

Cycle Electric Inc.

Installation Instructions

CE-84T-04

The CE-84T-04 is designed to upgrade the charging system on 2004 -2005 FLH-FLT Twin Cam models.

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 negative battery terminal.

2) Drain primary case oil.

3) Remove outer primary cover.

4) Consult 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 output shaft extension. Take note of all shims and spacers between output shaft extension and rotor.

6) Remove the rotor.

Note: the magnets in the 48 amp rotors are significantly stronger than normal rotors. It is recommended that you use a special rotor remover/installer tool such as (HD-441771).

7) Unplug regulator from stator and remove the plastic plug receptacle from stator side. Remove the terminal position assurance clip on the backside of plug. Each terminal has 2 lock tabs. Using 2 paper clips or #16 gage solid wires. Insert one on each side of a terminal from the front side of the plug receptacle and pull the wire out the backside.

8) Remove the 4 stator-mounting screws. Use a small screwdriver to push the lip of the case sealing grommet into the hole in the case. Pull the wire trough the case hole and remove the stator.

Alternator Installation

1) Install 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 well come all the way through and seat on the out side of the case.

2) Mount the stator to engine case with new mounting screws supplied. Screws have thread-locking compound already applied. Torque screws to 30-40 in-lbs.

! CAUTION!

When installing the rotor, keep fingers away from edge. The magnetic force may cause rotor to suddenly be drawn inward and could pinch fingers if in the way.

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) Install shims removed in step 6 of removal.

Note: This kit is designed as a direct replace for the stock charging system on 2004 –2005 FLH-FLT. No primary chain alignment should be necessary

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

8) Adjust primary chain.

9) Check primary chain alignment.

10) Install outer primary and other parts removed.

11) Add oil to primary case.

Regulator **Remove Old Regulator**

1) Unplug the regulator/stator connectors.

2) Unplug the regulator B+ wire

3) Disconnect the regulator GND. Wire from the ¼" grounding stud.

4) Unbolt the regulator and remove.

Install New Regulator **Regulator Installation**

Note: The bottom of the feet on the regulator are cut at an angle to lean the regulator away from the oil filter. Be sure to mount the regulator so it leans forward away from the oil filter.

1) Connecting wires to regulator

Note: When connecting wires, place regulator upside down with something soft under fins so paint won't be scratched.

A- Connect end labeled B+ to B+ terminal on regulator.

B- The ground wire is labeled GND on both ends. Connect the end with the smaller ring terminal to regulator GND terminal on regulator.

Note: For best appearance, position wires to follow the contour of the regulator legs.

C- To connect the AC wires place the regulator upside-down on suitable stand in front of front motor mount. The regulator-shipping box should work. Connect one AC Wire from the stator to each AC terminal on the regulator. It doesn't matter which one goes where.

2) Mount the new regulator. The regulator should sit directly on the frame and lean forward. If it leans back turn it around. Reuse the old wire claps. Install them on top of the regulator mounting foot. Reuse the stock 1/4" nuts to fasten the regulator to the frame.

3) Connect the battery wire plug.

4) Rout wire labeled GND. and connect it to the 1/4" ground stud.

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) Reconnect battery and start the motor. Test battery voltage. Voltage should run 14.4 to 14.6.

Have A Good Ride!!