

# Cycle Electric Inc.

## Installation Instructions CE-73T

The CE-73T is a three phase charging system designed to fit all 2001-2006 to upgrade to a 45-amp system.

These are generalized instructions and are not intended to be all-inclusive. For more detail see a service manual on your model.

### Alternator Removal

- 1) Disconnect the negative battery terminal.
- 2) Drain the primary case oil.
- 3) Remove the outer primary cover.
- 4) Consult an appropriate service manual and remove compensator sprocket.

*Note: After several thousand miles it may be possible to remove the compensator sprocket and chain adjuster shoe without removing the clutch. Caution: Do not put excessive side force on chain.*

- 5) Remove the output shaft extension. Take note of all shims and spaces between the output shaft extension and the rotor.
- 6) Remove the rotor.
- 7) Unplug the regulator from the stator and remove the plastic plug receptacle from the stator side. Use a small needle nose pliers to remove the orange lock clip from inside the plug. Then use a small screwdriver to release the locking tab and remove each wire from the plug receptacle one at a time.
- 8) Remove the 4 stator-mounting screws.

### Alternator Installation

- 1) Install the stator wire through the hole in the case. Pull gently on the wires to seat the case sealing grommet. On twin cam models the first lip on the grommet will come all the way through and seat on the out side of the case.
- 2) Mount the stator to the engine case with the new mounting screws (supplied). The screws have thread-locking compound already applied. Torque the screws to 30-40 in-lbs.
- 3) Install the stator wires into the plug housing. Insert the wires in holes #1 #2 and #3. It does not matter which wire goes in which hole. Push in until terminal snaps in. after all three wires are fully inserted install the orange locking clip.

4) Install the rotor slowly. Take care not to let the magnets hit the stator. Do not let the rotor snap in to place or magnet damage may occur.

*Note: no shims are used under the rotor on Twin Cam models.*

5) Reinstall any shims and spacers removed in step 5 of Alternator Removal.

6) Install compensator sprocket with chain adjuster Shoe, and clutch if removed.

7) Adjust primary chain.

8) Check primary chain alignment. Adjust if necessary

9) Install outer primary and other parts removed.

*Note: Don't forget to add oil on wet clutch models.*

### **Mounting new 50 amp breaker**

*Note: 2000 to 2006 models come stock with a 30 Amp main breaker. Do not change the stock 30 Amp main breaker to a larger breaker or switches and wires will not be protected and may burn up.*

*. We recommend that new accessories that use a lot of amperage be connected to the silver terminate on the new 50A breaker. If you want these accessories to activate from your ignition switch, use a relay.*

1) Use a suitable stand or lift to support the motorcycle so the rear wheel is off the ground.

2) Remove the rear wheel.

3) Remove the plastic panel to expose the main circuit breaker.

4) Remove battery.

5) Hold the new circuit breaker mounting clip next to the main breaker and mark a spot for the pop rivet. Drill .192" to .196" hole (#10 drill) and secure the new breaker bracket with the pop rivet supplied.

6) Insert the new 50 amp breaker in breaker bracket.

Connect small end of the 13" wire to copper color terminal on circuit breaker. Connect large end to battery positive terminal.

*Note: remove old regulator wire and reconnect new regulator wire before reinstalling plastic panel and rear wheel.*

### **Regulator** **Remove Old Regulator**

1) Disconnect battery negative terminal.

2) Disconnect regulator DC wires. One connects to the silver post on the main breaker. The other connects to a grounding stud.

*Note: if you tie a piece of fishing line to the ring terminal of old regulator wire before pulling the wire out. You can use this cord to pull the new wire in place.*

- 3) Take note of how old wire is routed. Cut wire ties and remove wire.
- 4) Unbolt two ¼-20 Allen screws and remove regulator.

## **Install New Regulator**

- 1) Mount new regulator. Reuse Allen screws.
- 2) Route and connect wire with the yellow label marked (silver post main breaker) to the silver post on the **new 50 amp circuit breaker**.
- 3) Rout and connect wire labeled GND to the grounding stud.
- 4) Connect AC plug to stator.
- 5) Check the routing of all wires to be sure they are not in a vulnerable position. Keep wires away from exhaust pipes and moving parts. Be sure wires are not in the very bottom of lower frame or they will get pinched if you bottom out.

Replace all wire ties previously cut and add new ones where necessary.

- 6) Reinstall the battery, plastic panel and rear wheel.  
Start the motor and test the voltage at the battery. Voltage should run 14.2 to 14.6 depending on what model you have.

## **Have A Good Ride!!**