Installation and Troubleshooting Guide

All rights reserved. Reproduction or use of content, in any manner, without express written permission by CDI Electronics, Inc., is prohibited.

CDI P/N's: 193-4204

NOTE: This unit replaces P/N's: 583529, 584204 and 585195.

WARNINGS:

This product is designed for installation by a professional marine mechanic. CDI cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

DO NOT USE A MAINTAINENCE FREE, AGM OR DRY CELL BATTERY WITH THIS TYPE REGULATOR/RECTIFIER AS THIS WILL VOID THE WARRANTY !!!

NEVER DISCONNECT THE BATTERY WHILE THE ENGINE IS RUNNING AS THIS MAY BURN OUT THE REGULATOR/RECTIFIER. ***If the boat is equipped with a battery switch, make sure that it is a make before break type.***

Installation

1. Disconnect the battery and all wires from the regulator.
2. Remove the old rectifier/regulator. (Note: On some engines, it may be necessary to remove the flywheel first.)
3. Thoroughly clean all ground connections and regulator mounting area.
4. Install the new regulator using the new gasket.
5. Connect the new rectifier/regulator to the stator (ignore any stripes on the stator as the new rectifier/regulator does not require the Yellow wires to be connected to a particular stator wire).
6. Reconnect the battery.

Testing regulator/rectifiers on the engine

Recommended tools:

Fluke multimeter with DVA adapter (CDI 511-9773-NL)	Load bank
Piercing probes (CDI 511-9770)	Jumper wires

1. Install an ammeter capable of reading the maximum output in line on the red wire connected to the starter solenoid.
2. Connect a load bank to the battery.
3. In the water or on a Dynometer, start the engine.
4. At 800-1000 RPM, check output on the gray wire, reading should be at least 8 volts with a DVA meter. A low reading usually indicates a bad regulator if the system is charging the battery.
5. Bring the RPM up to approximately 3500.
6. Turn on the load bank switches to increase the battery load to match the rated output of the stator.
7. Check the ammeter.
8. If the amperage is low,

A) Check the purple wire for voltage while the engine is running. You should see the same voltage as the battery.

B) Connect a jumper wire from the Positive battery cable to the purple wire and recheck the ammeter. If the amperage is now correct, there is a problem in the harness or key switch.

9. If the amperage is correct, but the battery voltage remains low, replace the battery.

Thank you for using CDI Electronics 8/18/2010