Installation and Troubleshooting Guide

NOTE: This installation is to be completed by an Authorized Dealer or Professional Service Technician. For questions regarding installation or warranty, call CDI Tech Support at 866-423-4832. **Do not return to the Dealer or Distributor where the part was purchased. Contact CDI Electronics Directly for Return Materiel Authorization**.

CDI P/N: 174-5255 Stator 2 Cylinder

This stator replaces the following P/N's: 398-4770, 398-4799, 398-5255 and 398-5256

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.

CDI replacement stators for Mercury have a built-in voltage controller on the low speed high voltage windings for enhanced durability.

Service Note: To reduce heat build-up inside the stator, this stator has open windings to increase the airflow around the stator poles.

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 Yellow stator leads to the rectifier.
7. Connect the red and blue wire to the switch box.
8. Connect the Black wire to an engine ground.

TROUBLESHOOTING

NO FIRE ON ANY CYLINDER:

1. Disconnect the Black/Yellow (or Orange) kill wire. If the engine now has fire, the kill circuit has a short.
2. Check the stator and trigger resistance and DVA as follows:

WIRE	Read To	CDI Ohms	DVA Voltage
Blue	Black (engine ground)	2200-2600	180 V or more
Red	Black (engine ground)	45-55	25 V or more
Brown	White	750-1200	4 V or more

3. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
4. Disconnect the rectifier and retest. If the ignition now has fire, replace the rectifier.

NO FIRE ON ONE CYLINDER:

1. Check the stator and trigger resistance and DVA as follows:

WIRE	Read To	CDI Ohms	DVA Voltage
Blue	Black (engine ground)	2200-2600	180 V or more
Red	Black (engine ground)	45-55	25 V or more
Brown	White	750-1200	4 V or more

2. Swap the Brown and White trigger wires. If the problem remains on the same cylinder, the power pack is probably at fault. If it moves, replace the trigger.
3. Check the outer flywheel magnets.

HIGH SPEED MISS-FIRE OR WEAK HOLE SHOT:

1. Disconnect the rectifier and retest. If the engine performs normally, replace the rectifier.
2. Connect a DVA meter between the Blue wire and engine ground. Then 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.
3. Connect DVA meter to the Red wire and engine ground. 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.
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.

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