

# Installation and Troubleshooting Guide

GUIGERRANDS TECHNICAL INSTITUTE

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: 113-5316 Power Pack 2 Cylinder

This kit will replace the following P/N's: 175316, 585261 and 585262.

**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. Clean all battery cable connections and engine grounds.
- 2. Disconnect the old power pack.
- 3. Remove the old CD module, saving the mounting bolts.
- 4. CLEAN ALL ENGINE GROUNDS, ESPECIALLY THE AREA WHERE THE POWER PACK IS TO BE GROUNDED!
- 5. Check for DC voltage on the kill (stop) wires (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. Using the original mounting bolts, install the new power pack and connect all the wires according to the service manual.

### TROUBLESHOOTING

#### NO FIRE ON EITHER CYLINDER:

- 1. Disconnect the Black/Yellow kill wire AT THE POWER PACK and retest. If you now have spark, the kill circuit has a fault, possibly the harness, stop switch or key switch.
- 2. Remove the spark plugs and retest. If you now have spark, check the cranking RPM (the engine will not fire correctly below 250 RPM). If the cranking RPM is OK, recheck the stator and timer base.
- 3. Check the stator and timer base as follows:

Test from	to	OHMS	DVA
Brown	Brown/Yellow	450-850	150V or more connected*
Blue	White	25-30	0.6 V or more connected
Green	White	25-30	0.6 V or more connected

\* If low, disconnect the brown and brown/yellow wires from the pack and retest. If the voltage jumps to over 225V – the pack is likely bad. A reading that remains below 175V usually indicates a bad stator.

4. Disconnect the rectifier and retest. If the spark comes back, replace the rectifier.

#### NO FIRE ON ONE CYLINDER:

- Swap the orange coil wire of the cylinder not firing with the one that does on the pack and see if the fire moves from one coil to the other one. If it does, the pack is likely bad. If the fire stays on the same cylinder, the ignition coil or Timer Base is likely bad.
- 2. Swap the Blue trigger wire with the Green trigger wire and retest. If the fire moves from one cylinder to the other, replace the trigger. If it does not move, the ignition coil is likely bad if you have already done the tests above.
- 3. Swap the Brown stator wire with the Brown/Yellow stator wire and retest. If the fire moves from one cylinder to the other, replace the stator.

#### Will not accelerate beyond 2500 RPM and shakes violently

#### **SLOW FUNCTION 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. Verify the correct spark plugs are installed (Factory Recommended Champion QL77JC4)
- 4. Disconnect the tan temperature sensor wire at the pack and retest. If the engine now operates normally, replace the temperature sensor.
- 5. If the engines still acts up, replace the power pack.

#### SLOW FUNCTION WILL NOT ACTIVATE:

- 1. Disconnect the tan temperature wire and short it to engine ground. *If the SLOW circuit now operates*, replace the temperature sensor.
- 2. Check the power coil output. You should have at least 10V from the Orange to the Orange/Black wire while they are connected to the power pack. If you have the correct voltage on the power coil, the power pack is likely defective.
- 3. Check the terminal on the Tan wire for broken wire or corrosion.

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Web Support: www.cdielectronics.com • Tech Support: 1-866-423-4832 • Order Parts: 1-800-467-3371

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