



BD POWER VALVE BODY

2001-2004 GMC/CHEVY DURAMAX 6.6L (LB7)

INSTALLATION INSTRUCTIONS

P/N# 1030470

Please read the complete instruction manual before beginning installation.

BD Engine Brake, Inc.
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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 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. Torque all bolts to 10 ft-lbs. and inspect all connections prior to install.
- Align the BD Duramax Valve Body assembly with the dowel pins to the main housing. Ensure 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 ft-lbs.
- Insure 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 ft-lbs.
- Re-install the drain plug and sealing washer. Tighten to 22-30 ft-lbs.
- Replace any lost transmission fluid to recommended levels using **DEXRON III** transmission fluid.

TIGHTENING SPECS AT A GLANCE

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

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BD ENGINE BRAKE, INC. LIMITED WARRANTY STATEMENT

BD Engine Brake, Inc. (BD) warrants to the original purchaser that any products purchased shall be free from defective parts and workmanship. A defect is defined as a condition that would render the product inoperable. BD limits the liability to the repair or replacement, at BD's option, of any warrantable product returned with a complete service history and proof of purchase. A valid proof of purchase is a dated bill of sale. Repaired or replaced products shall be returned to the customer freight collect. Accepted warranty units, which have been replaced, become the sole property of BD.

A Return Material Authorization (RMA) number obtained in advance from a BD customer service representative must accompany product returned, with shipping prepaid by the purchaser, for warranty determination. BD will be the final authority on all warranty decisions.

Labor costs incurred by the removal and replacement of a BD product, while performing warranty work, will be covered for 6 months at authorized service centers. Until the product has been approved at the original installing dealer or at one of our distributors, the consumer shall be responsible for these costs.

NOT COVERED UNDER THIS WARRANTY

This warranty shall not apply to any product that has been improperly stored or installed; or to misapplication, improper operation conditions, accidents, or neglect, or which has been improperly repaired or altered or otherwise mistreated by the owner or his agent. This product warranty shall terminate at the end of 12 months or 24,000 miles of service, whichever ever comes first, with the original purchaser. **This warranty does not cover electronics.**

The nature of this product is PERFORMANCE and is designed to perform above OEM specifications. This product was designed with this in mind and should NOT be used in RACING and/or HIGH HORSEPOWER applications.

Except as set forth in our product outline, BD disclaims any implied warranties of merchantability and fitness for a particular purpose. BD also disclaims any liability for incidental or consequential damages including but not limited to, repair labor, rental vehicles, hotel cost or any other inconvenience costs. This warranty is in lieu of all other warranties or guaranties, either expressed or implied, and shall not extend to any consumer or to any person other than the original purchaser residing within the boundaries of the continental U.S. or Canada.

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