



# Installation and Troubleshooting Guide

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**CDI P/N: 173-3724**

**This stator replaces P/N's: 581957, 582506, 582730, 583119, 583644, 583724 and 583830.**

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

**SERVICE NOTE:** Discoloration of all the battery windings is an indication of a problem in the rectifier/regulator. Discoloration of only one post of the battery windings indicates a problem in the stator.

## INSTALLATION

1. Remove the negative battery cable.
2. Remove the flywheel.
3. Disconnect the original stator wires.
4. Remove the original stator, saving the original bolts.
5. Install the new stator using the original bolts with a good thread-locker applied (CDI 989-3977 is recommended) to the bolts and tightened to the factory torque specifications.
6. Connect the new stator to the power pack. NOTE: If the original stator had a 3 pin connector, replace the 2 pin connector on the Brown wires with the 3 pin connector.
7. 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).
8. Replace the flywheel according to the service manual.
9. Clean all battery cable connections, both on the battery and the engine.
10. Replace the battery cable.

## TROUBLESHOOTING

### NO FIRE ON ANY CYLINDER:

1. Disconnect the kill wire and retest. If the ignition now has fire, check the kill circuit.
2. Check the resistance between the brown and brown/yellow wires. You should read approximately 500-650 ohms. DVA (peak voltage) should be 150v or more.
3. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
4. Disconnect the rectifier/regulator and retest. If the fire returns, replace the rectifier/regulator.

### NO FIRE ON ONE CYLINDER:

1. Disconnect the spark plug wires from the spark plugs and install a spark gap tester (511-9766 is recommended) on all cylinders.
2. Swap the brown wire and brown/yellow wire and see if the problem moves. If it does, the stator is likely bad.
3. Check the power pack and trigger.

### HIGH SPEED MISS-FIRE OR WEAK HOLE SHOT:

1. Connect a DVA meter between the brown and brown/yellow wires in each set and do a running test. AT NO TIME SHOULD THE VOLTAGE EXCEED 400v. If it does, the regulator circuit in the power pack is bad. The voltage should show a smooth climb and stabilize, gradually falling off at high RPM (above 5000). If you see a sudden drop in voltage right before the miss becomes apparent, the problem is likely in the stator.
2. Disconnect the rectifier and retest. If the problem disappears, replace the rectifier and retest to verify that the problem was in the rectifier.

### OVER CHARGING THE BATTERY:

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 FLOODED CELL battery.
4. A continued high voltage reading may indicate the need for a regulator/rectifier combination instead of a rectifier only.

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