

# **Installation and Troubleshooting Guide**

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CDI P/N: 113-2474

## This unit replaces the following P/N's: 582474, 582864, 582901, 586692 and 753790.

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.

#### Installation

- 1. Disconnect the negative battery cable.
- 2. Disconnect all of the wires going to the old power pack.
- 3. Remove power pack mounting bolts.
- 4. Check for DC voltage on the kill (stop) wire (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.
- 5. Connect the wires from the new power pack to the stator, trigger and ignition coils.
- 6. Mount the new power pack using the original bolts.
- 7. Reconnect the battery cable.

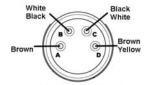
# **Troubleshooting**

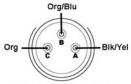
### NO SPARK ON ANY CYLINDER:

- 1. Disconnect the black yellow stop wire from the power pack and retest. If the engine's ignition has spark, the stop circuit has a fault-check the key switch, harness and shift switch.
- 2. Disconnect the yellow wires from the rectifier and retest. If the engine now sparks, replace the rectifier.
- 3. Check the resistance and DVA output of the Stator and Timer Base:

Read from	Read to	Reading	DVA (connected to pack)
Brown	Brown/Yellow	450-550 ohms	150V Minimum
Brown	Eng Ground	Open (disconnected)	150V Minimum connected
Brown/Yellow	Eng Ground	Open (disconnected)	150V Minimum connected
Black/White Trigger wire	White/Black Trigger wire	10-20 ohms	0.5 Volts Minimum

4. Check wire pin-out as follows:





**BACK SIDE VIEW** 

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Check the stator input diodes connected inside the power pack using a meter set to diode scale. If the readings show a short or open, replace the power pack.

Red meter lead	Black meter lead	Reading
Brown wire	Black wire	0.500 (The actual reading will vary, depending upon your meter.)
Brown/Yellow wire	Black wire	0.500 (The actual reading will vary, depending upon your meter.)
Black/Yellow wire	Brown wire	0.500 (The actual reading will vary, depending upon your meter.)
Black/Yellow wire	Brown/Yellow wire	0.500 (The actual reading will vary, depending upon your meter.)

6. Check the cranking RPM. A cranking speed of less than 250-RPM will not allow the system to fire properly.

# NO SPARK OR INTERMITTENT ON ONE OR MORE CYLINDERS:

1. Check the resistance and DVA output of the stator and Timer Base:

Read from	Read to	Reading	DVA (connected to pack)
Brown	Brown/Yellow	450-550 ohms	150V Minimum
Brown	Eng Ground	Open (disconnected)	150V Minimum connected
Brown/Yellow	Eng Ground	Open (disconnected)	150V Minimum connected
Black/White Trigger wire	White/Black Trigger wire	10-20 ohms	0.5 Volts Minimum

2. Check the DVA output on the orange wires from the power pack while connected to the ignition coils. You should have a reading of at least 150V or more. If the reading is low on one cylinder, disconnect the orange wire from the ignition coil for that cylinder and reconnect it to a load resistor. Retest. If the reading is now good, the ignition coil is likely bad. A continued low reading usually indicates a bad power pack.

## **HIGH SPEED MISS:**

Verify the engine RPM. If the engine is turning over 5500 RPM, the engine is hitting the RPM limiter. Check the propeller for slipping.

Thank you for using CDI Electronics.