



# Installation and Troubleshooting Guide



NOTE: This installation is to be completed by an Authorized Dealer or Professional Service Technician. For questions regarding installation or warranty, call CDI Tech Support at 866-423-4832. **Do not return to the Dealer or Distributor where the part was purchased. Contact CDI Electronics Directly for Return Material Authorization.**

## CDI P/N: 116-8475 Ignition Pack 2 Cylinder

**NOTE: This unit will replace the following P/N: 658475, 300-F658475.**

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 the old ignition module and remove it from the engine.
2. Discard the old mounting bolts.
3. Using the new mounting bolts, mount the replacement ignition module.
4. Use the new spark plug wire as it is or cut the new spark plug wire to length, remove the spark plug boot, install the new spring clip and re-install the spark plug boot on the correct length.
5. Connect the pack as shown below:

#### CD Module #1

Trigger: Orange  
 Pack: Orange  
 Green  
 Stator: Brown/Yellow  
 Pack: Blue  
 Kill: Brown or White  
 Pack: Brown

#### CD Module #2

Trigger: Red  
 Pack: Green  
 Green White/Green Orange  
 Stator: Brown/Blue  
 Pack: Blue  
 Kill: Brown (or White)  
 Pack: Brown

NOTE: On some engines, it may be necessary to swap the Red with the White/Green trigger wire in order to make the CD fire.

### Troubleshooting

#### NO SPARK OR INTERMITTENT SPARK ON ONE CYLINDER:

1. Check the Brown kill wires. They MUST be separated from each other. THIS SYSTEM SHORTS THE BROWN WIRES TOGETHER TO KILL THE ENGINE. The common practice of connecting the kill wires together and shorting them to ground in order to stop the engine will not work on this engine. Disconnect the Brown kill wires and retest. If you have spark, check the ignition switch's "M" terminals if using remote start. You should have a White wire on one terminal and a Blue wire on the other terminal. If both the Blue and White wires are connected together, correct the wiring. If the engine has a tiller handle, check the push button stop switch.
2. Check for broken wires and terminals, especially inside the fork terminal connectors.
3. Check the flywheel for broken or loose magnets.
4. Disconnect the kill wires from the CD and connect a DC voltmeter between the kill wires and engine ground, turn the ignition switch on and off several times. If, at any time, you see DC voltage appearing on the meter, there is a problem in the harness or ignition switch. **AT NO TIME SHOULD YOU SEE BATTERY VOLTAGE ON A KILL CIRCUIT.**
5. Visually inspect stator for burned or discolored areas. If found, replace the stator. If the areas are on the battery charge windings, it indicated a possible problem with the rectifier.
6. DVA readings should always be taken with everything hooked up.
7. Check the stator resistance; you should read 680-800 ohms (factory) and 250-350 ohms (CDI) DVA 180V or more from blue to yellow (Note – On some two cylinder engines, the stator has two blue wires and no yellow wire. The stator will read from blue to blue). All stator wires should read open to engine ground.
8. Disconnect and check the trigger resistance; trigger wire sets read approximately 50 ohms between the wire sets (DVA-0.5V or more), and open to engine ground. If the # 2 cylinder is the one not firing, swap the Red and White/Green trigger wires. If the cylinder starts firing, either the power pack or the trigger was connected backwards internally. The engine will perform satisfactorily if the wires are left with this connection.
9. If readings are good, disconnect stop wire from one pack. If the dead cylinder starts sparking, the problem is likely the blocking diode in the opposite pack.
10. Disconnect the rectifier and retest. If the engine fires, replace the rectifier.

#### ENGINE WILL NOT SHUT OFF:

Check the stop circuit in the pack by using a jumper wire connected to the Brown stop wire coming out of the pack and shorting it to the Brown stop wire coming out of the opposite pack. If this stops the packs from firing, the stop circuit in the harness or on the boat is bad. The ignition switch could also be bad.

#### COILS ONLY FIRE WITH THE SPARK PLUGS OUT:

Check for dragging starter or low battery causing slow cranking speed. DVA test stator and trigger.