

Installation and Troubleshooting Guide

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This stator replaces P/N: 583410

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.
- 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. Replace the battery cable.

Troubleshooting the stator

No fire at all:

- 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 500-700 ohms. DVA (peak voltage) should be 150v or more.
- 3. Check the resistance between the orange and orange/black wires. You should read approximately 95-105 ohms. DVA (peak voltage) should be 12v or more while connected to the power pack.
- 4. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
- 5. Disconnect the rectifier/regulator and retest. If the fire returns, replace the rectifier/regulator.

No fire on One Cylinder:

- 1. Swap the brown wire and 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 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.

Thank you for using CDI Electronics

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