



# Installation and Troubleshooting Guide

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**CDI P/N: 115-3301**

**This unit replaces the following P/N's: 404301, 523301, 523301-1 and 300F817855A1**

**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. **The acceptable voltage range for battery type ignitions is typically 9.5 Volts (at cranking) to a maximum of 16 volts at full throttle (13.2-14.6 preferred). Voltages above or below this range can cause damage to the CD.**

**DO NOT USE A MAINTENANCE FREE, DRY CELL OR AGM BATTERY WITH ANY BATTERY DRIVEN CD UNIT!**

**NOTICE:** This unit does not contain an active tachometer circuit. If the original tachometer is still on the boat and connected to the old CD module, you will need to use a tachometer that can be connected to one of the stator wires on the rectifier.

1. Disconnect the positive battery cable.
2. Check and clean all battery terminals and engine grounds.
3. Remove the high tension lead from the distributor and retain the old boot.
4. Disconnect all wires coming from the CD module.
5. Unbolt and remove the old CD module and ignition coil.
6. Install the new CDI module using the bolts supplied with the unit.
7. Install the new high tension lead in the distributor cap using the original boot and connect to the new coil.
8. Connect the wires from the new CD Module as follows:

Black wire	Engine ground
Blue wire	12V from the key switch
Gray wire	Positive terminal of the ignition coil
White/Black stripe wire	Distributor Points (or preamp) terminal

NOTE: This CD does not have the white and red wires used on the original unit.

9. Reconnect the battery cable.

NOTE: When you turn the ignition on, you may hear a high pitched whining noise coming from the CDI module. This is normal, depending upon the battery voltage.

## TROUBLESHOOTING THE CDI MODULE

Recommended Tools:

Fluke Multimeter and 511-9773 Peak Reading Adapter, or equal  
511-9766 Spark Gap Tester

1. Connect a spark gap tester to the high tension lead coming from the ignition coil and set it to approximately 7/16". If it fires when you crank the engine over, there is a problem in the distributor cap, rotor button or spark plug wires.
2. Check voltage present on the blue wire at cranking. It **MUST** be at least 9½ volts. If not, the problem is in the harness, key switch, starter or battery.
3. Connect a DC voltmeter to the white/black wire (while it is connected to the distributor) and rotate the engine. There should be some fluctuation in the meter reading. If the reading is high or low, and fails to move up and down, there is definitely a problem inside the distributor.
4. Connect a DC voltmeter to the blue wire, then disconnect the white/black wire and with the key switch turned on, strike the white/black wire against engine ground. The unit should fire each time. If it does, then the CD unit is usually good and the points (or sensor) require checking. If the CD module fails to fire with this test, verify that the voltage on the blue wire is remaining above 11 volts. If the voltage is good then the CD module is likely bad.
5. Check DVA voltage on the gray wire going to the coil, it should be approximately 200 volts at cranking. If the voltage is right, replace the coil with another coil and retest. A coil that is shorted internally will give a low reading. In this case replace the coil and retry.