Installation Guide for Evolution Industries Clutch Kits

Evolution Industries strongly recommends that 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 only highlight differences, if any, between Evolution Industries and original (O.E) installations. All other steps should be followed as outlined in the factory service manual. Before beginning the installation of your kit, make sure you have received all the correct parts necessary for your bike.

*****If you purchased a Complete Basket Assembly skip step 2, and 5 *****

The fiber clutch plates should be soaked in the same fluid that you will be using in your primary system. We recommend using one of the following:

- B&M Trick Shift "Type F"
- Bel Ray Primary Chain Case Fluid
- ATF "Type F"
- Spectro Primary Chain Case Fluid
- Or any conventional **non-synthetic** fluid designed to work in a V-Twin Primary.

1013-5002

(Fig.1) '07 & Later Shown

(Fig.2) '90-'97 Shown

(Fig.3) '36-84 Shown

Installation Steps:

1. Refer to the factory service manual to remove your original clutch basket assembly from the primary chain case. Once the clutch basket assembly is removed from the bike, remove the clutch plates if they have not been removed already.

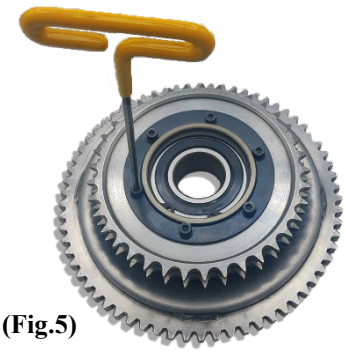
2. Remove the retaining ring from the back of the drive hub that holds the hub into the clutch basket bearing. Next, press the original drive hub out of the clutch basket. Be sure to support the basket from the sprocket to avoid putting pressure on the ring gear on '07 & newer models. At this point, you should have a basket with nothing inside it. (Figures 1, 2, and 3)

   For '36-E'84 applications, keep the drive hub installed in the bearing adapter. Remove the Allen Fasteners holding the retaining ring on the bearing adapter (Fig. 4). Lubricate the sleeve of the bearing adapter and install the drive hub with the bearing adapter into the clutch basket. Use medium-strength thread lock on the retaining ring fasteners and torque them to a maximum of 80 in/lbs. (Fig. 5).

New Clutch Installation:

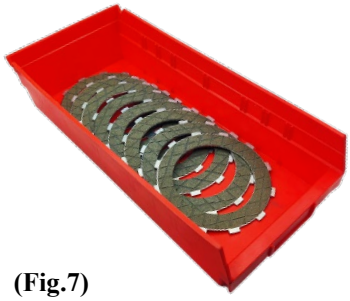
3. Remove the coil springs or diaphragm spring, then remove the pressure plate. Next, remove the clutch pack and **keep them in the order they were originally installed**. (Fig. 6)

(Fig.4)



(Fig.5)

(Fig.6)



(Fig.7)

(Fig.8)

(Fig.9)

(Fig.10)

4. **Separate and Prepare Plates:** Separate the steel plates from the friction plates, maintaining the original order of the steel plates. Soak the friction plates in the primary fluid for a few minutes to prepare them. (Fig. 7)

5. Next, press your new drive hub into the clutch basket. Grease the drive hub stem to ease installation. Support the inner race of the clutch bearing while pressing the drive hub into the clutch basket to avoid bearing damage. If the inner race of the clutch basket is not supported damage may occur to the bearing rollers and cause premature failure. The drive hub is fully installed when the retaining ring fits on the back of the clutch basket bearing race. (Fig. 8)

Note: For 2011 & Later models using OEM style thin bearing use second snap ring groove on drive hub.

6. **Reinstall the Clutch Basket:** Follow the factory service manual to reinstall the clutch basket, using the original torque specifications. If you find the drive hub does not slide smoothly onto the main shaft, inspect the splines for any burrs caused by the OEM drive hub shifting back and forth. Use a small V-file to carefully remove these burrs, ensuring the splines are clean and smooth. After filing, clean away any metal debris before attempting to reinstall the drive hub.

7. **Install the New Clutch Pack:** Reference Clutch Certificate to ensure steel plate order. Start with the steel plate indicated on the certificate, then a friction plate, and continue the alternating process. You should end with a steel plate next to the pressure plate. Ensure no two steel plates or two friction plates are next to each other. (Fig. 9)

8. **Install Pressure Plate and Coil Springs:** Fully back out the clutch adjuster before installing the pressure plate and coil springs. For hydraulic systems, transfer the push rod cup from the factory pressure plate to the new Evolution Industries pressure plate. Use a medium-strength thread locker on the coil spring bolts and lighten snugly, not exceeding 10 ft-lbs. torque. (Fig. 10).

9. **Adjust Clutch Mechanism:** For non-hydraulic models, adjust the inner clutch mechanism per factory specifications. If you are not using any easy pull devices, we suggest a ½ turn-out on adjuster screw.

Note: Easy pull devices may cause difficulty in finding neutral and can cause the motorcycle to creep when the lever is pulled in while the engine is running. This indicates the clutch is not fully disengaging.

10. **Final Steps:** Complete the installation by following the factory manual to reinstall any remaining parts. Fill the primary with fluid and allow a few miles of riding for the clutch to break in. Re-inspect and adjust the clutch if needed.

Notes: Medium (blue) strength springs are standard and support up to 150HP on '98-present models. If clutch slippage occurs after break-in and adjustment, consider installing heavy (red) springs, or mixing medium (blue) and heavy (red) springs to adjust spring pressure.