

Installation and Troubleshooting Guide



# CDI P/N: 173-3117

This stator replaces P/N's: 18-5868, 583847, 583117 and 583670.

**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. NOTE: You may have to change the connectors in order to make the new stator work with your existing power pack. Use care when doing this in order to prevent crossing the brown wire sets. You should be able to read approximately 900-1100 ohms between the brown wires in each connector.
- 6. Connect the new stator to the power pack. (NOTE: Some applications require changing the terminals and connectors on the Brown and Brown/Yellow wires).
- 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

#### NO FIRE ON ANY CYLINDER:

- 1. Disconnect the kill wires and retest. If the ignition now has spark, check the kill circuit.
- 2. Check the resistance between the brown and brown/yellow wires in each set. You should read approximately 900-1100 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 BANK:

- 1. Disconnect the spark plug wires from the spark plugs and install a spark gap tester (511-9766 is recommended) on all cylinders.
- 2. Using a set of jumper wires, swap the brown wire and brown/yellow wire sets and see if the problem moves. If it does, the stator is likely bad.
- 3. Swap the power packs from one side of the engine to the other and see if the problem follows the power pack.
- 4. Swap the timer base leads from one power pack to the other and see if the problem follows the timer base lead.

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

- 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.

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