



## 46 & 49 Tooth Sprocket/Ring Gear Kit Installation Instructions

-Evolution Industries strongly recommends installation be performed by a certified Harley-Davidson technician or an independent V-twin service shop.

-Please follow the factory service manual to ensure proper installation and safety while installing this product. These instructions will only note the differences, if any, between Evolution Industries and O.E. Installations. All other steps can be followed from the factory service manual.

-Before beginning installation of your kit, make sure you have received all of the required and correct parts necessary for the installation for your bike.

-Changing your primary gearing will affect cruise control operation, speedometer calibration and indicator light functions on most models. To correct this you will need a "tattoo" style ECM tuner such as DynoJet Powervision, TTS Mastertune, V&H Fuelpack 3 or a ThunderMax ECM. "Piggy-back" tuners will not work, nor will the Harley-Davidson Race/Super Tuner. Please contact the manufacturer of your tuner for the proper settings needed for your particular model and gearing change.



Fig. 1



Fig. 2

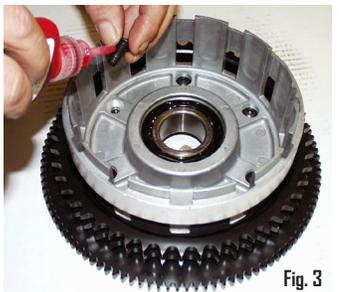


Fig. 3



49T Sprocket/Ring  
Gear Kit Shown



Optional Counter-Bore Tool (Part #1003-3001)



Fig. 4

1. Follow the steps in the Factory Service Manual to remove the clutch basket assembly from the primary chain case.
2. Remove the pressure plate, clutch pack (Steels & Fibers), and drive hub from the clutch basket. Your basket should look like (Fig. 4) at this point.
3. Using a drill press, drill out the factory rivets holding the clutch basket to the sprocket/ring gear. A 9/32" drill is sufficient in size. (Fig. 1)
4. (Optional) Drill the clutch basket to 0.175" deep with a counter-bore tool. (Fig. 2)
5. Install the basket onto the clutch sprocket/ring gear and apply fasteners with red loctite. Torque the basket fasteners to 10-15 Ft./lbs. using a criss-cross pattern. (Fig. 3)
6. (Optional) This step is also optional but installing the supplied roll pins will help stabilize the basket in the sprocket. Turn the assembled clutch basket upside down, and using a drill press, drill through the roll pin holes on the sprocket with a 5/16" drill bit. Press the roll pins into the clutch basket from the top.
7. Install your clutch back into the basket. Then reinstall the clutch basket assembly into the primary following the steps outlined in the factory service manual. Use the provided chain in the kit if installing a 49T sprocket kit. 46T kits may reuse the OE primary chain.
8. At this point if you have changed from a 46T basket to a 49T basket, you will need to correct the ECM calibration using any tuner mentioned above.