



2001-2004 LB7 GMC/Chevy Duramax Adjustable Waste Gate Kit

P/N# 1047160

This kit will not install on the 2004½ 6.6L LLY Duramax.

***PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION.
Please read the disclaimer before proceeding to install this unit.***

Introduction

The purpose of this kit is to allow the user to adjust the amount of boost pressure generated by their turbocharger. The larger diaphragm prevents waste gate creep and controls the waste gate much more efficiently.

Do not exceed 32psi on the OEM turbo.

Available Accessories

- *BD SuperMax Turbocharger Kit*

Kit Contents

Part Number	Description	Qty.
1407163	Rod End	1
1130141	5/16" Nut	1
1462445	Lock Nut	2
1453225	Actuator	1
1407153	Clamp	2
1407161	Mounting Bracket	1
1407155	Silicone Hose	8"
1130162	Circlip	1

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

Installation

Ensure that the engine coolant has dropped to ambient temperature before working on the vehicle.

Remove the plastic engine cowl or air intake silencer from the top of the engine; you should be able to access the factory wastegate at this point.

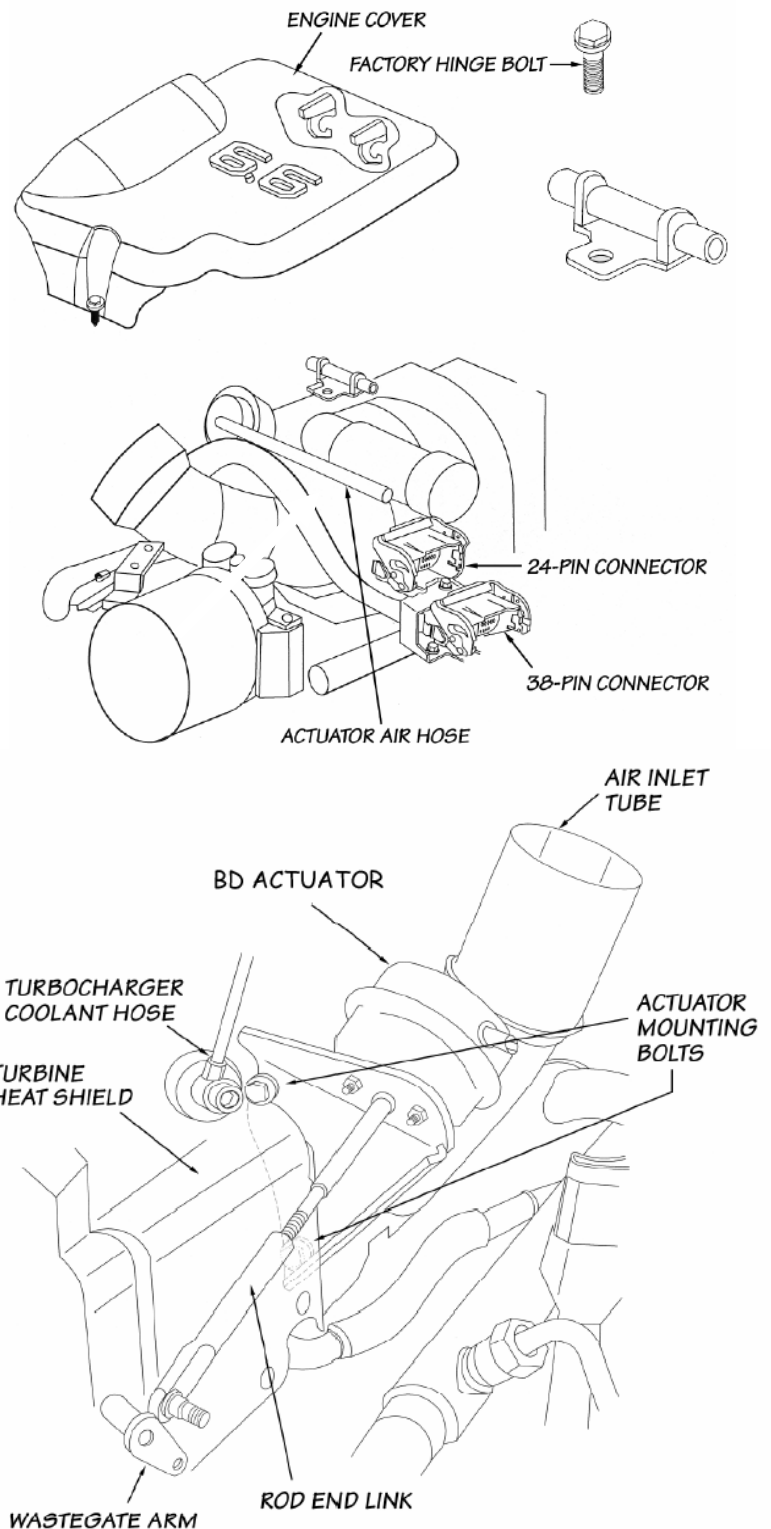
Remove the cir-clip from the wastegate arm. Remove the silicone hose from the wastegate actuator nipple.

Remove the top turbocharger coolant inlet hose fitting with a Torx #55 bit. Be sure to save the sealing washers and fitting as they will be re-used.

Apply air pressure to the wastegate diaphragm to stroke the rod. At this point you should be able to remove the rod from the wastegate arm.

Remove the two 12mm bolts securing the wastegate to the compressor housing.

Discard the stock wastegate.



BD Engine Brake Inc.

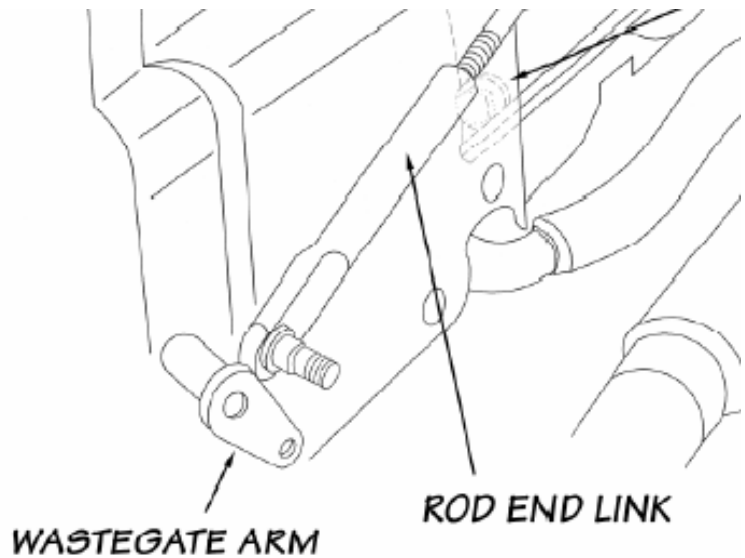
Plant Address: Unit A10, 33733 King Rd, Abbotsford, BC, Canada V2S 7M9

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

Using the two 12mm bolts, mount the BD actuator in place of the factory wastegate. Securely tighten the two bolts.

Apply air pressure to the wastegate diaphragm; this should stroke the rod end forward. Align the wastegate arm hole with the BD rod end and insert. Press the supplied circlip into place and secure the rod end to the wastegate rod.



Install the supplied wastegate hose on the actuator nipple and on the factory compressor housing nipple. Secure the connection with the crimp style clamps.

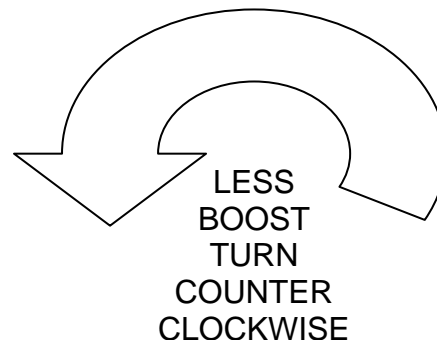
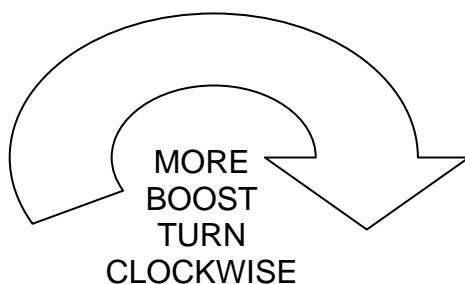
Re-install the cooling line with the Torx bit and sealing washers.

Re-install the plastic engine shroud or intake silencer.

The BD Actuator is pre-adjusted for ~27psi of boost pressure. Do not adjust the wastegate until you have test driven the truck.

If you would like to adjust the wastegate, loosen the jam nut and slide the rod end off of the wastegate lever shaft. Turn the rod end in or out depending on how you want to adjust the boost pressure.

For more boost pressure, shorten the wastegate rod. For less boost pressure, lengthen the wastegate rod.



To increase the boost pressure, you will have sufficient energy to drive the turbo faster. Once you have turned the rod to the desired position, re-install the circlip and lock the jam nut.

Do not exceed 32psi of boost pressure on the OEM turbo.

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

BD Engine Brake Disclaimer of Liability

Other than as expressly set forth herein, BD ENGINE BRAKE, Inc. (hereafter collectively, "SELLER"), together with its distributors, jobbers and dealers shall in no way be responsible for the PRODUCT'S proper use and service. In no event shall SELLER be liable for any special, incidental, indirect or consequential damages of any kind or nature, whether or not BUYER was advised of the possibility of damage, arising or resulting from the use or performance of the PRODUCT, and BUYER hereby waives any and all such claims.

BUYER acknowledges that he/she/it is not relying on SELLER'S skill or judgment to select or furnish goods suitable for any particular purpose and that SELLER has no liability that will extend beyond the scope of the limited warranty contained herein, and BUYER hereby waives all remedies or liabilities, expressed or implied, arising by operation of law or otherwise, (including, without limitation, any obligations of SELLER with respect to fitness for any particular purpose; merchantability; and special, incidental, indirect or consequential damages) or whether or not occasioned by SELLER'S negligence.

SELLER disclaims any warranty and expressly disclaims any liability for personal injury or damages related to BUYER'S use of the PRODUCT. BUYER acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and BUYER agrees to indemnify SELLER and hold SELLER harmless from any claim related to the PRODUCT and its use or performance. Under no circumstances will SELLER be liable for any damages, liabilities, costs or expenses incurred as a result of by reason of the use, performance or sale of the PRODUCT, including, without limitation, any damages, liabilities, costs or expenses incurred by reason of BUYER'S negligence related to those uses of the PRODUCT.

SELLER assumes no liability regarding the improper installation or misapplication of the PRODUCT. It is the installer's responsibility to check for proper installation, and, if in doubt, contact the manufacturer.

LIMITATION OF WARRANTY

SELLER hereby provides the following limited warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of SELLER'S product sold herewith. The SELLER 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 SELLER and BUYER.

The Warranty is Limited to one (1) year from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the SELLER and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by BD ENGINE BRAKE, Inc.

Under no circumstances shall the SELLER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances will the SELLER be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

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

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