

## **Installation and Troubleshooting Guide**

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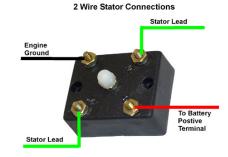
CDI P/N: 155-1450

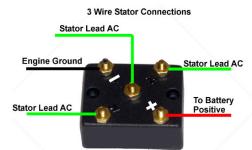
NOTE: This universal rectifier can be used to replace Chrysler/Force P/N: F369450, F369450-1, FK369450 and other applications as needed. This product is designed for installation by a professional marine mechanic. CDI cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

DO NOT USE A MAINTAINENCE FREE OR AGM BATTERY WITH THIS RECTIFIER AS DAMAGE TO ELECTRICAL PARTS MAY OCCUR!!!

Installation

- 1. Disconnect the battery negative cable.
- 2. Disconnect the old rectifier (note the color of the stator wires).
- 3. Remove the old rectifier, saving the original mounting screw.
- 4. Mount the new rectifier, using the original screw.
- 5. Connect the black engine ground wire to the ENG GND terminal.
- 6. Connect the red jumper wire from the starter solenoid to the + BAT terminal.
- 7. Connect the wires from the stator to the AC terminals.





NOTE: Stator lead positions are interchangeable

## **Troubleshooting**

Using a digital Volt/Ohm meter, Check the resistance of the rectifier as follows:

Red Meter Le	ead Black Meter Lead	Reading
ENG GND	AC 1	over I Mega Ohms
ENG GND	AC 2	over I Mega Ohms
ENG GND	AC 3	over I Mega Ohms
AC 1	+ BAT	over I Mega Ohms
AC 2	+ BAT	over I Mega Ohms
AC 3	+ BAT	over I Mega Ohms
AC 1	ENG GND	Open
AC 2	ENG GND	Open
AC 3	ENG GND	Open
+ BAT	AC 1	Open
+ BAT	AC 2	Open
+ BAT	AC 3	Open

\* Diode readings are to be read one way, then reverse the leads and read again. You should get a low reading in one direction and a higher reading in the other. In Addition, the AC terminals are not marked as listed. They may be referred to in any order as long as the order is sequential.

## **Maximum Output Test**

- 1. Install an ammeter capable of reading at least 15 amperes in-line on the red wire from the rectifier to the starter solenoid.
- 2. Connect a load bank to the battery.
- 3. In the water or on a Dynometer, start the engine and bring the RPM up to approximately 4500 in gear.
- 4. Turn on the load bank switches to increase the battery load to equal stator capacity and check the ammeter.
- 5. If the amperage is low,
  - A) Check the load bank connections and meter for battery draw.
  - B) If the output is still low, check and clean all connections between the battery and the rectifier. Inspect stator windings for burned or discolored windings.
- 6. If the amperage is correct, but the battery voltage remains low, replace the battery.

## Overcharging

- 1. Using a voltmeter, check the voltage on the battery and compare it to the voltage on the red wire connected to the starter solenoid to engine ground.
- 2. If the voltage is high on the engine compared to the voltage on the battery, do a voltage drop test and try to isolate the area where the problem is.
- 3. If the voltage is the same on the battery and the engine, but is over 15.5 volts at 4500 RPM, replace the battery with a known good high quality MARINE battery.
- 4. A continued high voltage reading may indicate the need for a regulator/rectifier combination instead of an rectifier only.

Thank you for using CDI Electronics

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