



# Installation and Troubleshooting Guide

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## CDI P/N: 174-4793

This stator replaces the following P/N's: 398-3587, 398-3618, 398-4792, 398-4793 and 398-5232.

Warning! 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 CHARGING SYSTEM!!!**

## INSTALLATION

1. Disconnect the stator wires from the rectifier/regulator.
2. Remove the flywheel.
3. Mark the position of the mounting screws in relation to where the stator wires come out of the old stator.
4. Remove the old stator.
5. Orient and install the new stator (using a good thread-locker applied to the bolts) in the same position as the old stator on the engine and install the flywheel, following the service manual instructions.
6. Connect the new stator to the regulator/rectifier (ignore any stripes on the rectifier as the new stator does not require the Yellow wires to be connected to a particular rectifier wire).

## Troubleshooting

Recommended tools:

Fluke multimeter with DVA adapter (CDI 511-9773-NL)

Ammeter Adapter (CDI 511-9772)

Battery Load bank

### Not Charging the Battery

1. With all wires connected and the engine running at approximately 1500 RPM, check the DVA voltage from each yellow wire to engine ground. The two readings have to be within 2 volts of each other (i.e. if one is reading 20 volts, the other has to read between 18 and 22 volts). If the readings are not equal, go to step 3. If they are equal, go to step 2.
2. Check the DVA voltage from the yellow wires to the red wire going to the solenoid. The two readings must be within 2 volts of each other. If the readings are unequal, replace the rectifier. If they are equal on this step and step 1, the rectifier and battery charging portion of the stator are OK.
3. If the readings are unequal, mark across the connection between the stator and rectifier stud on the low side. Turn the engine off and swap the stator leads. Crank the engine up and retest. The component that has the marking with the low reading is bad.

### Checking maximum output

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 Dynamometer, start the engine and bring the RPM up to approximately 5000.
4. Turn on the load bank switches to increase the battery load to match the rated output of the stator (12 amps).
5. Check the ammeter.
6. If the amperage is low, test per "**Not Charging the Battery**" above.
7. If the amperage is correct, but the battery voltage remains low, replace the battery.

Thank you for using CDI Electronics

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