Installation and Troubleshooting Guide

CDI P/N: 174-8778K 1

This stator replaces the following 2, 3 and 4 cylinder stators
P/N's: 398-818535A 3, 5, 8, 9,10,13,14, 15 and 31
398-8778A6, 10, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29 and F749095

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 P/N: 991-9705) be used in the bullet nose connectors to help prevent corrosion. To replace stators with ring terminals, use the bullet to ring adapters enclosed with this stator.

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.

SERVICE 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.

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 new stator to the regulator/rectifier (ignore any stripes on the rectifier/regulator as the new stator does not require the Yellow wires to be connected to a particular rectifier/regulator wire).
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 has either two or four cylinders).
8. Connect the Red/White and Blue/White wires to the engine ground if the engine is a three cylinder.

TROUBLESHOOTING

NO FIRE ON ANY CYLINDER:

1. Check the stator resistance and DVA output as given below:

WIRE	Read To	CDI Ohms	DVA
Blue	Blue/White	500-600(a)	180V or more
Red	Red/White	28-32	25V or more

1. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
2. 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 SPED MISS FIRE 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.