



- ◆ Install the spring cups into the pressure plate, followed by the springs, spring retainers, and socket head cap screws, as shown at left.
- ◆ Tighten cap screws until they bottom out.

The final step of clutch installation is the adjustment of the clutch itself.

- ◆ Tighten adjuster screw until it lightly seats on the clutch pushrod.
- ◆ Back screw out 1/2 turn and lock in place using the jam nut provided, using red loctite on threads.

### FINAL ASSEMBLY

- ◆ Install the nosepiece using the 1/4"-20 x 3/4" flat socket head cap screws.

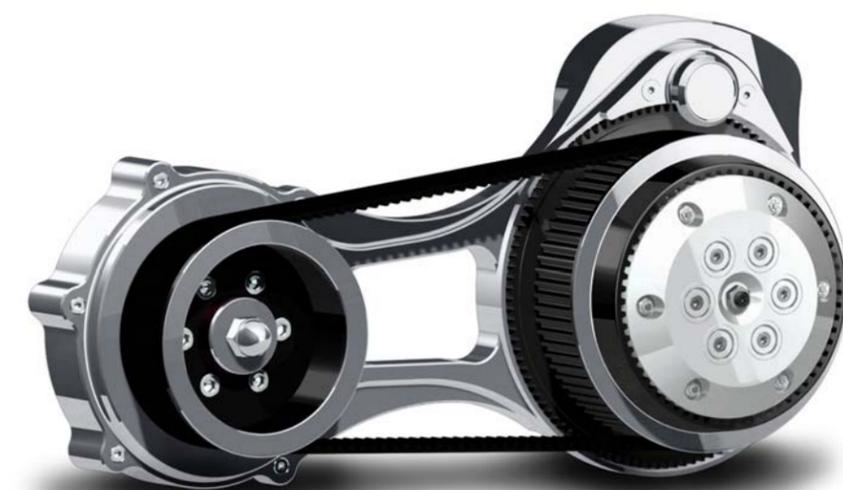


**INSTALLATION COMPLETE!**



**'07-UP HD  
OPEN PRIMARY  
BELT DRIVE SYSTEM**

**ASSEMBLY MANUAL**



TECH CYCLE PERFORMANCE PRODUCTS, INC.  
55 HULMEVILLE AVE., PENNDL, PA 19047  
PHONE: (215) 702-1482 FAX: (215) 752-2448 EMAIL: INFO@TECHCYCLE.COM  
WWW.TECHCYCLE.COM

## OVERVIEW

This manual will cover the following topics:

- ◆ Motor Plate & Belt Drive Installation
- ◆ Required Modifications
- ◆ Clutch Buildup & Installation

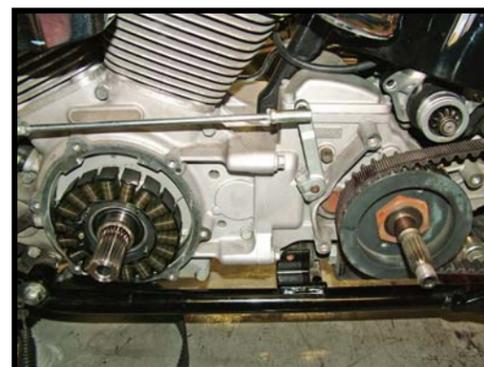
## MOTOR PLATE INSTALLATION

On the right is an image of a H-D with its primary stripped. To install your new Cyclone belt drive system, the following tasks must first be performed:

- ◆ Drain the primary oil and remove the outer cover.
- ◆ Remove the stock primary chain drive.
- ◆ Unbolt the starter, leaving it in place.
- ◆ Remove the stock inner primary.

Note: Tech Open Primary Systems are designed to fit stock applications. Aftermarket frames and/or engine shafts may cause installation difficulties.

# '07-UP HD OPEN PRIMARY BELT DRIVE SYSTEM ASSEMBLY MANUAL



The stock rotor needs to have the compensator assembly machined off to be used with this kit. Tech Cycle can provide you with a modified rotor or machine your stock unit to fit.

- ◆ Place the modified rotor on the engine mainshaft.
- ◆ Remove the stock belt sprocket from the transmission mainshaft (this requires removing the race pressed on the mainshaft using the proper puller tool).
- ◆ Bolt on the new sprocket provided by Tech.
- ◆ Proceed to bolt on the One-Piece Motorplate using the supplied hardware, and be sure to reuse the stock spacer in-between the engine and motorplate.

Note: To facilitate starter reinstallation, be sure to locate the starter housing into the backside-face of the motorplate prior to completely fastening the plate to the bike — if the starter does not slide in with the plate loose, it will not go together once the plate is fully tightened.

Your setup should now resemble the image at right.

- ◆ Bolt the starter into the backside of the plate., making sure it is fully seated against the flange.

It is now time to install the belt drive.



## CYCLONE BELT DRIVE INSTALLATION

On the right is an image of a Cyclone Clutch as it comes from the factory. However, in order to install your new belt drive, it must be disassembled:

- ◆ Remove the cap screws holding the clutch springs.
- ◆ Remove the spring retainers, springs, and spring cups from the pressure plate.
- ◆ Remove all clutch plates.

Note: Cyclone Belt Drives are designed to fit stock applications. Aftermarket transmissions may cause minor installation difficulties.

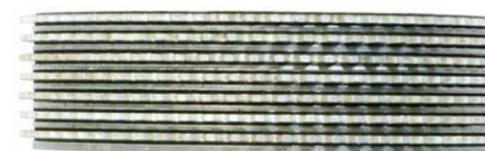
- ◆ Install rear pulley/clutch basket assembly onto transmission mainshaft.  
Note: Nut uses **left-hand thread**. Use **red** Loctite on shaft threads and torque nut to H-D specifications.



- ◆ Place the primary belt over the rear pulley, sliding the front pulley through the belt and onto the front mainshaft.
- ◆ Install stock washer and bolt through front pulley and into front mainshaft.  
Note: Use **red** Loctite on shaft threads and torque to H-D specifications.
- ◆ Using a long straight edge, check the pulleys' alignment. Any misalignment can be corrected with the supplied shims installed behind front pulley.
- ◆ Rotate the motor using a socket wrench to check that the belt is tracking straight and not making contact with the motor plate.

## CLUTCH BUILDUP & INSTALLATION

- ◆ Install clutch plates starting with the thickest steel plate and then alternating fiber and steel until all plates have been installed. A fiber plate should be the last disc to go on.



Thick disc goes in first

- ◆ The pressure plate must be aligned with the inner clutch hub to work correctly.
- ◆ Locate the small dot on each part — the dots should lie on top of one another when installed.
- ◆ With the dots aligned, place the pressure plate into the clutch basket.
- ◆ If the plate does not sit properly, recheck the dot alignment.

