

Installation and Troubleshooting Guide

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This stator replaces P/N's: 581046 and 581225 used on 1973 through 1977 V4 engines with terminal block style power packs.

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.

NOTICE: This stator uses a single charge coil to provide voltage for the CD module. Both the original and this replacement will test the same as regards the DVA output and resistance readings.

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.
- 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 the Stator

NOTICE: Any sign of leakage out of the high voltage coils or bubbling around the battery charge windings indicate a bad stator. Check for burned marks on each pole. If a problem is found on the battery windings, we recommend the rectifier/regulator be closely checked or replaced.

No fire at all:

- 1. Disconnect the kill wire and retest. If the ignition now has fire, check the kill circuit.
- 2. Check resistance between the Brown/Yellow and the Brown wire. You should read approximately 450-600 ohms. DVA (peak voltage) should be 150v or more while connected to the power pack.
- 3. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
- 4. Disconnect the rectifier and retest. If the fire returns, replace the rectifier.

No fire on One Bank:

- 1. Swap the Brown wire with the Brown/Yellow wire and see if the problem moves. If it does, the stator is likely bad.
- 2. Check the power pack and trigger.

High speed miss or weak hole shot:

- 1. Connect DVA meter between the Brown/Yellow and the Brown wire 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.

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.
- 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 a rectifier only.

Thank you for using CDI Electronics.

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