PANHEAD ELECTRIC STARTER
Installing Tech Cycle Indian Larry Kit

OWNERS AND BUILDERS OF PANHEAD-POWERED BIKES know that, unless the machine is a 1965 or a new version using a Shovelhead left crankcase, the only way they can get their motor to fire is with lots of vigorous leg activity. That is. unless they delegate the job to their finger by doing what the pros like Indian Larry do: install a Tech Cycle electric starter kit.

When Paul Spradlin of Underground Cycles was building this year's Daytona giveaway bike, we asked him to install just the starter and belt drive system, without the steel inner and outer primary covers, for this tech story. I did that because though these covers can be installed with this kit, and, in fact, are on the Daytona bike, the inner cover requires extensive modification, while the outer also needs some changes. That goes beyond what I wanted to cover in an install story, especially since many builders do not hide the belt drive under chrome tin.

Paul used Tech Cycle's Indian Larry Signature Series kit. which has rounded contours on the support plate. This allows it to be slightly more movable, which helps provide a little extra clearance for different frame applications. The Indian Larry kit is also spaced wider to allow for a rear drive belt. All the aluminum components of this kit are CNC-machined from 6061-T6 billet aluminum. All the electrical parts are brand new, quality components. including one of Tech Cycle's Tornado starter motors, which can be rotated and mounted four different ways, so it can be made to fit just about any application, swingarm or rigid. The system's 1-1/2" belt drive is manufactured for Tech Cycle by BDL and comes with a BDL Competitor clutch. The belt drive's BDL clutch basket is modified by Tech Cycle and fitted with an 83-tooth ring gear.

Tech Cycle's Twister Electric Start Kit is designed for use with a RevTech 5-in-4 tranny, as we have done, but other kits are also available for all four- and five-speed style cases, including the rotary top (cowpie) late Shovel transmissions, as well as Knuckle and Panhead four-speed cases without primary cover cars. Kits are also available for factory and aftermarket rear belt applications.

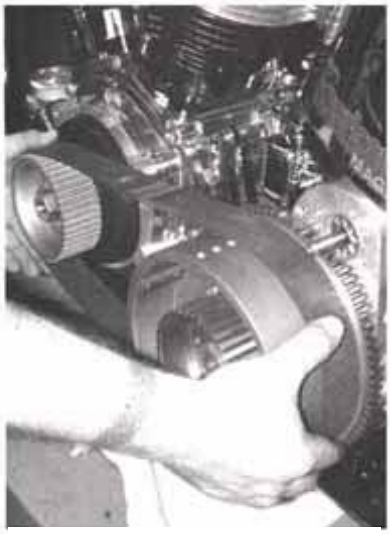
1) Our opening shot shows the tranny and oil tank installed and ready for the electric starter and belt drive system.

2) The first part on is the Tech Cycle starter motor support plate. Bolt it to the four ears of the tranny, which are for the inner primary cover, using the 5/16” Allen bolts supplied in the kit.

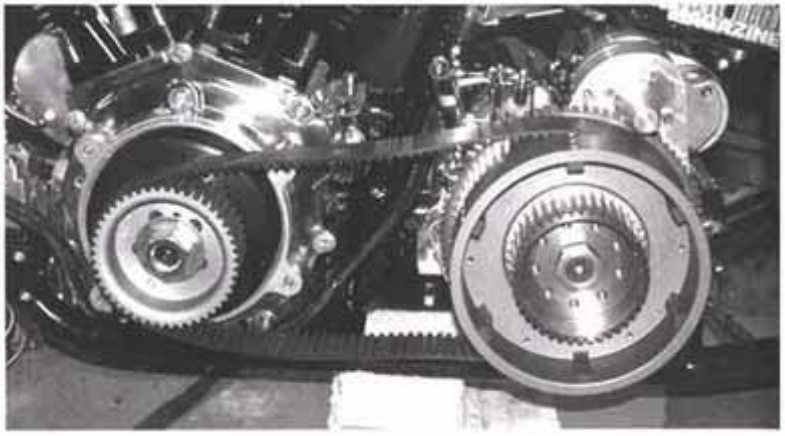
3) Next in is the Tech Cycle chrome Tornado starter motor, which gets attached to the support plate using the two supplied Allen bolts.

4) The Tech Cycle / BDL front pulley can then get bolted to the engine sprocket using the supplied washer and nut. A 1-5/16" socket should do the trick.

5) After positioning a key into the slot on the tranny's mainshaft, the Tech Cycle / BDL clutch basket (shell) goes on next using a 1-1/4" socket.
Note: This is a reverse-thread nut, so don't go the wrong way!



6) The Tech Cycle / BDL belt can then get slipped over the pulley and clutch basket.



7) The Tech Cycle / BDL starter extension goes on last using the supplied hardware and a 3/16" Allen. That finishes the installation, except for the wiring.

8) Here's how the finished installation looks. You can also run a set of steel primary covers if you choose. However, you'll have to alter the inner and outer covers to some degree to get them to work with this system.

As seen in American Iron Magazine