

Instructions for installing the Three-wire IAC module

Description

The Electromotive Three-wire IAC module converts the single wire IAC output as found on Electromotive's TEC3r computer to a Three-wire type idle speed motor. The Three-wire IAC module is not compatible with older TEC3 or TEC2 idle speed outputs.

Instructions

Verify that the idle speed motor you want to use is a three-wire device. With a DVOM in ohms range, measure the resistance between the center pin and one of the outer pins. That resistance must not be less than 5 ohms. It will typically be about 12 ohms but could be higher. Measure the resistance from the center pin to the other pin. This should be about the same as the first reading. Measuring between the two outer pins should show double this value.

Mount the Three-wire IAC module somewhere between the TEC3r and the IAC motor. An under hood location is ok but it must not be near the exhaust manifold.

Wiring: (See attached wiring diagram)

- 1. Use the enclosed wire harness and connect the 4-pin connector to the Three-wire IAC.
- 2. Use the enclosed Black wire with the ring terminal to make a ground connection between the screw terminal on the chassis to engine block ground.
- 3. Connect the Red power lead that has the in-line fuse to switched +12V ignition.
- 4. Connect the Red/White lead to the center terminal of the IAC motor.
- 5. Connect the Purple lead to the TEC3r Grey connector pin 23 (or see below).
- 6. Connect the Blue/White lead to one of the outer terminals of the IAC motor.
- 7. Connect the Blue/Black lead to the other outer terminal of the IAC motor.

IMPORTANT... The chassis of the Three-wire IAC module must be grounded. The chassis is part of the circuit.

Please refer to the latest TEC3r instruction manual on programming the Three-wire IAC motor. You should be using the latest software and firmware from Electromotive for the best results.

Optional uses:

The Three-wire module can be used to convert a GPO output to a three wire output that might be used for variable valve timing or other three wire loads. Simply connect the purple wire to a GPO output instead of the IAC output and program using the GPO tables.

Programming Notes:

Program the GPO channel from 0% to 100%. If 100% does not result in the maximum flow, but just the opposite, reverse the two blue wires. If the GPO output pulse rate drops to zero(0%), both outputs will turn off and your three-wire motor will go to its unpowered state. In Bosch IAC motors this may result in a high RPM. The 0% GPO mode is intended to reduce heat build-up in your IAC motor.

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