

Off Road Engineering  
(949) 581 2991  
High Idle Controller HIC800  
2003 to 2005 GM trucks and SUV, 2003 to 2007 H2 Hummer

Installation

Refer to the wiring diagram on the following pages

1. Disconnect the connector going into the accelerator pedal. Plug the male connector of the HIC800 into the accelerator pedal socket. Plug the vehicle's accelerator pedal connector into the female connector of the HIC800.

**IMPORTANT!!!!** Route the power wires (RED and BLACK ) away from the accelerator pedal wire harness. The wires should not come in contact with the harness.

Do not zip tie any wires to the accelerator pedal wire harness. This might cause an unstable RPM level when the high idle is activated.

Connect the RED wire from the HIC800, to a 12V source. **The 12V source MUST be 12V with the ignition ON, and OFF during engine cranking.**

For vehicles with dual alternators, connect to battery system to be monitored. A relay must be used to ensure that the HIC800 module is off during engine cranking. Power to the relay coil should be obtained from the fuse panel using the supplied "add a circuit" fuse adaptor. Tap into an accessory fuse that is 12V Ign. On, and OFF during engine cranking. See the dual alternator wiring diagram for more details.

For single alternator vehicles use the supplied "add a circuit" fuse adaptor to tap into the fuse panel. Remove an accessory fuse or the radio fuse and plug the fuse into the "add a circuit" adaptor. Then plug the fuse adaptor into the vacant fuse panel socket. Make sure the supply voltage is **OFF during engine cranking.**

For automatic transmissions connect the BLACK wire from the HIC800 to a good ground. For manual transmissions connect the BLACK ground wire to the wire coming off the parking brake switch. High idle will only be enabled if the parking brake is set.

2. For automatic transmissions connect the GREEN interlock wire coming from the HIC800 to the brake pedal stop light switch located on the brake pedal. We recommend soldering this connection.

Connect the **GREEN** interlock wire to the **GRN/WHT wire (green with white stripe wire)** on the brake pedal stop light switch.

*High idle will only be enabled with the vehicle in PARK and is disabled when the vehicle is taken out of PARK. Depressing the brake pedal (with vehicle in PARK) will disable the high idle. Tapping the brake pedal will reset the high idle system.*

For manual transmissions connect the GREEN wire to the Orange wire. Connect the BLACK ground wire to the wire coming off the parking brake switch. High idle will only be enabled if the parking brake is set.

3. Connect the ORANGE wire from the HIC800 to the High Idle switch. +12V will activate the high idle.

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Operation

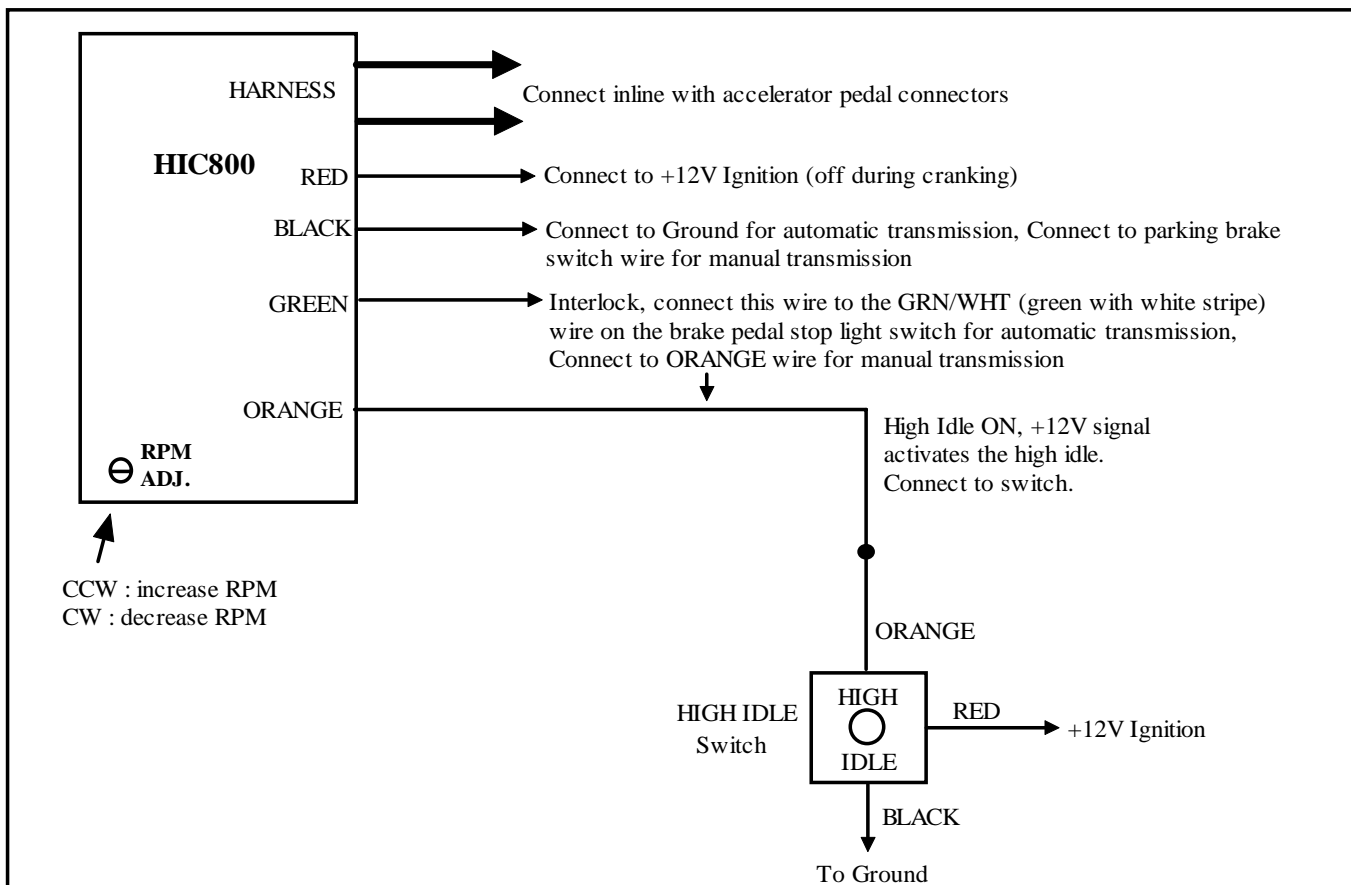
The HIC800 high idle controller provides a variable user adjustable high idle speed. The idle speed is adjusted with the trimpot located on the HIC800 control module. RPM range is approximately idle to 2000 RPM depending on vehicle model.

Typically a high idle of 1200 to 1300 RPM is sufficient for increased alternator output.

The interlock (GREEN wire connected to the brake pedal stop light switch) must be satisfied, Transmission in PARK and foot off brake pedal, to enable the high idle. The high idle is turned on by applying +12V to the ORANGE “High Idle ON” wire.

The HIC800-VM has a built in battery charge protect mode in addition to the features of the HIC800. The Battery Charge Protect mode will activate the high idle when insufficient alternator output causes the battery voltage to drop. When the battery voltage drops below 13.0V for a period of 10 seconds the high idle will be enabled. The **LOW VOLTAGE** LED will indicate a low voltage condition. The LED will be lit with the ignition ON and will go out once the engine is started and the battery voltage goes above 13.0V. Once the high idle is enabled it will remain on until reset by the interlock or the engine is turned off. Applying 12V to the ORANGE “High Idle ON” terminal of the HIC800 will also turn on the high idle while in the Charge Protect Mode, regardless of the battery voltage, as long as the interlock is satisfied.

Wiring Diagram



# Wiring Diagram for Dual Alternator systems

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