

# INSTALLATION/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: 213-2138 High Performance Power Pack 3 Cylinder

This unit replaces the following P/N's: 582138 and 582400 For High Performance Applications.

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.

### INSTALLATION

- 1. Disconnect the negative battery cable.
- 2. Disconnect all of the wires going to the old power pack.
- 3. Remove power pack mounting bolts.
- 4. Check for DC voltage on the kill (stop) wire (usually Black/Yellow) with the key-switch in the on and off position. At no time should you see over 2 volts DC on this wire as severe damage to the power pack can occur.
- 5. Connect the wires from the new power pack to the stator, trigger and ignition coils.
- 6. Mount the new power pack using the original bolts.
- 7. Reconnect the battery cable.

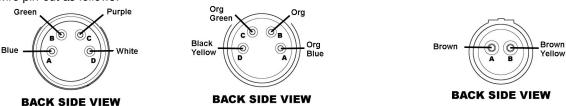
#### TROUBLESHOOTING

#### NO SPARK ON ANY CYLINDER:

- 1. Disconnect the black yellow stop wire from the power pack and retest. If the engine's ignition has spark, the stop circuit has a fault-check the key switch, harness and shift switch.
- 2. Disconnect the yellow wires from the rectifier and retest. If the engine now sparks, replace the rectifier.
- 3. Check the resistance and DVA output of the Stator and Timer Base:

Read from	Read to	OEM Reading	CDI Reading	DVA (connected	to pack)
Brown	Brown/Yellow (9 Amp)	360-440 ohms	530-630 ohms	150V Minimum	
Brown	Brown/Yellow (12 Amp)	750-950 ohms	530-630 ohms	150V Minimum	
Brown	Eng Ground	Open (disconnected)	Open (d	disconnected)	150V
Minimum connected					
Brown/Yellow	Eng Ground	Open (disconnected)	Open (d	disconnected)	150V
Minimum connected					
Black/White Trigger wire	White/Black Trigger wire	9-21 ohms	9-21 ohms	0.5 Volts Minimu	m

4. Check wire pin-out as follows:



Check the stator input diodes connected inside the power pack using a meter set to diode scale. If the readings show a short or open, replace the power pack.

open, replace the power pack.

Red meter lead
Black meter lead
Reading

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Brown wire Black ground wire 0.500 (The actual reading will vary, depending upon your

meter.)

Brown/Yellow wire Black ground wire 0.500 (The actual reading will vary, depending upon

your meter.)

White trigger wire Black ground wire 0.500 (The actual reading will vary, depending upon your

meter.)

Check the cranking RPM. A cranking speed of less than 250-RPM will not allow the system to fire properly.

#### NO SPARK OR INTERMITTENT ON ONE OR MORE CYLINDERS:

1. Check the resistance and DVA output of the stator and Timer Base:

Read from	Read to	Reading	DVA (connected to pack)
White	Blue	9-21 ohms (disconnected)	0.5V Minimum
White	Purple	9-21 ohms (disconnected)	0.5V Minimum
White	Green	9-21 ohms (disconnected)	0.5V Minimum
Brown	Eng Ground	Open (disconnected)	150V Minimum connected
Brown/Yellow	Eng Ground	Open (disconnected)	150V Minimum connected

Check the DVA output on the orange wires from the power pack while connected to the ignition coils. You should have a reading of
at least 150V or more. If the reading is low on one cylinder, disconnect the orange wire from the ignition coil for that cylinder and
reconnect it to a load resistor. Retest. If the reading is now good, the ignition coil is likely bad. A continued low reading usually
indicates a bad power pack.