



# Installation and Troubleshooting Guide

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**CDI P/N: 116-7323**

This unit replaces P/N: 817323A3, A4

Warning! This product is designed for installation 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.

## Installation

1. Disconnect and remove the old switch box.
2. Check for DC voltage on the kill (stop) wires (usually Black/Yellow) with the key-switch in the on and off position. At no time should you see over 2 volts DC on this wire as severe damage to the power pack can occur.
3. Loosely attach the mounting plate to the switch box (Potted side) using the supplied screws.
4. Route the Green coil wires through the hole in the mounting plate.
5. Connect the trigger wires according to the color of the wires.
6. Connect the Black/Yellow wire to the Black/Yellow kill wire from the engine harness.
7. Slide the mounting bracket through the hole in the mounting plate so that the mounting bracket will clamp the mounting plate when tightened.
8. Position the switch box as shown below and install the remaining mounting screw.
9. Tighten the two mounting brackets screws.
10. Connect the green coil wires to the coils.
11. Connect the Purple/White, Blue and Black wires to the Converter box.



Mounting bracket shown

## TROUBLESHOOTING THE SWITCH BOX

### Unit will not fire:

1. Disconnect kill wire AT THE PACK.
2. Check for broken or bare wires on the switch box, converter and trigger.
3. Check the DVA voltage of the converter, (Read from the blue wire to engine ground), with everything connected. The readings should be approximately 180 volts or more on the blue wire, and 11.5 volts or more on the red wire to engine ground.

### Engine will not kill:

Check kill circuit in the pack by using a jumper wire connected to the black/yellow wire coming out of the pack and shorting it to ground. If this kills the engine, the kill circuit in the harness or on the boat is bad, possibly the ignition switch.

### High speed miss:

Check DVA voltage on the blue wire to engine ground at high speed.

**NOTICE:** Use caution when doing this and do not exceed the rated voltage range of your meter. The reading should show a smooth climb in voltage. If there is a sudden or fast drop in voltage right before the miss becomes apparent, the converter is usually at fault. If there is no indication of the problem, it could be mechanical problem.

### Coils fire with spark plugs out but not in:

Check for dragging starter or low battery causing slow cranking speed and low voltage to the Converter. DVA test Converter and trigger.



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## **Intermittent firing on one or more cylinders:**

1. Check for low voltage from the converter and trigger.
2. Dismount the ignition coils and inspect the coils for cracks and broken ferrite cores.

## **All cylinders fire but the engine will not crank and run:**

Index the flywheel and check timing on all individual cylinders. If the timing varies, replace the switch box.

## **Timing Advanced:**

Using an ohmmeter, check the resistance on the White/Black wire from the switch box to engine ground. You should read approximately 8.5K ohms. Readings below 8K ohms or above 9K ohms indicate a bad switch box.

## **Switch Boxes Blows Repeatedly after a Short Running Time:**

1. Dismount the ignition coils and inspect the coils for cracks and broken ferrite cores.
2. Connect a DC volt meter from engine ground to the kill wire from the engine harness and turn the key switch on and off several times, AT NO TIME SHOULD YOU SEE ABOVE .8 VOLTS. A reading above 0.8 volts indicates a problem in the keyswitch or harness.

Thank you for using CDI Electronics.

1/15/2008