



# Installation and Troubleshooting Guide

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## CDI P/N's: 174-9710K1

This stator replaces the following 2, 3 and 4 cylinder P/N's:  
398-818535A17 and A18,  
398-9710A11, A15, A22, A23, A31, A33, A34, A36, A39, A43, A45, A46, A47, A48 and A49.  
398-9873A 4, A 9, A25, A29, A32, A33 and F747095.

**Note: 174-9710K1 requires a voltage regulator, DO NOT USE WITH A RECTIFIER ONLY.**

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.

It is recommended that dielectric grease (i.e. CDI 991-9705) be used in the bullet nose connectors to help prevent corrosion.  
NOTE: Any sign of leakage out of the high voltage coils or bubbling around the battery charge windings indicate a bad stator. Check for burned marks on each pole. If a problem is found on the battery windings, we recommend the rectifier/regulator be closely checked.  
To replace stators with ring terminals, use the bullet to ring adapters enclosed with this stator.

**DO NOT USE THE RED STATOR ADAPTER WITH THIS REPLACEMENT! The adapter can be identified as being approximately 3/4 inch wide, 8 inches long with one end having a White/Green and Green/White wire from the stator and the other end having a Black ground wire and either a single or two blue wires for connection to the switch box.**

If this stator is to be used as a replacement for the "red" Mercury stator series, connect all wires as they were originally from the factory. See note below for 3 cylinder engines.

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

### 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 (using a good thread-locker applied to the bolts) in the same position as the old stator on the engine and install the flywheel, following the service manual instructions.
6. Connect the stator leads as follows.

New Stator	4 Cylinder Switch Box	3 Cylinder Switch Box	2 Cylinder Switch Box	Regulator/Rectifier
Yellow	No Connection	No Connection	No Connection	Yellow
Yellow	No Connection	No Connection	No Connection	Yellow/Grey Stripe
Red	Red	Red	Red	No Connection
Blue	Blue	Blue	Blue	No Connection
Red/White Stripe	Red/White Stripe	Engine Ground	Red/White Stripe	No Connection
Blue/White Stripe	Blue/White Stripe	Engine Ground	Blue/White Stripe	No Connection

7. Replace the flywheel according to the service manual.

### Troubleshooting the stator

#### No fire at all:

1. Check resistance from the blue to the blue/white stator wire. OEM will read approximately 3500 ohms (CDI stators will read from 500-700 ohms). Check resistance from red to red/white. It should be approximately 80 on OEM stators, and 28-32 on CDI's. There should be no reading to engine ground with all of the wires disconnected. DVA (peak voltage) test stator output. It should be 180v or more on the low speed coil (Blue to Blue/White) and 25v or more on the high speed coil (Red to Red/White).
2. Inspect the flywheel outer and trigger magnets to see if they are loose or broken. Disconnect the rectifier/regulator and retest. If the fire returns, replace the rectifier/regulator.
3. 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 the blue with the blue/white stator leads, and the red with the red/white stator leads to see if the no fire problem changes. If it does, the stator is bad. If the problem remains on the same cylinder(s), the switch box 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. Repeat the test for the red and red/white wires. There should be a smooth climb in voltage with no drop at all up to wide-open throttle.
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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