

# INSTALLATION/TROUBLESHOOTING GUIDE

# CDI P/N: 273-3117RS

This stator will replace the following part numbers for racing applications: 582574, 582847, 583050, 583117, 583274, 583668 and 583670.

**WARNING!** This product is designed for installation 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, requiring service.

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 according to the factory specifications and procedures.
- 6. Connect the new stator to the power packs (use the correct adapter harness to match existing connectors) and to the regulator/rectifier.
- 7. Replace the flywheel according to the service manual.
- 8. Replace the battery cable.

## Troubleshooting the stator

#### No fire at all:

- 1. Disconnect the black/yellow kill wire at the power packs and retest. If the ignition now has fire, check the kill circuit.
- 2. Check the stator resistance and DVA voltage in each connector as follows:

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	Red meter lead	Black meter lead	Ohms Reading	DVA voltage (while connected to the pack)	
	Brown	Brown/Yellow	400-550	150V or more	
3.	. Check the trigger resistance and DVA voltage in each connector as follows:				
	Red meter lead	Black meter lead	Ohms Reading	DVA voltage (while connected to the pack)	
	Blue	White	10-20(a)	1V or more	
	Green	White	10-20(a)	1V or more	
	Purple	White	10-20(a)	1V or more	

(a) Some timer bases will read 40-44 ohms resistance (DVA voltage will be the same).

- 4. Inspect the flywheel outer and trigger magnets to see if they are loose or broken.
- 5. Disconnect the rectifier/regulator and retest. If the fire returns, replace the rectifier/regulator.

#### No fire on one bank:

1. Check the stator resistance and DVA voltage in each connector as follows:

Red meter lead	Black meter lead Ohms R	eading	DVA voltage (while connected to the pack)
Brown	Brown/Yellow	400-550	150V or more

- 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.
- 3. Check the trigger resistance and DVA voltage in each connector as follows:

Red meter lead	Black meter lead	d Ohms Reading	DVA voltage (while conr	nected to the pack)
Blue	White	10-20(a)	1V or more	
Green	White	10-20(a)	1V or more	
Purple	White	10-20(a)	1V or more	
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(a) Some timer bases will read 40-44 ohms resistance (DVA voltage will be the same).

### High speed miss or weak hole shot:

- 1. Connect a DVA meter between the wires in each connector, one at a time and do a running test. AT NO TIME SHOULD THE VOLTAGE EXCEED 500v. If it does, the control circuit in the power pack is bad. The voltage should show a smooth climb and stabilize, gradually falling off at high RPM (above 7000). If you see a sudden drop in voltage right before the miss becomes apparent, swap stator leads to see if the problem is in the stator or power pack.
- 2. Disconnect rectifier/regulator and retest. If the problem disappears, replace the rectifier/regulator and retest.

Thank you for using CDI Electronics.

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