
This kit is designed to allow use of your factory fog light operation along with an addition auxiliary light control. Your factory fog light control (left button) works exactly as your single button switch you currently have. The auxiliary control (right button) bypasses the BCM and does not have a low power failsafe (if they are left on) and has no way of indicating that the system is on, it will not display any OEM light indicators on the dash cluster.

The auxiliary control has only three connections: 12v power, ground, and connection to the positive coil side of an aftermarket relay. All three connections are only for the auxiliary circuit (right button) the factory fog light control will not change its factory operation. Once installed you can turn the auxiliary circuit on by pressing the right button of the headlight switch once and to turn the lights off you press it again.

Warning: This unit will not directly supply power to any lights, an additional aftermarket relay is required (please see wiring diagram on page 3).
Notes: This is an off highway product; please check your local laws on vehicle lighting. This item must be installed by an experienced professional, and additional skills and steps may not be detailed in these instructions. Manufacture warranties may be void if this is found to be the cause of damage to your electrical components.

Safety notes: This item must be installed by an experienced professional, and additional skills and steps may not be detailed in these instructions. The use of fuses is to prevent damage to factory electrical components and to prevent the risk of fire. The red 12V input wire must be fuse protected at the source with no larger than a 2 amp fuse.

Please contact for troubleshooting or installation issues: offhighwayequipment@gmail.com

Included in the kit:

- 1 – Control Module with Attached Harness
- 1 – Headlight Switch with Left and Right Control Buttons
- 1 – Mini Blade Fuse Tap with 2 amp Fuse
- 1 – Male Quick Connector
- 1 – Female Quick Connector
- 1 – Firewall Rubber Grommet
- 2 – Butt Connectors
- 4 – Zip Ties
- 1 – Ring Terminal
- 2 – Extra Fuses

Tools Required:

- Crimp Tool
- Wire Strippers
- Small Flat Head Screw Driver
- 7mm and 10mm Socket or Wrench
- Needle Nose Pliers
- Box Cutter
- Flashlight (recommended)
- Mechanic’s Gloves (recommended)
General Wiring Diagram

30/40 Amp Relay Not included but is required

Fuse

Relay Coil Activation +

Control Module

12v + From Park Lamp Circuit or Ignition

Fuse

Red

Ground -

Black

Ground -

+ 12v

Ground -

+ 12v

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Step 1: Place vehicle in safe position, not in the street and remove negative battery terminal with 10mm wrench or socket.

Step 2: Continuing in the engine compartment remove hood cable from the 3 plastic clips to allow slack to pull through firewall. Position the cable over the battery for the most amount of slack.
**Step 3:** Move to the interior driver’s side and push the seat back as far as you can. Then remove the (2) 7mm bolts holding the lower kick panel.

![Image of seat bolts](image1.png)

**Step 4:** Remove the hood release cable lever by pushing it forward towards the front of the vehicle sometimes wiggling while pulling down the tab inside.

![Image of hood release](image2.png)
**Step 5:** The lower panel is also held in with clips, just pull on the panel starting at the top left and right, then pull the bottom last.

**Step 6:** Once you have the panel off, unclip the headlight switch and 4wd control (if equipped), connectors only go one way do not worry about marking them. Squeeze the tab and wiggle if done right it will let loose, do not use any tools to remove clips, damaging this can cause it to fall out while driving. Set the lower panel aside and move on the step 7.
**Step 7:** Remove the hood lever from cable using needle nose pliers, you need to squeeze the two tabs together for the retainer to fit through the hole. Then align the steel cable with the cut out and set lever out of the way.

![Image of hood lever removal](image1.jpg)

**Step 8:** Remove the cable from the firewall (the wall between the cab and the engine) using the needle nose pliers. Grab the rubber grommet with the pliers and pull, we will not be reusing this, don’t worry about damaging. Once the grommet is out gently pull the cable 1-2 feet out from the wall. You may need to walk back to the engine compartment to make sure it has not snagged on something. Pulling harder than required may damage the cable.

![Image of cable removal](image2.jpg)
**Step 9:** The factory grommet will need to be cut off the cable using a box cutter. Be careful not to cut the cable. Cut down the length of the grommet cutting a little at a time and peel it after every cut. Once all of the grommet is off walk back to the engine compartment and pull the cable all the way out from the cab.

**Step 10:** Insert the supplied grommet from the engine compartment next to the battery this may take a couple tries.
**Step 11:** Move back to the driver’s side and install the red wire stopping after the safety fuse housing is through, leaving the two other wires still in the cab. Then walk back to the engine compartment and insert the hood cable through the grommet, make sure the cable goes under the washer fluid hose and then reinstall all (3) the plastic clips. After you are done move back to the cab and finish installing the harness through the grommet.

![Image of installation process](image1.png)

**Step 12:** Route the box up to the headlight switch connector and attach to the factory loom using the already installed ties, make sure you are happy with the position of the harness before setting ties. The supplied zip ties are up to your discretion we recommend keeping the harness from moving objects and do not let it hang down. Any extra slack pull to the engine compartment.

![Image of harness installation](image2.png)
Step 13: Remove the headlight switch from the panel and install the supplied switch. The switch is held in with 4 tabs, you will need to carefully pry the edges back starting with the side closet to the steering wheel. Take your time having your other hand pushing on the switch helps. The new switch just snaps into place. Connect the single pin connector to the module and reconnect the 4wd controls and headlight switch. Pull back on the connectors to make sure they are locked in place. Then reinstall the lower panel in reverse order starting with the bottom.

Step 14: (optional): Once you are finished in the cab, take a picture and share with your followers.

Step 15: Move to the engine compartment and connect the black ring terminal to the ground cable stud. Do not connect the battery.
**Step 16:** Run the Red wire to your 12V source, we recommend connecting it to the trailer parking light circuit with the supplied fuse tap. Running the wire from the bottom of the fuse box through a drain hole in the driver front side. Locate the trailer parking lights fuse from your owner’s manual, remove the fuse and insert the tap. Take the factory fuse and insert it in the bottom spot on the fuse tap.

![Image of fuse box](image1.jpg)

**Step 17:** Connect the blue wire to the positive coil side (activation) on your aftermarket light relay using the supplied butt connector or quick connectors.

**Step 18:** Double check your work tug on all connections pick up loose tools get cleaned up. Then connect battery check that the lights are working by powering the circuit you have connected it to.