

# BANDIT MACHINE WORKS

## Sportster Belt Drive Super Clutch (to use w/S&S Sportster Cases)

### Installation Instructions

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**CAUTION:** You've just purchased the best clutch money can buy, please take the time to read these instructions completely and carefully before you start. We at BANDIT recommend that a qualified mechanic does the installation of this product. **Since open primaries present a obvious danger to riders, we at BANDIT recommend that a protective shield be installed over the belt and pulleys to prevent serious injury.**

1. Check the center hub for proper fit on the transmission input shaft. Check for clearance between the pulley and the trap door around the mainshaft bearing.
2. Check for clearance between the detent retention stud on the shift drum and the back of the clutch pulley. Shorten the stud slightly for clearance if necessary.
3. The clutch bearing is pre-installed. If the bearing must be removed, reinstall as follows: **DO NOT INSTALL THE BEARING DRY!** Coat the outside diameter of the bearing with oil and the bearing bore with silicone grease. Support the pulley at the base of the bearing bore, not at the outer edge of the shell, and press the bearing in with an arbor press and a proper sized driver. This should be a light press fit. Install the large snap ring. Coat the inside diameter of the bearing with the same lube and press the center hub into place with the proper sized driver. **DO NOT PRESS ON THE STUDS.** Be sure to support the bearing at the base of the inner bearing race or else the bearing will be damaged. Install the small snap ring. Make sure that the small snap ring is seated securely in it's groove.
5. Install the rear pulley assembly onto the input shaft. Wrap the belt around the rear pulley and Install the front pulley onto the front sprocket shaft. Rotating the assembly while working the belt will make this easier. Install the spring washer over the mainshaft nut with the concave side facing the clutch hub. Apply Loctite to the threads on the front and rear shafts and tighten.
6. Install the clutch plates. Inspect the drive slots in the friction plates, deburr as necessary and remove any overlapping lining. The plates must move freely on the drive keys for the clutch to release freely. Place the .120 thick steel over the splined hub first. Next, install a steel plate onto the hub followed by a friction plate and continue until nine friction plates and ten steels are installed with the last plate being a steel plate. Hold the plates into the assembly with firm finger pressure and measure the clearance from the last plate to the end of the splined hub. This should be a minimum of 0.180" and a maximum of 0.300". Adjust this clearance by adding steel plates or swapping plates of different thicknesses. Inspect periodically and adjust this clearance dimension as the lining wears.
7. Install the clutch adjusting screw into the bearing in the pressure plate, securing it with the retaining snap ring. Align the timing mark on the pressure plate with the timing mark on the splined hub and install the pressure plate. Insert the spring cups into the pressure plate. Insert the springs into the cups, followed by the spring collars. Install the retaining nuts and run down until the spring collars are flush with the pressure plate. To increase spring pressure for high output engines, the spring collars may be set as much as .250" below the pressure plate face without coilbind.

### Suggestions and Recommendations

Use a dial indicator to true the pressure plate. Adjust the spring retaining nuts until the pressure plate runs out less than .010" when the clutch is released. The more true the pressure plate runs, the less total release travel will be required.

Be sure that you have at least .060" travel on the pressure plate. If your clutch does not release freely at .060" travel you have some warped drive plates. Make sure that there is enough free play in your release cable. We recommend a minimum of 1/8" measured at the cable and 3/16" is better. This clutch uses a great deal less spring pressure than other clutches and what might seem like enough free play could be holding the pressure plate slightly released.