

**Installation and Troubleshooting Guide** 

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## CDI P/N: 114-7452K 1

NOTE: This unit replaces the 18-5777, 18-5778, 339-7452A1, A7, A8, A9, A10, A11, A14, A15 and A21 switch boxes.

<u>NOTICE</u>! This product is designed for installation by a professional marine mechanic. CDI cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

WARNING! If the old pack fired only one cylinder, remove the flywheel and check the magnets to see if they are loose.

SERVICE NOTE: 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.

## To replace 339-7452 with wires:

- 1. Disconnect and clean all engine and battery ground wires.
- 2. Disconnect all wires connected to the switch box and remove the green coil wires from the coils.
- 3. Unbolt and remove the old 339-7452 switch box.
- 4. Bolt the new switch box on, using the new bolts supplied.
- 5. It is recommended that dielectric grease (i.e. CDI 991-9705) be used in the bullet nose connectors to help prevent corrosion.
- 6. Reconnect the wires. (If the wires are too long, fold up the excess and secure with a cable tie).
- To replace 339-7452 with stud terminals, follow steps 1 through 4 above, and the following:
- 1. Cut the ring terminals off of the stator, trigger and kill wire.
- 2. Strip off approximately 3/16 inch of insulation from the wires.
- 3. Crimp and solder the bullet connectors and shields on the wires to match the wires on the pack.
- 4. Reconnect all wires to the pack.

## TROUBLESHOOTING

Visually inspect the stator for cracks or varnish leakage. If found, replace the stator. **Unit will not fire:** 

- 1. Disconnect the black/yellow kill wire AT THE PACK. Check for broken or bare wires on the unit, stator and trigger.
- 2. DVA test the stator and trigger as follows:

Read from	Read to	<b>OEM Resistance</b>	CDI Resistance	DVA
Black/White	Eng Gnd	150-250	200-250	25V or more
Black/Yellow	Eng Gnd	3250-3650	2200-2400	180V or more
Brown/White	Brown/Yellow	750-1400	925-1050	4V or more
Brown/White	Eng Gnd	OPEN	OPEN	< 1 volt

## Engine will not kill:

Check the kill circuit in the pack by using a jumper wire connected to the black/yellow wire coming out of the pack and shorting it to ground. If this kills the engine, the kill circuit in the harness or on the boat is bad, possibly the ignition switch.

**High speed miss:** Check the DVA voltage of the stator while running the engine. It should show a smooth climb on the black/white wire. NOTICE: Use caution when doing this and do not exceed the rated voltage range of your meter. The readings should show a smooth climb in voltage. If there is a sudden or fast drop in voltage right before the miss becomes apparent, the stator is usually at fault. If there is no indication of the problem, it could be a small water leak in one or both cylinders.

**Coils fire with spark plugs out but not in:** Check for dragging starter or low battery causing slow cranking speed. DVA the test stator and trigger.

Intermittent firing on one or more cylinders: Check for low voltage from the stator and trigger.

All Cylinders fire but engine will not crank and run: Index the flywheel and check timing on both cylinders. If the timing is off, check the trigger and flywheel. If no other fault is found, replace the switch box.