



Installation and Troubleshooting Guide



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: 119-2400

This unit replaces P/N's: 30306-2400M, 30306-2400, 35306-2600, 35306-2602, 35306-2602M, 36206-0600M, 36206-0601M, 36206-0602M, 3A-30624-00M, and 3A-30624-00.

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.

Warning! Never disconnect the spark plug wires while the engine is running as this will damage the internal Ignition coil. Do not attempt to start the engine with the spark plug wires not connected either to the spark plugs or a spark tester.

How to test the Engine Stop Circuit (Kill) for DC Voltage:

1. DC voltage present on the kill circuit of the CDI unit to a faulty key switch, boat harness, or engine harness will severely damage the CDI unit's internal kill circuit. Connect a Digital Multi Meter to the Ignition kill wires AT THE CDI UNIT while disconnected from the CDI unit in reference to a known good engine ground. Turn the Ignition switch on and off several times. If at any time you see over 2 VDC on the kill wires, there is a problem with one or both harnesses and/or the Ignition switch. The kill wire should not be connected back to the new CDI unit at any point until the problem is corrected **OR DAMAGE TO THE CDI UNIT WILL OCCUR!**

INSTALLATION

1. Disconnect the Negative battery cable.
2. Disconnect all wires from the old CDI unit and remove it from the engine.
3. Thoroughly clean all ground connections and CDI unit mounting area.
4. Install the new CDI unit using the original bolts. It will be necessary to mount the new CDI unit on an angle using only two bolts.
5. Connect the spark plug wires to the spark plugs. It does not matter which spark plug wire goes to which spark plug as the internal Ignition coil fires both spark plugs at the same time.
6. Connect the Red, Black, and Blue wires from the CDI unit to the Charge (Exciter) coil (Red), plate ground (Black), and Trigger (Pulsar) coil (Blue). If the original CDI unit used a three pin connector between the Stator plate and the CDI unit, cut the three pin connector off of the Stator plate assembly close to the connector. Strip approximately .1875" of insulation from the Black, Blue, and Red wires. Slide the shields on the wires before you crimp and solder the connectors on the Red, Black, and Blue wires from under the flywheel. Use the wires on the new CDI unit as a guide for the correct terminal to use.
7. Connect the Black wire to engine ground.

Note: Some of the older engines used a Brown ground wire while the newer engines use a Black wire.

8. Connect the Brown and Black stop (kill) wires to the engine harness or stop circuit.
9. Reconnect the Negative battery cable.

TROUBLESHOOTING

NO SPARK ON EITHER CYLINDER:

1. Check the cranking RPM. A cranking speed of less than 250 RPM may not allow the system to spark properly. This can be caused by a weak battery, dragging starter, bad battery cables, or a mechanical problem inside the engine.
2. Perform a visual inspection of all ground wire connections to make sure that they are clean and tight.
3. Disconnect the Black and Brown stop wires and retest. If you now have spark, the stop circuit has a fault.
4. Test the Stator (Exciter) and Trigger (Pulsar) coils as follows:

Read from	Read to	Resistance	DVA (Connected)
Red (Excitor)	Black (Engine Gnd)	200-300 Ω	110 V Minimum
Blue (Pulsar)	Black (Engine Gnd)	30-46 Ω	4 V Minimum

NO SPARK ON ONE CYLINDER:

1. If only one spark plug has spark, the internal Ignition coil is defective. The CDI unit is more than likely faulty.

HIGH SPEED MISS:

1. If the boat is equipped with a Hummingbird I.D. depth finder, disconnect the power to it and retest. If the miss is gone, switch to a different depth finder. See Tohatsu Service Bulletin # 1200, dated 9/14/1990.
2. Check fuel lines/tank for restrictions, leaks, or loose connections.
3. Check fuel pump diaphragms for holes that may allow extra fuel at high RPM's.
4. Verify correct spark plugs are installed and are not fouled.
5. Disconnect the stop switch and retest. If the engine performs properly, the stop circuit has a fault.

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Web Support: www.cdielectronics.com • Tech Support: 1-866-423-4832 • Order Parts: 1-800-467-3371

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