20413110



# INSTALLATION INSTRUCTIONS

**P/N 413110, 413210, & 413410** (Super Torque Starter for 1981-2016 Sportster Harley Davidsons® & 1994-2008 BUELL except 1125R)

# READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION!

**NOTE:** Refer to the Factory Shop Manual electrical section for safety instructions prior to preforming any repairs or installations of electrical components.

**CAUTION!** ALWAYS DISCONNECT THE BATTERY CABLES BEFORE PERFORMING ANY ELECTRICAL SYSTEM REPAIRS OR MODIFICATIONS.THIS WILL PREVENT DAMAGE TO THE ELECTRICAL SYSTEM OR ACCIDENTAL STARTING OF THE MOTORCYCLE IN CASE OF AN ELECTRICAL ARC CAUSED BY SHORTING THE BATTERY POWER TO GROUND.

**WARNING!** SEVERE DAMAGE TO THE ELECTRICAL SYSTEM OR PERSONAL INJURY MAY OCCUR BY NOT FOLLOWING THE ABOVE SAFETY INSTRUCTIONS.

## STARTER REMOVAL:

- 1. Remove the seat. Disconnect the cables at the battery. Remove the ground (-) cable first and then the positive (+) cable.
- 2. Disconnect ignition switch wire and battery cable from starter solenoid.
- 3. Remove the two socket head starter mounting bolts and washers. Note the location of any ground wires that are attached to the starter bolts.
- 4. Remove the starter motor.

## STARTER INSTALLATION:

- Install the Spyke starter using the two socket head mounting bolts and washers. Attach the ground wire to the proper mounting bolts. Torque the bolts to 13 to 20 ft. Ibs. NOTE: Apply thread sealer such as liquid Teflon to the bolts threads to prevent leaks.
- Attach positive (+) battery cable and ignition switch wire to the starter solenoid. Torque the battery cable nut to 65-85 in. lbs. CAUTION: Do not over tighten the nut.
- 7. Re-install the battery cables to the battery in the reverse order as they were remove in Step 1.

NOTE: For improved electrical system operation and to insure that the maximum amps required by the starter are available, Spyke recommends using a two-ground cable wiring system at the battery. The (-) cable from the battery should attach to the ground stud on the frame or bolt directly to the frame. A second cable (4 gauge) should attach from the grounding point on the frame to one of the starter mounting bolts. All connections must be clean and tight and free from any powder coat, paint, or grease.

#### For technical assistance call 909/547-9058

PerTronix, LLC. 440 E. Arrow Hwy. San Dimas, CA 91773



#### LIMITED WARRANTY

PerTronix, LLC. Warrants to the original Purchaser of its solid-state ignition system (product) that the module, trigger rotor and wiring (components) shall be free from defects in material and workmanship for a period of (12) months from the date of purchase.

If within the period of the foregoing warranty PerTronix finds, after inspection, that the product or any component thereof is defective, PerTronix will, at its option, repair such products or component or replace them with identical or similar parts PROVIDED that within such period Purchaser Promptly Notifies PerTronix, in writing, of such defects.