Installation and Troubleshooting Guide

CDI P/N: 113-4767

This unit replaces the following P/N's: 18-5768, 584767, 584768, 584908, 585074, 585224, 585260, 5000014 and 5001344.

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

PLEASE USE THE FACTORY RECOMMENDED QL77JC4 SPARK PLUGS.

1. Disconnect the negative battery cable.
2. Remove power pack mounting bolts and disconnect all of the wires going to the old power pack.
3. Connect the wires from the new power pack to the stator and trigger.
4. Mount the new power pack using the original bolts.
5. 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.
6. Connect the Orange/Blue coil lead to the top ignition coil and the Orange coil lead to the bottom ignition coil.
7. Reconnect the battery cable.

Troubleshooting

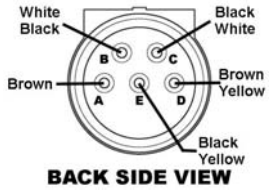
NO SPARK ON ANY CYLINDER:

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	450-850 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

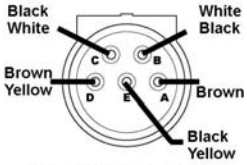
4. Check wire pin-out as follows:

Power Pack



BACK SIDE VIEW

Timer Base



WIRE SIDE MALE

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
Black wire	Brown wire	0.500 (The actual reading will vary, depending upon your meter)
Black wire	Brown/Yellow wire	0.500 (The actual reading will vary, depending upon your meter)
Black wire	Black/Yellow wire	0.500 (The actual reading will vary, depending upon your meter)
Brown wire	Black/Yellow wire	0.500 (The actual reading will vary, depending upon your meter)
Brown/Yellow wire	Black/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 kickback diodes connected inside the power pack using a meter set to diode scale.

Read from	Read to	Reading
Black	Org/Blue	0.500 (The actual reading will vary, depending upon your meter)
Black	Org	0.500 (The actual reading will vary, depending upon your meter)

If the diodes read shorted or open, replace the pack.

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 5900 RPM, the engine is likely hitting the RPM limiter. Check the propeller for slipping.

Will not accelerate beyond 2500 RPM and shakes violently

SLOW circuit is activating:

1. Check the engine temperature and verify that the engine is not overheating.
2. Check the location of the tan temperature sensor wire. It should not be located too close to a spark plug wire.
3. Disconnect the tan temperature sensor wire at the pack and retest. If the engine now operates normally, replace the temperature sensor.
4. If the engines still acts up, replace the power pack.

SLOW circuit will not activate

Disconnect the tan temperature wire and short it to engine ground.
If the SLOW circuit now operates, replace the temperature sensor.
If the SLOW circuit still does not work, replace the power pack.

Thank you for using CDI Electronics.