

# **Installation and Troubleshooting Guide**

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This stator replaces P/N: 584849.

**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 regulator/rectifier, power pack and timing covers.
- 3. Disconnect the timing sensor.
- 4. Disconnect the stator leads from the power pack and regulator/rectifier.
- 5. Carefully disconnect and remove the throttle linkage connected to the flywheel cover.
- 6. Remove the flywheel cover. Watch for the bendix washers and do not lose them.
- 7. Unbolt the flywheel.
- 8. Using the correct flywheel puller, remove the flywheel.
- 9. Disconnect the original stator plug from the power pack.
- 10. Remove the original stator, saving the original bolts.
- 11. 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.
- 12. Connect the new stator to the power pack.
- 13. 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).
- 14. Replace the flywheel according to the service manual, using new bolts in the hub.
- 15. Replace the flywheel cover. Be sure the bendix washers are in place and that the bendix does not need lubricating.
- 16. Carefully connect the throttle linkage connected to the flywheel cover.
- 17. Connect the timing sensor.
- 18. Verify the ignition timing and reset according to the service manual.
- 19. Replace the battery cable.

# **Troubleshooting**

## No fire at all:

- 1. Disconnect the 4 wire harness connector from the power pack, if the engine now fires the kill circuit or harness is likely bad.
- 2. Check resistance for the brown wires. Brown to Brown/Yellow should read 900-1200 ohms. DVA (peak voltage) should be 150V or more while connected to the power pack.
- 3. Orange to orange/black should read 50-60 ohms. DVA (peak voltage) should be 11-22V 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.

#### High speed miss or weak hole shot:

- Connect DVA meter to between the brown wires 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.
- Disconnect rectifier/regulator and retest. If the problem disappears, replace the rectifier/regulator and retest.

### **Quick Start Does Not Work:**

- 1. Check the resistance from the Orange to the Orange/Black wires. You should read 50-60 ohms.
- Check DVA voltage from the Orange to the Orange/Black wires while connected to the power pack. The reading should be 11-22V. A reading above 22V indicates a problem in the power pack while a reading below 11 volts usually indicates a problem in the stator.

Thank you for using CDI Electronics.

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