

# 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 Materiel Authorization.

#### CDI P/N: 113-2811 Power Pack 4 Cylinder This unit replaces the following P/N: 18-5783, 582811, 763794 and 9-25005.

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. (No RPM Limit).

### 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. 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.

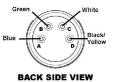
# TROUBLESHOOTING

# NO SPARK ON ANY CYLINDER:

- 1. Disconnect the black yellow stop wire from the power pack and retest. If the engine's ignition now 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       | 450-650 ohms        | 150V Minimum            |
| Brown              | Eng Ground         | Open (disconnected) | 150V Minimum connected  |
| Brown/Yellow       | Eng Ground         | Open (disconnected) | 150V Minimum connected  |
| White Trigger wire | Blue Trigger wire  | 30-52 ohms          | 0.35 Volts Minimum      |
| White Trigger wire | Green Trigger wire | 30-52 ohms          | 0.35 Volts Minimum      |
|                    |                    |                     |                         |

4. Check wire pin-out as follows:





FEMALE BACK SIDE VIEW

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       | 30-52 ohms (disconnected) | 0.35V Minimum           |
| White        | Green      | 30-52 ohms (disconnected) | 0.35V 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.