

# South Bend Duramax DD Installation Instructions

## **Torque specifications:**

Flywheel to crank 140-150 ft. lbs.

Pressure plate to flywheel is 45 ft. lbs.

Unbolt pressure plate from flywheel in a star pattern with quarter turns.

Check discs on input shaft for free movement before installation.

Bolt flywheel to crank with provided specs.

Line up paint marks on pressure plate, center plate, and flywheel.

Install discs according to sticker (located on disc) for correct hub direction.

Install pressure plate bolts in crossing pattern, one quarter turn at a time (do not use air powered tools for this step).

Refer to Important Information Form (included) for more installation information.

# SOUTH BEND CLUTCH

## INSTALLATION INSTRUCTIONS - READ CAREFULLY

### NEVER

- ▶ Force the input shaft into the disc hub. It will bend the disc or scar the splines.
- ▶ Allow the weight of the transmission to hang on the disc.
- ▶ Touch The friction surface of the disc with greasy hands.
- ▶ Use an impact wrench to tighten the pressure plate mounting bolts.
- ▶ Install a new disc without replacing the pressure plate and release bearing.
- ▶ Use the proper alignment tool.
- ▶ Check the fit of the disc hub splines to the input shaft BEFORE installation.
- ▶ Resurface or replace the flywheel.
- ▶ Tighten pressure plate bolts in a "star" or criss-cross pattern, one turn at a time.

### ALWAYS

FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS WILL NEGATIVELY AFFECT THE PERFORMANCE OF YOUR CLUTCH AND MAY VOID YOUR WARRANTY.

THIS UNIT MAY APPEAR DIFFERENT THAN YOUR OLD PART DUE TO THE DESIGN DIFFERENCES OF VARIOUS MANUFACTURES. IT WILL FUNCTION PROPERLY IN YOUR VEHICLE.

SOM PRYING MAY BE REQUIRED TO LEVEL THE FINGERS OF THE CLUTCH. USE A SMALL PRY BAR POSITIONED BETWEEN THE COVER AND THE DIAPHRAM SPRING TO FORCE THE HIGH FINGERS DOWN TO A UNIFORM POSITION

### Bolt Torque Specifications

Pressure plate to flywheel, 20 ft. lbs. torque & flywheel to crank, 95-105 ft. lbs. (Threadlock recommended)

### Flywheel Resurfacing

Flywheels should NOT be lathe cut. OEM taper on flywheel runs approximately 2/1000 to 3/1000" from outside to inside. This does NOT need to be matched. Flat is preferred with our clutch. Flywheels should be resurfaced with a grinder specifically built for grinding flywheels. Do not try for a rough finish, the smoother the better. Make sure pressure plate bolts holes are thoroughly cleaned after resurfacing is done. Running a thread chaser or tap will ensure threads are clear of all debris.

### ATTENTION!!

High performance clutches require a break-in period. 200 miles of normal city driving (stop and go driving) should properly break in your clutch. If slipping occurs, resume normal driving for 50 miles

For technical assistance please call 800-988-4345

## **IMPORTANT NOTICE**

### **READ BEFORE INSTALLATION**

**This technical bulletin pertains to South Bend Clutch's newly designed clutch disc which contains 6 neoprene dampners and 2 coil springs and noise that may be associated with using them.**

Due to an industry wide problem with short life of the torsional springs in the clutch disc, we have upgraded this area. Reasons for premature failure include:

- Power enhancements to the engine
- Overloading or continuous heavy towing
- Excessive idling of engine
- Habitually accelerating in wrong gear
- Poorly tuned engines
- Worn transmission parts
- Misalignment of engine and transmission
- Pilot bearing failure
- Continuous down shifting

Because many of these conditions exist, often in combination, a stronger disc is necessary to increase the life of the clutch.

By strengthening the springs we have made the disc more rigid, which can allow some of the low end vibration of the engine to be transferred to the transmission. This can create a noise which is known as gear rollover (some refer to this as idle clatter). This is most noticeable when the truck is in neutral and at idle RPM. This may also be apparent when accelerating at too low an RPM.

The amount of noise seems to be different from one truck to the next and may be attributed to how the truck has been modified or how well the engine runs.

The noise does not harm the truck in any way. Although it may be a nuisance, it is the only way to prolong the life of high torque clutch systems in heavy duty applications.

We do have the original (softer spring) design upon request.

Any further questions call us at 800-988-4345. Thank you.

## *Warranty Policy*

South Bend Clutch, Inc. warrants that our Clutches are free from defects in workmanship and material under normal use and service. The obligation of South Bend Clutch, Inc. under this warranty is limited to repair or replacement of the defective products, which fails within 12 months or 12,000 miles. We will not be liable for losses that might be claimed as a result of the failure of any part, nor shall we be liable for damages or injury to any persons or property resulting from the misuses or improper installation of any part subject to this warranty.

South Bend Clutch, Inc. reserves the right to examine all parts returned for warranty claim to determine whether or not any such part has failed because of a defect in material or workmanship. Our obligation under this warranty shall be limited to repairing, replacing, or crediting, at our discretion, any part found to be defective.

The Limited Warranty will not be valid under the following express conditions:

- When proper break-in procedure was not followed. To receive proper break-in procedure for your application please call 1-800-988-4345.
- When Flywheel was not replaced with new or resurfaced to specification.
- Clutches which have been altered, improperly installed, or damaged by accident, negligence or misuse.

PRODUCTS USED FOR HIGH PERFORMANCE AND/OR RACING PURPOSES WHICH THEY WERE NOT ORIGINALLY ENGINEERED FOR, WILL NOT BE COVERED.

## *Return Policy*

No returned product for warranty, repair, or replacement will be accepted without a return authorization number. Please call and speak to our warranty department at 1-800-988-4345.