Installation and Troubleshooting Guide

CDI P/N: 173-4981

This stator replaces P/N's: 584109 and 584981.

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 5 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 2 sets of brown wires. Brown to Brown/Yellow and Brown/White to Brown/Black should read 450-600 ohms for one set. DVA (peak voltage) should be 150V or more on each set 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.

No fire on one bank:

Check resistance for the 2 sets of brown wires. Brown to Brown/Yellow and Brown/White to Brown/Black should read 450-600 ohms for one set. DVA (peak voltage) should be 150V or more on each set while connected to the power pack.

High speed miss or weak hole shot:

1. Connect DVA meter to each set of 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, swap stator leads to see if the problem is in the stator or power pack.
2. 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.
2. 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. 3/21/2011