

The idea. Use a true factory GM switch from a full-size SUV to replace your existing rear wiper switch. This new switch has a factory fog light button. Your underhood fuse box also has a fog light fuse and relay since GM used the same fusebox for their full-size trucks and SUV's. You have no way to use said fuse/relay, nor one of the factory fog light buttons. You want to replace the comically gigantic daytime running lights (that most including new H2 owners think are fog lights) with actual fog lights. You want it to look and work in a somewhat factory manner.

My solution for the lights was to find some that are larger than 4" which in my opinion looks odd since the hole for the DRL's is so large. Not much of a selection but I found some that serve two purposes. They have a halo function which I plan to use as DRL's using the factory DRL wiring already in place. Then add wiring, and a factory GM rear wiper switch with the additional fog light button below it and a specialized module from Amazon that acts as a latching relay which can work with a single momentary push button (like the factory fog light button).

One roadblock. GM has not enabled, nor will they enable the fog light output in our truck body control modules and the factory button is momentary. That presents a problem since a typical relay needs a button that stays on or stays off.

Additionally. Some of this is optional. You can elect to not use the unused fuse and relay in your underhood fuse box and just use some other relay of your choice that you add. You can also use the button for something else if you want.

Another plus to this method versus fog light control through the TBCM is that the factory control will shut fog lights off when you cut the high beams on and will always reset to off when the truck is turned off. Using this method, you can cut the fog lights on independent of the headlights or high beams being on or off and if you leave them on when you shut the truck off, they will come on when you start the truck the next time. VERIFY

First and foremost, I cannot be held responsible for what you do, your lack of any particular skill, nor will I try to teach you a skill.

You need some basic skills regarding automotive electrical wiring. Ability to de-pin, and re-pin connectors. Ability to make proper connections (the cheapest butt connectors are flimsy junk and will eventually fail), the cheapest crimpers are junk and will make poor crimps. Soldering is ideal. Connectors under the hood would ideally be automotive grade weatherproof connectors (these generally require fairly high-end crimpers to properly terminate wiring on them).

A couple of notes. The factory relay in the underhood fusebox is hot at all times and requires a negative trigger.

Using the module from Amazon by itself is an option and hope its relay holds up to the power draw of the lights you connect to it. That module is not weather proof so you would also need to run a larger hot wire from its output to the fog lights in the front end.

The way I'm using it I only need to run a single small wire from the inside to the engine compartment. Of course, also wiring from the relay under the hood to the lights is also required...

The wires I added to the underhood fusebox and wiper/fog light switch connector are what I scavenged and might not match the wire colors you use.

For the module itself, I just wrapped it in a single layer of electrical tape, then a layer of foam tape (so there will not be any rattles) and just stuck it behind the switch.

Needs –

- Skills as noted above.
- Factory rear wiper switch from a 2003-2007 Chevy Tahoe, GMC Yukon, etc that also had factory fog lights. Ebay or a junkyard are the best sources. If eBay make sure the seller is including the connector and some of the wiring from the connector since out factory plug is missing three additional wires.
- At least two of the underhood fuse box wires with the terminals also from a junkyard or eBay. These will need to be extracted/de-pinned from one of the large connectors on the bottom side of the underhood fuse box by removing the one center bolt to release the large connector.
- Whatever lights you plan on using.
- Module from Amazon. This is the one I got.  
[https://www.amazon.com/gp/product/B015MRQNXS/ref=ppx\\_yo\\_dt\\_b\\_asin\\_title\\_o00\\_s01?ie=UTF8&psc=1](https://www.amazon.com/gp/product/B015MRQNXS/ref=ppx_yo_dt_b_asin_title_o00_s01?ie=UTF8&psc=1) “ELECTRONICS-SALON Panel Mount Momentary-Switch/Pulse-Signal Control Latching SPDT Relay Module,12V” CZH-Labs D-1022A
- Appropriate automotive grade wire, connectors, solder, etc.
- Some way to enclose/protect/secure the module from Amazon.
- Gods good grace to help you get it right on the first try.

Okay – so here is a view of the underhood fuse box. You need to add terminals/wires to the two positions shown since our fusebox does not have any wires there. You need the correct type of terminals from a junkyard fusebox to do this.

In my example I used a light brown wire and a black wire.

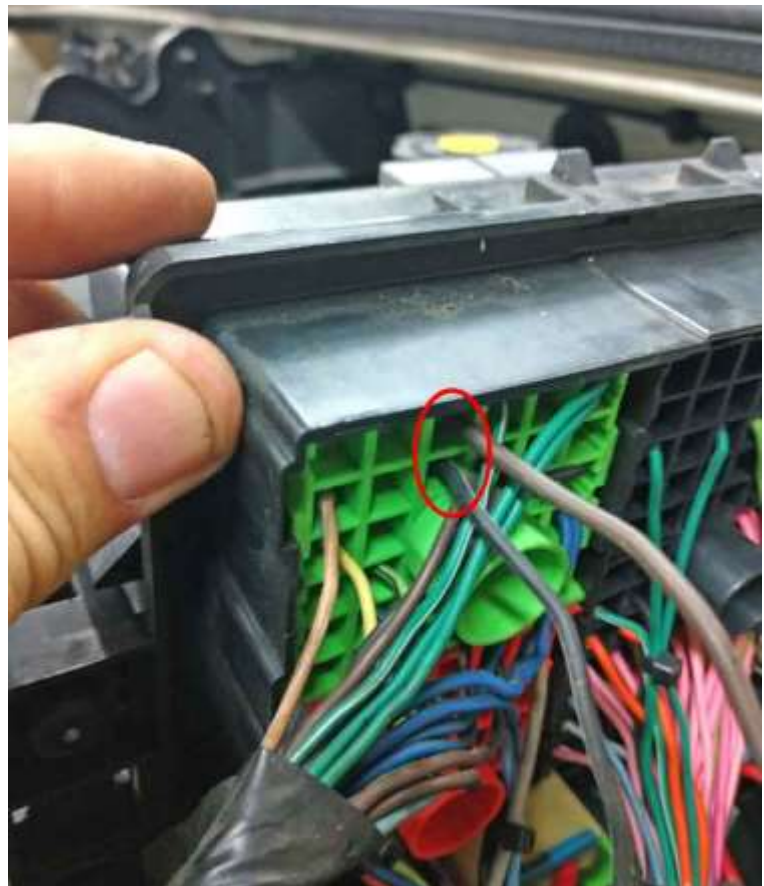
The black wire needs to be a negative line to trigger the relay. I tied this to the “blue” wire shown in the diagram on the last page.

The thicker light brown wire is the positive output for your lights you are adding.

You need to find a suitable ground point for the lights and then extend the light brown wire to the lights.

You need to extend the black wire through the firewall and to the module from Amazon.

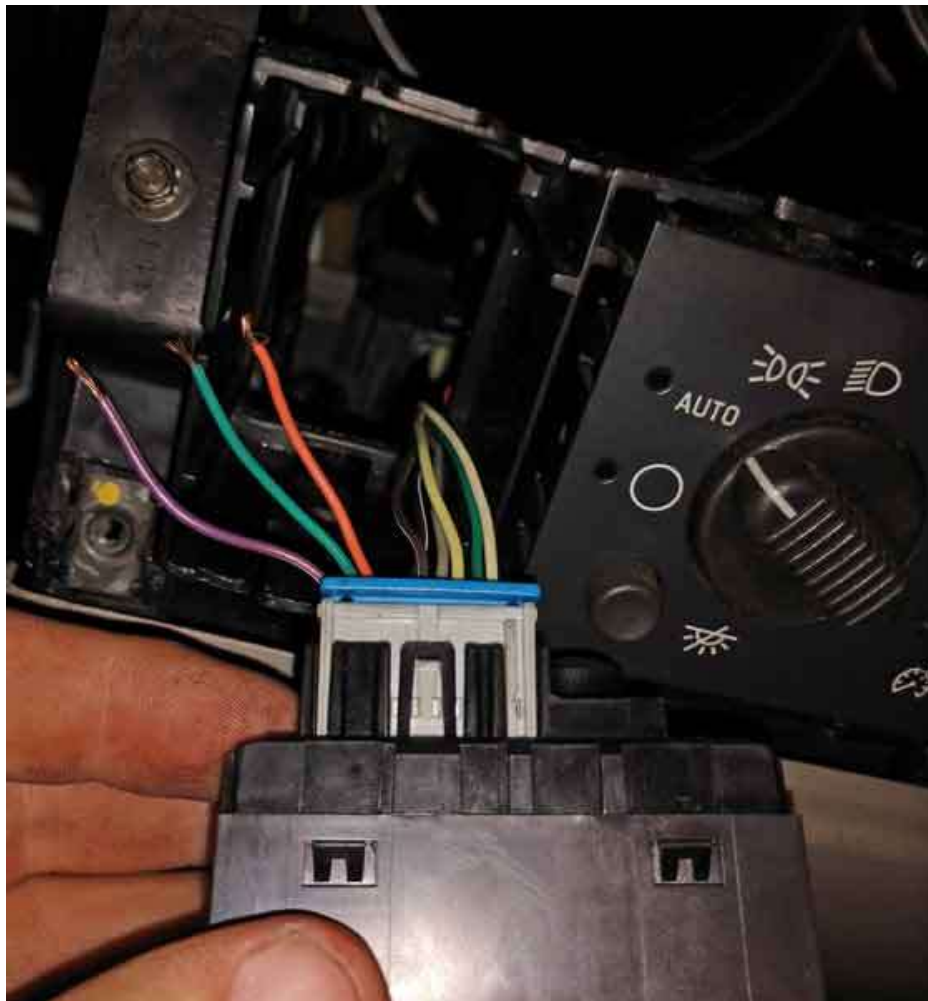
You need to de-pin 3 wires from the donor fog light button connector wiring. The factory wires are orange, green, and purple. You need to add these wires to your factory connector in the next 3 open positions as shown in my photo.



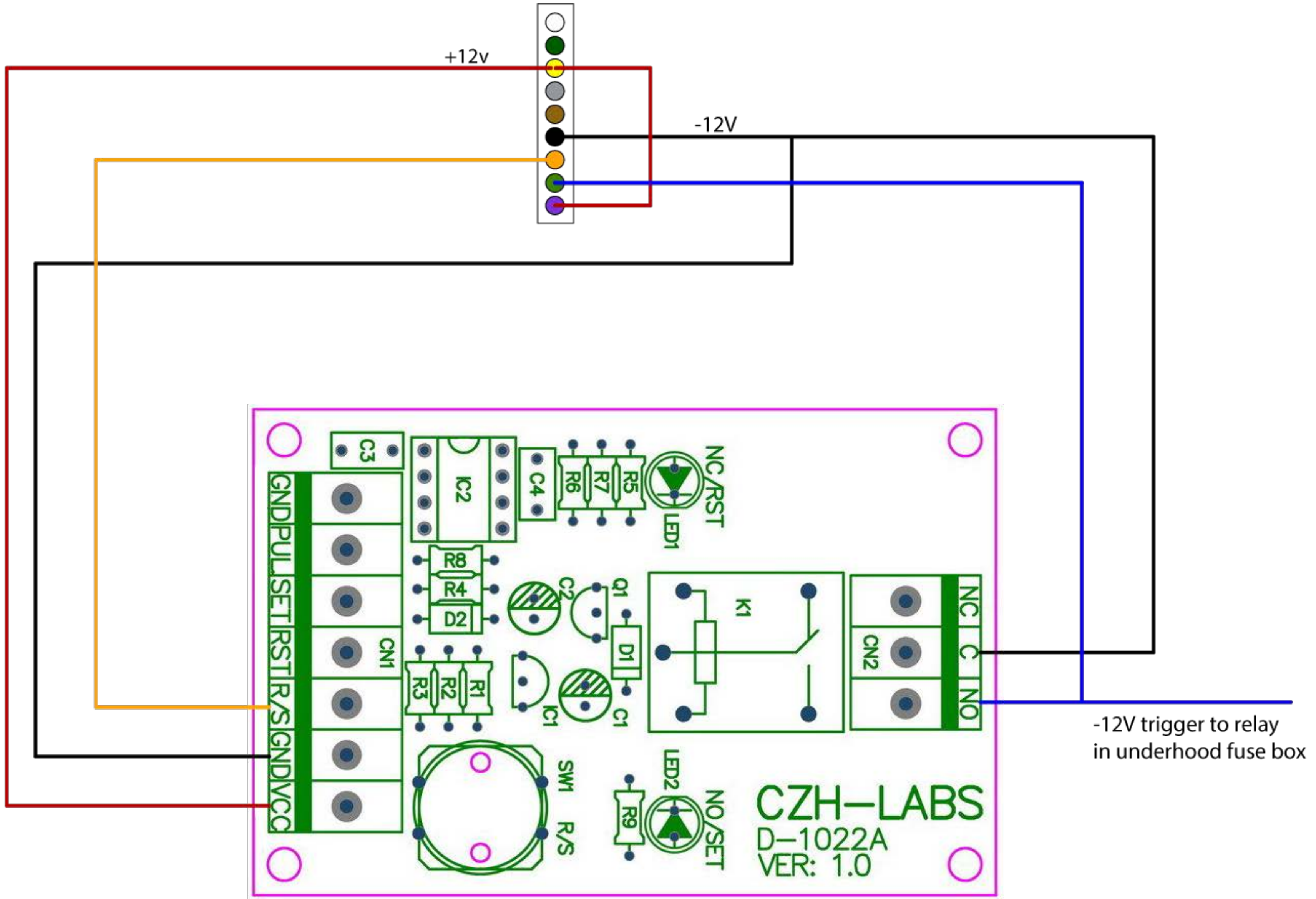
Orange is a ground output when you push the fog light button. You need to connect this to the module from Amazon.

The other two wires are for an indicator led beside the button that comes on when the fog lights are on. Quite helpful to have. Connect purple to positive, green to same negative output that goes to the underhood relay.

Since the module itself only uses 50ma of current I decided to just power it off of the yellow wire (third ones from the right in the photo above) that we already have to the rear wiper (and now also fog light) switch as that wire is accessory powered and 50ma is very little. I also used the ground from the same existing wiring to the plug which is the sixth wire and is black with a thin white trace. All I am doing with the module is providing a ground to trigger the factory relay under the hood and will also be powering the LED indicator which uses next to no power. Below is the wiring diagram I modified / made of how I have things wired. Keep in mind – if the donor wires/pins you are using are a different wire color then you need to note those differences..... Good luck!



# Rear wiper /fog light switch connector



-12V trigger to relay in underhood fuse box