





# **BD POWER SHORT SHIFTER**

for Dodge Cummins 1998-2005 Manual Transmissions

| Application Chart |                        |         |  |  |
|-------------------|------------------------|---------|--|--|
| 1031056           | Dodge <b>1998-2002</b> | 5 Speed |  |  |
| 1031050           | Dodge <b>2000-2002</b> | 6 Speed |  |  |
| 1031055           | Dodge <b>2003-2005</b> | 6 Speed |  |  |

Please read all instructions and check that all contents in this kit are present and correct before beginning installation.

BD ENGINE BRAKE, INC.

#### Kit Contents

Please check the table below that applies to your model of Dodge and make sure all parts are correct and present.

| Kit# 1031050 (2000-2002 Dodge / 6 Speed) |                |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
|------------------------------------------|----------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1301051Z                                 | 1301052B       | 1301054               | 1301059                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
|                                          |                |                       | THE AMERICAN STATE OF |  |  |
| Shifter Shaft                            | Shifter Spacer | Capscrew 1/4" x 21/4" | Permatex ® Silicone Gasket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| Qty: 1                                   | Qty: 1         | Qty: 4                | Qty: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |

| Kit# 1031055 (2003-2005 Dodge / 6 Speed) |                |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
|------------------------------------------|----------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1301055Z                                 | 1301052B       | 1301054               | 1301059                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
|                                          |                |                       | ACTIVATION OF THE PROPERTY OF |  |  |
| Shifter Shaft                            | Shifter Spacer | Capscrew 1/4" x 21/4" | Permatex ®<br>Silicone Gasket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| Qty: 1                                   | Qty: 1         | Qty: 4                | Qty: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |



#### Welcome

Thank you for purchasing a BD Short Throw Shifter mod kit. Your kit should have the above-mentioned items for your installation; please check to make sure that you have everything.

## **Tools Required**

- 1/4" drive socket set with metric sockets
- 8mm & 10mm socket
- T-25 Torx Socket
- 3/16" Allen wrench
- Small torque wrench
- 3/32" Pin Punch and small hammer (5spd only)

#### Installation



Remove the outer shifter boot with an 8mm socket.

Remove the shifter arm by loosening the lock nut and unwind the arm.

Remove the floor console with a 10mm socket. There are more screws hidden under the rubber cup holder mats







Remove the inner shifter boot with an 8mm socket.



Remove the shift tower from the transmission.

HINT: Mark the shift arm carrier and the transmission case to ensure correct alignment when reinstalling.

Remove the rubber isolator that is on top of the transmission tower. **NOTE:** The bottom of the isolator is metal and the top is rubber.



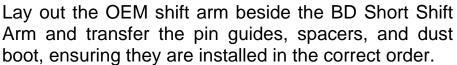
Clean up any residual silicone gasket material from the top of isolator and the transmission case.

CAUTION: Ensure no material drops into the transmission case by putting a rag into the opening.



Using a number T-25 Torx bit, disassemble the shift tower.

HINT: Mark the position that the shifter arm is pointing to on the shift arm carrier to ensure correct position when reinstalling.

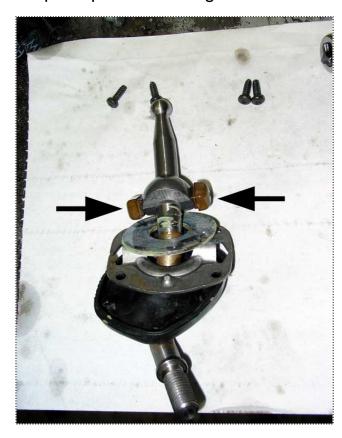




# 6 Speed Shifter

Remove the plastic bushing from the OEM shift arm. **DO NOT LOSE THIS PIECE**.

Snap the plastic bushing on to the ball of the Short Shift arm.





### 5-Speed Shifter

The 5 speed shifter has a different design as seen by these photos:





To change the shifter rail pin from the OEM shifter to the BD Short Shifter you will need to remove the shifter rail pin from the shift arm.

Place the OEM shift arm assembly in a vise and with a 3/32" or similar pin punch remove the roll pin securing the shifter rail pin to the shift arm.

With the shift arm assembly still in the vise, grab the bottom of the shifter rail pin with vise grip or similar pliers and remove.



**NOTE:** The shifter rail pin has rubber Orings and lubricant used during assembly so it will be air-lock sealed in the shift arm assembly.

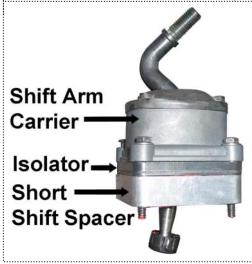
Insert the shifter rail pin into the BD Short Shifter arm and then insert the roll pin with a small hammer. Be careful not to round the end of the roll pin or the shifter rail pin will not be properly secure.



Reinstall the shift arm assembly in the shift arm carrier by reversing the steps taken to disassemble it.

Apply fresh silicone to both sides of aluminum spacer and place on transmission.

Place the rubber isolator, metal side down, on top of the aluminum spacer.



Install the shift arm carrier assembly onto the rubber isolator and install the four metal bushings in place. Insert and tighten the bolts with a 3/16" Allen socket to 7 - 9 ft lbs using a torque wrench.

Install all other pieces (Dust Boots and Console) in the reverse order of removal.

If the shift pattern label is off center, pry the label out of the shifter knob with a small screw driver or pick and install in correct alignment.



# BD ENGINE BRAKE, INC. LIMITED WARRANTY STATEMENT

BD Engine Brake, Inc. (BD) warrants to the original purchaser that any parts purchased shall be free from defects in material 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 prepaid with a complete service history and proof of purchase to the factory. A valid proof of purchase is a dated bill of sale. 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.

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

This warranty shall not apply to any unit that has been improperly stored or installed; or to misapplication, improper operation conditions, accidents, or neglect, or which has been improperly adjusted, repaired, altered, or otherwise mistreated by the owner or his agent or if the transmission that this product is installed in is not within OEM recommended specifications at the time of installation.

This parts warranty shall terminate at the end of 1 year in service with the original user. Labor costs incurred by the removal and replacement of the BD product, while performing warranty work, will be covered for 1 year with proof of installation.

Except as set forth in our parts 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, freight, 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.