



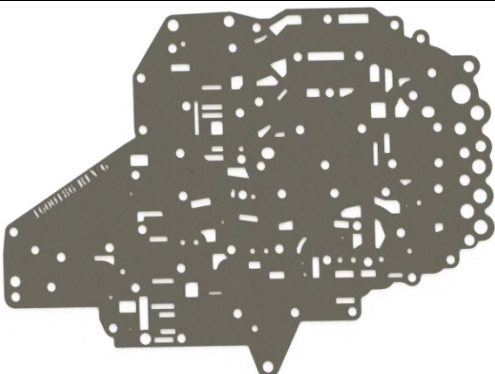
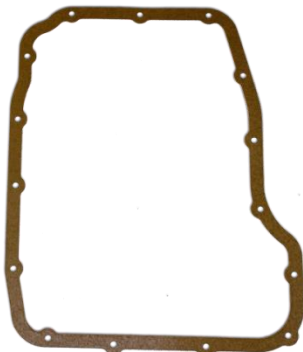
68 RFE VALVE BODY UPGRADE

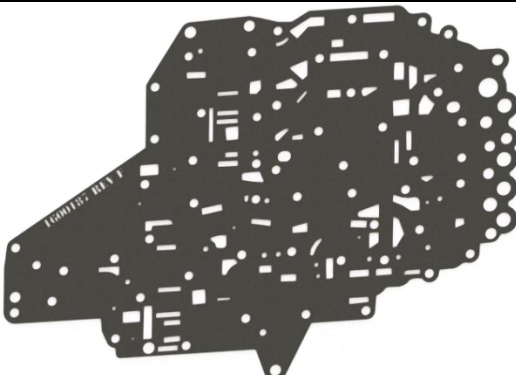
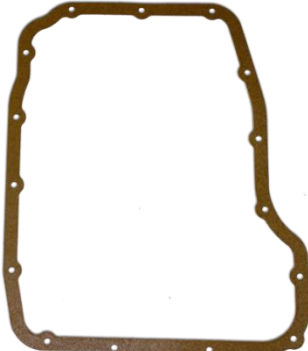
Part #:	1030360	2007-11 (Early Model)
Part #:	1030361	2010-12 (Late Model)

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

K I T C O N T E N T S :

Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly of your truck.

Kit Contents for 1030360			
1030369	4799778	1600186	1601523
			
68 RFE Pressure Controller	Clutch Feed Seal	Valve Body Plate	Gasket
Qty : 1	Qty : 3	Qty : 1	Qty : 1

Kit Contents for 1030361			
1030369	4799778	1600187	1601523
			
68 RFE Pressure Controller	Clutch Feed Seal	Valve Body Plate	Gasket
Qty : 1	Qty : 3	Qty : 1	Qty : 1

Tools Required

- Drain Pan
- Transmission Funnel
- 8mm Socket
- T25 Torx Socket
- Torque Wrench (in/lbs)
- Drill
- 1/8" Drill Bit
- Brake Clean or Parts Cleaner
- Center Punch
- Scraper

BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

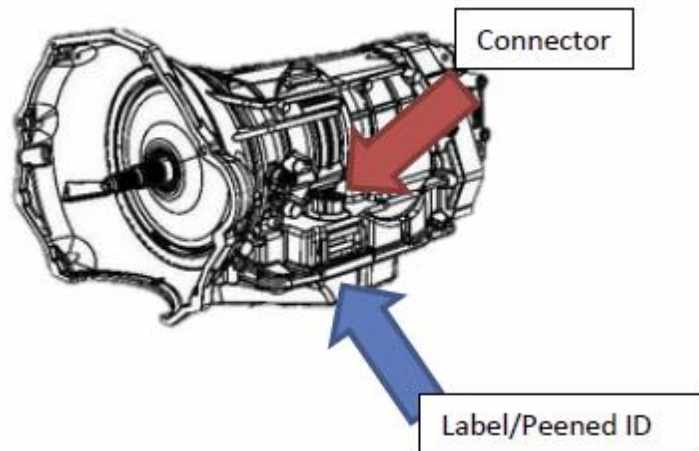
Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bd-power.com

Upgrade Options

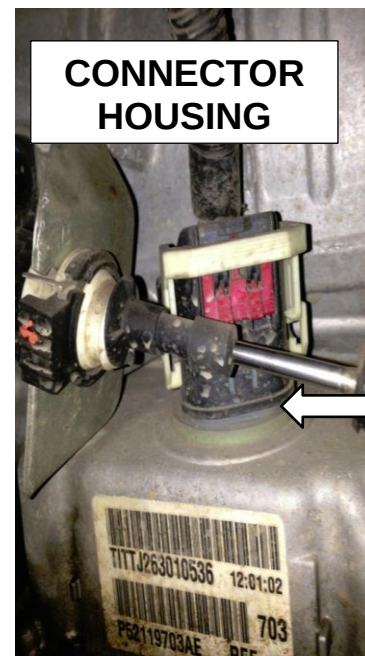
1030240	Torque Converter
1061525	6.7L HD Transmission Pan
1041220	6.7L Cummins Flex Plate
1061529	Adapter Tool – 68 RFE

Valve Body Plate Verification

Before proceeding, you will need to visually inspect your transmission to verify the correct plate has been ordered.



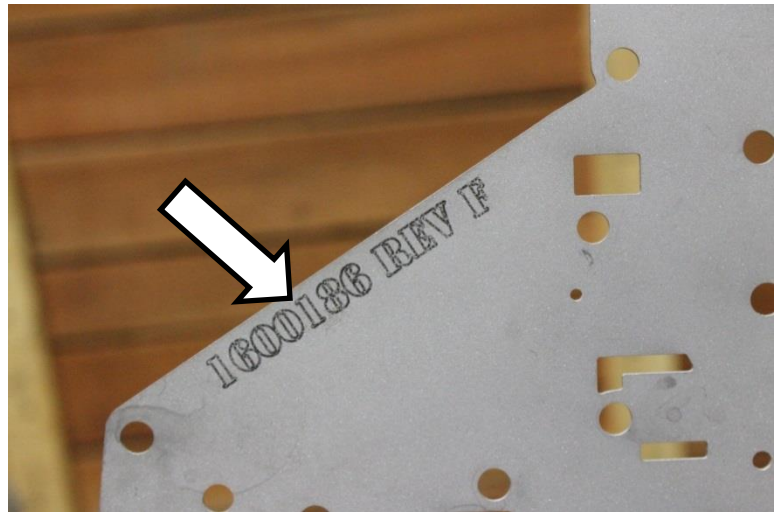
The transmission main electrical connector is located on the driver's side of the transmission. The color of the connector protruding from the transmission will be white or grey and will determine the application.



White Connector = Early Model
(Plate 1600186)

Grey Connector = Late Model
(Plate 1600187)

The part number is etched into the plate supplied in the kit.



Another method to check the model year is by the label or peened number on the side of the case. These numbers can also be found on the driver's side of the transmission right below the main connector.

The two letters will indicate an early or late model.

AA	Early Model
AB	Early Model
AC	Early Model
AD	Early Model
AE	Late Model
AF	Late Model



BD Transmission Part Numbers:

Early Model Year	Late Model Year	Application Notes
1064242	1064252	2WD 68rfe Transmission
1064244	1064254	4WD 68rfe Transmission
1030360	1030361	68rfe Valve Body/Module Upgrade

BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

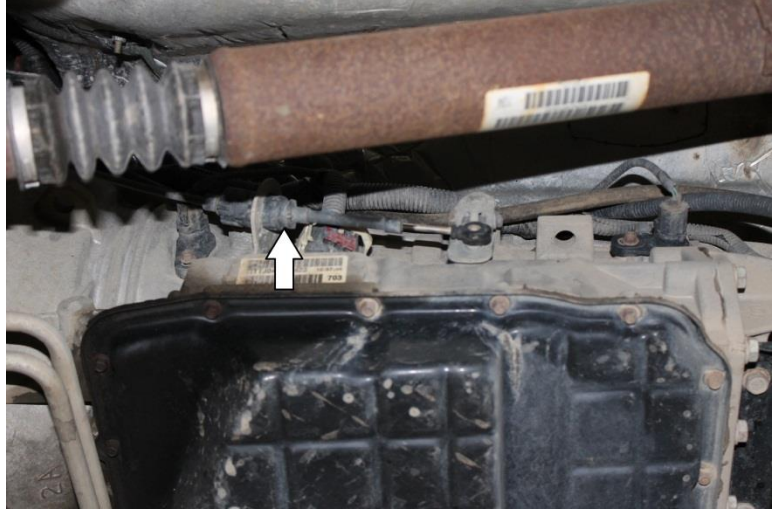
U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bd-power.com

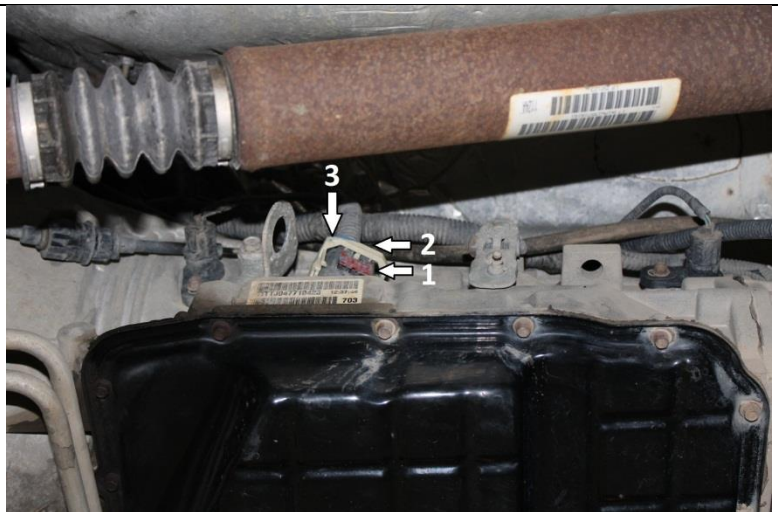
Valve Body Installation

1. Disconnect vehicle batteries and secure cables away from batteries.
2. Lift transmission dip stick approx. 6 inches to avoid interference later on.
3. Raise vehicle on vehicle lift. If using a jack, use safety stands and chock wheels.

4. Remove shifter cable from transmission for better access to the main electrical connector.



5. To remove connector, push red tab (1) downwards. Then, press the black tab (2) which will allow the white handle (3) to be rotated downwards, releasing the connector from the transmission.



6. Position drain pan below the transmission.

7. Remove 14 of the 15 transmission pan bolts (8mm). Loosen the remaining bolt but leave in place to keep the pan from falling. The transmission cooler lines may need to be moved to access some of the bolts, gently pry them out of the way.



BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bd-power.com

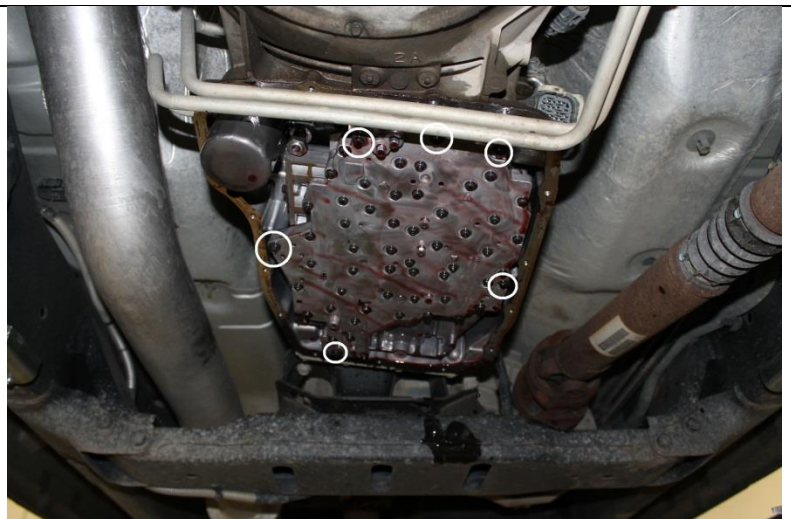
8. Tap pan with a mallet to break the silicone gasket seal. Allow fluid to drain. Remove last screw and drain remainder of fluid.



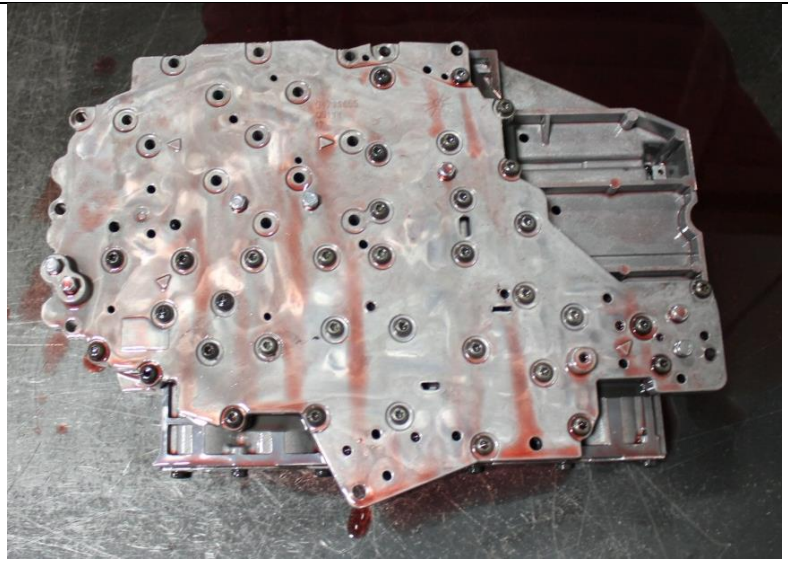
9. Remove transmission filter by removing the one T25 Torx screw.



10. Remove the six 8mm bolts securing the valve body to the transmission. Drain valve body of fluid. To remove valve body from transmission, wiggle it while pulling downwards to work the electrical connector through the case.

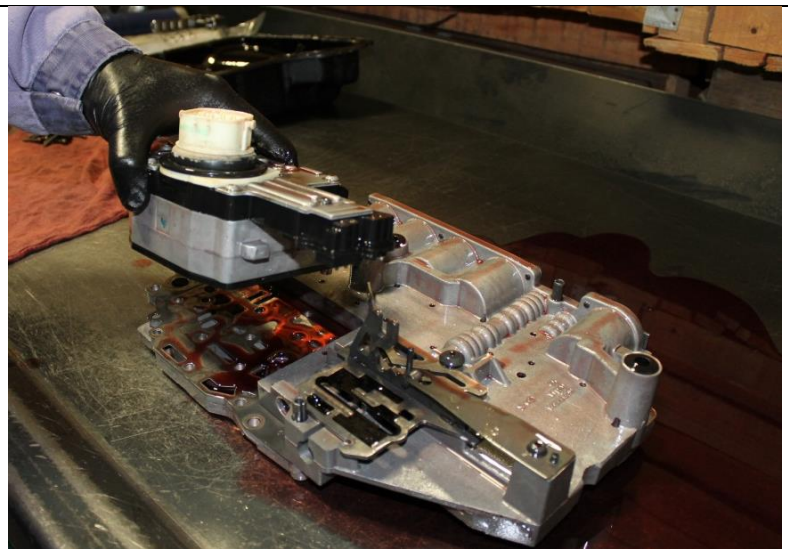


11. Place the valve body on a clean work surface.



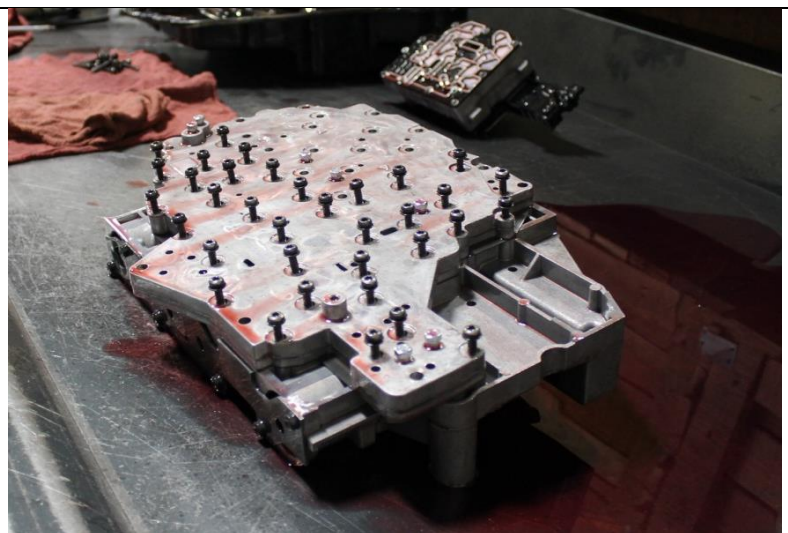
12. Remove fifteen T25 Torx screws securing the solenoid pack to the valve body, remove solenoid pack and place it to the side.

Note: All bolts are the same length.

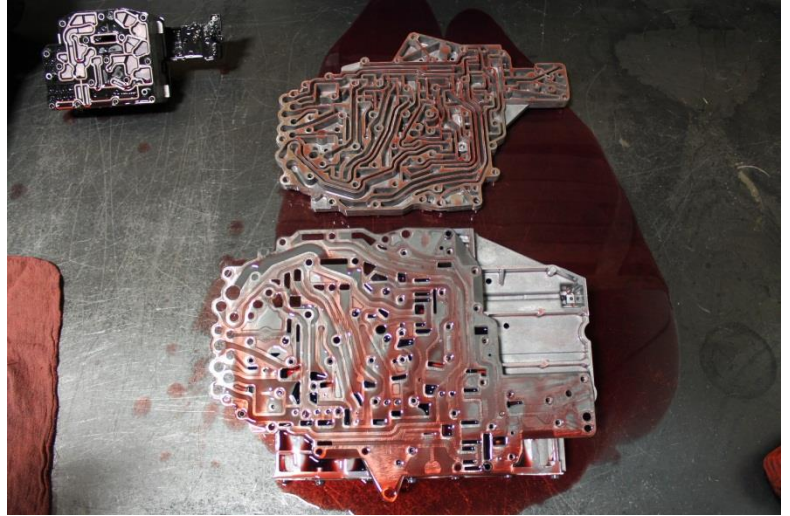


13. Remove remaining thirty five T25 Torx screws securing the valve body halves.

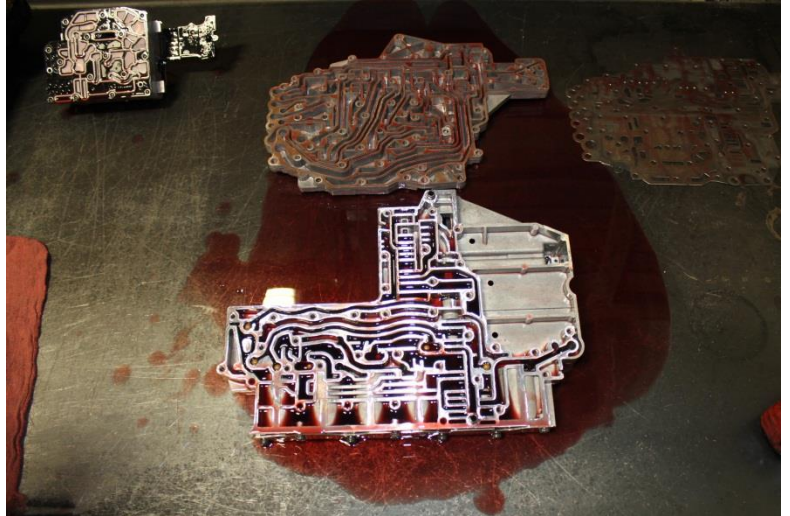
Note: All bolts are the same length.



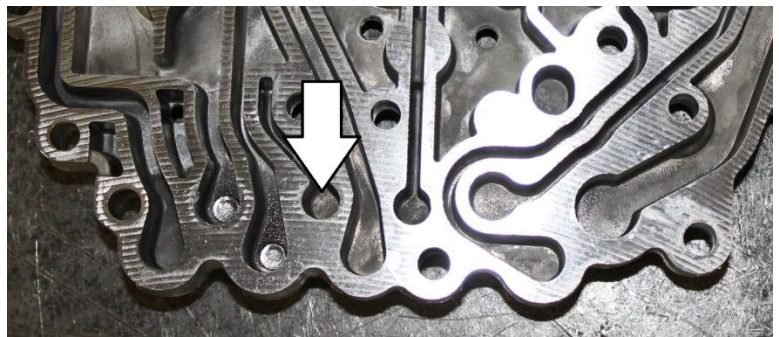
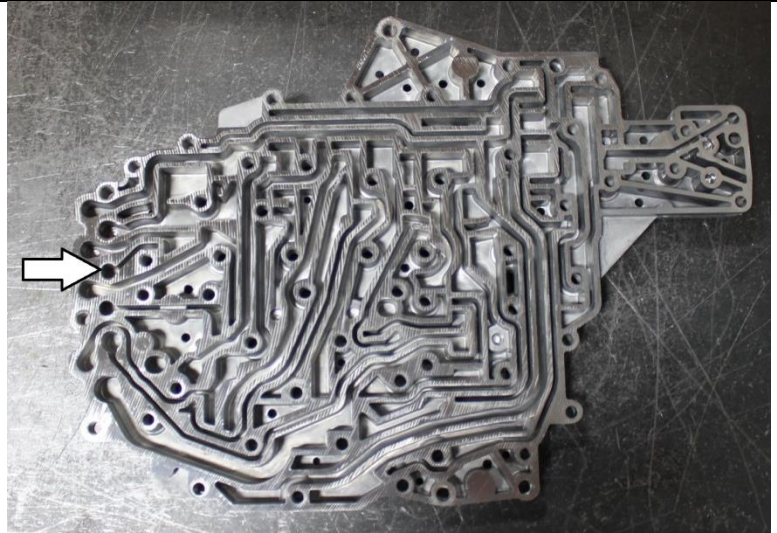
14. Carefully separate the two halves of the valve body. Separate as shown in pictures – *do not invert the larger (top) portion as it contains plastic check balls*. The two halves will have to be wiggled apart as the alignment dowels will be holding them together.



15. Remove old separator plate.



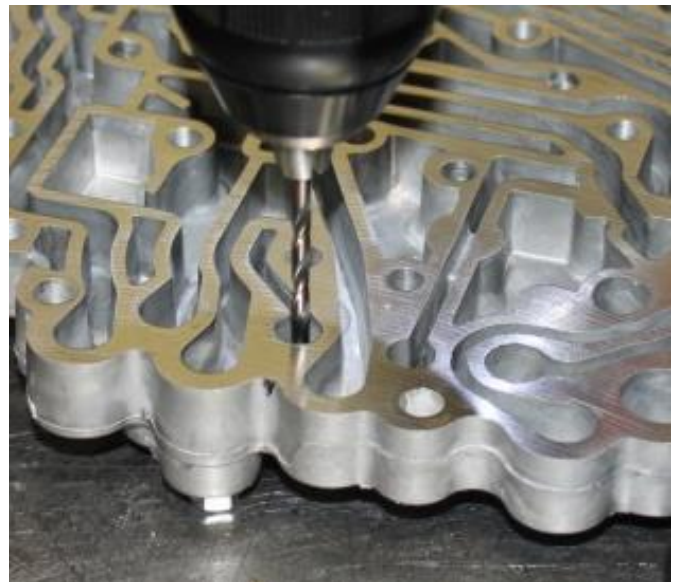
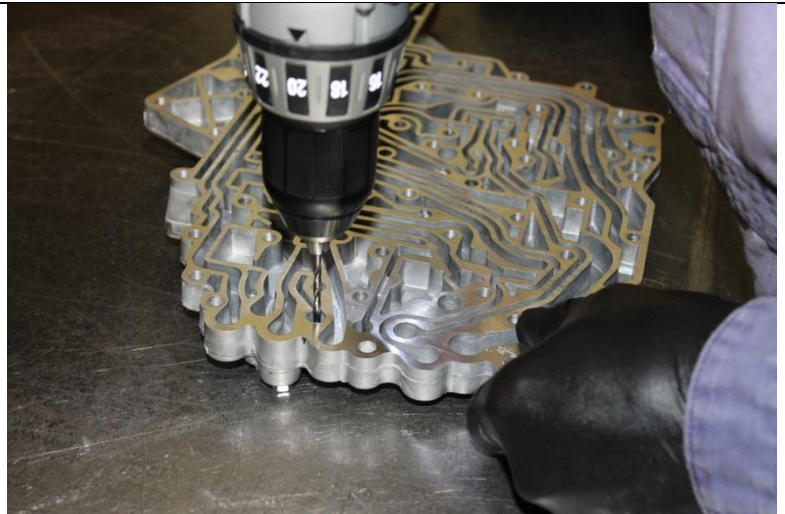
16. Thoroughly clean the bottom (smaller) half of the valve body. Locate the passage to be drilled.



17. Punch center of hole using a center punch.



18. Drill hole with 1/8" drill bit.

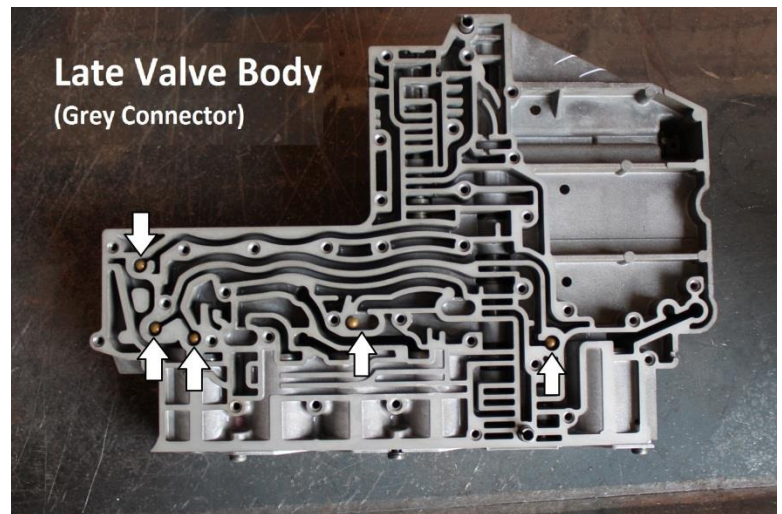
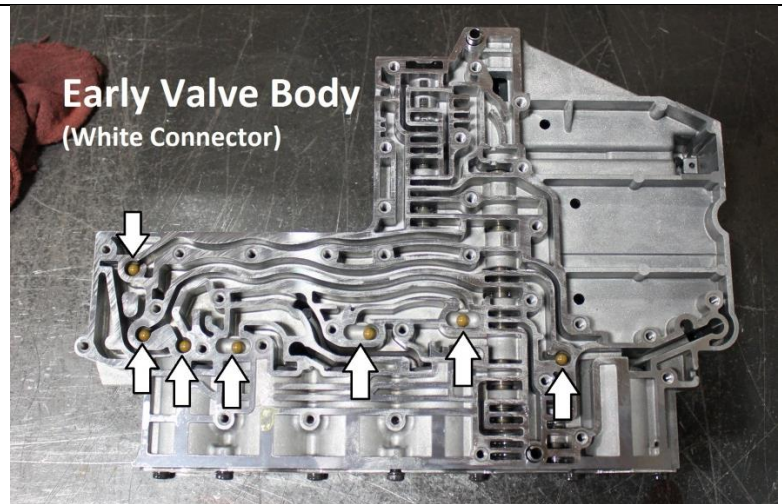


19. Thoroughly remove any burrs and clean all shavings from the valve body. It is imperative that no contaminants are left as they may cause transmission damage.

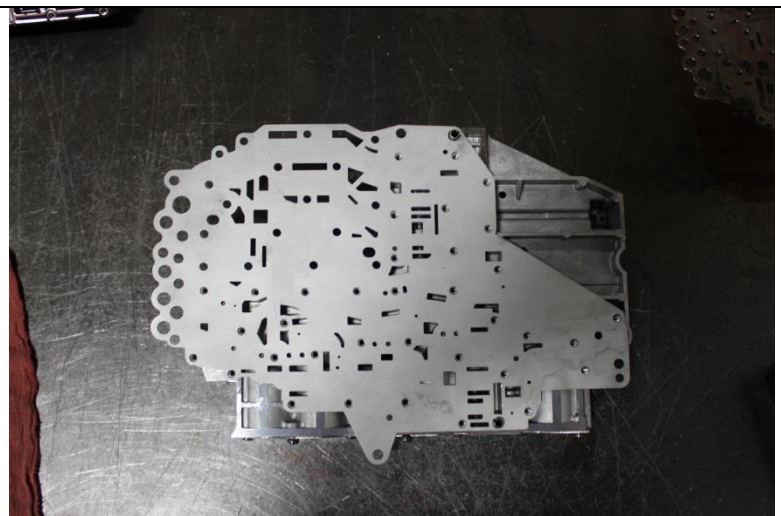


20. Ensure that all the check balls are still in the correct locations in the upper half of the valve body. Early model valve bodies (identified by white electrical connector on solenoid pack) have seven balls. Late models (gray connector) only have five.

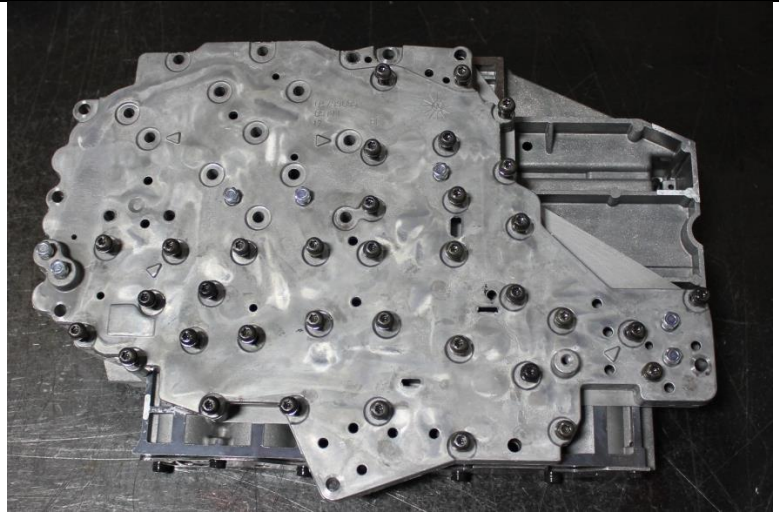
If this part has been contaminated in any way, it must be thoroughly cleaned before reassembly.



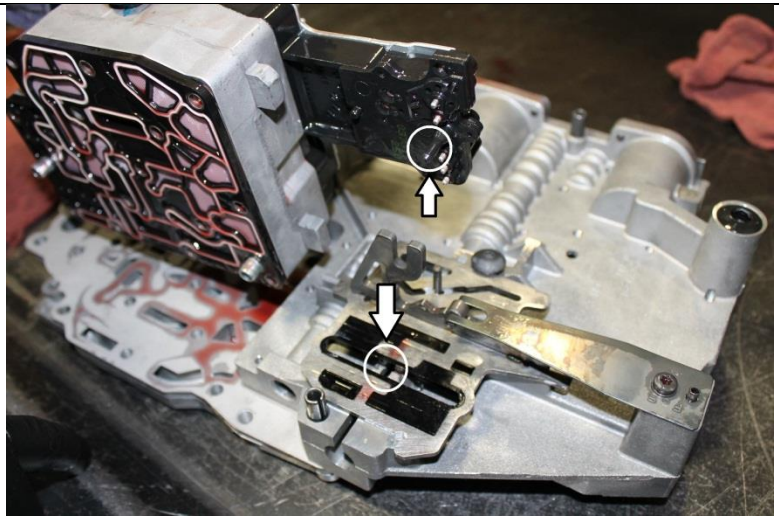
21. Install BD separator plate. Ensure it fits flat on the valve body.



22. Re-install bottom (smaller) half of valve body. Ensure it fits flat on the separator plate. It may need to be worked downwards while rocking to be installed over the dowels. Install attaching screws so they are fully seated but do not tighten until the solenoid pack has been installed.

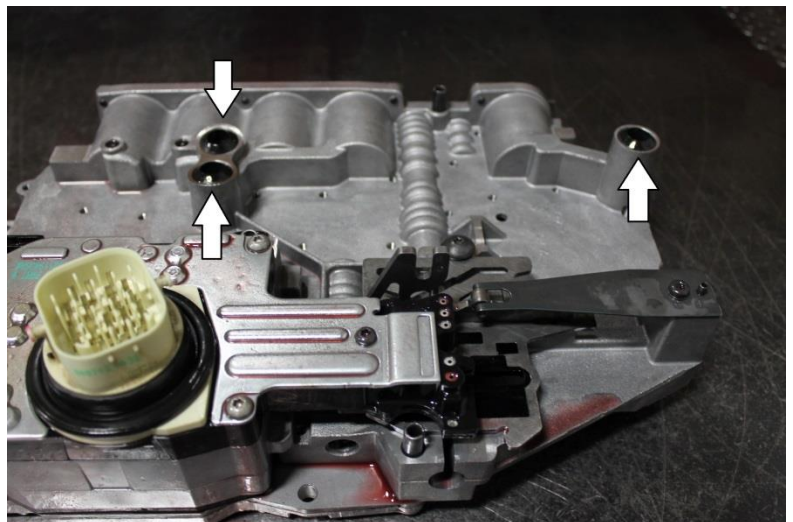


23. Re-install solenoid pack onto valve body. Be sure to properly align the pin on the solenoid pack with the slot on the valve body. Due to the alignment dowels, the valve body may need to be wiggled down into position. Install solenoid pack attaching screws. Install remaining Torx screws to fasten the solenoid pack to the valve body.



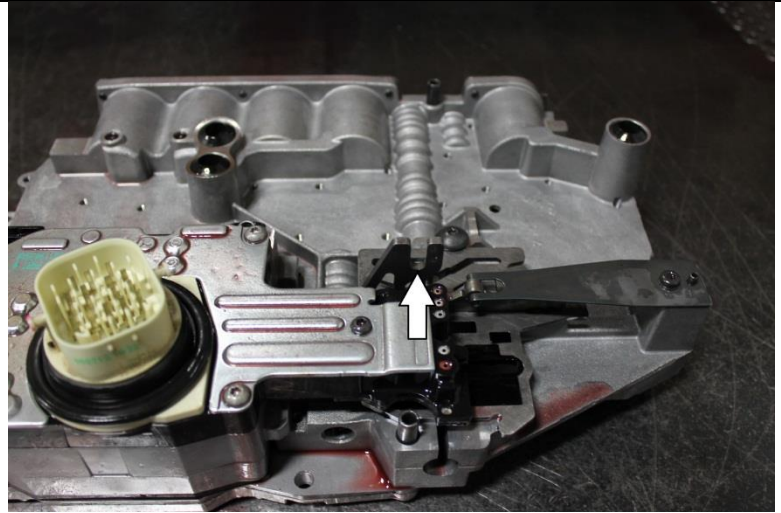
24. Torque all valve body Torx screws to 55 in-lbs, working from the center outwards. Carefully check that no screws were missed.

25. Inspect the three rubber seals on the top of the valve body, replace with supplied seals if they are nicked or otherwise damaged. Ensure the seal mating surface on the transmission is clean.



26. Wipe clean the bore on the transmission case around the electrical connector. Scrape all old silicone gasket material (if any) from the oil pan mating surfaces.

27. Check that the shift lever on the valve body lines up with the shift lever on the transmission and lift the valve body back into the transmission. Start the 8mm screws by hand, do not tighten yet. Work the shift lever on the outside of the transmission case by hand to ensure that the lever is making contact with the valve body correctly.



28. Torque the valve body attaching bolts to 105 in/lbs.



29. If desired, install new filter(s). Otherwise, reinstall the filter/pickup assembly. Torque to 55 in/lbs.



30. Place the supplied gasket on the transmission pan. Hold pan below transmission and install attaching screws. Torque the pan screws to 84 in/lbs.



31. Apply dielectric grease (supplied in pressure enhancer kit) to main electrical connector and reattach connector. Reattach shifter cable to shift lever.

32. Lower vehicle.

33. Reconnect vehicle batteries.

34. Fill transmission fluid until COLD line is met. Start and run vehicle. Move shifter through different gears twice to fill valve body. Check for leaks. Check fluid level again. Top up as required.

35. Road test. Run through upshifts several times at light throttle to ensure transmission is shifting correctly. Shifts will feel firmer with increased throttle.

36. Recheck fluid level.

BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bd-power.com

ADAPTER KIT BD# 1061529

37. Note. If you would like to verify the increases in line pressure, use adapter kit (BD 1061529) in conjunction with a 300psi gauge. Readings will be between 50-250psi depending on throttle and driving conditions.



Use this kit with a 300 psi gauge.

38. To complete this installation you will need to install the 1030369 68 RFE Pressure Control module please reference the installation manual included in the kit. ***NOTE: The orange key will need to be inserted into the module.***