



BD Power VALVE BODY

For GMC/Chevrolet Duramax 6.6L Trucks

Installation Instructions

	1030470	2001-04 Duramax LB7
	1030471	2004-05 Duramax LLY

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

BD Engine Brake, Inc.

Plant Address: Unit A10, 33733 King Rd, Abbotsford, BC, Canada V2S 7M9

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 REMOVAL INSTRUCTIONS

- Remove the drain plug from the transmission oil drain. If the transmission fluid is relatively clean, then drain the fluid into a suitable container for re-use after installation.
- Remove the 12 bolts that fasten the oil pan to the main transmission housing.
- Remove the oil pan and gasket. Check the magnet in the oil pan for excessive or large metallic particles. If there is excessive material present, a transmission overhaul may be necessary.
- Remove the suction seal by pulling straight down when the suction tube is seated in the main housing.
- Remove the suction seal from the filter or from the seal bore in the main housing. Discard the old seal and filter if it is being replaced.
- Release the main electrical connector from the main housing. This allows the internal wiring harness to remain with the valve body as it is being removed. As the valve body is removed, be careful not to lose the manual selector valve pin or allow the manual selector to slide out.
- Remove the 15 bolts that fasten the valve body to the transmission housing. Be ready to support the weight of the valve body as the last bolt is removed.
- Remove the valve body assembly from the dowel pins in the main housing. When the valve body has cleared the dowel pins, move it sideways to disengage the pin in the manual selector valve from the slot in the detent lever.
- Remove the valve body assembly.

VALVE BODY INSTALLATION INSTRUCTIONS

- Remove the BD Duramax Valve Body from the packaging and ensure the manual valve and pin are present (usually in a separate bag at the bottom of the packaging foam).
- Remove the solenoids from the stock valve body and ensure that there is no debris on them. Inspect all seals for any damage.
- Lay the BD Duramax Valve Body onto a clean surface with the pressure control manifold facing upwards.

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- Remove the Trim Solenoid retaining clip and the plastic plugs, making sure not to allow the valves or springs to fall out.
- Re-install the stock solenoids, retaining clips and wiring harness onto the BD Duramax Valve Body. **If you are installing the BD Valve Body for an LLY Duramax, also install the BD G-Solenoid plate.** Torque all bolts to **10 lbs-ft** and inspect all connections prior to installation.
- Align the BD Duramax Valve Body assembly with the dowel pins to the main housing. Ensure that the manual valve pin is installed in the linkage slot.
- Push the main electrical connector harness outward through the hole in the main housing.
- Seat the valve body assembly against the main housing and install one bolt to hold the assembly in place.
- Re-install the remaining 14 bolts that fasten the valve body assembly to the main housing. Tighten the bolts to **7-10 lbs-ft.**
- Ensure that the retaining feet in the connector in the main housing are properly seated.
- Install a new seal on the suction filter tube.
- Remove any gasket material from the main housing and check the flange for scratches to eliminate any chance of split-line leaks.
- Install 2 headless guide bolts (M8 x 1.25) into opposite corners of the oil pan mounting face.
- Install a new pan gasket and align the mounting bolts. Tighten to **18-21 lbs-ft.**
- Re-install the drain plug and sealing washer. Tighten to **22-30 lbs-ft.**
- Replace any lost transmission fluid to recommended levels using **DEXTRON III** transmission fluid.

TIGHTENING SPECS AT A GLANCE

Valve Body Assy. To Main Housing Bolts (x 15)	7-10 lbs-ft.
Valve Body Mounting Bolts (x 12)	18-21 lbs-ft.
Drain plug and sealing washer	22-30 lbs-ft.

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