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**.

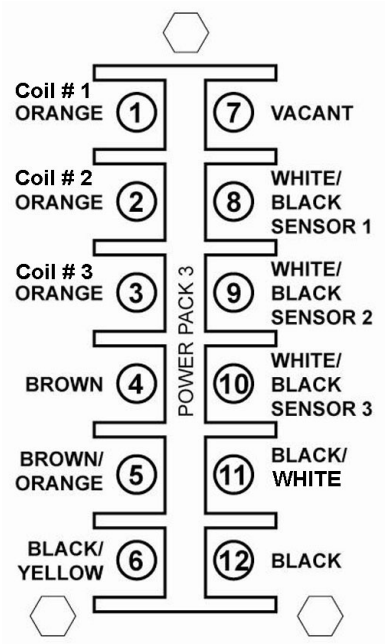
CDI P/N: 113-1726 Power Pack 3/6 Cylinder

Replaces: 581334, 581493, 581551, 581552, 581713, 581925, 581726, 582057 (Includes cover & gasket), 18-5754, 18-5757, 75330 and 75360. (No RPM Limit).
Fits: 1972-1978 (65, 70 & 75 HP 3 Cyl.) 1976-1978 (150, 175, 200 & 235 HP V6 – 2 Req.)

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 (3 Cylinder Engine)

1. Remove the old Power Pack cover.
2. Disconnect all wires from the old Power Pack.
3. Remove the old Power Pack and save the 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 VDC on this wire as severe damage to the Power Pack can occur.
5. Install the new Power Pack using the original bolts.
6. Reconnect the wires according to the connection guide below (also located on the cover).
7. Install the new cover and gasket using the new screws included with the new Power Pack.



INSTALLATION (6 Cylinder Engine)

1. Remove the old Power Pack cover.
2. Disconnect all wires from the old Power Pack. Watch for the connections from the Timer Base to the Power Pack.
3. Remove the old Power Pack and save the 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 VDC on this wire as severe damage to the Power Pack can occur.
5. Install the new Power Pack using the original bolts.
6. Connect the Stator, Kill and coil wires to the new Power Pack.
7. Connect the White Timer Base wire to the Black/White Terminal.
8. Connect the Blue Timer Base wire to the White/ Black Terminal for # 1.
9. Connect the Green Timer Base wire to the White/ Black Terminal for # 2
10. Connect the Violet Timer Base wire to the White/ Black Terminal for # 3.
11. Reconnect the wires according to the connection guide located on the cover.
12. Install the new cover and gasket using the new screws included with the new Power Pack.

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TROUBLESHOOTING

NO SPARK ON ANY CYLINDER:

1. Disconnect the Kill (Black/Yellow) wire and retest. If the Power Pack now has spark, there is a problem in the harness or key switch.
2. Remove the spark plugs and retest. If the engine now has spark, the Timer Base is likely bad. (You may be able to re-gap the sensor using the gap gauge P/N: **553-9702** and get the spark back with the spark plugs installed). Also check the cranking speed, the engine should be turning 250 RPM minimum. (Check the battery and starter).
3. Check the Stator for signs of leakage out of the charge coils.
4. Check Stator and Timer Base resistance and DVA:

Read from	Read to	OEM Ohms	CDI Ohms	DVA Connected	DVA Disconnected
Brown	Brown/Yellow	450-850 Ω	450-850 Ω	150 minimum	175 minimum*
Black/White	White/Black (Cyl # 1)	10-20 Ω	35-55 Ω	0.5 minimum	0.5 minimum
Black/White	White/Black (Cyl # 2)	10-20 Ω	35-55 Ω	0.5 minimum	0.5 minimum
Black/White	White/Black (Cyl # 3)	10-20 Ω	35-55 Ω	0.5 minimum	0.5 minimum

*If the Brown wire voltage jumps to over 225 DVA, the Power Pack is likely bad.

5. Using a digital ohmmeter set to Diode scale, check the Power Pack as follow:

Red meter lead	Black meter Lead	Reading
Terminal #1 Thru #5	Terminal #12	approx 0.500
Terminal #6	Terminal #12	approx 1.060
Terminal #7	Terminal #12	Open
Terminal #8 Thru #11	Terminal #12	approx 0.550

6. Using an digital ohmmeter set to Ohm scale, check the Power Pack as follow:

Red meter lead	Black meter Lead	Ohms
Terminal #11	Terminal #8	approx 175 Ω
Terminal #11	Terminal #9	approx 175 Ω
Terminal #11	Terminal #10	approx 175 Ω

NOTE: If one reading shows a shortage, you can lose spark on all cylinders.

7. *Disconnect the Rectifier and retest. If the system fires, replace the Rectifier*.

NO SPARK ON ONE CYLINDER:

1. Swap the Orange coil wire of the cylinder without spark with one that does on the Power Pack and see if the spark moves from one coil to the other one. If it does, the Power Pack or Timer Base is likely bad. If the spark stays on the same cylinder, the ignition coil is likely bad. If the spark moves, swap the Timer Base wire for the non-firing cylinder with another one. If this moves the spark again, the Timer Base is likely bad.
2. Swap the Timer Base wires on the Power Pack and see if the spark moves from one cylinder to the other one. If it does, the Timer Base is likely bad. If the spark stays on the same cylinder, the Power Pack is likely bad.
3. Disconnect the Timer Base from the Power Pack and check the resistance in the Power Pack as follows:

Red meter lead	Black meter lead	Ohms
Terminal #11	Terminal #8	approx 175 Ω
Terminal #11	Terminal #9	approx 175 Ω
Terminal #11	Terminal #10	approx 175 Ω

Note: All readings should be fairly even. If the sensor reading in the Power Pack for the cylinder not firing shows over a 10% different reading compared to the other sensors, the Power Pack needs replacing.

4. Disconnect the Timer Base wires and check the resistance of the Timer Base as follows:

Red meter lead	Black meter lead	OEM Ohms	CDI Ohms
White/ Black wire, Sensor 1	Black/White wire	10-20 Ω	35-55 Ω
White/ Black wire, Sensor 2	Black/White wire	10-20 Ω	35-55 Ω
White/ Black wire, Sensor 3	Black/White wire	10-20 Ω	35-55 Ω

NOTE: An open reading on one sensor usually indicates a defective Timer Base.