

Installation and Troubleshooting Guide

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This kit will replace all of the 18736 series regulator/rectifiers.

WARNINGS:

This product is designed for installation by a professional marine mechanic. CDI cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

DO NOT USE A MAINTAINENCE FREE, AGM OR DRY CELL BATTERY WITH THIS TYPE REGULATOR/RECTIFIER AS THIS WILL VOID THE WARRANTY !!!

NEVER DISCONNECT THE BATTERY WHILE THE ENGINE IS RUNNING AS THIS MAY BURN OUT THE REGULATOR/RECTIFIER. If the boat is equipped with a battery switch, make sure that it is a make before break type.

Installation

- 1. Disconnect the battery negative post.
- 2. Disconnect the green wires from the ignition coils and the high tension leads from the spark plugs.
- 3. Disconnect the old regulator/rectifier.
- 4. Remove the coil plate covering the regulator/rectifier.
- 5. Remove the old regulator/rectifier.
- 6. Clean the gasket area where the o-ring sealed the old regulator/rectifier.
- 7. Connect the new regulator/rectifier to the stator, tachometer lead, and terminal strip.
- 8. Using the new spacers and bolts, mount the new regulator/rectifier plate assembly with the coil plate. (Wires up).
- 9. Reconnect the wires to the ignition coils.

Troubleshooting

Tachometer

- 1. At 800-1000 RPM, check output on the grey wire, reading should be at least 8 volts with a DVA meter. A low reading usually indicates a bad regulator if the system is charging the battery.
- 2. Check the resistance between the gray wire and engine ground. You should read approximately 9.8K ohms. Grey to red, and grey to the yellow wires should be a high reading, usually in the M range.

Maximum Output Test

- Install an ammeter capable of reading at least 40 amps in-line on the red jumper wire connected from the terminal strip to the starter solenoid.
- 2. Connect a load bank to the battery.
- 3. In the water or on a Dynometer, start the engine and bring the RPM up to approximately 4500 in gear.
- 4. Turn on the load bank switches to increase the battery load to equal 40 Amps.
- 5. Check the ammeter.
- 6. If the amperage is low,
 - A) Check the load bank for battery draw.
 - B) Reconnect the ammeter between the red wires from the regulator/rectifier and the terminal strip. Retest. You should show about 40 Amps.
 - C) If the output is still low, check and clean all connections between the battery and the regulator/rectifier plate.
- 7. If the amperage is correct, but the battery voltage remains low, replace the battery.

Bench Test

Diode plate check:

Test the forward diodes between the two yellow wires and the red wire. You should get a reading of about 7.5K (7,500). Check the resistance from each of the yellow wires to case ground, you should be a high reading, usually in the M range. The red wire should be a high reading, usually in the M range.

Tachometer Circuit:

Check the resistance between the gray wire and engine ground. You should read approximately 9.8K ohms. Grey to red, and grey to the yellow wires should be a high reading, usually in the M range.

Thank you for using CDI Electronics

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