

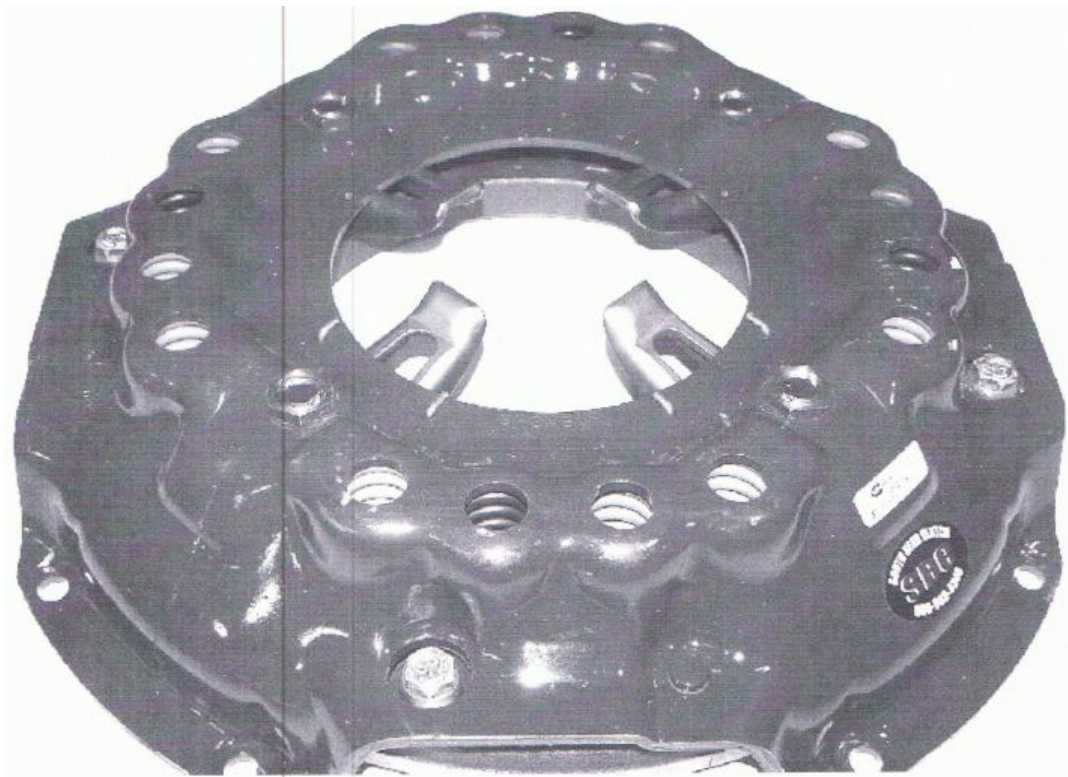
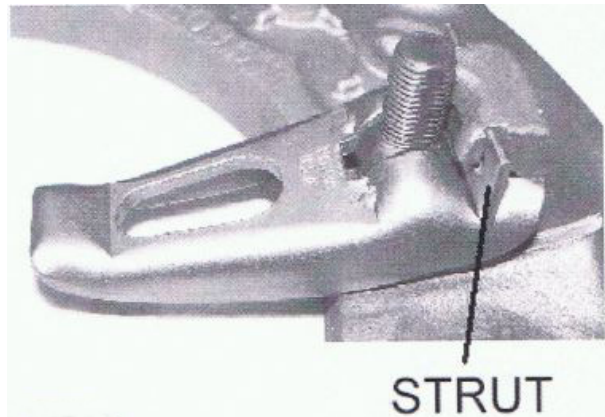
## Borg & Beck Clutch Information

After the clutch is bolted to the flywheel, under no circumstance should the release lever, or the release lever plate if equipped, be pulled away from the flywheel against the anti-rattle spring pressure as this will leave the strut in a "free" position and will allow it to drop out of position. This can be identified by one or more release levers higher than the others. This is the primary cause of strut displacement and its importance cannot be overstated. If these circumstances occur please contact South Bend Clutch as soon as possible.

### **CAUTION**

DO NOT LIFT THIS UNIT BY THE LEVERS  
DAMAGE CAN OCCUR

ALL STAMPED EDGES ARE SHARP AND  
COULD CAUSE INJURY



## **PREVENT YOUR CLUTCH FROM OVERHEATING**

Feramic friction material when heated to 1100F can run the risk of welding to the adjacent friction plates. Use the following steps to prevent this from happening.

- 3 sec rule. Don't slip your clutch for more than 3 sec at high RPM
- Don't use the clutch to prevent rolling back on a hill.
- Engage the clutch as quickly as possible when taking off from a complete stop.
- Follow all break-in procedures.

## **WHAT TO DO WHEN YOUR CLUTCH GETS TOO HOT**

Follow a few easy steps to lessen the damage if your clutch gets too hot.

- Hold the clutch pedal down for 10-15 seconds immediately after over-heating to allow cooling time.
- Continue driving your car after over-heating.
- If your clutch welds itself together try starting the car while in gear with your foot on the brake. This will many times break it free. SBC is not responsible for any damage.

# South Bend Ford/Dodge DD

## Installation Instructions

### **Torque specifications:**

Flywheel to crank 90-100 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.

# Removal and Installation

## Removal

1. Disconnect battery negative cable.
2. Shift transmission into Neutral.
3. Remove screws attaching shift boot to floor pan. Then slide boot upward on the shift lever.
4. Remove the bolts holding the shift tower to the isolator plate and transmission gear case.
5. Remove the shift tower and isolator plate from the transmission gear case.
6. Raise and support vehicle.
7. Mark propeller shaft and axle yokes for alignment reference. Use paint, scribe, or chalk to mark yokes.
8. Remove universal joint strap screws and remove straps.
9. Remove propeller shaft.
10. Disconnect and remove exhaust system as necessary.
11. Disconnect wires at backup light switch.
12. Support engine with adjustable safety stand and wood block.
13. If transmission is to be disassembled for repair, remove drain bolt at bottom of PTO cover and drain lubricant from trans.
14. Remove bolts/nuts attaching transmission to rear mount.
15. Support transmission with a transmission jack. Secure transmission to jack with safety chains. NOTE: It is recommended that a heavy duty, scissors style transmission jack be used to remove and install the NV5600 transmission.
16. Remove rear cross member.
17. Remove bolts attaching clutch slave cylinder to clutch housing. Then move cylinder aside for working clearance.
18. Remove wire harness from clips on transmission.
19. Remove bolts attaching transmission clutch housing to the engine block.
20. Slide transmission and jack rearward until input shaft clears clutch disc and pressure plate.
21. Lower transmission jack and remove transmission from under vehicle.

## Installation

Apply light coat of MOPAR high temperature bearing grease to contact surfaces of following components:

- input shaft splines and pilot bearing hub.
- release bearing slide surface of front retainer.
- pilot bearing.
- release bearing bore.
- release fork.
- release fork ball stud.
- propeller shaft slip yoke.

1. Apply sealer to threads of bottom PTO cover bolt and install bolt in case.
2. Mount transmission on jack and position transmission under vehicle. NOTE: It is recommended that a heavy duty, scissors style transmission jack be used to remove and install the NV5600 transmission.
3. Raise transmission until input shaft is centered in clutch disc hub.
4. Move transmission forward and start input shaft in clutch disc and pilot bushing/bearing.
5. Work transmission forward until seated against engine block. Do not allow transmission to remain unsupported after input shaft has entered clutch disc.
6. Install and tighten transmission-to-engine block bolts.
7. Install clutch slave cylinder.
8. Connect backup light switch wires.
9. Fill transmission with recommended lubricant. Correct fill level is bottom edge of fill plug hole.
10. Position transmission harness wires in clips on transmission.
11. Install transmission mount on transmission or rear cross member.
12. Install rear cross member.
13. Remove transmission jack and engine support fixture.
14. Align and install propeller shaft.
15. Lower vehicle.
16. Shift transmission into third gear.
17. Clean the mating surfaces of shift tower and isolator plate with suitable wax and grease remover.

18. Apply MOPAR Gasket Maker, or equivalent, to the sealing surface of the transmission case. Do not over apply sealant.
19. Install the isolator plate onto the transmission case, metal side down.
20. Install the shift tower onto the isolator plate. No sealant is necessary between the shift tower and top of the isolator plate.
21. Verify that the shift tower, isolator plate, and the shift socket are properly aligned.
22. Install the bolts to hold the shift tower to the isolator plate and the transmission case. Tighten the shift tower bolts to 10.2 -11.25 Nm (7.5 - 8.3 ft. lbs.)
23. Install shift boot and bezel.
24. Connect battery negative cable.

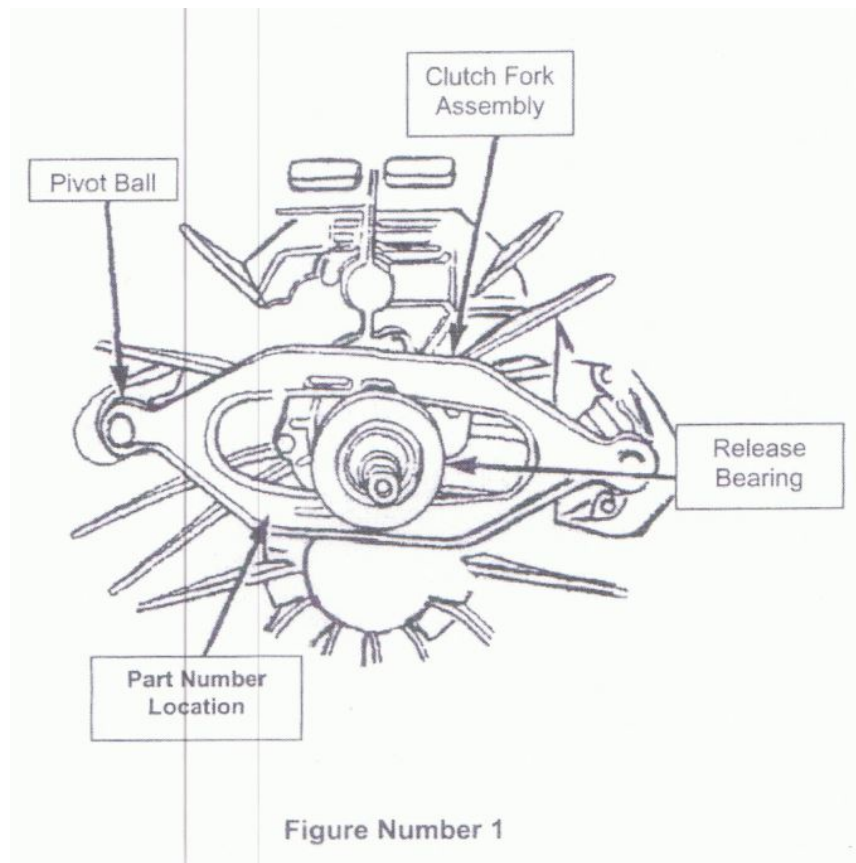
# Orientation of release fork for Dodge Ram applications

## Applications:

<u>Model Year</u>	<u>Engine Size</u>	<u>Vehicle</u>
1994-2002	8.0L V10 Gas	Dodge Ram
1994-2002	5.9L Turbo Diesel	Dodge Ram

Please note that the clutch fork on this vehicle can be installed in the reverse position. When installed correctly, the result will be a “growling” noise coming from the bell housing and/or a no release condition. Please refer to Figure Number 1 for the correct fork orientation during the assembly process.

**When the clutch fork is installed properly, the fork part number will be on the left side of the transmission input shaft. The left side of the transmission is the side where the pivot ball is located (see Figure Number 1).**



## *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.