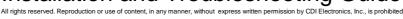
CDI P/N: 117-TIA02-12

Installation and Troubleshooting Guide





This unit replaces the following P/N's: 663-85540-14-00, 663-85540-15-00, 83030M, 83030T, TIA02-10 and TIA02-12.

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. Use a small amount of dielectric silicone grease in the bullet connectors.
- 4. Mount the new power pack using the original bolts.
- 5. Connect the wires as follows:

	10110110110.		
CDI Pack	Mariner Engine	Yamaha Engine	Connects to
White/Red	White/Red	White/Red	Trigger
White/Black	White/Black	White/Black	Trigger
Blue	Blue	Blue	Stator (Charge Coil)
Brown	Brown	Brown	Stator (Charge Coil)
Yellow	Yellow	Yellow	Blanker Coil
Black/White	Black/White	White	Kill circuit
Grey	Grey	Black/White	Ignition Coil # 1
Orange	Orange	Black/White	Ignition Coil # 2
Black	Black	Black	Engine Ground

6. Reconnect the battery cable.

TROUBLESHOOTING

NO SPARK ON ANY CYLINDER:

- Disconnect the White stop wire and retest. If the engine's ignition has spark, the stop circuit has a fault-check the key switch, harness and shift switch.
- 2. Disconnect the yellow wire from the pack and retest. If the engine now sparks, the Blanker coil is likely bad.
- 3. Check the stator resistance.

1.

	olunioo.		
Read from	Read to	Reading	DVA (connected to pack)
Brown	Blue	225-245 ohms	150 Volts Minimum (while connected to the pack).

4. Check the resistance and DVA output of the Triggers:

Read from	Read to	Reading	DVA (connected to pack)
White/Red Trigger wire	Engine ground	75-85 ohms	4 Volts Minimum
White/Black Trigger wire	Engine ground	75-85 ohms	4 Volts Minimum
Yellow	Engine ground	25-35 ohms	10 Volts Minimum

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 and DVA output of the stator plate assembly:

Read to	Reading	DVA (connected to pack)	
Engine ground	75-85 ohms	4 Volts Minimum	
Engine ground	75-85 ohms	4 Volts Minimum	
Engine ground	25-35 ohms	10 Volts Minimum	
	Engine ground Engine ground	Engine ground 75-85 ohms Engine ground 75-85 ohms	Engine ground75-85 ohms4 Volts MinimumEngine ground75-85 ohms4 Volts Minimum

2. Check the DVA output on the Orange and Grey wires (Yamaha engines will use Black/White wires) from the power pack while connected to the ignition coils. You should have a reading of at least 130V or more. If the reading is low on one cylinder, disconnect the 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 indicates a bad power pack or trigger (test per above).