

CDI P/N 123-7567

This unit will replace P/N's: 987567.

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.

NOTE: This install sheet covers the 123-7567 Electronic Shift Assist (ESA) module for boats equipped with a Prestolite BID (Breakerless Ignition Distributor) distributor. If your boat has any other type of distributor, please call CDI for a cross reference.

Installation

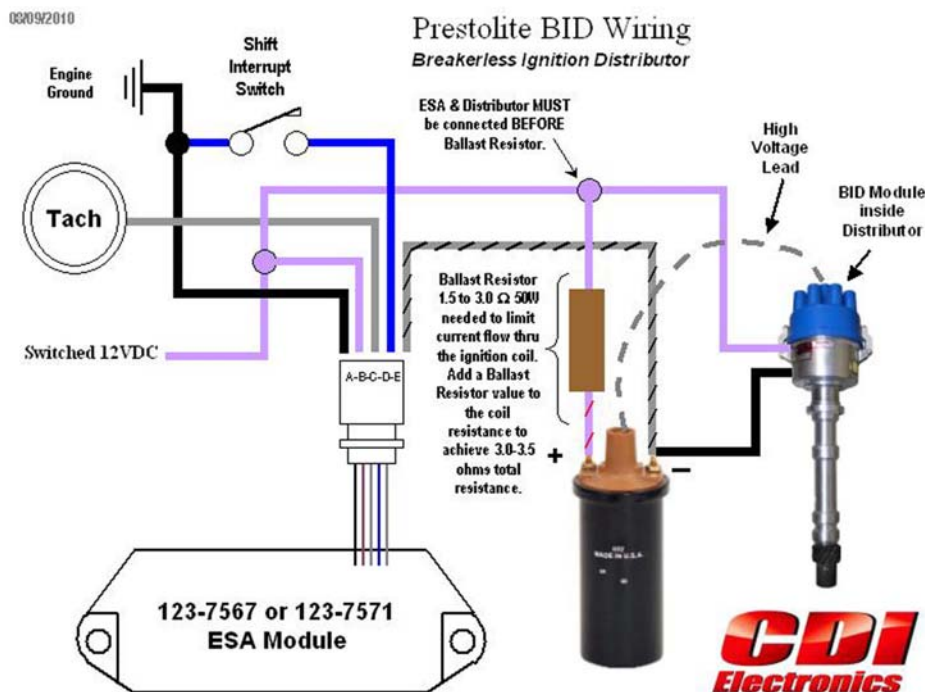
1. Disconnect and remove the old EST module and remove it from the engine.
2. Using the original bolts, mount the new EST to the mounting bracket. Be careful not to pinch any wires behind the case.
3. Connect the wires as the original EST was connected.
4. Measure the resistance of the ignition coil from the positive to the negative terminals. Normally a 1.5 ohm coil is used. If so, install a 1.5 ohm, 50 watt Ballast Resistor inline between the positive terminal of the coil and the wiring for the ESA and Distributor. See diagram below.
5. The following is a color code/function explanation:
 - A) **Violet** - Switched 12V to power the ESA module.
 - B) **Grey/Black Stripe** - Negative side of ignition coil from the Prestolite Electronic Distributor for the ESA to monitor the engine RPM and cause the engine to stumble when shifting.
 - C) **Grey** - Tachometer signal pulses sent to the dash mounted RPM gauge.
 - D) **Black** - Engine ground reference for the ESA module.
 - E) **Blue** - Ground signal from the shift switch indicating a shift is occurring.

Troubleshooting

1. Verify all connections are correct. Inspect the connectors and make sure the wire colors and pin locations are the same on both sides of the connector.
2. Back probe the Blue wire (you may remove the wire from the connector if needed) and with the engine idling in neutral, short the Blue wire from the ESA module to engine ground. (Note: If the engine is idling too fast, the ESA will not engage). You should notice a slight drop in engine RPM. If the engine works correctly with this test, but does not work when the Blue wire is connected to the shift switch, check the shift switch and wires. If the ESA does not work with the Blue wire shorted to engine ground, recheck the engine RPM, ground wire connection and 12V power to the ESA.

Engine Stalls When Shift Switch is Activated:

1. Verify that the ignition coil is correct. It should read approximately 1.5 ohms between the positive and the negative terminals with all wires disconnected from the coil. Verify Ballast Resistor is connected correctly.
2. Disconnect the negative side of the ignition coil and connect a jumper wire to the terminal. Connect a voltmeter to the positive side of the ignition coil and turn the key-switch to the on position. You should read approximately 6 volts. A high reading indicates a problem with the ballast resistor.



Thank you for using CDI Electronics

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