

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 Material Authorization.

CDI P/N: 177-0012 Stator Charge Coil 2 Cylinder

Replaces P/N: 66T-85520-00-00

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.

NOTE: Any sign of leakage out of the high voltage coils or burned marks on the middle area of the stator coils.

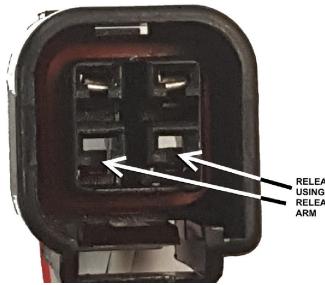
INSTALLATION

- Disconnect the 4 pin connector from the CD Unit.
- Note the location of the Blue and Brown wires going into the 4 pin connector (we recommend taking a picture of the backside of the connector showing the wire location).
- 3. Remove the Yellow wedge lock in the face of the connector by gently prying up on the removal tab..



REMOVE LOCKING WEDGE BY GENTLY PRYING UP ON THE TAB AS SHOWN

Using a Pin Removal Tool, release the plastic locking arm holding the Blue and Brown terminals in the 4 pin connector and remove the wires from the connector.



RELEASE THE TERMINAL LOCK BY USING A PIN REMOVAL TOOL AND RELEASING THE PLASTIC LOCKING ARM

5. Remove the flywheel.

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- 6. Mark the location of the original stator charge coils in relation to where the stator wires come out of the old stator and remove the old stator coils.
- 7. Orient and install the new stator charge coils (using a good thread-locker applied to the bolts) in the same position as the old stator charge coils on the engine and install the flywheel, following the service manual instructions.
- 8. Insert the Blue and Brown wires/terminals into the 4 pin connector, matching the original locations.
- 9. Re-install the Yellow Wedge Lock.
- 10. Connect the 4 pin connector to the CD Unit.

TROUBLESHOOTING

NO FIRE ON ANY CYLINDER:

- Disconnect White Stop wire and retest. If fire returns, there is a problem with the Stop circuit.
- 2. Check ground connections of CD Unit and Ignition Coils.
- 3. Check the Stator and Trigger resistance and DVA as follows:

WIRE	Read To	Ohms	DVA Connected	DVA Disconnected
Blue	Brown	600-900 Ω	190 V	330 V
Blue	Engine Ground	OPEN	-	2 V or less
Brown	Engine Ground	OPEN	-	2 V or less
White/Red	White/Black	300-425 Ω	4 V	7 V

4. Disconnect White Stop wire and retest. If fire returns, there is a problem with the Stop circuit.

NO FIRE ON 1 CYLINDER:

- 1. Swap the Ignition coils. If the fire follows the Ignition Coil, replace it.
- 2. Swap the Trigger inputs to the CD CD Unit.
- 3. If the problem remains on the same cylinder, replace the Switch Box.
- 4. If the problem moves to the other cylinder, replace the Trigger.
- 5. Check the resistance of the coils and DVA output from the CD Unit to the ignition coils as follows:

WIRE	Read To	Ohms	DVA Connected
Black/Orange (Pack)	Black (Engine Ground)		180 V
Black/White (Pack)	Black (Engine Ground)		180 V
White #1 (Coil)	Black	0.32-0.44 Ω	
Black #1 (Coil)	Hi Tension Lead	5.4K-7.8K Ω	(Resistor Boots Removed if present)
White #2 (Coil)	Black	0.32-0.44 Ω	
Black #2 (Coil)	Hi Tension Lead	5.4K-7.8K Ω	(Resistor Boots Removed if present)

Check the Resistor boots from the input to the sparkplug terminal (if present). You should read between 4K and 6K ohms. If outside this range, replace the Resistor boot.

HIGH SPEED MISS-FIRE OR WEAK HOLE SHOT:

- 1. Verify the engine has the correct sparkplugs installed and gapped.
- Connect DVA meter to the Blue and Brown wires and do a running test. The voltage should show a smooth climb and stabilize, gradually falling off at higher RPM's. If you see a sudden drop in voltage right before the miss becomes apparent, the stator is likely at fault.
- 3. Make sure the engine is not hitting the RPM Limiter.
- 4. Check the Stator and Pulsar Coil DVA readings from Idle to WOT as follows.

WIRE	Read To	@1500 RPM	@3500 RPM
Blue	Brown	190V	190 V
White/Red	Black	10 V	17 V
White/Black	Black	10 V	17 V

- 5. Run the engine at the RPM where the miss is occurring and perform a high speed engine shutdown (do not change the throttle setting). Remove and inspect the sparkplug porcelain insulator at the sparkplug gap. A Black plug indicates either weak fire or a rich fuel/air mix. If the tang electrode has a whitish look to it, that cylinder may be too lean.
- 6. Swap the ignition coils location and repeat the test. If the problem follows, replace the ignition coil.