Installation and Troubleshooting Guide

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CDI P/N: 113-3114

This unit replaces the following P/N: 583114.

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 and trigger.
6. Connect the Orange/Blue coil lead to the top ignition coil, Orange wire to the middle ignition coil and the Orange/Green coil lead to the bottom ignition coil.
7. Mount the new power pack using the original bolts.
8. Reconnect the battery cable.

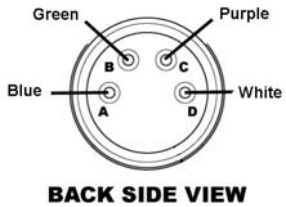
Troubleshooting

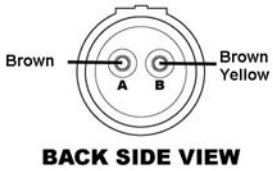
NO SPARK ON ANY CYLINDER:

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:





5. 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 ground wire	0.500 (The actual reading will vary, depending upon your meter.)
Brown/Yellow wire	Black ground wire	0.500 (The actual reading will vary, depending upon your meter.)
White trigger wire	Black ground 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)
White	Blue	38-42 ohms (disconnected)	0.5V Minimum
White	Purple	38-42 ohms (disconnected)	0.5V Minimum
White	Green	38-42 ohms (disconnected)	0.5V Minimum
Brown	Eng Ground	Open (disconnected)	150V Minimum connected
Brown/Yellow	Eng Ground	Open (disconnected)	150V Minimum connected

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:

Using an inductive Tachometer, verify the engine RPM on all cylinders. Check on the Primary and secondary wires. If there is a difference between the readings on the same cylinder, the coil is likely defective. If the RPM is within 300 RPM of the limit, the engine may be hitting the limiter.

Thank you for using CDI Electronics. 2/02/2009

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