

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: 110-0001 Ignition Control Module

This Ignition Module will replace the following P/N's: 0958744 and 30580-881-734. Fits Models BF75B, C, D, E and F (Serial Number 1201207 and newer) and BF100B, C, D, E and F (Serial Number 1201174 and newer).

Warning! 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.

- 1. All DVA tests are done at cranking speed unless otherwise noted.
- 2. All resistance tests are done disconnected from all other components.
- 3. It is recommended that dielectric grease (i.e. CDI P/N: 991-9705) be used on the rubber seal on the connector.
- 4. Please use the Factory recommended sparkplug, gapped at the proper gap.

INSTALLATION

- 1. Disconnect the negative side of the battery.
- 2. Disconnect the wires from the old CDI Ignition Module.
- 3. Remove the old CDI Ignition Module.
- 4. Install the new CDI Ignition Module, using the stand-offs and bolts provided.
- 5. Connect the new CDI Ignition Module to the wires, matching wire colors (See Below).

Connections

Wire Color	Connects To	Function
Green	Engine Ground, Exciter Coil, Pulsar Coil	Engine Ground
Yellow	Yellow	Low Oil Indicator Lamp
Black	Stop Switch	Kill circuit
Brown	Brown	Exciter Coil (High Voltage Charge Coil)
White	White	Pulsar Coil (Trigger Coil)
Green	Green	Pulsar Coil (Trigger Coil)
Blue	Blue	Neutral Safety Switch
Black/White	Black/White	Neutral Safety Switch
Orange	Orange	Output to the Ignition Coil

6. Connect the negative side of the battery.

TROUBLESHOOTING

NO FIRE ON EITHER CYLINDER:

- 1. Disconnect the Black Stop wire. If spark comes back, the Stop (Kill) circuit has a fault.
- 2. Inspect the flywheel magnets to see if they are loose or broken.
- 3. Check the Exciter and Pulsar Coils resistance

Read from	Read to	Ohms
Green (Pulsar Coil)	White	108-132 Ω
Green (Pulsar Coil)	Eng Gnd	Open
Green (Exciter Coil)	Brown	297-363 Ω
Green (Exciter Coil)	Eng Gnd	Open

4. Check the secondary resistance of the ignition coil. With the 5 K Ω resistor boots removed, you should read between 6.4 K and 9.6 K Ω . Check each 5 K Ω resistor boot, you should read between 4 K and 6 K Ω .

NO FIRE ON ONE CYLINDER: Replace the ignition coil.

HIGH SPEED MISS:

- 1. Check the Pulsar (Trigger) coil resistance from Green to White, you should read from 108-132 Ω .
- Check the Pulsar Coil 's DVA from Green to White while connected. You should see the DVA increase with RPM.
- 3. Check the Exciter Coil's resistance from Brown to Green wires. You should read 297-363 Ω disconnected. Check the resistance from the Brown and the Green wires to engine ground. There should be no reading.
- 4. Check the Exciter Coil 's DVA from Brown to Green. You should see the DVA increase with RPM and stabilize. There may be a slight decrease in DVA at high RPM's. A sharp drop in the DVA indicates a problem with the exciter coil.
- Check the secondary resistance of the ignition coil. See #4 above "NO FIRE ON EITHER CYLINDER".



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ENGINE HAS SPARK BUT WILL NOT RUN OR LOW ON POWER:

- 1. Verify correct sparkplugs are installed.
- 2. Check sparkplug gap. Recommended electrode gap is 0.024-0.028 inches.
- 3. Verify Ignition Timing is correct.
- 4. Check carburetor adjustment.
- 5. Verify the carburetor has gasoline in the carburetor bowl. If empty, check for a clogged fuel filter, kinked fuel line, defective Primer bulb or loose fuel connector. Clean carburetor and replace fuel lines with a LP (Low Permeability) fuel line.
- 6. Replace fuel in the gas tank with fresh fuel or switch to another fuel tank with fresh fuel and purge the fuel system.
- 7. Verify fuel pump is working properly.
- 8. Check engine oil for gasoline. If the oil level is extremely over-full, it can cause sparkplugs to be fouled or hydraulically lock the cylinders. If the oil smells strongly of gasoline, check the fuel pump shaft seal and the carburetor for flooding.
- 9. Check engine oil for water emulsification. If found, check thermostat.
- 10. Check compression. Both cylinders should be within 15 lbs of each other (nominally 140 lb on a BF75 and 150 lb on a BF100). If low, check valve adjustment, valves, valve guides, cylinder head gasket and pistons.
- 11. Perform a cylinder leak-down test. Both cylinders should be less than 12% leakage.