



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 Material Authorization.**

CDI P/N: 117-689-21 Ignition Pack 2 Cylinder

This unit replaces the following P/N's: 84872M, 84872T, 689-85540-20-00 and 689-85540-21-00.

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. Remove power pack mounting bolts and disconnect all of the wires going to the old power pack.
3. Connect the wires to the new power pack.
4. Mount the new power pack using the original bolts.
5. Connect the wires as follows:

Wire	Function
Blue	Stator Wire
White	Kill (Stop) Wire
Black	Engine Ground Wire
White/Red	Pulsar (Trigger)
Orange	Ignition Coil
Black Wire	Ignition Coil

6. Reconnect the battery cable.

TROUBLESHOOTING

NO SPARK ON ANY CYLINDER:

1. Disconnect the White stop wire 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. Clean all engine and ignition grounds. Check the ground wires to make sure the wire is not broken at the terminal.
3. Verify the correct spark plugs are installed.
4. Check the resistance and DVA output of the Pack, Stator and Trigger:

Read from	Read to	OEM Reading	DVA (connected to pack)
Brown Stator wire	Black Engine Ground Wire	120-160 ohms	190 Volts Minimum
White/Red Trigger wire	Black wire	12-16 ohms	5 Volts Minimum
Orange (from Pack)	Engine Ground	N/A	210 Volts Minimum
High Tension Lead	High Tension Lead	2.56K-4.2K Ohms	N/A

5. 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 of the Ignition coil, between the 2 sparkplug leads. You should read between 2.56K-4.2K Ohms.
2. Check the flywheel magnets for loose or broken magnets.
3. Replace the ignition coil.

ENGINE WILL NOT ACCELERATE ABOVE APPROXIMATELY 2500 RPM:

1. Using an inductive tachometer, check the RPM on both cylinders. A difference in readings between the individual cylinders can be caused by a bad coil or loose/broken magnets.
2. If both cylinders show the same RPM and the engine will only rev to approximately 2500 RPM, check the running stator DVA output from idle thru WOT. You should show a steady increase in voltage on the Blue to engine ground through approximately 2000 RPM, then slowly decreasing the remainder of the RPM range. A sharp drop in voltage can be the result of a bad stator coil or a bad pack.

ENGINE WILL NOT KILL (STOP)

Disconnect the White kill wire and connect a jumper wire from the White wire to engine ground. If you still have spark, the power pack is likely bad. If the engine has no spark with the jumper connected, either the wiring harness, keyswitch or emergency stop switch is bad.

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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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