

CDI P/N: 117-6921

NOTE: This unit replaces P/N's: Replaces: 6G9-85540-20-00, 6G9-85540-21-00, 6G9-85540-22-00, 825667, 825667T.
Fits 1995-1998 Mercury 4 Stroke 8 HP (Bondersee) and 9.9 HP Engines. 1985-2005 Yamaha F9.9 HP.

NOTICE! 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.

WARNING!!! NEVER DISCONNECT THE SPARK PLUG WIRES WHILE THE ENGINE IS RUNNING AS THIS WILL DAMAGE THE IGNITION COIL. DO NOT ATTEMPT TO START THE ENGINE WITH THE SPARK PLUG WIRES NOT CONNECTED EITHER TO THE SPARK PLUGS OR A SPARK TESTER.

Please use the factory recommended spark plugs (NGK CR6HS) gapped at 0.024".

INSTALLATION

1. Disconnect the battery.
2. Disconnect all wires from the old power pack and remove it from the engine.
3. Thoroughly clean all ground connections and power pack area.
4. Install the new power pack using the original bolts.
5. Connect the White/Red, Black, Brown and Blue wires from the power pack to the charge coil (Brown and Blue), plate ground (Black) and trigger (pulsar) coil (White/Red).
6. Connect the Black wire to engine ground.
7. Connect the Orange and Black wires to the ignition coil.
8. Connect the White stop (kill) wire to the engine harness or stop circuit.
9. Reconnect the battery.

TROUBLESHOOTING

Recommended tools:

CDI 60 OR 33 multimeter with DVA adapter (CDI 511-9773NL)

Piercing probes (CDI 511-9770)

NO FIRE ON EITHER CYLINDER:

1. Disconnect the White stop wires and retest. If you now have spark, the stop circuit has a fault.
2. Test the stator (exciter) and trigger (pulsar) stator coils as follows:

Red Lead	Black Lead	Resistance	DVA Disconnected	@ Idle	@1500 RPM
Brown	Blue	280-420	95 V minimum	90 V minimum	205V minimum
White/Red	Black	168-252	4 V min	2.5 minimum	7.5 V minimum
Orange	Black	0.08 -0.22	-	85 V minimum	195V minimum

3. Check the ignition coil's secondary side. You should read from the #1 Spark plug lead to the #2 Spark plug lead and show 13-14K ohms with the Resistor Boots installed and 3.485K to 4.715K with the Resistor Boots removed.
4. If the above readings are OK and there is no spark, the ignition coil is likely defective as it may be arcing internally.

NO FIRE ON ONE CYLINDER:

BOTH SPARK PLUG LEADS MUST BE CONNECTED TO A SPARK TESTER!!

1. Check the ignition coil's secondary side. You should read from the #1 Spark plug lead to the #2 Spark plug lead and show 13-14K ohms with the Resistor Boots installed and 3.485K to 4.715K with the Resistor Boots removed.
2. If the readings are OK and there is no spark on one cylinder, the ignition coil is likely defective as it may be arcing internally

HIGH SPEED MISS-FIRE OR WEAK HOLE SHOT:

1. Check the DVA voltage from Idle to WOT. If the voltage drops sharply right when the miss starts, there could be a problem in the charge coil. Check resistance and do a visual inspection of the charge coil. If it is discolored or has what appears to be water stains in the windings, it is likely arcing internally and needs to be replaced or repaired.
2. Check fuel lines/tank for restrictions, leaks or loose connections.
3. Check fuel pump diaphragms for holes, allowing extra fuel at high RPM's.
4. Verify correct spark plugs are installed and are not fouled.
5. Disconnect the stop switch and retest. If the engine performs properly, the stop circuit has a fault.