

## Critical Wear Areas & Vacuum Test Locations

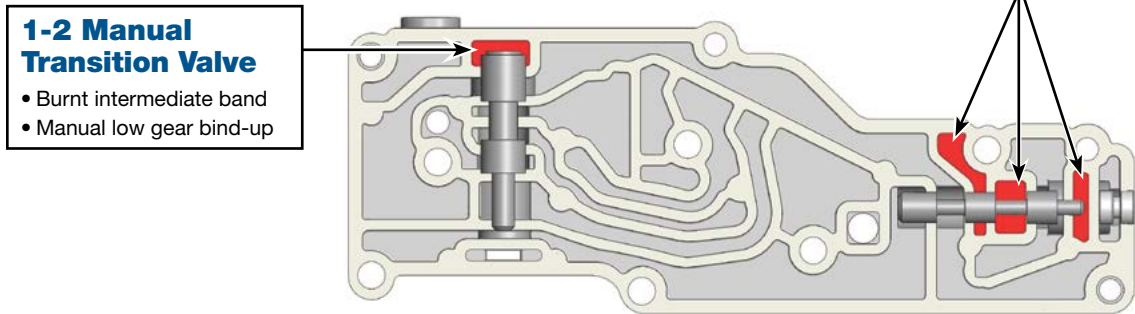
**NOTE:** OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts noted for replacement.

### Lower Control Body • 4R100 Non-PTO Shown

**NOTE:** Worm tracks and test locations same for '96-'98 E40D.

Worm tracks and test locations different for '89-'95 E40D.

Worm tracks slightly different for PTO 4R100, test locations are the same.

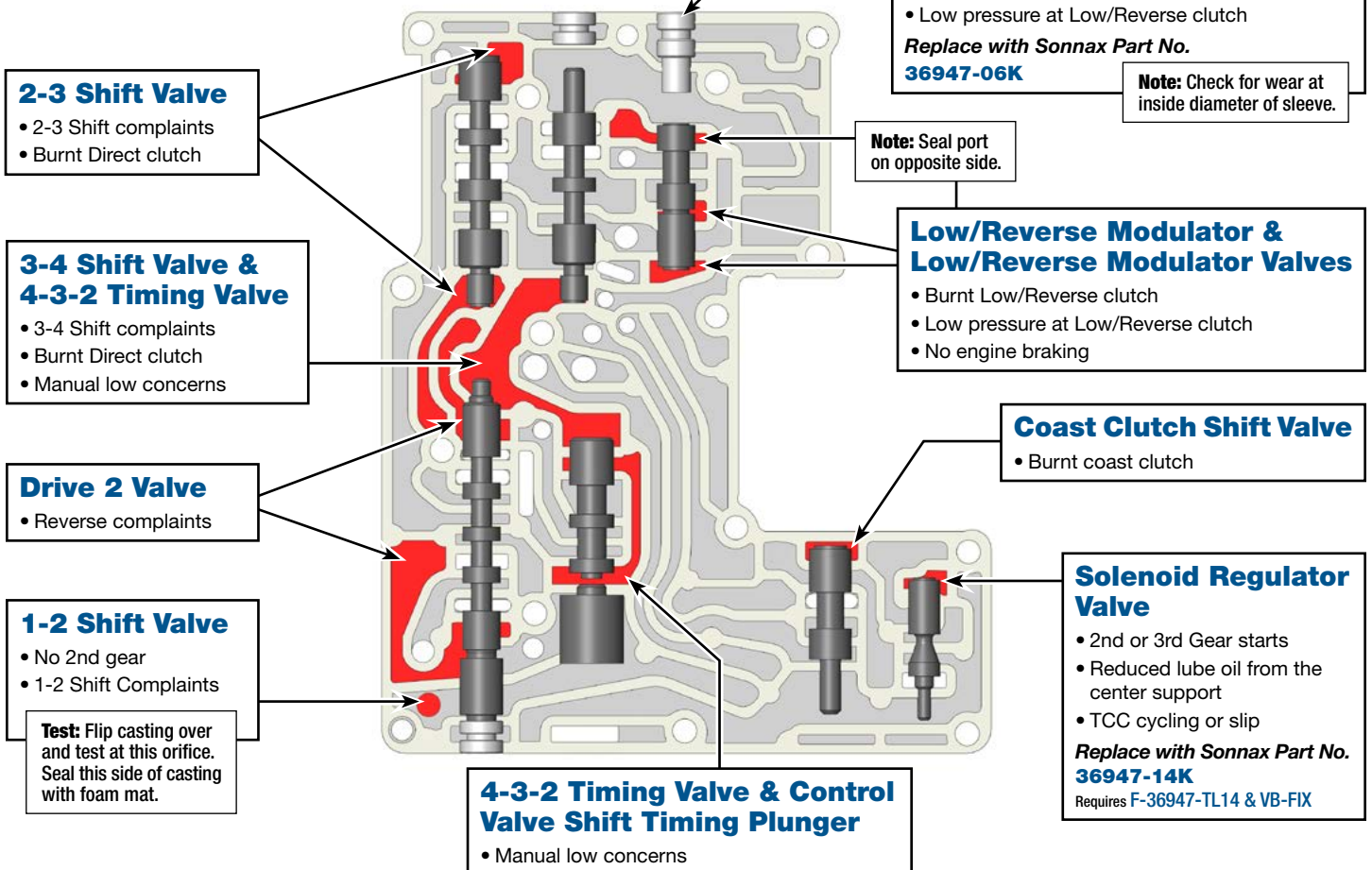


### Upper Control Body • 4R100 Non-PTO Shown

**NOTE:** Worm tracks and test locations same for '96-'98 E40D.

Worm tracks and test locations different for '89-'95 E40D.

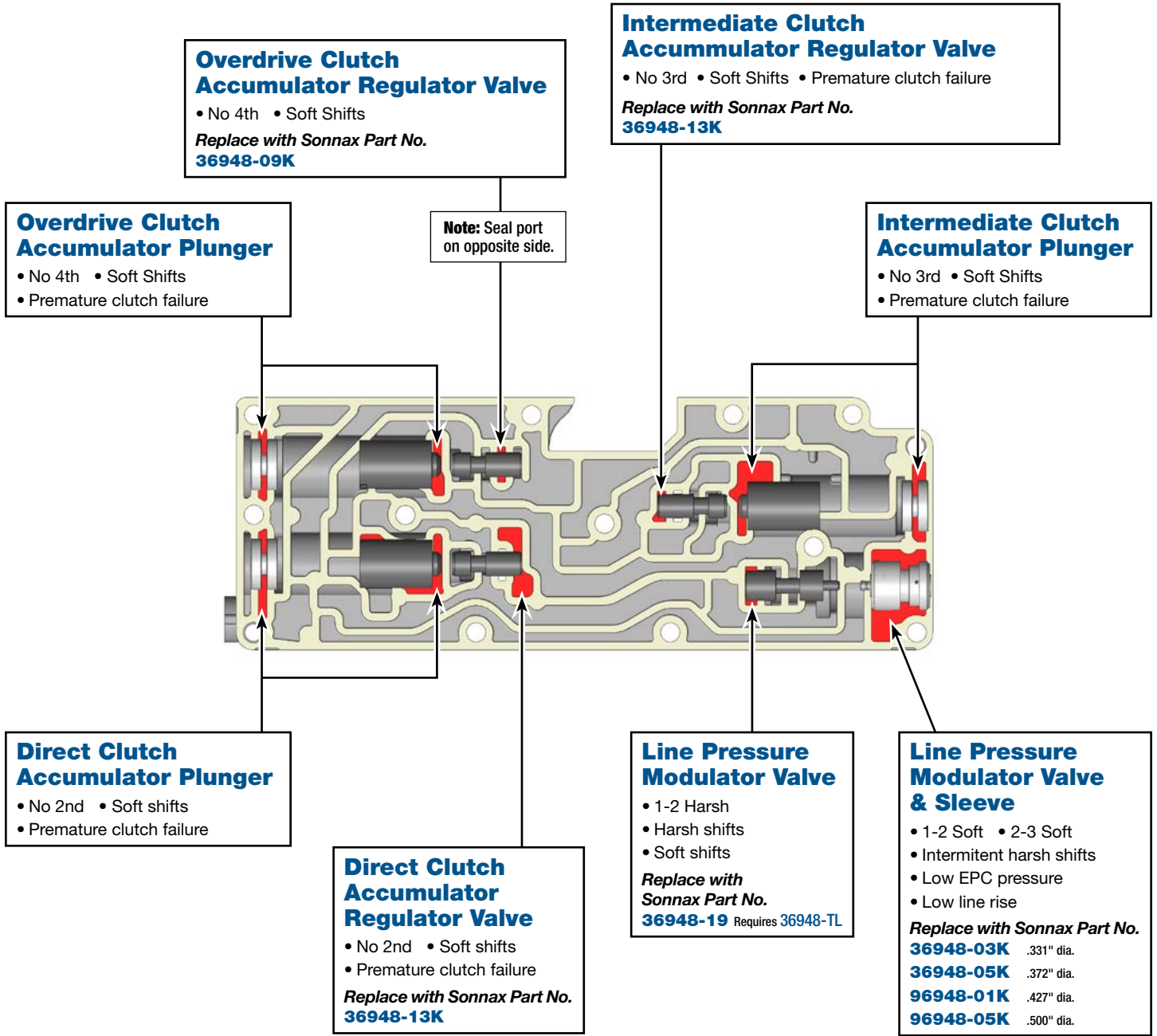
Worm tracks slightly different for PTO 4R100, test locations are the same.





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

**Accumulator Control Body • 4R100 Non-PTO Shown**



# 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).

## Pump Body • E40D Shown

**NOTE:** Test ports on 4R100 slightly different.

### Main Regulator Valve

- Code 62, 628, 1744
- Engine stall or engagement in Reverse
- Engine stumble on engagement in Reverse
- High line pressure
- Overheated converter

**Replace with Sonnax Part Nos.**

**36424-04K** Line-to-Lube Pressure Regulator Valve

**36424-16K** Oversized Line-to-Lube Pressure Regulator Valve Kit  
Requires F-36424-TL16C & VB-FIX

### Main Regulator Valve & Sleeve

- Delayed Reverse
- Low line rise
- Soft shifts

**Replace with Sonnax Part Nos.**

**36424-01K** Boost Valve Kit (with O-rings)

**36424-03K** Boost Valve Kit (without O-rings)

**Note:** Test ports on opposite side while sealing this side against foam pad.

**Note:** 4R100 has air bleed here that will need to be sealed.

**NOTE:** 4R100 Port is different. Must seal indicated air bleed when testing these ports.

**Note:** Seal holes on opposite side.

### Converter Regulator Valve

- Excess converter pressure
- Internal converter damage
- Low converter & converter clutch apply pressure

**Replace with Sonnax Part Nos.**

**36424-11K** Oversized Converter Regulator Valve Kit  
Requires F-36424-TL11C & VB-FIX

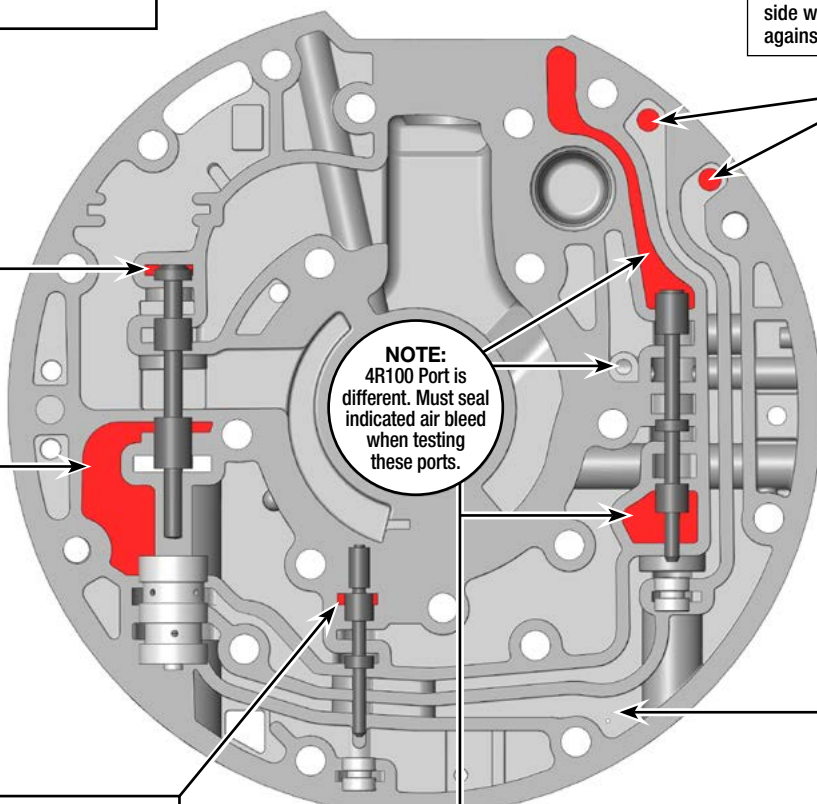
### Converter Clutch Control Valve

- No lockup
- TCC always applied
- Lockup shudder
- TCC cycling

**Replace with Sonnax Part Nos.**

**36424-08K** TCC Control Plunger Valve Kit (4R100 PWM Only)

**36424-15K** Oversized TCC Control Valve (4R100 PWM Only)  
Requires F-36424-TL15C & VB-FIX

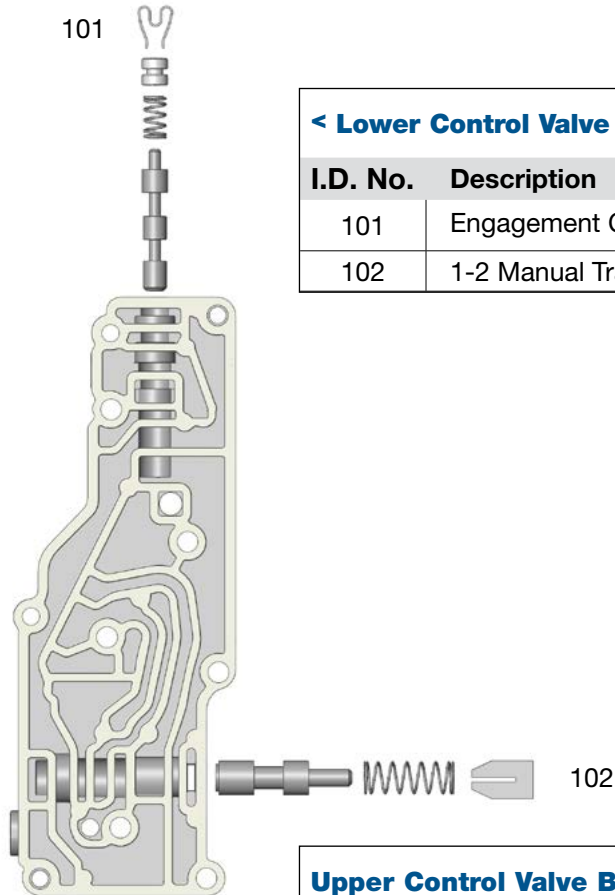


## OE Exploded View

### Lower Control Body

#### 4R100 Non - PTO Shown

NOTE: E4OD is the same.



**< Lower Control Valve Body Descriptions**

I.D. No.	Description
101	Engagement Control Valve
102	1-2 Manual Transition Valve

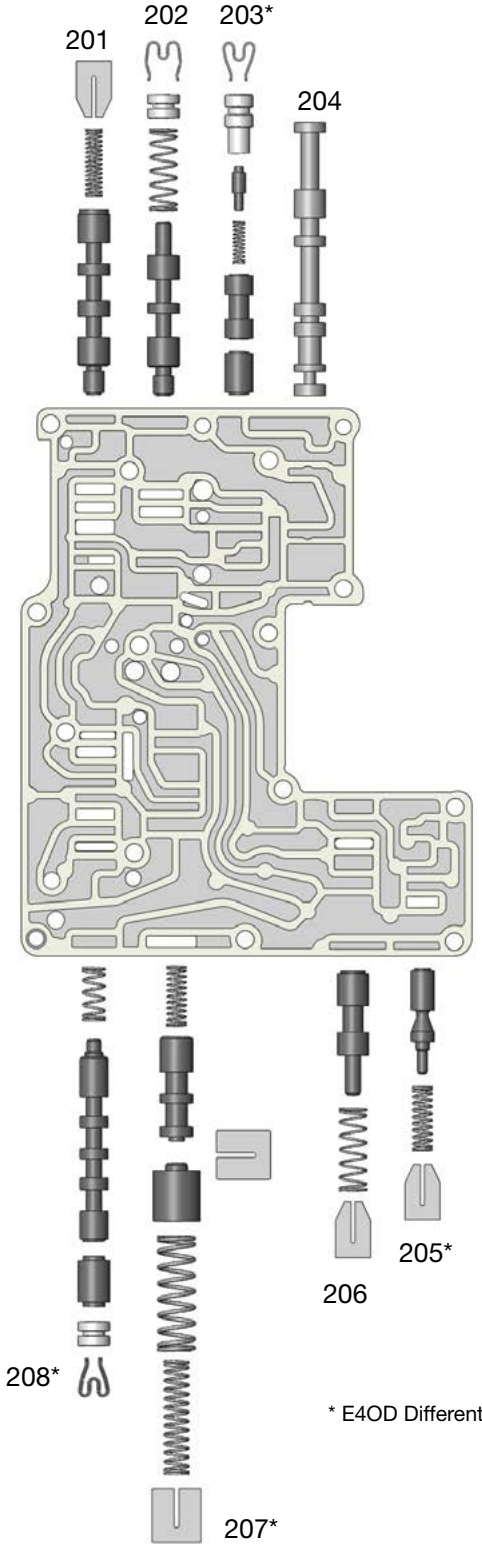
**Upper Control Valve Body Descriptions >**

I.D. No.	Description
201	2-3 Shift Valve
202	3-4 Shift Valve
203*	Low/Reverse Modulator Valve (Inboard)
	Low/Reverse Modulator Valve (Center)
	Low/Reverse Modulator Valve Plunger & Sleeve (Outboard)
204	Manual Control Valve
205*	Solenoid Regulator Valve
206	Coast Clutch Shift Valve
207*	4-3-2 Timing Valve (Inboard)
	Control Valve Shift Timing Plunger (Outboard)
208*	Drive 2 Valve (Inboard)
	1-2 Shift Valve (Outboard)

### Upper Control Body

#### 4R100 Non - PTO Shown

NOTE: E4OD Worm tracks and valves vary slightly.



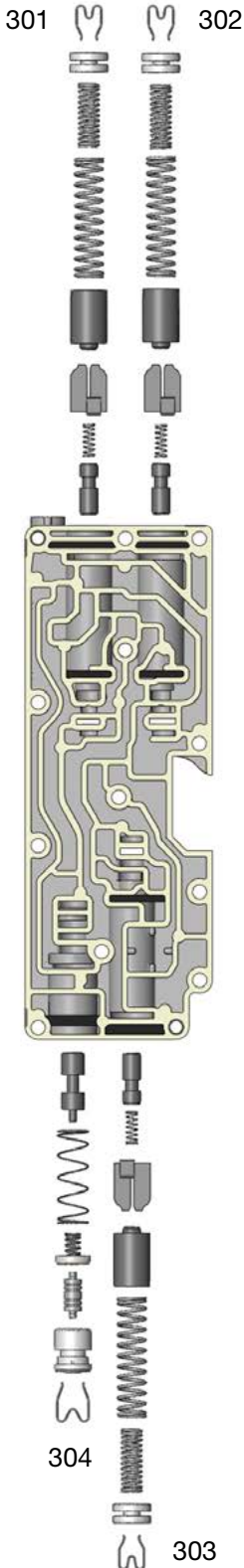
\* E4OD Different



# OE Exploded View

## Accumulator Control Body 4R100 Non - PTO Shown

## Pump Body E40D Pump Body Shown



**< Accumulator Control Body Descriptions**

I.D. No.	Description
301	Direct Clutch Accumulator Regulator Valve (Inboard)
	Direct Clutch Accumulator Plunger (Outboard)
302	Overdrive Clutch Accumulator Regulator Valve (Inboard)
	Overdrive Clutch Accumulator Plunger (Outboard)
303	Intermediate Clutch Accumulator Regulator Valve (Inboard)
	Intermediate Clutch Accumulator Plunger (Outboard)
304	Line Pressure Modulator Valve (Inboard)
	Line Pressure Modulator Plunger Valve & Sleeve (Outboard)

**Pump Body Descriptions >**

I.D. No.	Description
401	Main Regulator Valve (Inboard)
	Main Regulator Valve & Sleeve (Outboard)
402	Converter Regulator Valve
403A	E4OD Converter Clutch Control Valve
403B	4R100 Non-PWM Converter Clutch Control Valve
403C	4R100 PWM Converter Clutch Control Valve (Inboard)
	Converter Clutch Control Plunger Valve & Sleeve (Outboard)

