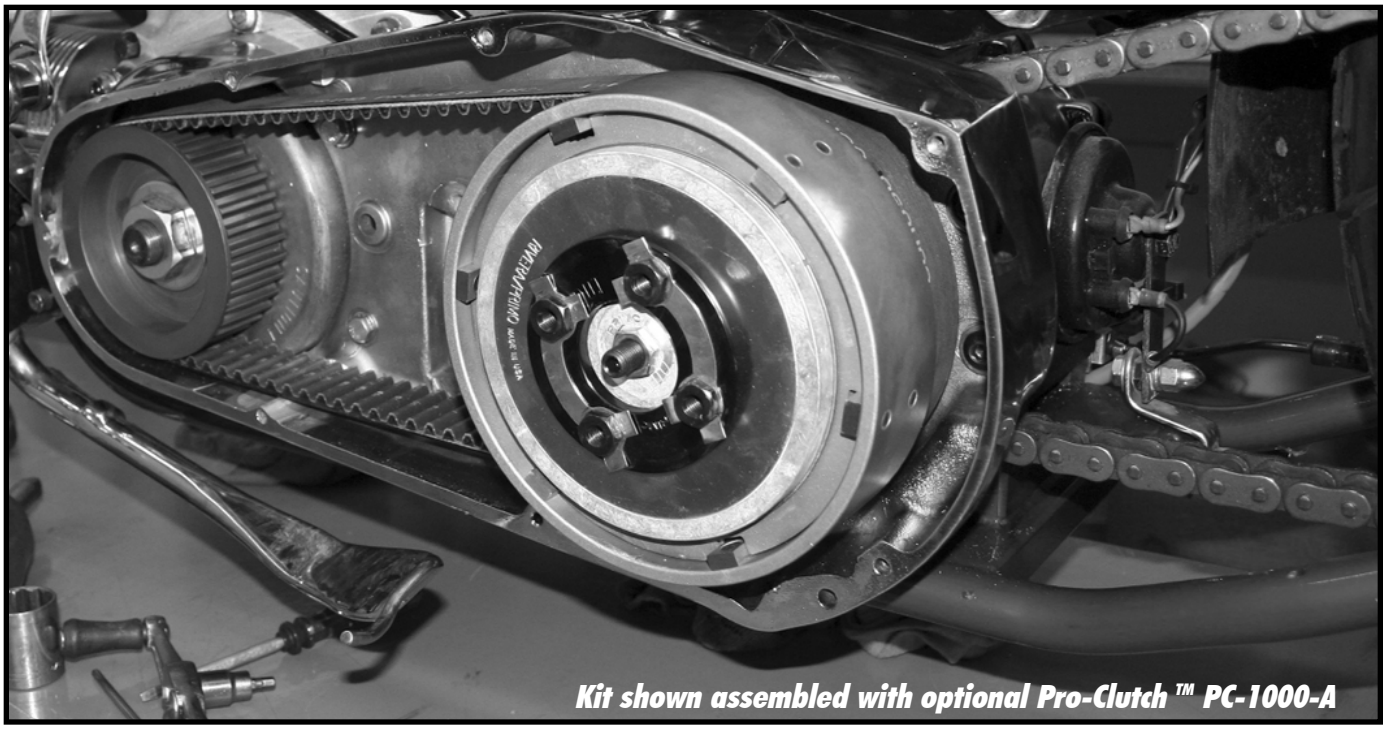
INSTALLATION INSTRUCTIONS
BRUTE II EXTREME™ BELT DRIVES

1-1/2" Wide . .11mm Belt . . Closed Primary . . Electric & Kickstart Models
Fits 1937-1984 Big Twins

ATTENTION INSTALLER...
Prior to starting the following installation procedure make sure the motorcycle is secured properly, and that the battery is removed to prevent accidental start-up. Also please read and familiarize yourself with the instructions. Use only the correct tools for a safe, long-lasting installation.

NOTE:
Primo Belt Drives are designed and engineered to correctly fit stock Harley-Davidson motorcycles. Aftermarket frames, primary covers engine shafts, or clutch hubs may cause installation problems; also bent frames, sagging motor mounts, worn transmission mounts and other defects may cause shortened belt life due to incorrect pulley alignment.


Kit shown assembled with optional Pro-Clutch ™ PC-1000-A

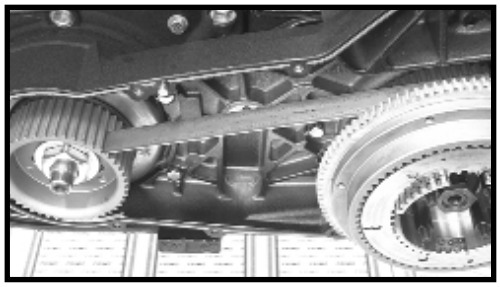
INSTALLATION:
Remove the outer primary cover. Remove the front pulley, chain, compensator & chain adjuster Remove oil lines to primary and plug or clamp to prevent leakage. Cut the chain oiler hose 3 inches from the oil pump and permanently plug. **All belts must be run dry without lubrication of any kind. Therefore, remove all oil from inside the primary covers.**

The spacer behind the front pulley should be removed prior to installing the belt drive. This spacer may or may not be required to correctly align the pulleys. If a spacer is needed for alignment, various sizes are available from your local Primo Belt Drives dealer (part number **PX-1**=package of 6 various sizes).

Install the front pulley supplied in the kit. Loop the belt around both pulleys to insure that you have the proper belt for your pulleys, then gently push the unit into place. Use the supplied washer & nut on the motor shaft. **Torque the motor nut to 80-100 foot pounds.**

If installing a PC-1000-A remove the clutch hub & clutch basket. On tapered shaft models check the fit on the shaft & the fit of the keyway in the hub. Install the key in the mainshaft, making sure it is firmly seated (use of super glue or threadlock in the keyway is helpful to keep the key from sliding out of the keyway during clutch installation). **Tighten the clutch hub nut(left-hand thread) to 60-90 foot pounds.**

After installing and adjusting clutch, track the belt by turning the pulleys. If needed use a straight edge between the front and rear pulleys to check alignment. ➡ Improper alignment of the pulleys will result in reduced belt life. Spacing the motor pulley outward will cause the belt to track towards the outer primary cover. If spaced too far out the belt will rub on the inside of the clutch shell.



Before installing the primary cover be sure that everything inside clears both the outer and inner covers. In some cases a small amount of metal may need to be removed from one or more of the bosses on the inner or outer primary cover.

FREE PLAY: This term describes the amount of up and down movement in the belt taken at the center-top with a cold drive train. Both pulleys must be securely tightened ready to run. The correct way to measure free play is to grasp the belt top-center and push up and down using about 10 pounds of force. **The correct free play for enclosed installations is approximately 1/2"-3/4"**. Free play is critical. Both the pulleys and the primary cover expand under the influence of heat during normal operation. **If you believe that a free play problem exists, do not start the motorcycle ! Call first.**

***VENTING*:** Primo recommends that enclosed belt installations be vented to allow cool air to circulate into and out of the primary case. This will keep heat expansion to a minimum & extend belt life. **Special Note**: 1969 Motorcycles require a #16657 motor seal.

LIMITED WARRANTY:
All pulleys are warranted to be free from defects in material and workmanship under normal use for a period of one year from actual date of purchase. Seller's liability shall be limited to repair or replacement of any materials found to be defective, free of charge at it's plant or authorized service depots, of specific manufactures components. It is further warranted that products that were designed for a specific purpose, shall perform for that purpose when installed exactly as defined in the Installation Instructions accompanying the unit. In no event shall Rivera Primo Inc. or seller be liable for consequential or special damages asserted to be attributed to malfunction of our product, for any reason including, but not limited to, damage asserted to be from improper installation of our purchased Primary Belt Drive components.
This warranty shall not apply to any products which have been subjected to abuse, neglect or accident, nor shall it apply to any product which has been repaired or modified by any person not specifically authorized in writing by the manufacturer.

THERE IS NO WARRANTY ON BELTS: Due to the differing conditions and circumstances under which all belts are installed and used, Gates Rubber Company will not warranty any belt for length of service. Regardless of belt type, keeping your system free of debris and other objects is most important. Remember too, improper handling of the belt can shorten service life. Do not crimp the belt. Do not twist the belt. Do not pry the belt onto the application. If you're shipping or storing, try to eliminate forward and back-bending of the belt.

LIMITATION OF LIABILITY:
THERE ARE NO IMPLIED WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF ANY SHIPMENT AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS EXCEPT THAT THE MATERIAL SOLD HEREUNDER SHALL BE OF SELLER'S STANDARD QUALITY, and buyer assumes all risk and liability for all loss, damage or injury to person or property resulting from the use of said material in manufacturing processes or in combination with other substances, or otherwise. Except as otherwise provided herein quality shall be in accordance with seller's specifications. Final determination of the suitability of the material for the use contemplated by buyer is the sole responsibility of buyer, and seller shall have no responsibility in connection with such suitability.

WARNING: All primary belt drives should never be operated without the proper safety guards in place. Failure to use belt guards such as outer primary covers will terminate any existing warranty.

OPTIONAL PRO-CLUTCH™:

PRO-CLUTCH™ . . . PC-1000-A
For 1937-1984 Big Twins

Now that you've purchased a legendary Primo Belt Drive, why not mate that bad-boy to the finest clutch assembly sold today, Rivera Primo's **Pro-Clutch™**, part number PC-1000-A.

This baby **will easily transmit all of your motor's horsepower to the transmission without slipping or grabbing !** Better yet, it'll do that without sacrificing smooth, easy hand control.

The PC-1000-A model is engineered for early-model Big Twins, 1936-1984, and upgrades the clutch assembly in two ways. First, by increasing the friction area by more than 100%. Secondly, by replacing the old, outdated coil-spring clutch pack with Rivera Primo's proprietary diaphragm spring design. Diaphragm spring-operated clutches have proven to be more durable & more effective than typical coil-spring clutch packs when utilized in street & high performance applications. Simply stated, they get the job done !!

The **Pro-Clutch™** installs quickly into the existing clutch basket by removing the OEM hub and caged(loose) bearings, then installing the supplied hub adapter assembly and new clutch pack consisting of eight(8) steel and seven(7) Kevlar friction plates.

So, give us a call and get yours on the way. We're certain you won't regret the move !