



**VT No. 20-0516 Instruction**

The VT No. 20-0516 for early-model (1936-1984) Big-Twin motorcycles upgrades the clutch in two ways: First, by increasing the friction area by almost 50%. Second, by replacing the coil-spring clutch- pack with a proprietary diaphragm spring design. Diaphragm-spring operated clutches have proven to be more durable than typical coil spring clutch packs, when utilized in street & high performance motor vehicle applications. The clutch installs quickly into the existing clutch basket (belt or chain) by removing the OEM hub and caged (loose) bearings, and installing the clutch hub adapter assembly and clutch pack!

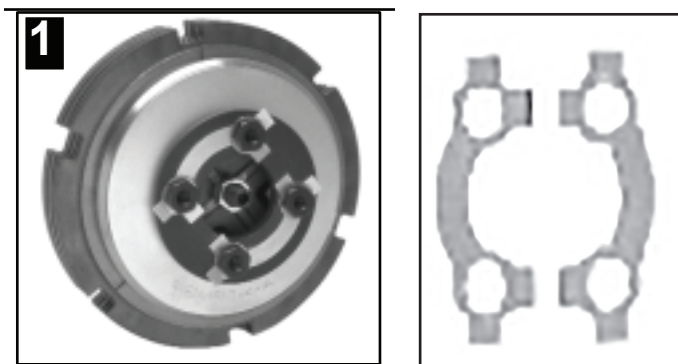
**SAFETY FIRST**

**When performing work on any motorcycle, and prior to starting this installation disconnect BOTH battery cables! If the motorcycle is on a lift, fasten it securely to prevent it from falling! Read and become familiar with the instructions before starting. For safety, use only the proper tools for this installation!**

**STEP 1:**

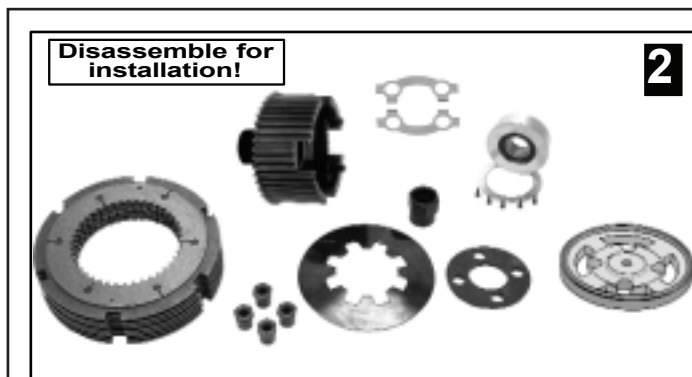
This is the clutch. Get familiar with it before disassembling it for installation! Strip the clutch basket of all the OEM clutch components such as bearing cage & bearings, clutch plates, pressure plate, coil springs etc!

**Note the position of the new lock-clips.**



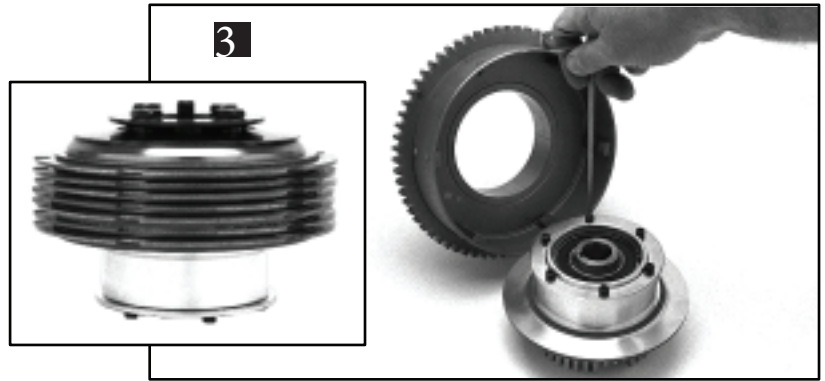
**STEP 2:**

To prepare the clutch for installation disassemble it completely while noting the exact sequence of the components for reference during reassembly!

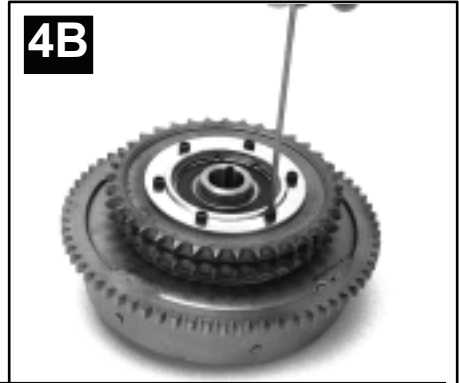
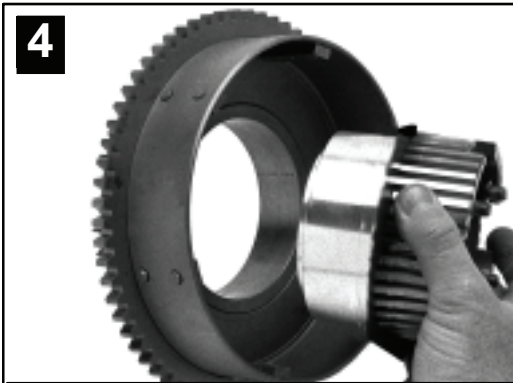


**STEP 3:**

Remove the 6 Allen head bolts and the lock-ring at the rear of the adapter!  
Keep track of ALL the Allen bolts!



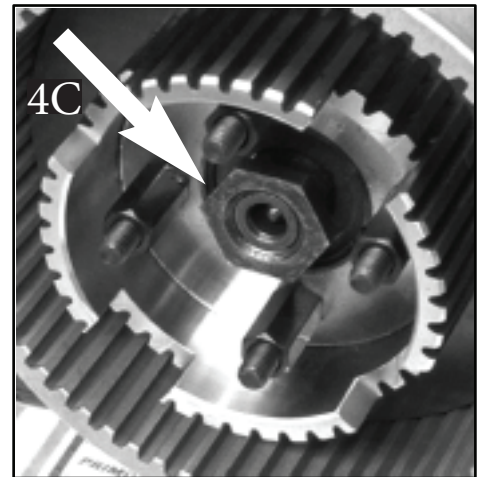
**STEP 4:** Install the clutch hub & adapter into the OEM clutch basket. Use thread lock on the allen bolts and tighten to 80 INCH POUNDS (not foot pounds!)



**Install the adapter into the basket! Install the lock-ring on the rear of the adapter!!**

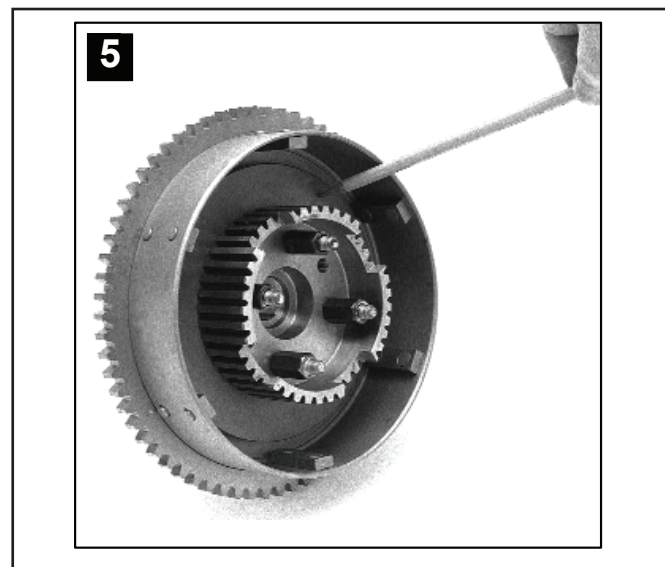
**STEP 4C:**

Install the clutch basket/hub assembly onto the transmission main-shaft using two drops of blue threadlock and tighten the clutch hub nut to 50-60 foot-pounds of torque.



**STEP 5:**

First plate installed is the .120" steel plate. It goes all the way to the rear of the clutch hub.

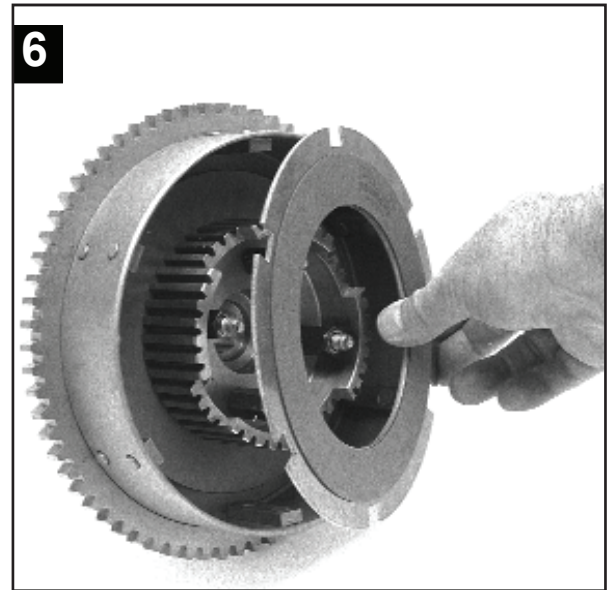


**STEP 6:**

Next clutch in is a friction(as shown above) then steel, alternating until all the plates are installed!

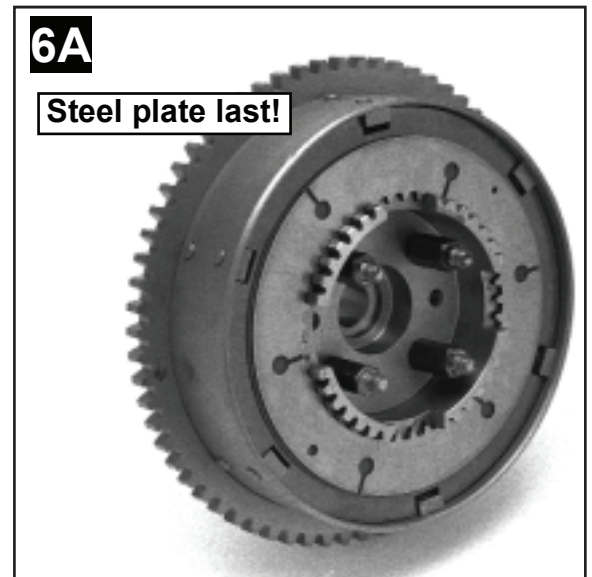
**ATTENTION!**

If the clutch is to be operated in an oil bath it is recommended that the friction plates be soaked in primary lubricant for 15-20 minutes. Wipe off excess lubricant prior to installation. We recommend using Dextron III ATF (Automatic Transmission Fluid) in the primary for best performance with the clutch.



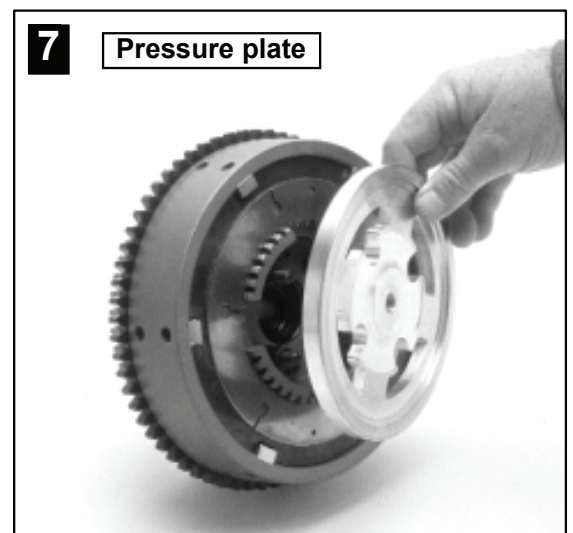
**STEP 6A:**

Last clutch plate to be installed is a steel drive plate!



**STEP 7:**

The billet aluminum pressure plate is installed next, flat surfaces facing inward as shown!





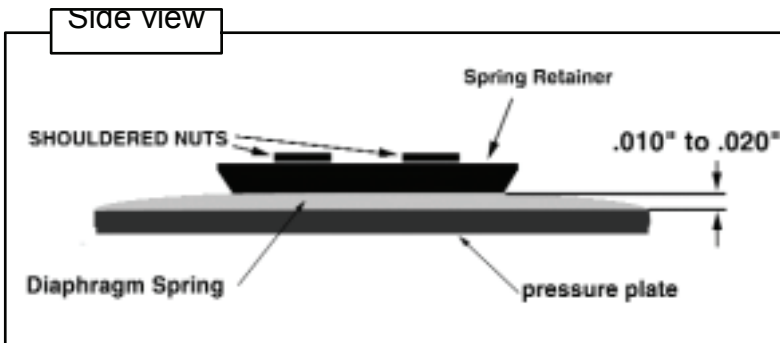
**STEP 8:**

Dab some high-quality anti-seize on the stud threads of the clutch hub! This will prevent the nuts from sticking and cause the studs to come loose when the clutch is disassembled.



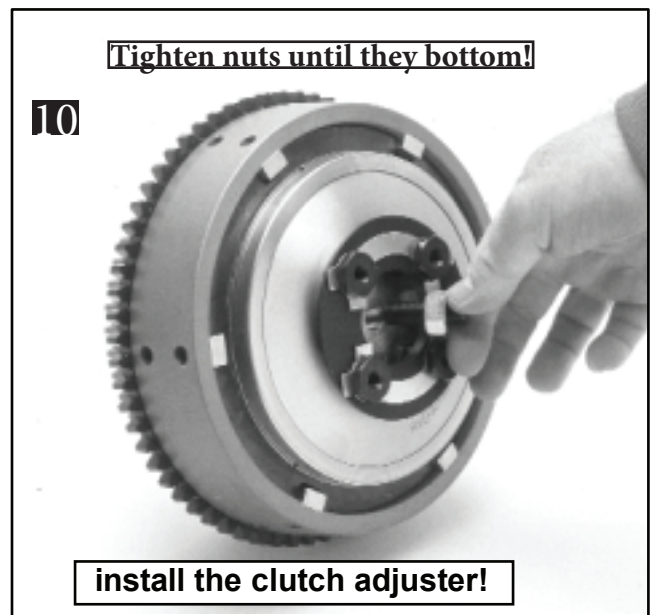
**STEP 9:**

The diaphragm spring & spring retainer are installed next. Spring retainer goes bevel-side in! Tighten the shoulder nuts until they bottom completely & are snug! The lock-clips should be installed as pictured. Bend one tab over each nut to keep it tight. The diaphragm spring should be compressed to within .010" -to-.020" of being flat. The spring will have a very slight outward bow.

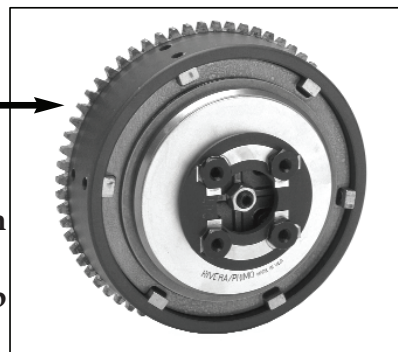


**STEP 10:**

Install the clutch adjustment screw, and adjust the clutch per the instructions in your service manual.



Your finished installation will look like this



Be sure to bend one of the locking tabs over each shoulder nut to keep them tight. Pre-Evolution applications eliminates the creep & chatter associated with early style clutch installations. Your early model HD will be easier & safer to operate with clutch installed. A special clutch hub nut is included in every kit!