

Installation and Troubleshooting Guide



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: 511-9766

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.

The 511-9766 8 cylinder spark tester is for use in checking spark to the spark plugs. It is not recommended for use in doing running engine tests.

For running engine tests please use CDI Electronics single cylinder neon spark tester P/N 511-9764.

When using this spark tester, the engine needs to be spinning over at 250 RPM minimum to generate sufficient voltage from the Stator in order for the Power Pack to provide suitable voltage to the ignition coils. DFI engines will need 300 RPM minimum.

Warning! Prolonged usage of this spark tester can cause the starter motor to overheat due to engaging the starter motor for long periods of time. Allow sufficient time for the starter to cool off between tests.

This unit is a sealed spark tester designed to prevent the unit from causing a fire or explosion. Since this is a sealed unit, air cannot enter the case inhibiting spark below 115 DVA. The minimum DVA required to generate a spark at 3/8" is 115 DVA when using this spark tester. DVA lower than 115 will not be sufficient enough to jump a 3/8" gap.

Keep in mind, a variety of engines will not crank and run effectively below 150 DVA.

If you do not have spark at 115 DVA, please refer to the CDI Electronics Troubleshooting guide to help you determine the potential problem with the engine's ignition system.

INSTALLATION

- 1. Connect the large spring clip to engine ground, making sure to have the clear side of the tester facing you.
- 2. For safety purposes, it is advisable to bolt the small black wire to a good viable engine ground.
- 3. Adjust the air gap on the threaded round headed screws in the tester to the desired gap. The recommended gap is normally 3/8".

WARNING!!! DO NOT EXCEED 3/8" GAP IN EXPLOSIVE OR FLAMMABLE AREAS DUE TO THE POSSIBILITY OF ARCING BETWEEN SCREWS.

- 4. Disconnect the spark plug wires from the spark plugs and connect them to the top of the round headed screws in the tester. If the wires are too short to connect them all to the tester, you can either test one bank at a time or use CDI extension wires. Extension wires are sold in sets of 4, P/N 511-9902 (7" for use with outboard motors), and P/N 511-9903 (24" for inboard and automotive use).
- 5. Crank the engine over and watch for sparking on all cylinders.
- 6. If you do not have spark on all cylinders, check the DVA on the cylinders with weak or no spark.
- 7. If the DVA is weak on one or more cylinders, please refer to the CDI Electronics Troubleshooting guide to help you determine the problem.