

U140E, U140F, U240E, U241E Remanufactured Valve Body

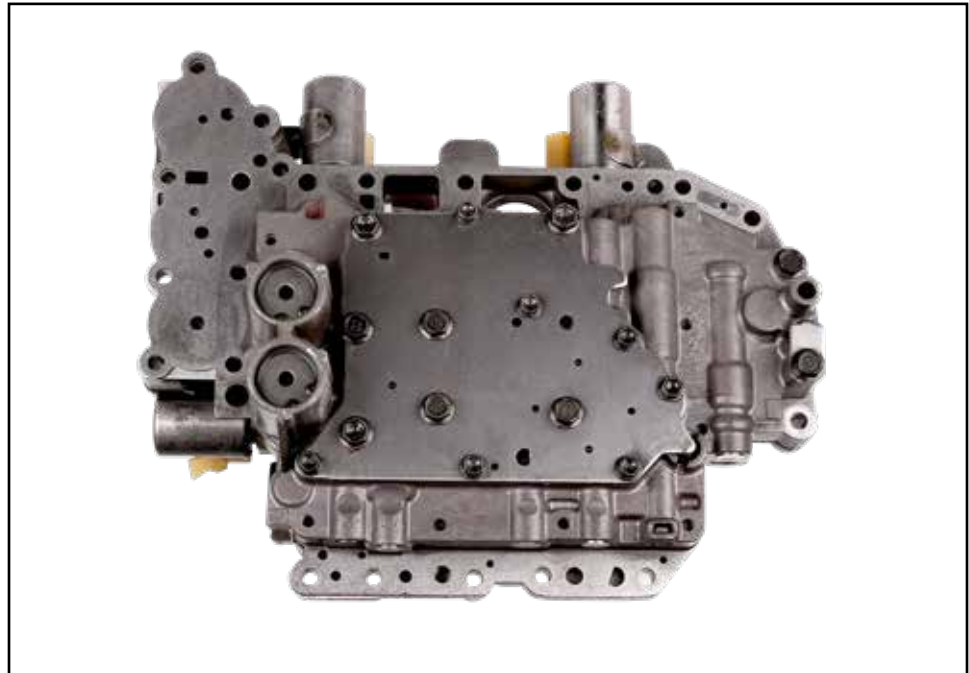
Part Nos.

TOY171

'99-'05 without Central Lube Feed

TOY172

'99-'05 with Central Lube Feed



Valve Body Installation Tips

1. Verify Case Accumulator Pistons & Springs are Installed Correctly

Common spring colors:

- C1 (Closest to bell housing) = Red
- C3 (Middle) = White
- B3 (Rear) = Inner Green / Outer Blue

2. Air Check

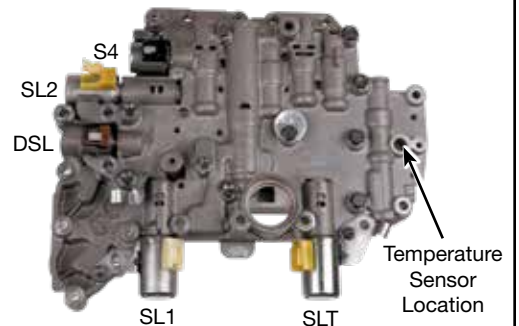
While valve body is out, air-check indicated circuits (**Figure 2**) using low, regulated air pressure. This will help you discover any issues prior to installing the remanufactured valve body.

3. Install Valve Body onto Case

- Install drainback checkball and spring into case, spring first (**Figure 2**).
- Verify B1 and B2 apply seals are in the case locations.
- Align slot in manual valve with manual linkage.
- Assemble valve body on case and torque bolts to 11 Nm or 8 ft-lb.
- Connect wire harness to solenoids and install temperature sensor (**Figure 1**). Assemble bracket into temperature sensor slot and torque bolt to 6.6 Nm or 58 in-lb.
- Install filter and three retaining bolts and torque to 11 Nm or 8 ft-lb.
- Assemble pan gasket and pan onto transmission case and torque bolts to 7.8 Nm or 69 in-lb.

U140 Solenoid ID

Figure 1



Common Internal Wire Colors

Solenoid	Color
SLT	Green & Orange
SL1	White & Black
DSL	Green
SL2	Brown & Yellow
S4	Red

Valve Body Installation Tips (continued)

4. Fluid Fill & Road Test

- Fill transmission with Toyota WS transmission fluid to factory spec.
- Let engine run to warm transmission fluid to approximately 175°.
- Install scan tool to verify transmission fluid temp is achieved.

NOTE: This function must be done with a capable scan tool.
- Reset transmission memory with capable scan tool. (Battery disconnect will not reset.)
- Road test vehicle performing 10–15 upshift and downshift cycles through all four speeds.

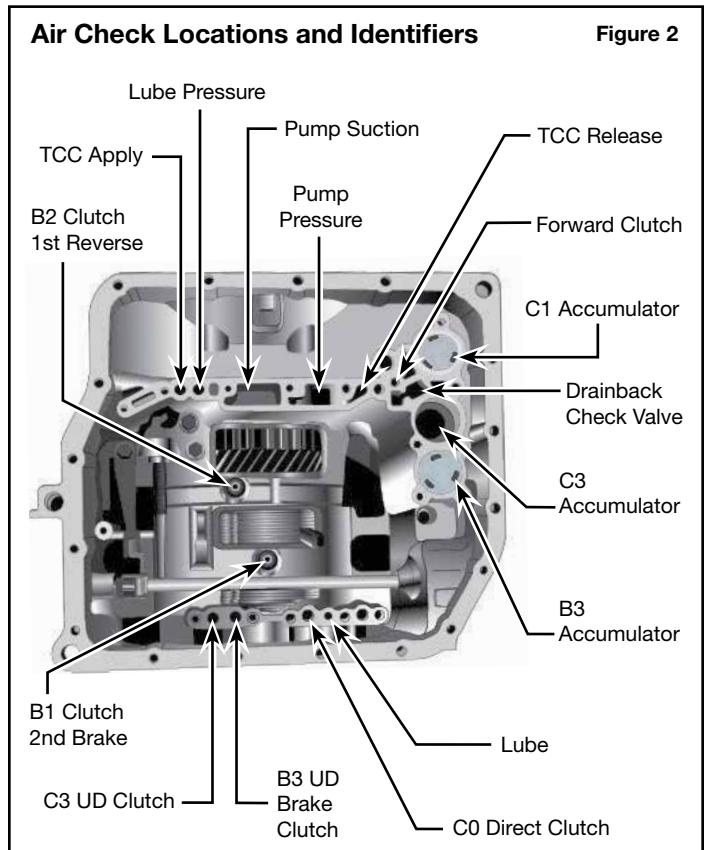
NOTE: A small 2-3 upshift flare or overlap issue, clunk into 4th Gear and a 3-2 downshift clunk is common during adaptive relearn. This condition will typically resolve itself within the 10–15 shift cycles after reset is performed.

Transmission Diagnostic Tips

This remanufactured valve body has been through a rigorous inspection and rebuild process, then a comprehensive, functional hydraulic and electronic test to ensure it meets OE performance and quality. It is designed to eliminate many pressure-, shift- and converter-related complaints, but will not correct complaints that stem from other areas of the transmission.

The following are common areas of failure or root causes for symptoms that could be attributed to valve body issues that should also be examined or addressed during your transmission build. A brake and clutch application chart (**Figure 3**) is below for additional aid in diagnosing problems.

- 2-3 Upshift flare and or binding can be caused by sealing ring problems in the rear cover. This can cause premature C2 clutch failure.
 - A bind-up during 2-3 upshift can be caused by bad speed sensors.
- Shift quality complaints can also be caused by:
- Clutch and brake clearance issues



- Low battery voltage and poor battery grounds
- Bushing/bearing failure and overheat can be caused by case bearings turning, evidenced by bits of aluminum debris in ATF.



NOTE: The case bearing has been known to spin out on high mileage units, causing fine metal to build up which can hang up solenoids and valve trains in the valve body.

U140E, U140F, U240E, U241E Clutch & Brake Application Chart

Figure 3

Gear Range	FWD Clutch C1	REV Input Clutch C2	U/D Clutch C3	2nd Brake B1	L/R Brake B2	U/D Brake B3	No. 1 One-Way Clutch F1	No. 2 One-Way Clutch F2
Park						ON		
Reverse		ON			ON	ON		
Neutral						ON		
D-1 st Gear	ON					ON	ON	ON
D-2 nd Gear	ON			ON		ON		ON
D-3 rd Gear	ON					ON		ON
D-4 th Gear	ON		ON					