



# Installation and Troubleshooting Guide

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**CDI P/N: 174-5454K1**

This stator replaces P/N's:

398-5454A21, 22, 24,25, 26,41,56,62 and 63 series (4 cylinder)

398-5919A2, 3, 6, 7, 8 and 10 (4 cylinder)

398-5704A2, 4 and 7 (3 cylinder)

**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. **DO NOT USE WITH THE FLYWHEEL CONTAINING GLUED-IN MAGNETS (1988 and newer) !!**

Service Note: CDI replacement stators for Mercury and Mariner have a built-in voltage regulator on the low speed windings for enhanced durability. To reduce heat build-up inside the stator, this stator has open windings to increase the airflow around the stator poles.

***If this stator is to be used on a three cylinder engine, connect the red/white and blue/white striped wires to engine ground.***

If this stator is to be used as a replacement for the Mercury "Red Stator" conversion kit, connect all wires as they were originally from the factory. The adapter is not needed.

## INSTALLATION

1. Disconnect the stator wires from the switch box, engine ground and the rectifier/regulator.
2. Remove the flywheel.
3. Mark the position of the mounting screws in relation to where the stator wires come out of the old stator.
4. Remove the old stator.
5. Orient and install the new stator in the same position as the old stator on the engine and install the flywheel, following the service manual instructions.
6. Connect the Yellow stator leads to the rectifier/regulator.
7. Connect the red and blue wire to the switch box (also connect the red/white and blue/white wires to the switch box if the engine is a four cylinder).
8. Connect both the red/white and blue/white wires to engine ground if the engine is a three cylinder.

## Troubleshooting

### **No fire at all:**

1. Check resistance from blue and blue/white stator wires, OEM is approximately 6000 ohms (CDI stators will read approximately 2250 ohms). Check resistance from red to red/white. It should be approximately 60 to 150 on OEM stators, and 48-58 on CDI's. There should be no reading to engine ground with the wires disconnected. DVA (peak voltage) test stator output. It should be 180v or more on the low speed coil and 25v or more on the high speed coils.
2. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
3. Disconnect the rectifier/regulator and retest. If the fire returns, replace the rectifier/regulator.
4. Disconnect red and red/white wires and retest. If DVA test above was OK, the pack is usually bad.

### **No fire on 2 cylinders:**

1. DVA test stator (see #1 above).
2. Swap sides with the stator leads to see if the no fire problem follows one side of the stator. If it does, the stator is bad. If the problem remains on the same 2 cylinders, the power pack or trigger is probably at fault.

### **High speed miss or weak hole shot:**

1. Connect DVA meter to the blue and blue/white wires and do a running test. The voltage should show a smooth climb and stabilize, gradually falling off at higher RPM's (above 3000). If you see a sudden drop in voltage right before the miss becomes apparent, the stator is likely at fault.
2. Connect DVA meter to the red and red/white wires. The voltage should show a smooth climb throughout the RPM range, a sudden drop or decline in voltage indicates a problem usually found in the stator, although a rectifier can cause the same symptom.
3. Disconnect rectifier/regulator and retest. If the problem disappears, replace the rectifier/regulator and retest.
4. For a high speed electrical miss, rotate the stator one mounting hole and retest. If the miss is still present the stator may be bad.

Thank you for using CDI Electronics

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