



# Installation and Troubleshooting Guide

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**CDI P/N: 114-4911**

**NOTE: This pack can replace the 18-5786, 18-5787, 332-4911A2, A5 and A8 and 338-4733A 2 CD modules.**

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.

**WARNING!!! DISCONNECT THE ORANGE KILL WIRE FROM THE PACK AND CONNECT A DC VOLTMETER TO THE WIRE FROM THE HARNESS. TURN THE KEY SWITCH ON AND OFF SEVERAL TIMES. IF ANY DC VOLTAGE IS SHOWN ON THIS WIRE, THE PACK IS PROBABLY BLOWN AND THE KEY SWITCH OR HARNESS IS BAD.**

**To replace the 332-4911A 2, A 5, A 8 and 18-5786 with the 114-4911:**

1. Remove the old pack and clean all ground wires and mounting plate.
2. Check all trigger, stator and kill wires for breaks and broken insulation.
3. Check for DC voltage on the kill (stop) wires (usually Black/Yellow or Salmon) 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.
4. Connect the Green wire to the #1 (Top) Cylinders ignition coil, the Green/White wire to the #2 (Bottom) Cylinders ignition coil and the Black wire to the same ground wire location as the ignition coils negative side.
5. Connect the Red and Blue wires to the Red and Blue stator wires.
6. Connect the Brown and White wires to the Brown and White trigger wires.
7. Connect the Orange Kill (Stop) wire to the Orange wire.
8. Install the new CD using the original bolts or bolts supplied with the unit.

**To replace the 338-4733A 2 and 18-5787 with the 114-4911:**

1. Remove the old pack and clean all ground wires and mounting plate.
2. Check all the trigger, stator and kill wires for breaks and broken insulation.
3. 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.
4. Install the new CD using the original bolts or bolts supplied with the unit.
5. Connect the Green wire to the #1 (Top) Cylinders ignition coil, the Green/White wire to the #2 (Bottom) Cylinders ignition coil and the Black wire to the same ground wire location as the ignition coils negative side
6. Remove the ring terminals from the red, blue, orange, brown and white wires on the new pack, stator, trigger and kill wires. Connect the wires together, (matching colors) by using butt splices or bullet connectors.

## TROUBLESHOOTING THE CDI MODULE

1. **If the unit will not fire:** Disconnect the kill wire AT THE PACK. Check for broken or bare wires on the unit, stator and trigger. Using the Fluke meter with the CDI 511-9773 peak reading voltage adapter (or CD77), and 511-9770, measure DVA voltage of the stator (read from the red and blue wire to engine ground) while cranking the engine. With everything connected, you should read approximately 180 volts or more on the blue wire and 30 volts or more on the red wire. If okay, disconnect the rectifier and retest. If the engine has spark, replace the rectifier.
2. **Engine will not kill:** Check the kill circuit in the pack by using a jumper wire connected to the orange 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.
3. **High speed miss:** Replace the rectifier and retest. If the miss is gone, the rectifier is bad. If the miss remains, use the Fluke meter with the 511-9773, (or CD77) and 511-9770 probes to check DVA voltage of the stator red 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 readings should show a smooth climb in voltage. If there is a sudden or fast drop in voltage right before the miss becomes apparent, the stator is usually at fault. If there is no indicator of the problem, it could be a small water leak in one of two cylinders.
4. **Coils fire with spark plugs out but not in:** Check for dragging starter or low battery causing slow cranking speed. DVA test the stator and trigger. Disconnect the rectifier, regulator and retest. If the problem no longer exists, replace the rectifier and/or regulator.
5. **Intermittent firing on top or bottom cylinder:** Check for low voltage from the stator and trigger. Check DVA voltage to the coils. They should read within 30 volts of the stator reading. If one is low, swap coil leads and retry. If the low reading follows a lead from the pack, then the pack is bad. Disconnect the rectifier and retest. If the problem is eliminated, replace the rectifier.

Thank you for using CDI Electronics.