



BD High Flow Max Manifold

For 2500/3500 2001-2007 GMC/Chevrolet Duramax Trucks

Installation Instructions

Part# <mark>1041460</mark>

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION.

BD ENGINE BRAKE, INC. Plant Address: A10-33733 King Rd, Abbotsford, BC, Canada V2S 7M9 US Shipping Address: 88-446 Harrison St, Sumas, WA 98295 US Mailing Address: PO Box 231, Sumas, WA 98295 Phone: 604-853-6096 Fax: 604-853-8749 Internet: www.bd-power.com

Welcome



Thank you for purchasing the BD High Flow Max Manifold for GMC/Chevrolet Duramax vehicles.

As you can see by the large dent in the stock manifold, there is a sizeable restriction in the flow of the exhaust. The **BD High Flow Max Manifold** eliminates this restriction, allowing the full flow of exhaust to be pushed out faster, lowering EGT's.



At this time this kit does not come with a manifold gasket. Currently the highest quality gasket is being made by GM. See the chart below for OEM part numbers.

GM OEM Part #	Description
97188684	Manifold Gasket
97188685	Manifold to Feed Pipe Gasket

Upgrade Options		
Description	Part #	
BD Super Max Turbo (LB7 only)	1046200	

Manifold Installation

Raise and suitably support the vehicle to a comfortable height.

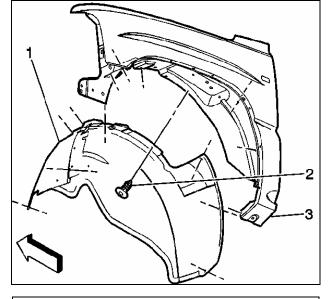
Remove the driver's side front wheel.

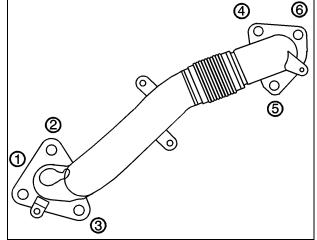
Remove the driver's side plastic fender well.

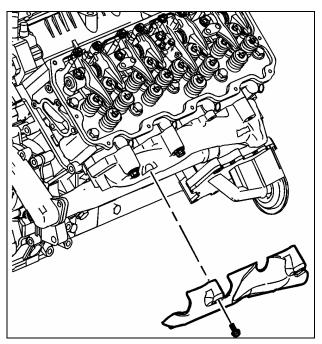
Remove the exhaust pipe to exhaust manifold bolts (1, 2, and 3).

Remove the exhaust manifold heat shield bolts.

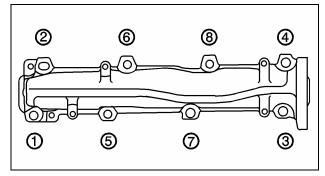
Remove the exhaust manifold heat shield.

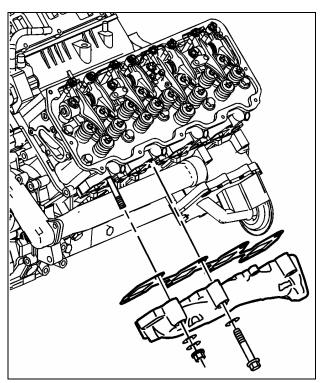


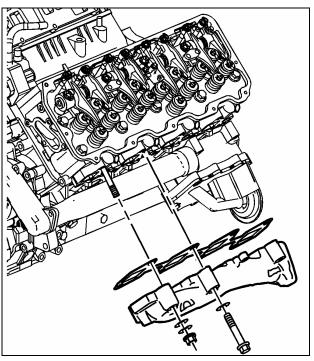




Remove the exhaust manifold bolts and nuts in the proper sequence.







Remove the exhaust manifold.

Remove the exhaust manifold gasket. (NOTE: GM RECOMMENDS A NEW GASKET TO BE USED. FROM OUR EXPERIENCE, THE ORIGINAL GASKET CAN BE RE-USED)

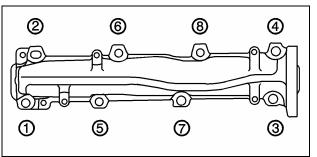
Clean and inspect head surface.

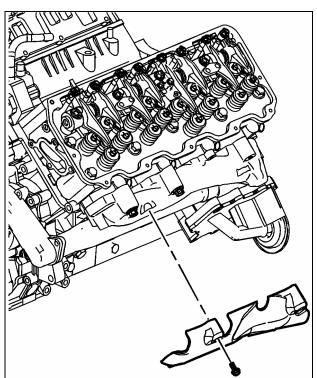
Install the BD High Flow exhaust manifold with gasket.

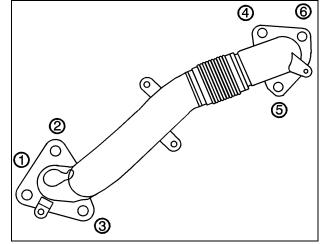
Install the exhaust manifold bolts & nuts.

Use the sequence shown to properly tighten the exhaust manifold bolts.

Tighten the bolts/nut to 38 N·m (28 lb ft).







Install the exhaust manifold heat shield. **Note: You will have to slightly modify or form the heat shield to allow clearance around the new manifold.

Install the exhaust manifold heat shield bolts.

Tighten the bolts to 8 N·m (71 lb in).

Install the exhaust pipe gasket. Align the tab on the gasket to face outward.

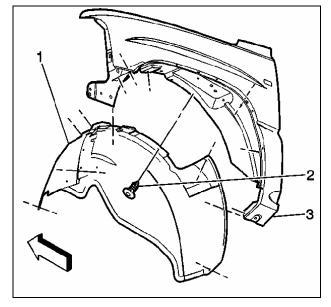
Install the exhaust pipe and the bolts (1, 2, and 3) to the exhaust manifold.

Tighten the bolts to 53 N·m (39 lb ft).

Reinstall the driver's side plastic fender well.

Reinstall the driver's side front wheel.

Lower the vehicle.



Allow the vehicle to go through one or two heat cycles before re-torqueing the manifold bolts.

The manifold is also drilled and tapped for a $\frac{1}{4}$ NPT thermocouple probe. Included in the kit is a $\frac{1}{4"}$ NPT to $\frac{1}{8"}$ NPT adapter for using a $\frac{1}{8"}$ thermocouple probe, and also a $\frac{1}{4"}$ NPT plug if there is no thermocouple being used.

Questions?

If you have any technical questions or problems with this kit, then please call the BD Diesel Performance Technical Support Line at (800) 887-5030, Monday to Friday, 8:30am-5:00pm, Pacific Standard Time. Or, you can post on the online BD Support Forum, located at <u>http://www.bd-power.com/forum/</u>

BD ENGINE BRAKE, INC. LIMITED WARRANTY STATEMENT

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

DISCLAIMER OF LIABILITY

BD Engine Brake Inc., its successors, distributors, jobbers, and dealers (hereafter "**BD**") shall in no way be responsible for the product's proper use and service. <u>THE **BUYER** HEREBY WAIVES ALL LIABILITY CLAIMS.</u>

BD disclaims any warranty and expressly disclaims any liability for personal injury or damages. **BD** also disclaims any liability for incidental or consequential damages including, but not limited to, repair labor, rental vehicles, hotel costs, or any other inconvenience costs by reason of use or sale of any such equipment. The **BUYER** acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the **BUYER** agrees to indemnify **BD** and to hold **BD** harmless from any claim related to the item of any equipment purchased.

This warranty shall not apply to any unit that has been improperly stored or installed, or to misapplication, improper operation conditions, accidents, neglect, or which has been improperly repaired or altered or otherwise mistreated by the **BUYER** or his agent. **BD** also assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

LIMITATION OF WARRANTY

BD Engine Brake Inc. (hereafter "**BD**") warrants to the **BUYER** that any parts purchased shall be free from defects in material workmanship. A defect is defined as a condition within the product that would render the product inoperable. **BD** gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of **BD's** product sold herewith. **BD** shall be in no way responsible for the product's open use and service and the **BUYER** hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by **BD** and the **BUYER**.

The Warranty is Limited to one (1) year from the date of sale. Until BD has approved the claim, the consumer may be responsible for these costs.

A Return Material Authorization (RMA) number, obtained in advance from **BD**, must accompany all products returned for warranty consideration. All products must be returned, shipping prepaid, to **BD** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by **BD** and repaired or replaced product will be returned to the customer freight collect. Accepted warranty units, which have been replaced, become the sole property of **BD**.

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.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.