

Off Road Engineering
(949) 581 2991
Electronic Hand Throttle - Model EHT200
Installation Instructions

Parts included:

EHT200 control module, handheld remote, throttle body harness, installation kit.

Throttle body harness part numbers:

202 -- 1987 - 1997 Jeep, Mopar EFI kit.

204 – 1996 to 2000 GM engines, Turbo City EFI kit

203 -- 1998 - 2004 Jeep

205 – 1987 - 1995 GM engines, Howell EFI kit

1. Disconnect the negative cable from the battery to avoid damage to the electrical system during installation.
2. Mount the control module under the dash near a rubber firewall plug and plug the throttle body wire harness into the control module. Install the handheld remote in a desired location and feed the connector to the control module and plug it in.
3. Connect power and ground to the module, red and black wires:

1997 to 2004 Jeep:

Connect the red power wire to the supplied fuse tap, remove the radio fuse and plug into the fuse tap, then push the fuse tap into the vacant radio fuse slot. (The EHT200 must get power from a 12V ign. on, OFF during cranking source) Connect the black ground wire to a good chassis ground.

1987 to 1996 Jeep and other fuel injected engines:

Connect the red power wire to a 12V ignition ON wire using the supplied blade connector and t-tap. A good source is the back of the cigarette lighter or an existing 12V power source that is being used for a CB or amp. Connect the black ground wire to a good chassis ground.

4. Remove one of the rubber plugs in the firewall and feed the wire harness through to the throttle body. Cut a hole in the rubber plug for the wire loom to fit through and replace the plug. Unplug the connector going to the idle air control motor located on the throttle body (same connector type that is on the Electronic Hand Throttle harness) and plug it into the female connector of the Electronic Hand Throttle's wire harness. Then plug the male connector of the Electronic Hand Throttle into the idle air control motor located on the throttle body.
5. The "DLY" function tab allows the user to disable a 4 sec delay before manual control is allowed. Do not disable this delay on 1997 to 2004 Jeep engines, a check engine light might come on if the delay is not present. To turn off the delay for other application connect one of the supplied black jumpers to the DLY terminal and connect to ground. No connection = 4 sec delay, connected to ground = no delay.
Ground the terminal to activate, do not connect 12V to any of the function terminals !!
6. The "SLW" and "FST" function terminals allow the user to change the up/down toggle speed. This is the rate of speed at which the engine rpm increases or decreases. Default speed is medium, grounding the "FST" terminal increases the up/down toggle speed by 30%, and grounding the "SLW" terminal decreases the up/down toggle speed by 30%. Use one of the supplied black jumpers to ground one of the terminals.
Ground the terminal to activate, do not connect 12V to any of the function terminals !!
7. Route the wire harness away from all moving parts and heat, and secure with the supplied wire ties. Reconnect the negative cable to the battery and install all covers.

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Operating Instructions

1. After the installation is complete, start the engine and let it warm up for a few minutes. Turn on the EHT. The green light on the handheld remote will indicate that the computer is bypassed and you have manual RPM control. If the DLY terminal is not connected to ground there will be a 4 second delay before the green light will turn on and manual control is allowed. This delay is needed for 1997-2004 Jeep engines to avoid a possible check engine light.
2. Press the toggle switch up and the engine RPM will increase. Release the toggle switch when the desired RPM is reached. The engine RPM will remain at the set level. Press the toggle switch down to set the engine RPM back to its normal or desired level. Turn the EHT off to return control to the computer. After turning the EHT off, the vehicle's computer will turn the engine RPM back down to the normal level, but the computer is slow. It is faster to turn the engine RPM back down manually.
3. RPM range is typically below idle to 2500-3000 rpm. On 1997-2004 Jeep engines, it will be necessary to tap the accelerator to set the engine RPM above 1800 RPM. When a high engine RPM is required in neutral, simply press the toggle switch up, when the RPM stop at 1800, tap the accelerator and the RPM will continue to increase. When the vehicle is in gear and traveling at a sufficient speed it is not necessary to tap the gas to go above 1800 RPM.
The speed at which the rpm level changes can be adjusted with the SLW and FST terminals on the control module. Grounding the SLW terminal will decrease the up/down toggle rate by 30%, grounding the FST terminal will increase the up/down toggle rate by 30%. Do not connect any of the function terminals to 12V, this will damage the module and void the warranty.

Applications:

Rock Crawling:

Simply adjust the engine RPM to control your speed by pressing the toggle switch up or down. To slow down, the brake may also be applied. The EHT will give vehicles with manual transmissions the feel of an automatic transmission by applying the brake.

Down Hill Descend:

On steep downhill descends, adjusting the engine RPM to below the factory set idle speed will dramatically decrease the downhill speed. Just be careful not to stall the motor when reaching level ground.

Winching:

Adjust the EHT to around 1500 RPM to increase the alternator's current output and keep the battery from draining. This allows you to keep your foot off the accelerator pedal and on the brake, if needed.

Running Air Compressors and Welders:

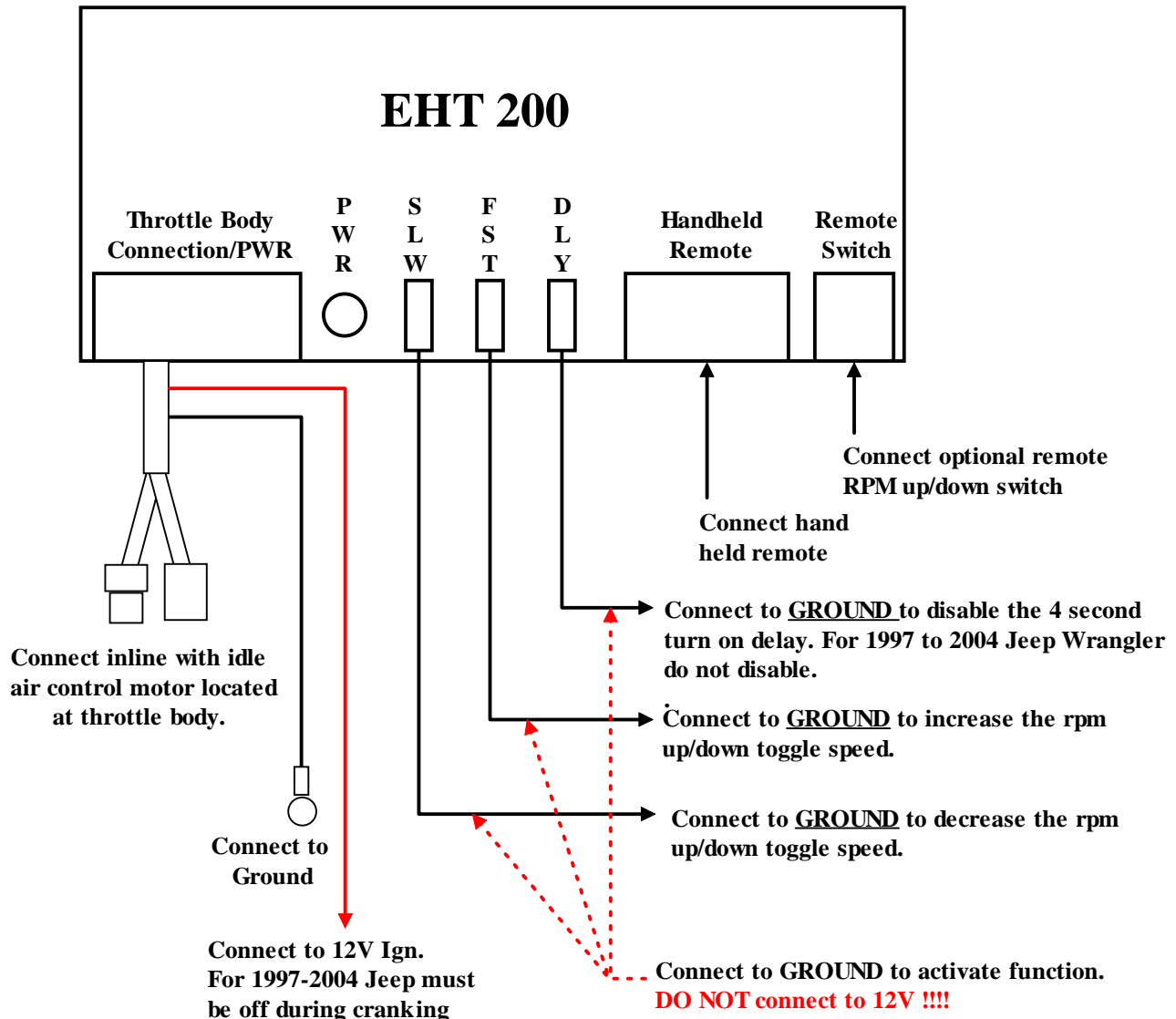
Adjust the EHT to around 1500 RPM and your engine will supply sufficient current for welding and electrical air compressors, and sufficient RPM for mechanical air compressors.

WARNINGS:

- Read and follow the Installation and Operating Instructions thoroughly.
- The EHT is for off-road use only, use only with the transfer case in low range.
- Do not press the toggle switch with the EHT turned on, and the motor not running.
- Do not turn the engine off with the RPM below the factory set level or above 1000 RPM.
- Do not leave your vehicle unattended with the RPM adjusted above the factory set level.
- If the EHT causes the engine to stall (by adjusting the engine RPM too low) press the toggle switch up for 2 seconds, with the ignition on, before starting the engine.
- **Do not apply 12V to any of the function terminals, this will damage the module and void the warranty. The functions need to be grounded to activate.**

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EHT 200 Electronic Hand Throttle
Wiring Diagram



Special function terminals:

Delay: There is a 4 second delay when the EHT200 is turned on before idle speed can be changed. This delay is needed on 1997 to 2004 Jeep Wranglers to avoid a check engine light. Grounding the DLY terminal disables the delay.

Fast and Slow toggle speeds: Normal toggle up/down speed is medium. Grounding the FST terminal increases the rpm up/down toggle speed. Grounding the SLW terminal decreases the rpm up/down toggle speed.