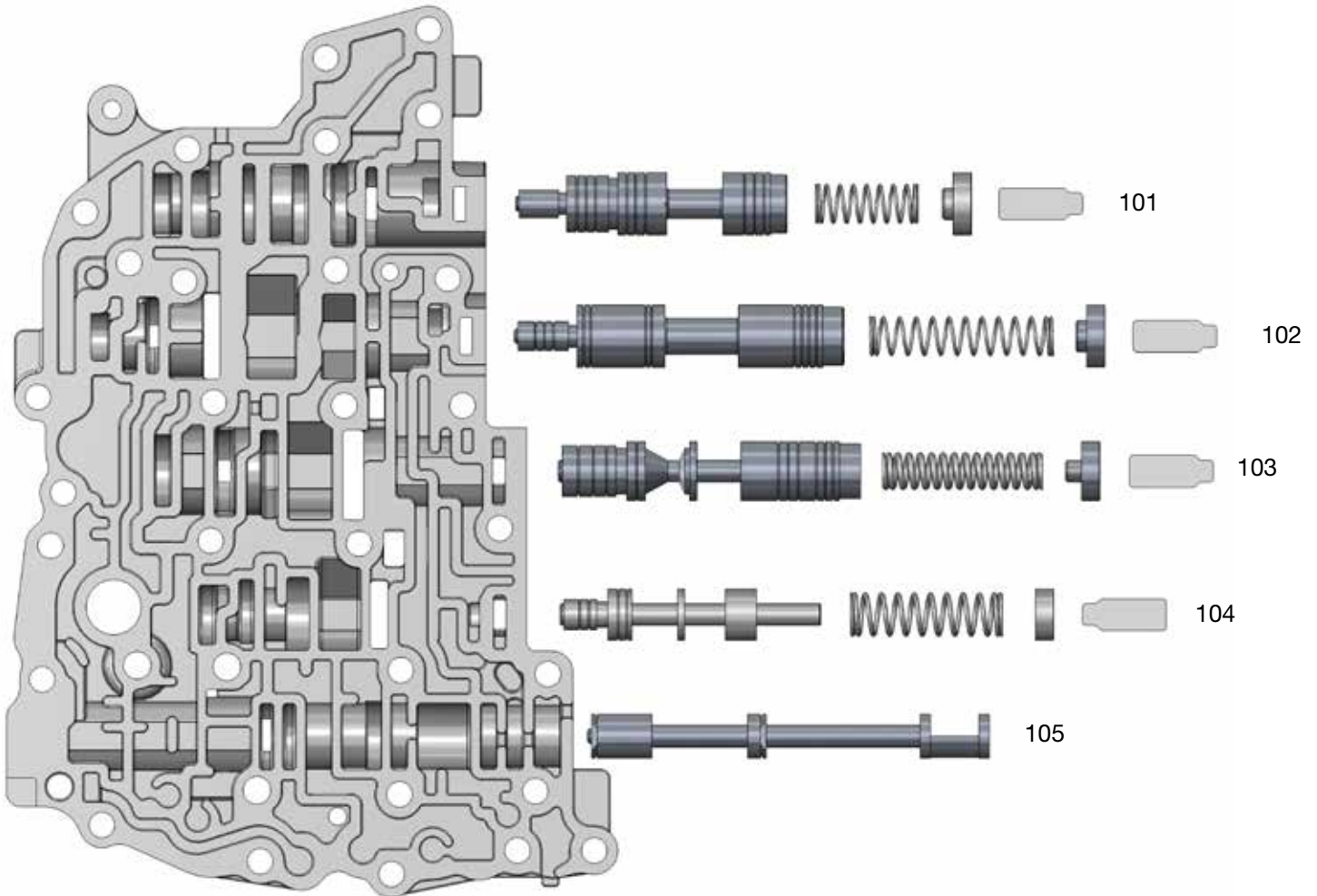
**33510N-01** Requires F-33510N-TL & VB-FIX

Block this port while testing.



## OE Exploded View

### Main Valve Body

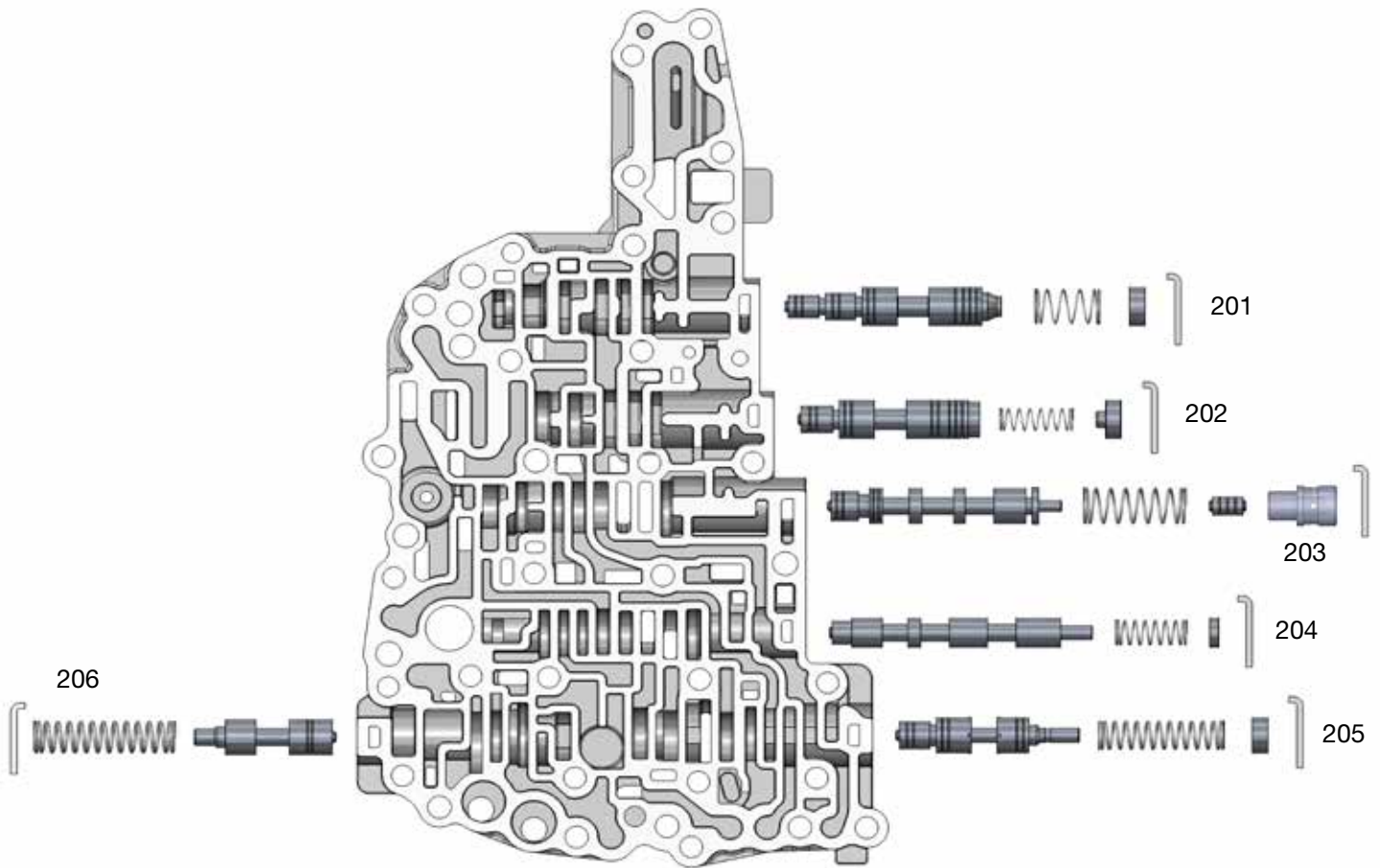


#### JF011E Main Valve Body Descriptions

I.D. No.	Description
101	Secondary Pressure Regulator Valve
102	Primary Pressure Regulator Valve
103	Torque Converter Pressure Regulator Valve
104	Torque Converter Lube Regulator Valve
105	Manual Valve

## OE Exploded View

### Middle Valve Body

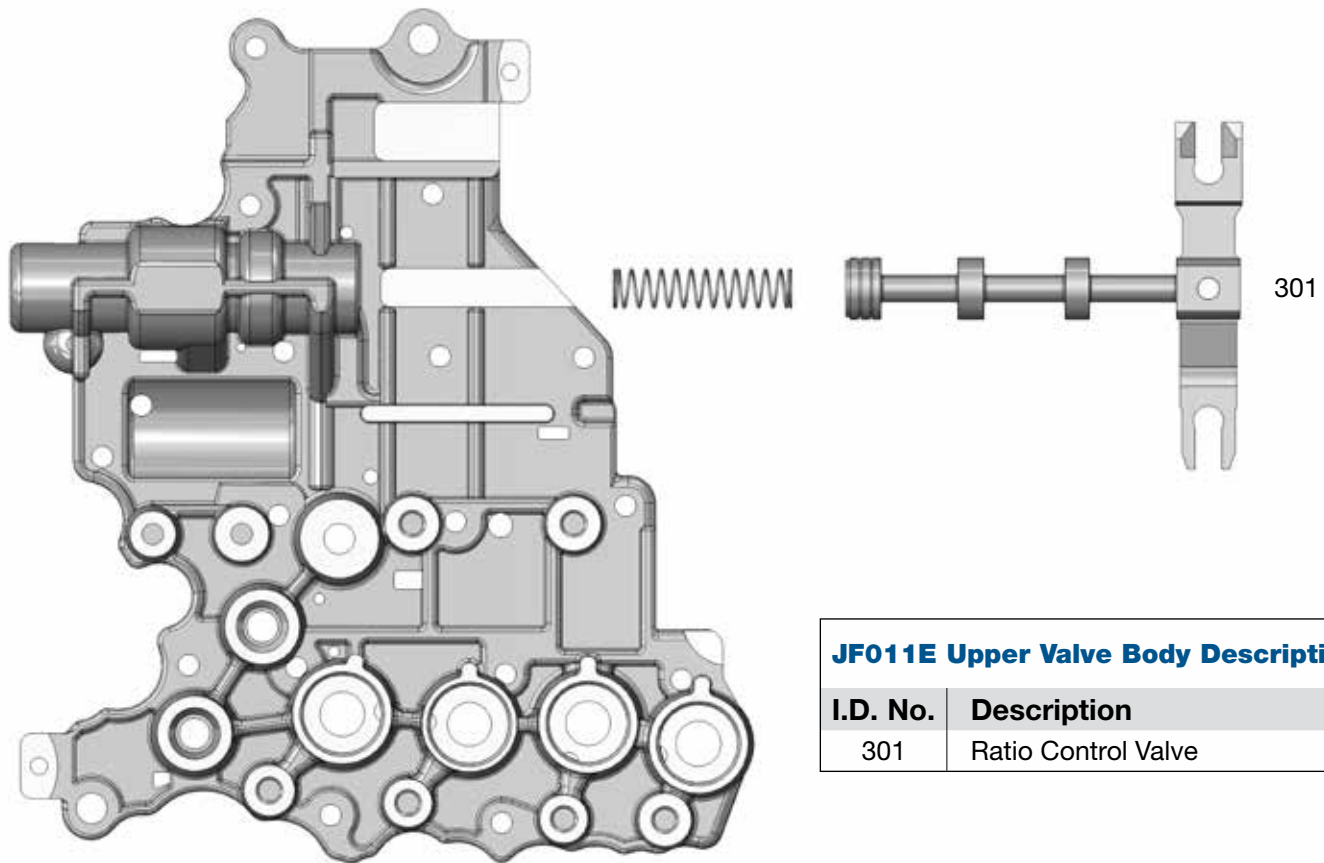


#### JF011E Middle Valve Body Descriptions

I.D. No.	Description
201	Secondary Pulley Control Valve
202	Clutch Reducing Regulator Valve
203	Lockup Control Valve
204	Select Switch Valve
205	Select Control Valve
206	Solenoid Regulator Valve

## OE Exploded View

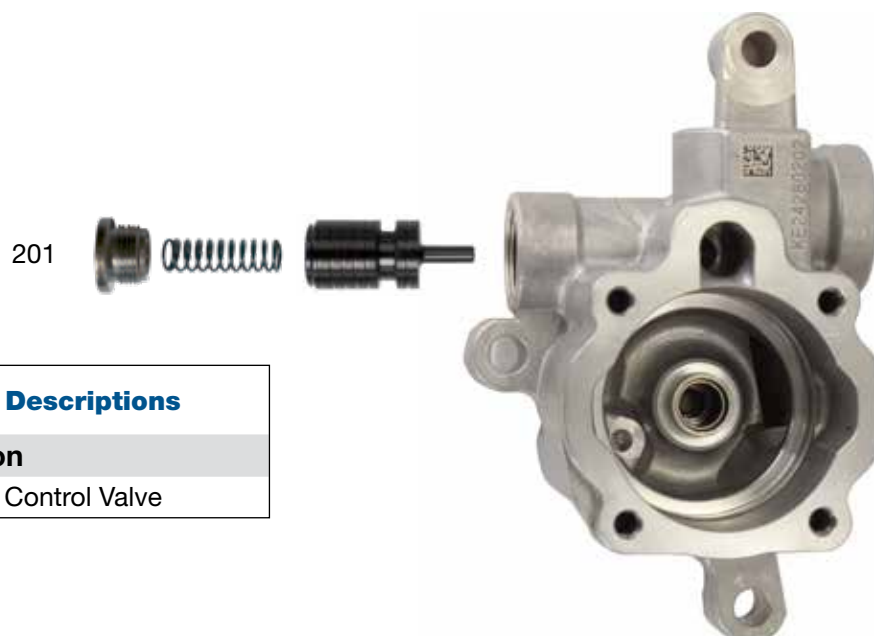
### Upper Valve Body



#### JF011E Upper Valve Body Descriptions

I.D. No.	Description
301	Ratio Control Valve

### Pump Body



#### JF011E Pump Body Descriptions

I.D. No.	Description
201	Pump Flow Control Valve