

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: 179-0005 Exciter Coil 2 Cylinder

Replaces P/N: 3G2060210M, 3G2-06021-0, 3G206-0210.

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.

INSTALLATION

- 1. Disconnect the Red bullet connector to the CD Unit.
- 2. Remove the flywheel. Remember, the flywheel nut may be Left hand thread.
- 3. Remove the old Exciter Coil Assembly screws, keeping the original mounting screws.
- 4. Remove the channel bracket holding the wires exiting the stator plate assembly, saving the mounting screws.
- 5. Unwrap the support arm from the wire bundle with the Red, Blue, White and Yellow wires.
- 6. Tie a string around the Red wire of the old Exciter Coil Assembly close to the bullet connector.
- 7. Spray a little cooking oil up into the wire bundle with the Red, Blue, White and Yellow wires.
- 8. Pull the Red wire out of the wire bundle with the Blue, White and Yellow wires.
- 9. Remove the string from the Red wire of the old Exciter Coil and re-tie it on the new Exciter Coil's Red wire near the bullet connector. Then, use the string to pull the new Red wire through the bundle.
- 10. Route the wires from the new Exciter Coil Assembly the same as the old Exciter Coil Assembly.
- 11. Mount the new Exciter Coil Assembly to the plate, using the recommended thread-locker applied to the screws.
- 12. Route the wire bundle under the channel bracket to hold the wires exiting the stator plate assembly in place using the original screws.
- 13. Wrap the support arm around the wire bundle with the Red, Blue, White and Yellow wires.
- 14. Install the flywheel according to the service manual, using the correct torque specifications.
- 15. Connect the Red wire from the new Exciter Coil Assembly to the CD Unit.

TROUBLESHOOTING

NO FIRE ON ANY CYLINDER:

- 1. Disconnect Brown 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. Test the stator (exciter) and trigger (pulsar) stator coils as follows:

Red Lead	Black Lead	Function	Ohms	DVA Connected
Red	Component Gnd (Black)	Exciter Coil	232-348 Ω	110 V Minimum*
Blue	Component Gnd (Black)	Pulsar Coil	30-48 Ω	3 V Minimum**

^{*} A low resistance or DVA reading indicates the exciter coil is defective and needs to be rebuilt.

NO SPARK ON ONE CYLINDER:

If only one spark plug has spark, the internal ignition coil is defective. The CD Unit will need to be replaced.

ENGINE WILL NOT SHUT OFF:

Short the Brown stop wire (from CD) to engine ground, if the engine shuts down, check the stop switch and harness.

HIGH SPEED MISS-FIRE:

- 1. Verify the engine has the correct sparkplugs installed and gapped.
- 2. Test the stator (exciter) and trigger (pulsar) stator coils as follows:

Red Lead	Black Lead	Function	Ohms	DVA Connected	
Red	Component Gnd (Black)	Exciter Coil	232-348 Ω	110 V Minimum*	
Blue	Component Gnd (Black)	Pulsar Coil	30-48 Ω	3 V Minimum**	

- 3. On a Dynometer or on the water, connect DVA meter to the Red Exciter lead and engine ground. Run the engine to the point the miss-fire is present and watch the DVA voltage. The voltage should show a smooth climb and stabilize around 300 volts DVA, 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. Switch to the Blue wire and repeat the test.
- Make sure the engine is not hitting the RPM Limiter at approximately 6200 RPM.
- 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 a 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 connection to the sparkplugs and repeat the test. If the problem follows, replace the ignition coil.

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

Web Support: www.cdielectronics.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, Ilc., is prohibited.

^{**} A low resistance or DVA reading indicates the pulsar coil is defective and needs to be rebuilt.