



# Installation and Troubleshooting Guide

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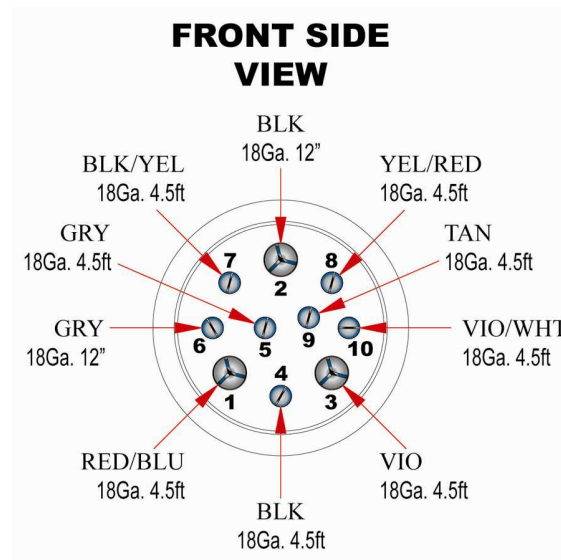
## CDI P/N: 413-1000 Universal Internal Engine Wiring Harness

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. 20 Amp Fuse is not included with this harness.

**NOTE: Compare the new harness wire function and pin location to the old harness. If there is a difference in pin-outs between the two harnesses, contact CDI Tech Support at 866-423-4832 for advice. If you cut the wires and start the configuration process, CDI cannot warranty the harness.**

### NORMAL CONNECTIONS:

Wire Color	Function/Connection
Black (18 AWG) (Short Wire)	Engine Ground Top Large Pin (May not be required)
Black (18 AWG)	Negative Terminal on Starter Solenoid and Engine Ground
Black/Yellow	Engine Stop Circuit from Ignition Pack
Grey (Short)	(May not be needed)
Grey (Long)	Tachometer Signal from Regulator/Rectifier and Tachometer Signal to VRO
Purple (or Violet)	12V From Key-switch
Purple/White Stripe	Choke Solenoid
Red/Blue (18 AWG)	Through Yellow Fuse Holder to Battery Side of Starter Solenoid
Tan	Warning system (Over-heat, Oil, etc)
Yellow/Red	Start Terminal on Starter Solenoid



### INSTALLATION

1. Meter the old harness and record the wire function and pin location.
2. Please crimp and solder all connections.
3. If your old harness used a larger wire for battery power, use the included heavier wire and splice into the appropriate wire close to the molded head and cover the splice with heat shrink.
4. If the old harness had a Blocking diode in the harness, you will need to install one in the new harness on the same wires. (On an engine with a VRO and System Check, there will be one in the Tan wires) (On V block engines with a shift switch, there will be one in the Black/Yellow wires to separate the two sides).
5. Using the old harness as a guide, cut and terminate the wires as needed, using the terminals provided in the 912-9708 Terminal Kit.
6. Once you have the wires cut and terminated to your satisfaction, install the spiral wrap to protect the wiring.

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

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