



# Installation and Troubleshooting Guide



NOTE: This installation is to be completed by an Authorized Dealer or Professional Service Technician.

## CDI P/N: 174-6617K1

This stator replaces the following P/N's: 86617A 2, A 3, A 5, A 9, A11, A13, A19 AND A20.

Warning! 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.

### INSTALLATION

#### TO REPLACE THE 86617A11:

1. Disconnect the old stator from the CD module, saving the nuts.
2. Remove the flywheel and old stator, saving the original bolts/nuts.
3. Using the original bolts, install the new stator per OEM specifications with a thread-locker applied.
4. Connect the black wire to a clean engine ground.
5. Connect the black/white and black/yellow wires to the CD module reusing the original nuts and jumpers supplied.
6. Reinstall flywheel per OEM standards.

#### TO REPLACE THE 86617A 2, A 3, A 5, A 9, A13, A19 and A20:

1. Disconnect the old stator from the CD module.
2. Remove the flywheel and old stator, saving the original bolts/nuts.
3. Using the original bolts, install the new stator per OEM specifications with a thread-locker applied.
4. Connect the black wire to a clean engine ground.
5. Connect the black/white and black/yellow wires to the CD module.
6. Reinstall flywheel per OEM standards.

### TROUBLESHOOTING

NOTICE: These systems have had several reports of magnets coming loose, causing numerous problems, including no fire on one cylinder. Before proceeding, PLEASE check the magnets to be sure they are tight and not broken.

#### NO SPARK ON EITHER CYLINDER:

1. Visually inspect the stator for cracks or varnish leakage. If found, replace the stator.
2. Disconnect the Black/Yellow kill wire FROM THE SWITCHBOX. If spark returns, the Kill circuit has a fault.
3. Check for broken or bare wires on the unit, stator and trigger.
4. Check the stator and trigger as follows:

Read from	Read to	CDI Ohms	DVA Connected	Disconnected
Black/Yellow Stator wire	Black Stator wire	2300-2750	180 V or more	180 V or more
Black/White Stator wire	Black Stator wire	200-250	25 V or more	25 V or more
Brown/White	Brown/Yellow	650-850	4 V or more	4 V or more
Brown/White	Eng Gnd	OPEN	< 1 volt	< 1 volt
Brown/Yellow	Eng Gnd	OPEN	< 1 volt	< 1 volt

#### NO SPARK OR INTERMITTANT SPARK ON ONE CYLINDER:

1. Inspect the flywheel to see if one of the magnets has broken loose and shifted around to where it is touching the other magnet.
2. Connect a spark tester to the ignition coils and swap the Green wires on the switchbox to the ignition coils. If the problem moves, check the trigger wires for continuity. If OK, replace the switchbox. If the problem did not move, replace the ignition coil.
3. Verify the correct spark plugs are installed. OEM calls for a BP8H-N-10 or BPZ8H-N-10.

#### ENGINE WILL NOT SHUT OFF:

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 defective, possibly the ignition switch.

#### HIGH SPEED MISS:

1. Check the DVA voltage of the stator from the Black/Yellow Stator wire to the Black wire while running the engine. It should show a smooth climb on the voltage. NOTICE: Use caution when doing this and do not exceed the rated voltage range of your meter. If there is a sudden or fast drop in voltage right before the miss becomes apparent, the stator is usually at fault.
2. Verify the correct spark plugs are installed. OEM calls for a BP8H-N-10 or BPZ8H-N-10. If the BP8H-N-10 spark plugs are installed, try the BPZ8H-N-10 spark plugs.
3. If there is no indication of the problem, it could be a small water leak in one or both cylinders.

#### BOTH CYLINDERS HAVE SPARK BUT THE ENGINE WILL NOT RUN:

1. Check the flywheel shear key.
2. 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.