



# Installation and Troubleshooting Guide

All rights reserved. Reproduction or use of content, in any manner, without express written permission by CDI Electronics, Inc., is prohibited.



## CDI P/N: 173-1651

This stator replaces P/N's: 581651, 584755, 585087 and 763770.

**WARNING!** This product is designed to be installed by a professional marine mechanic. CDI Electronics cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

**SERVICE NOTE:** Discoloration of all the battery windings is an indication of a problem in the rectifier/regulator. Discoloration of only one post of the battery windings indicates a problem in the stator.

### Installation

1. Remove the negative battery cable.
2. Remove the flywheel.
3. Disconnect the original stator wires.
4. Remove the original stator, saving the original bolts.
5. Install the new stator using the original bolts with a good thread-locker applied (CDI 989-3977 is recommended) to the bolts and tightened to the factory torque specifications.
6. Connect the new stator to the power pack and to the regulator/rectifier (ignore any stripes on the rectifier as the new stator does not require the Yellow wires to be connected to a particular rectifier wire). (If the 5 pin connector is used, follow the pin-out diagram below)
7. Replace the flywheel according to the service manual.
8. Replace the battery cable.

To replace the 584755 and 585087 stators:

1. Cut the terminals off of the yellow wires on the new stator.
2. Strip approximately 3/16" of insulation off of the yellow wires on the new stator.
3. After installing the connector shields, crimp and solder the bullet (or barrel) connectors on the 3 yellow wires coming out of the new stator.
4. Snap the bullet connectors together to connect the yellow wires from the new stator to the rectifier.

### Troubleshooting the stator

#### No fire at all:

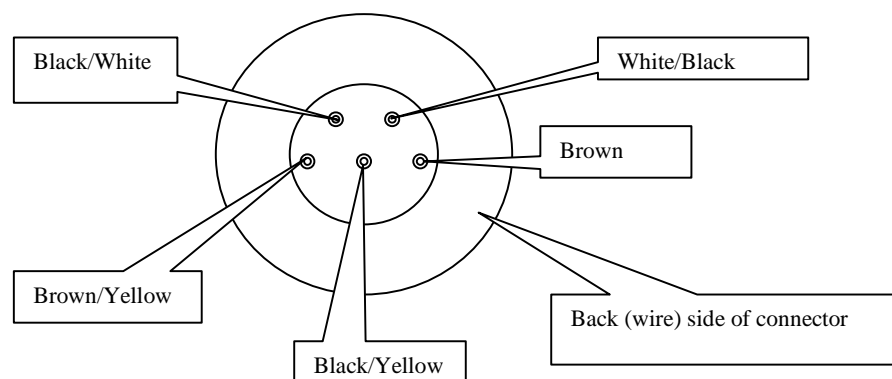
1. Disconnect the kill wire and retest. If the ignition now has fire, check the kill circuit.
2. Check resistance between the brown and brown/yellow wires. You should read approximately 450-600 ohms. DVA (peak voltage) should be 150v or more.
3. Check resistance between the black/white and the white/black trigger wires. You should read approximately 40 ohms. DVA (peak voltage) should be 0.5v or more.
4. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
5. Disconnect the rectifier and retest. If the fire returns, replace the rectifier.

#### No fire on One Cylinder:

1. Swap the brown wire with the brown/yellow wire and see if the problem moves. If it does, the stator is likely bad.
2. Check the power pack and trigger.

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

1. Connect a DVA meter between the brown and brown/yellow wires and do a running test. AT NO TIME SHOULD THE VOLTAGE EXCEED 400v. If it does, the regulator circuit in the power pack is bad. The voltage should show a smooth climb and stabilize, gradually falling off at high RPM (above 5000). If you see a sudden drop in voltage right before the miss becomes apparent, the problem is likely in the stator.
2. Disconnect the rectifier and retest. If the fire returns, replace the rectifier.



CDI Electronics • 353 James Record Road SW • Huntsville, AL 35824

Web Support: [www.cdielelectronics.com](http://www.cdielelectronics.com) • Tech Support: 1-866-423-4832 • Order Parts: 1-800-467-3371

All rights reserved. Reproduction or use of content, in any manner, without express written permission by CDI Electronics, Inc., is prohibited.