



1047170 1999.5-2003 7.3L Adjustable Waste gate Kit



- Installation Manual -

Note this kit will not install on the 1999 7.3L Powerstroke.

***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 exceeded 30 psi on the OEM turbo.

Available Accessories

- *BD PowerMax turbo*

Kit Contents

Part Number	Description	Qty.
1407174Z	Rod End	1
1130141	5/16" Nut	1
1462445	Lock Nut	2
1453226	Actuator	1
CC-08	Clamp	2
1407173	Circlip	1

BD Engine Brake Inc.

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

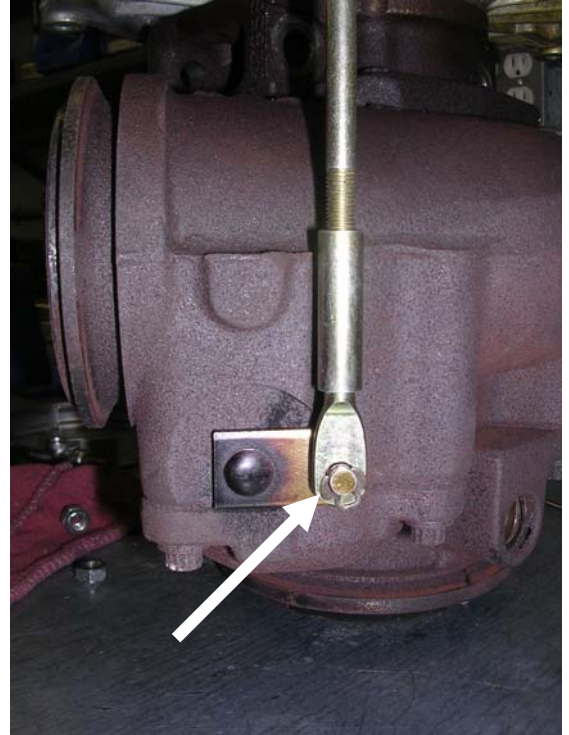
U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

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

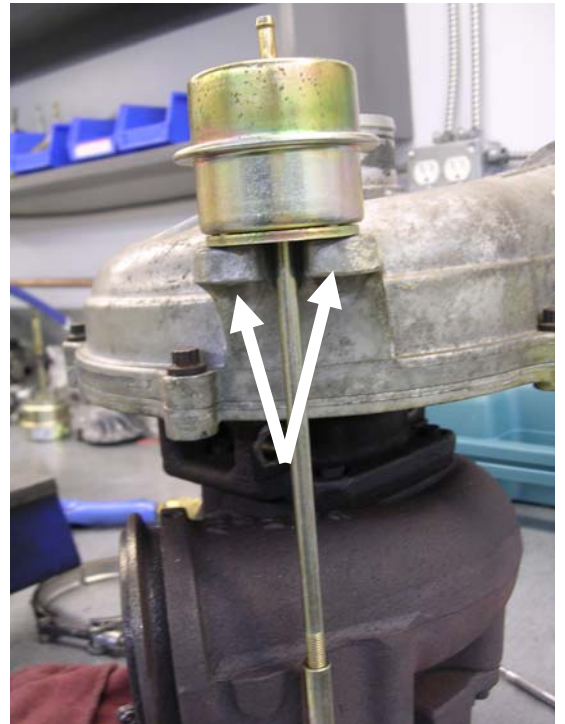
Installation

To remove factory wastegate, use a small pick or screw driver to remove the circlip. Slide the rod off to the side, you can also use air pressure to stroke the wastegate to make removal easier.

Note you do not need to remove the turbo for installation.



Use a 7/16" socket and remove the two mounting nuts that secure the wastegate to the housing.



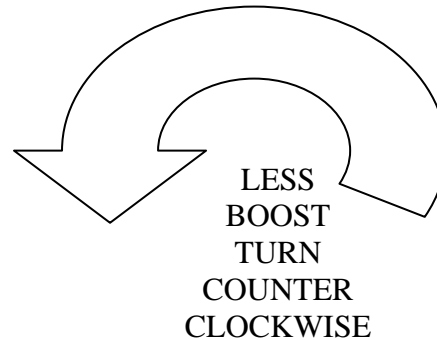
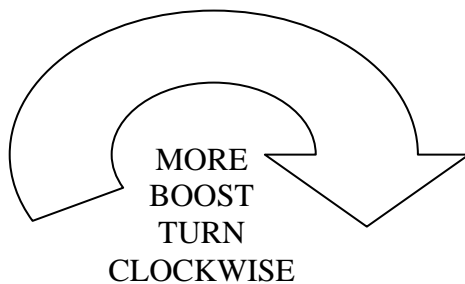
Install the BD adjustable wastegate. Use the two new locking nuts that are supplied in the kit to secure the wastegate diaphragm to the compressor housing. Then apply air to wastegate port to stroke the actuator. Once stroked you should be able to slide the rod end over the wastegate lever shaft. Re-install circlip.

The waste gate is pre-setup to allow 25psi of boost pressure. Once complete turn (shortening the rod) will increase boost pressure by 5 psi. One half turn will increase boost pressure by 2.5 psi.



If you would like to adjust the wastegate, loosen the jam nut and slide the rod end off 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.



Note that to increase the boost pressure you will 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.

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