

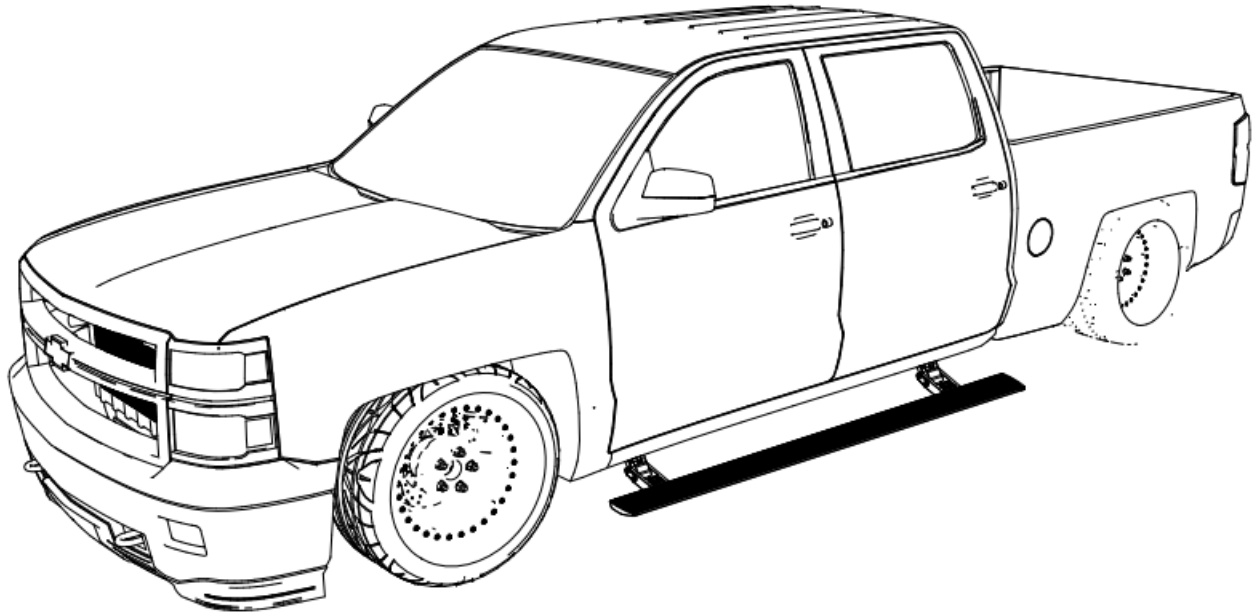
# INSTALLATION INSTRUCTIONS

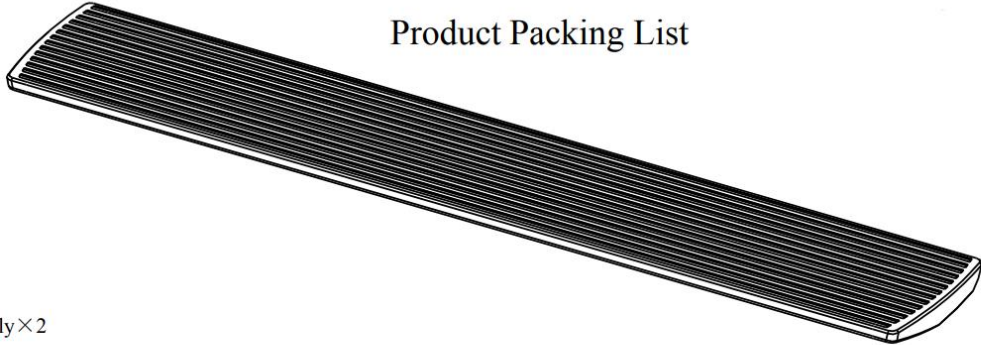
**2014-2018 Chevy Silverado 1500/2500/3500 Part Number- GM-4500**

**Note-** Installation time 3-5 hours

**PARTS LIST:**

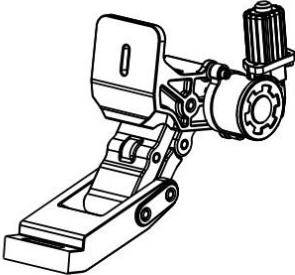
2	Step Board	25	Wire ties
1	Controller assembly w/ harness	1	Rivet install tool
1	Front driver side linkage	2	Fuses
1	Rear driver side linkage	2	Hex flange bolts M8x25mm
1	Front passenger linkage	2	Wired magnetic induction module
1	Rear passenger linkage	4	Magnets
8	Hex flange bolts M8x30mm	4	LED Lamp
8	Socket cap screw M6x25mm	1	Power board switch
4	Flush head rivet M8x18mm	1	Hex flange nut M8



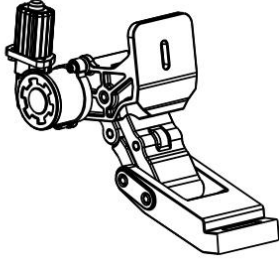


Product Packing List

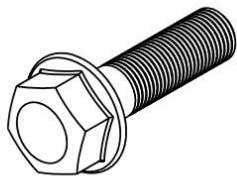
① - Board Assembly × 2



② - Front Motor Linkage Left × 1  
Rear Motor Linkage Left × 1  
6120100.1L



③ - Front Motor Linkage Right × 1  
Rear Motor Linkage Right × 1  
6120100.1R



④ - Hexagon Flange Bolt × 8  
QC/T340-1999 M8×30



⑤ - Socket Cap Screw × 8  
GB/T70.1-2000 M6×25



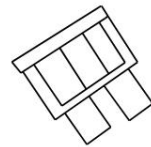
⑥ - Flush Head Rivet × 4  
GB/T17880.1-1999 M8×18



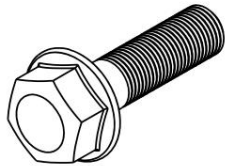
⑦ - Hexagon Flange Nut × 1  
QC/T864-2011 M8



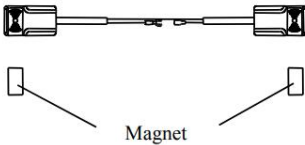
⑧ - Wire Tie × 25  
GB/T22344-2008 5×300



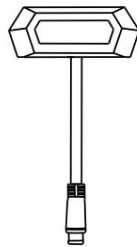
⑨ - Fuse × 2



⑩ - Hexagon Flange Bolt × 2  
QC/T340-1999 M8×25



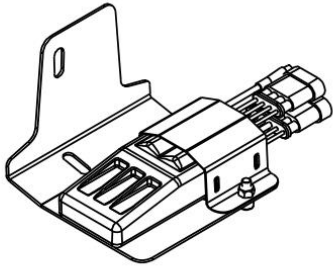
⑪ - Wired Magnetic Induction Module × 2  
- Magnet × 4



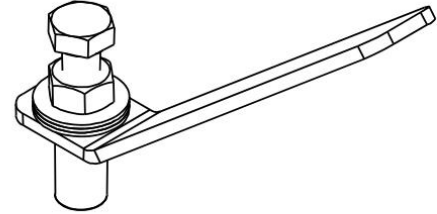
⑫ - LED Lamp × 4  
6161100.4.8  
(Optional)



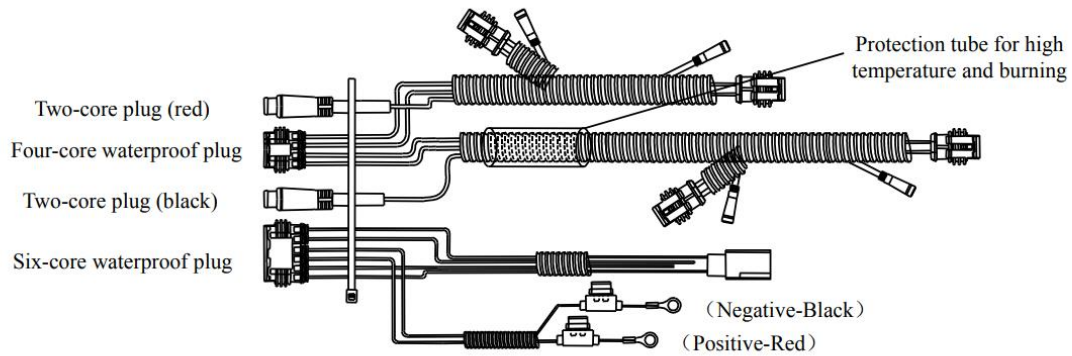
⑬ - Power Board Switch × 1  
6124151.4.9



⑭ - Controller Assembly  
6120100.4.4ZJ



⑮ - Rivet Nut Installation Tool



⑯ - Control Input Wire ×1 6120100.4.1



# INSTALLATION INSTRUCTIONS

## Product Technical Specification

**Rated Voltage: 12V**

**Specified Load:  $\leq$ 350kg Gross Weight: 27.5kg**

**Forward Extension Length: 158mm (Horizontal distance between the edge of power board and the vehicle door when the board extends)**

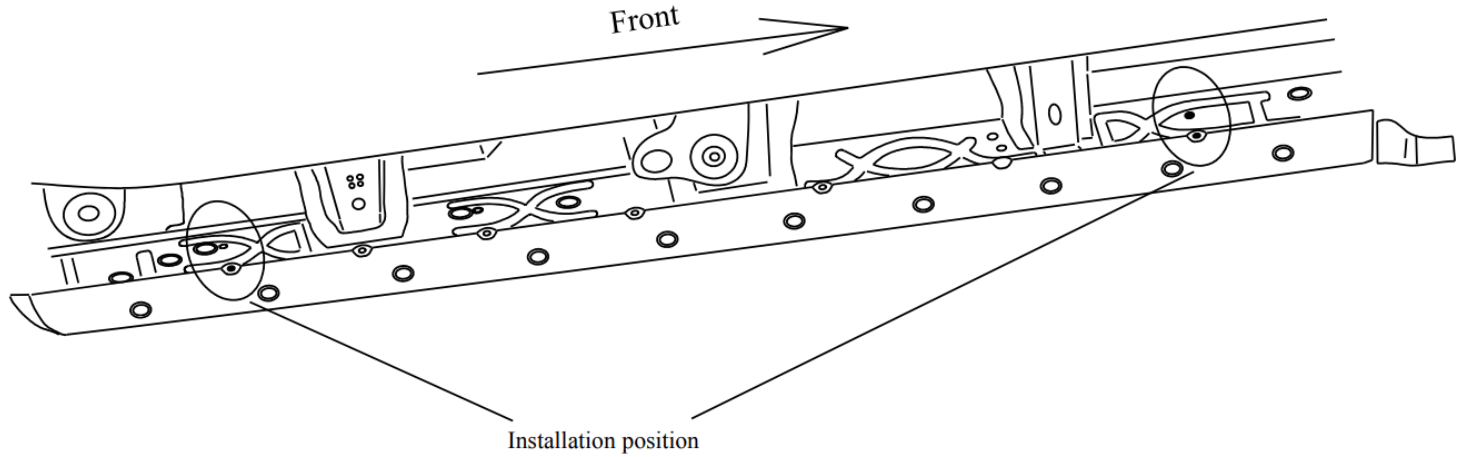
**Board falling dimension: 245mm.**

**(Vertical height difference between the edge of power board and the vehicle door while board extending).**

**(Both dimensions of forward and falling are theoretical, which may vary due to uncertainties such as installation errors, manufacturing errors of vehicle bottom and etc.,)**

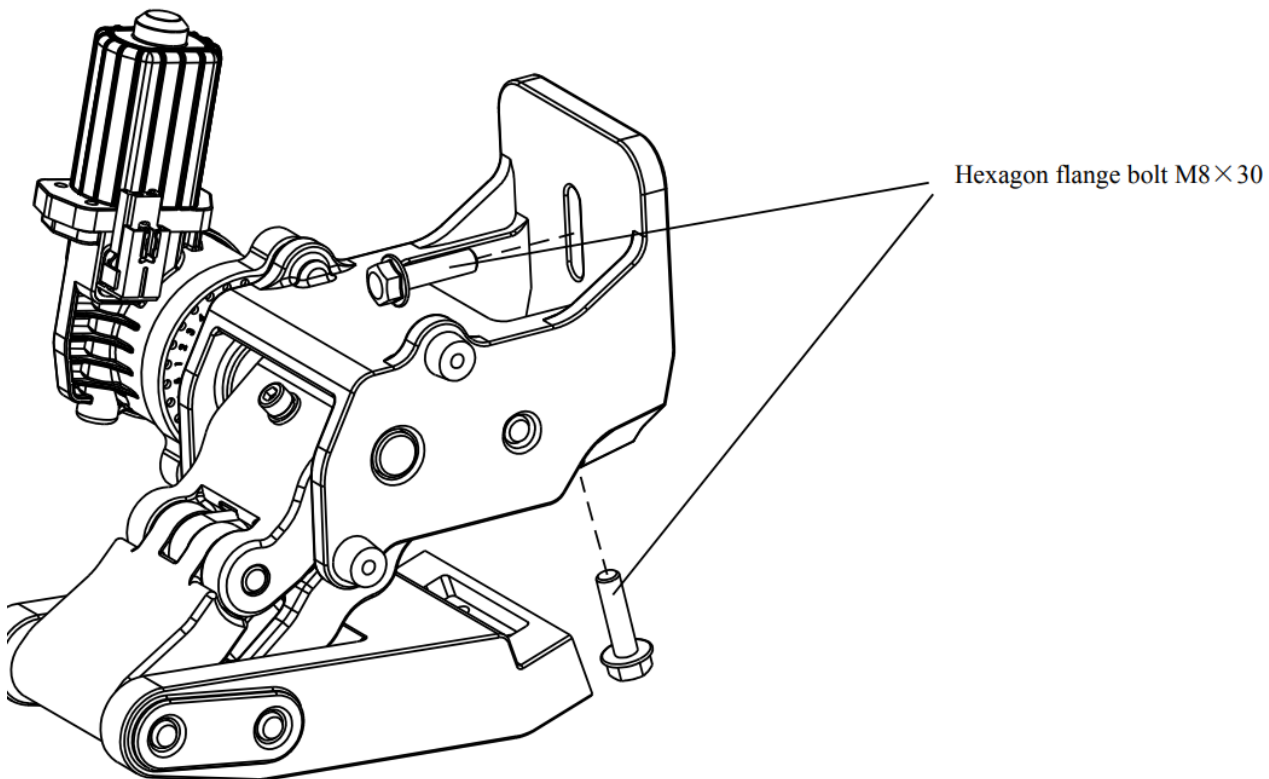
**Notice: Impact load is not allowed.**

## Mechanical Installation



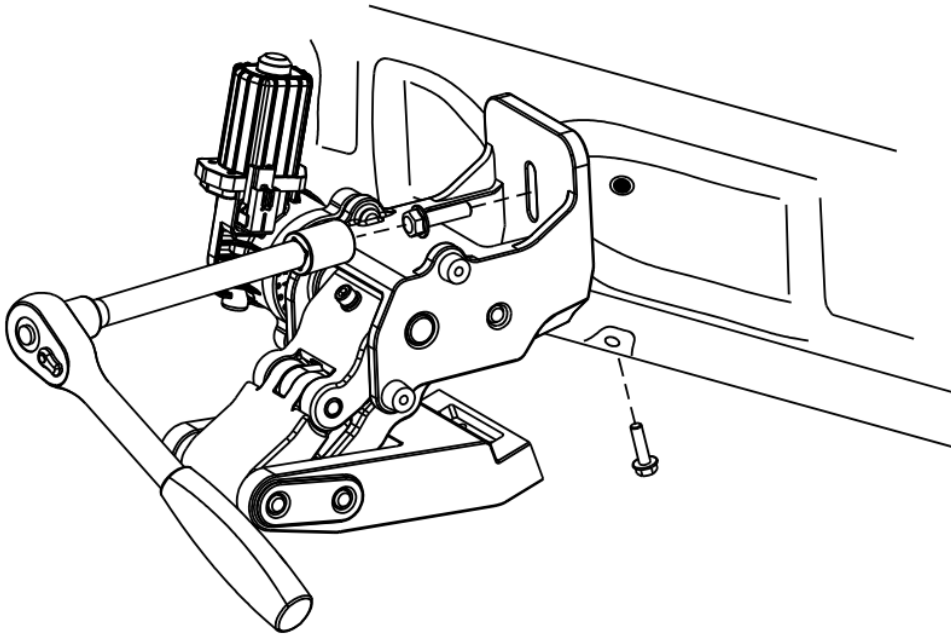
**Step 1.** Locate the installation positions under the driver side of the vehicle. This will be where the front and rear linkages mount.

**Step 2.** Prep the linkages with the associated hardware

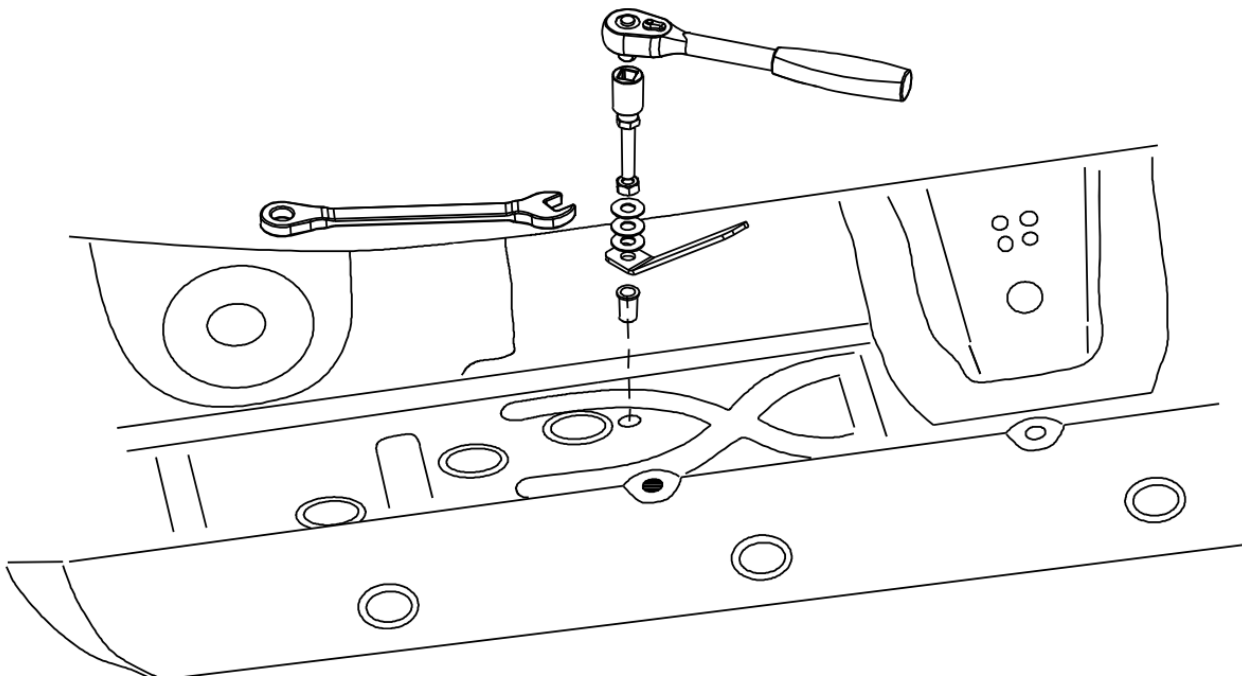




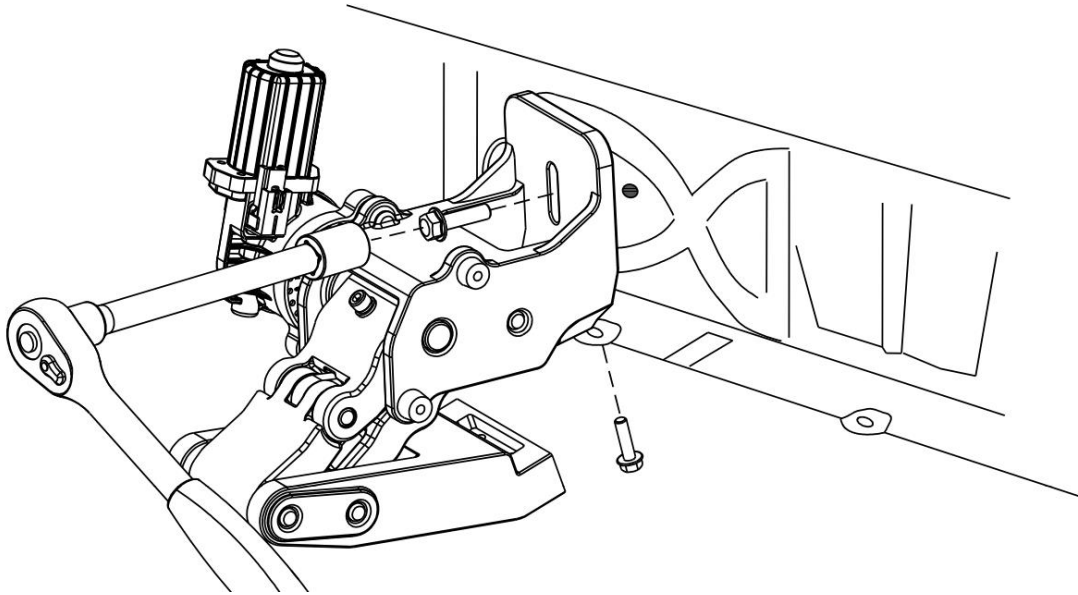
**Step 3.** Use the hardware to mount the linkages



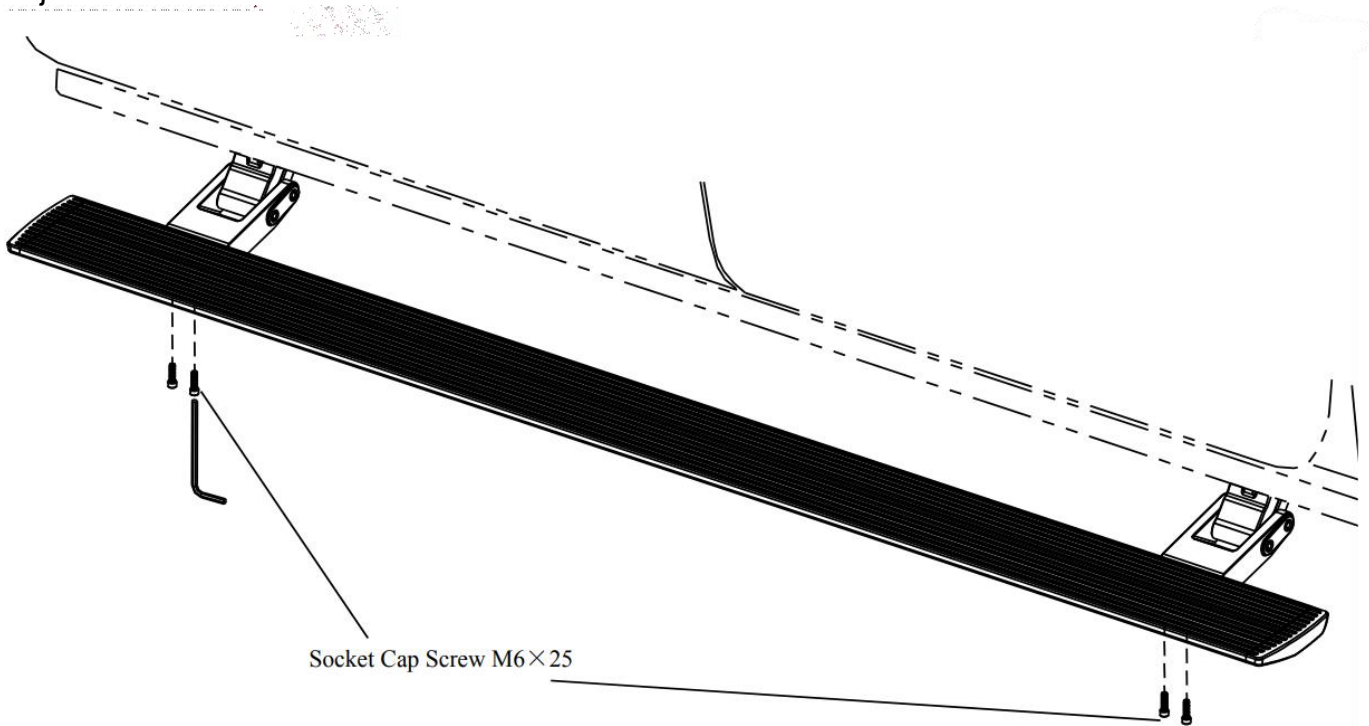
**NOTE-** If the mounting hole on the rear is not threaded. Then you must utilize the provided rivet tool and install the flush head rivet



Mount the rear linkage

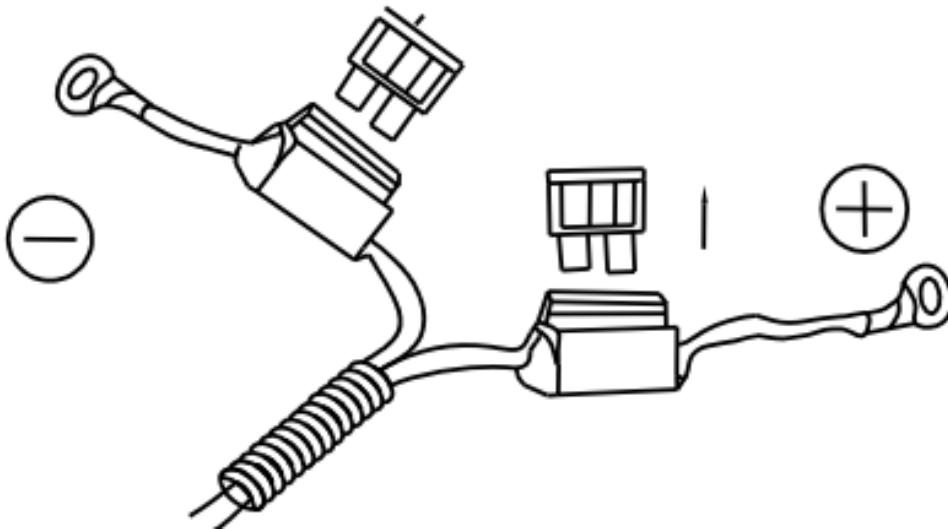
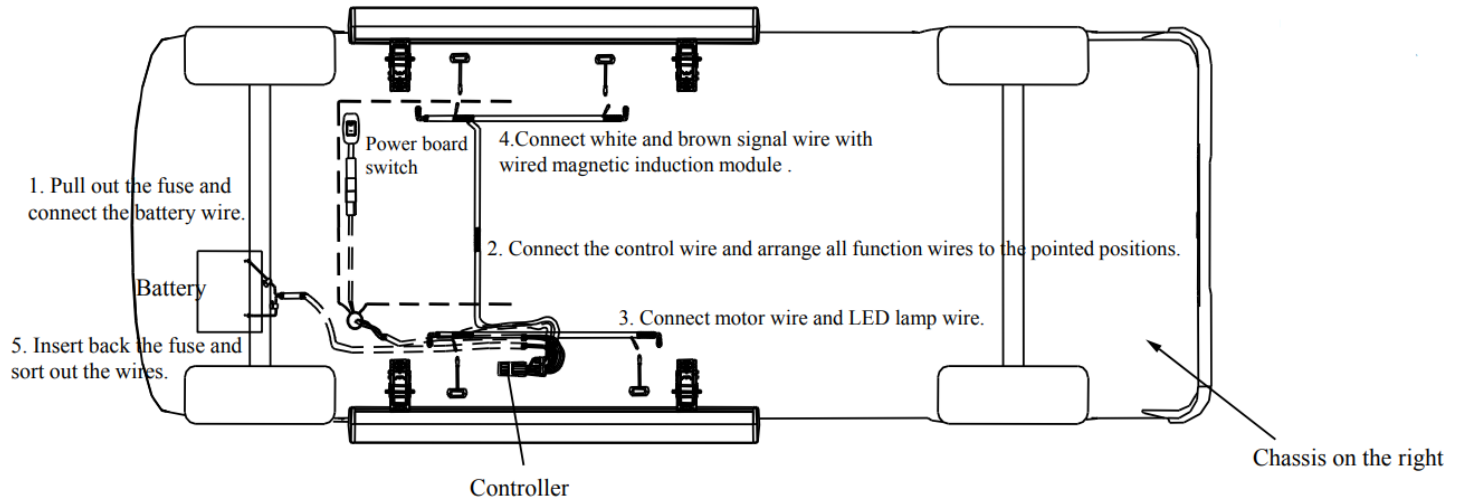


**Step 4.** Install the boards using the M6x25mm socket cap screws. Be sure to use the T-Nuts and adjust the board side to side to ensure the best fit



## Electric installation of the magnetic control

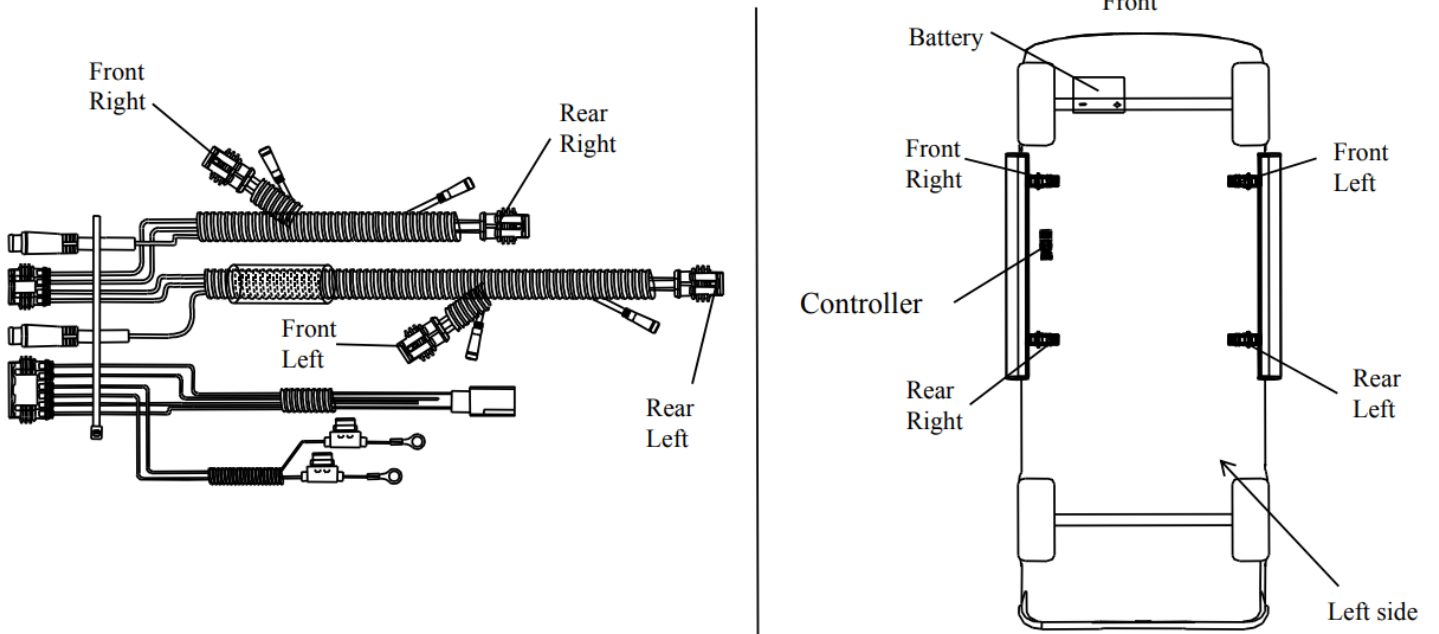
**Step 1.** Locate the control input wire and remove the fuses. Then connect the positive and negative terminals to the vehicle battery.



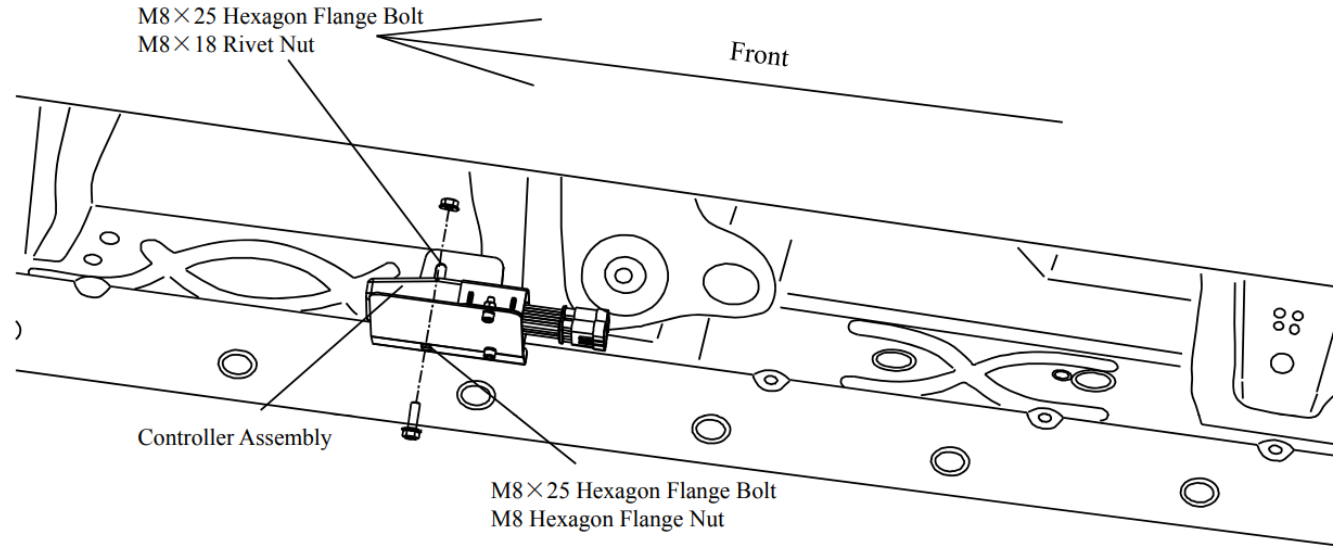


# INSTALLATION INSTRUCTIONS

**Step 2.** Using the wiring diagram and the vehicle diagram below. Be sure the four connectors are connected to their respective linkages. (Front right, Front left, Rear right, Rear left)

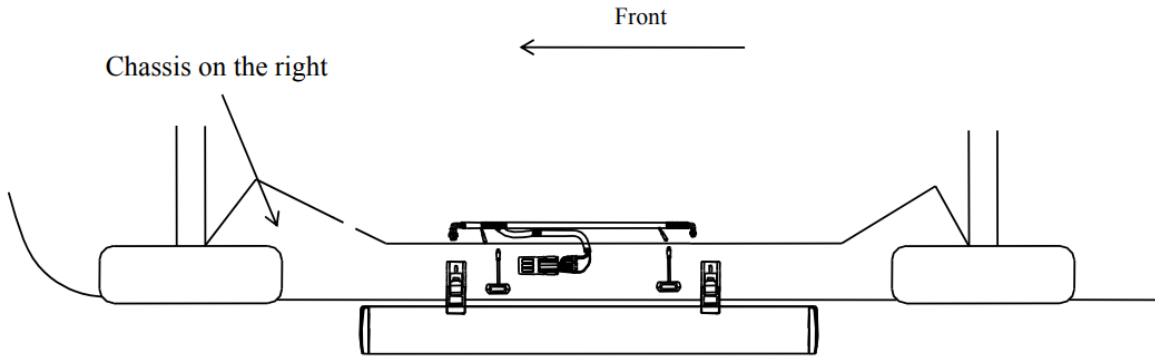


**Step 3.** Using the rivet tool. Install a rivet nut into the hole, then install the controller using the M8x25mm. Fix the controller assembly with a M8x25mm hex flange bolt with a M8 flange nut. Refer to diagram below.

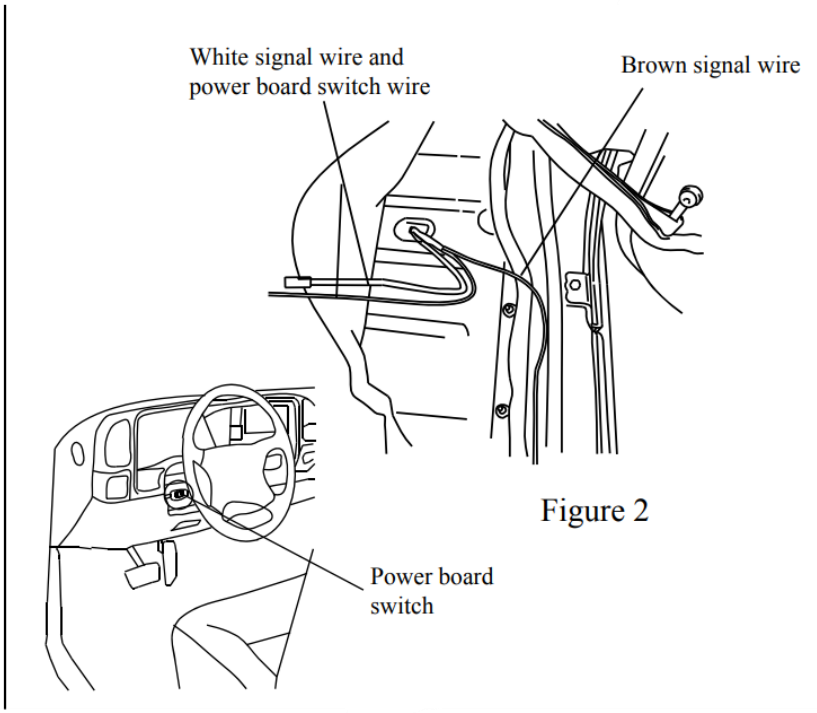
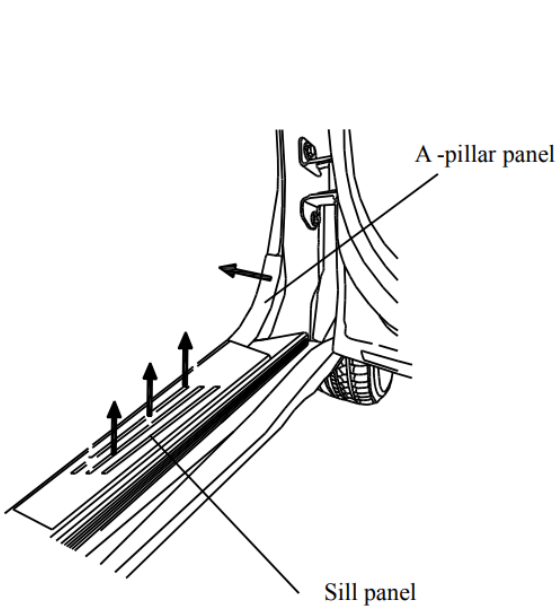


# INSTALLATION INSTRUCTIONS

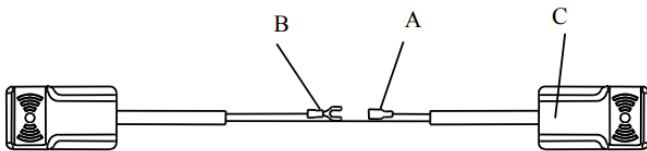
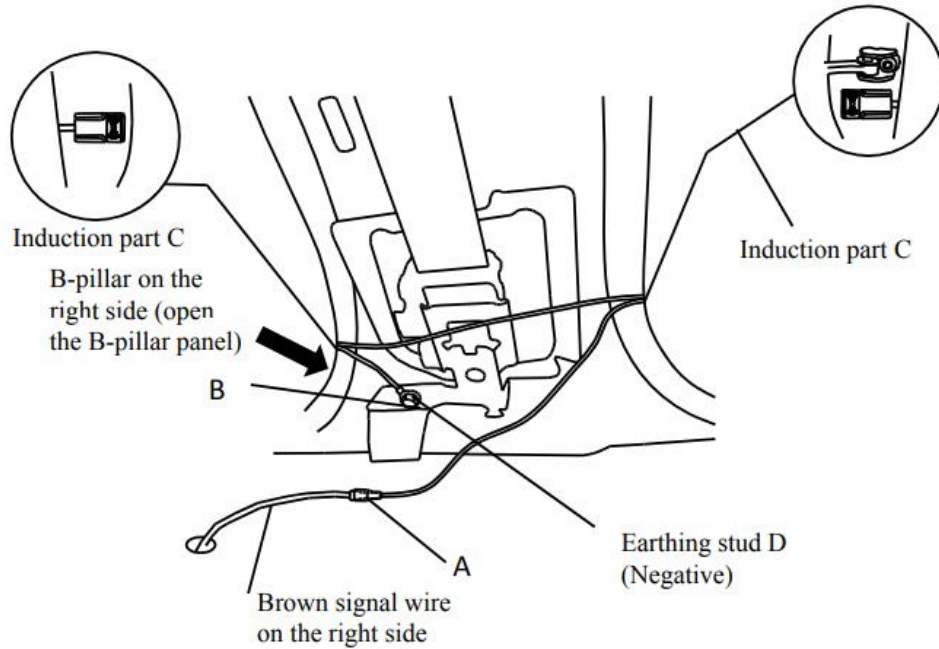
**Step 4.** Arrange the motor wire and led lamp wire together. Make sure it is neat.



**Step 5.** Pull the sill panel and A-Pillar panel on the driver side. Pull the brown signal wire through the rubber grommet on the chassis on the right side. Then the white signal wire is pulled to the left side of the vehicle under the carpet. Stick the power board switch to the left side of the steering wheel.

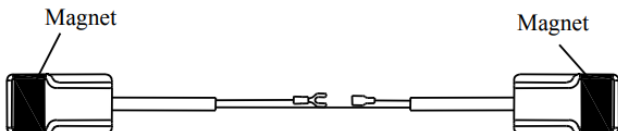


**Step 6.** Open the B-Pillar panel on the right side of the vehicle. Using the diagram below. Connect the brown signal wire to terminal A on the magnetic inductor. Loosen the ground (stud D), then connect the fork terminal B to the ground (stud D). Tighten down the ground. Take the induction part labeled C to both the sides of the B-Pillar. Stick the magnet on the inside of the vehicle door. The process for the white signal wire is the same for both sides.



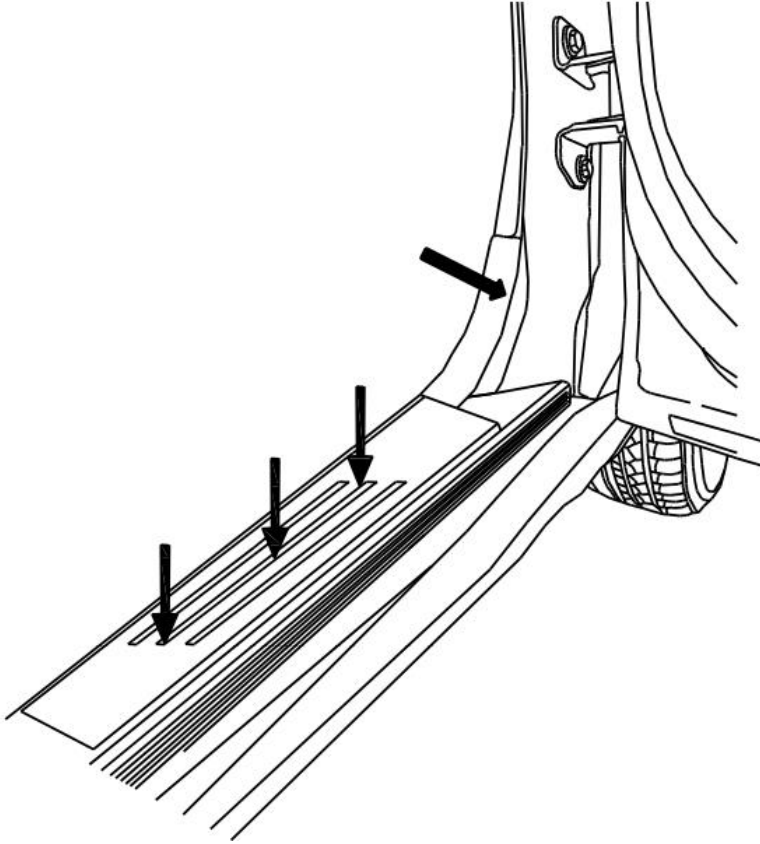
Wire Harness Magnetic Inductor

<p>Insert the door signal wire into A.</p>	<p>Tighten the nut connecting B and ground terminal of door pillars.</p>	<p>Remove the adhesive tape at the back of C, and stick one end on one side of the door pillars.</p>
<p>Stick the other end to the other side of vehicle door pillars.</p>	<p>Stick the magnets to the inner side of the vehicle door and keep their positions corresponding to C.</p>	

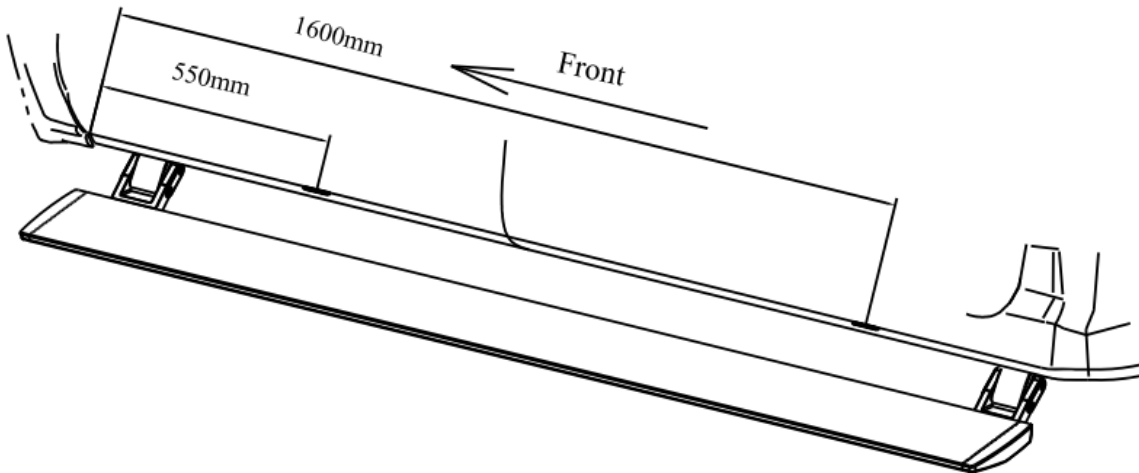


Instruction: The magnet position after closing the door is shown as above picture.

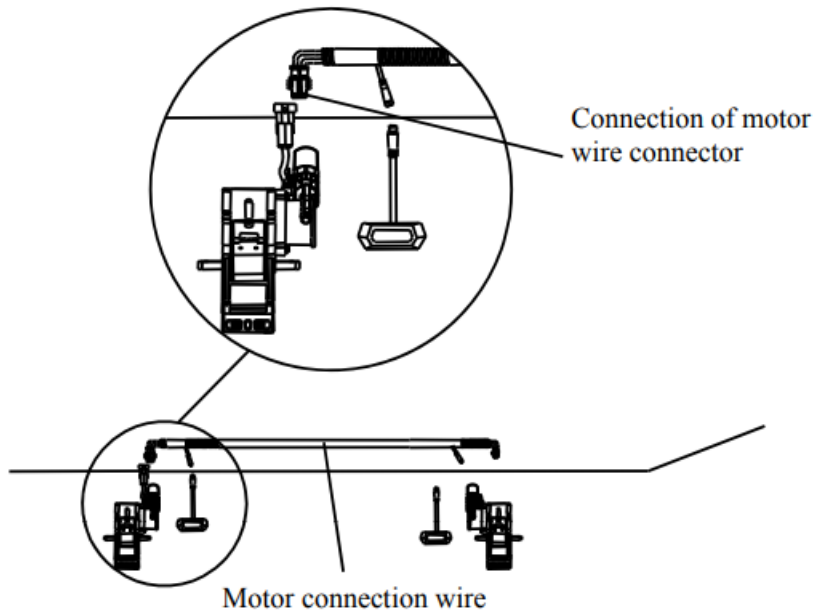
**Step 7.** Clean up the harness and reinstall the panels.



**Step 8.** Install the LED strip by peeling the adhesive tape behind the led strip and apply it to the body pinch weld lip below the apron.

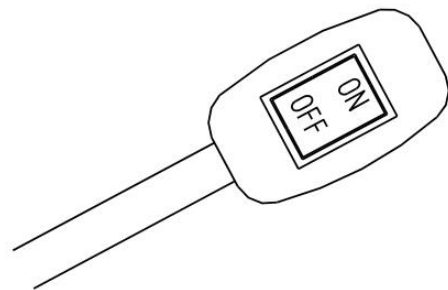
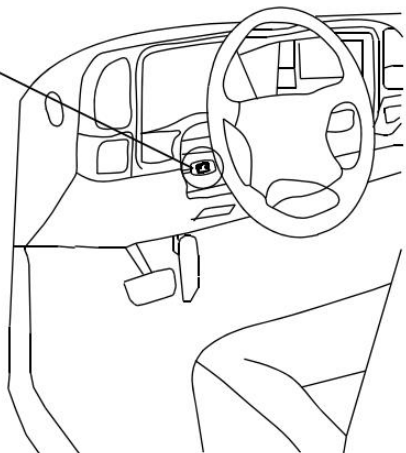


**Step 9.** Connect the motor wire to the control input wire. Be sure the color codes match from harness to controller. Keep the harness neat as possible.



**Step 10.** Inspect the power board switch on the controller. Make sure it is in the off position. Insert the fuses removed at the beginning of the install. Inspect all connections on the harness. Turn the controller on. Begin to test the functionality of the power boards. If power boards are not operating normally. Refer to the trouble shoot guide at the end of the instructions.

Stick the power board switch with 3M tape under the left side of steering wheel.



#### I. Function of power board switch

Turn off the switch when no need of power board or inconvenience of power board, then the power board will automatically get back and stop working to avoid any impact when use the vehicle.

#### II. Power board switch using method:

1. Press power board switch button to set "ON". And at the same time, the steps will automatically go back and stop working.
2. Press the power board switch button to set "OFF". And at the same time, the power board will return to its normal working status.





# INSTALLATION INSTRUCTIONS

## Maintenance

Inspect the operation of the step, ensure it works as it's supposed to.

At every oil change interval, take the time to inspect for damage to each cable connection and the exposed components, apply dielectric grease to the electrical components and dry Teflon lubricant (PTFE LUBE) to the mechanical

Inspect hardware to be sure hardware is still tight.

Be sure the board is still stable with the motor fully actuated.

Keep the underside of boards clean and free of debris and ice if in colder weather.

## Warranty

2 Year Limited warranty on electrical and mechanical components

The following can potentially void warranty

- Failure to maintain the steps in accordance with the maintenance guidelines provided in the installation instructions
- Misuse of the steps (Using the product in any manner other than for the intended use of the product)
- Installation errors causing damage to the product
- Electrical and mechanical modifications

To file a warranty claim

- Contact an authorized BA dealer to initiate warranty process. Authorized dealers must contact BA to assist in evaluating the warranty claims. Valid warranties will have an RGA issued. Once issued the dealer will request the product be returned to BA facilities.
- Products purchased through an authorized BA dealer will be refunded and/or credited by that BA dealer.
- Warranty contact: [help@bodyarmor4x4.com](mailto:help@bodyarmor4x4.com)
- Return address: Body Armor 4x4, 1050 N. Vineyard Ave. Ontario CA, 91764



# INSTALLATION INSTRUCTIONS

## Troubleshooting Guide

After installing the steps, when the door is opened one motor goes up while the other goes down.  
**Disconnect the motors and swap connections.**

How do I extend or retract the motor linkages when I am installing these?

**Make sure your connected to the battery, connect the power to the motors and the disable switch. Then hit the disabled switch, this is a great way to control the extension or retraction of the motors.**

When I open the door, the steps do not retract and come down.

**Flip the override switch from “I” or “on” position. If the steps retract after the override switch is powered, then the steps have proper power. If the boards do not retract check the fuses.**

The steps only work on one side.

**Flip the switch on and off a few times to confirm the steps go up and down. If they don’t move, check the power connectors at the front and rear motor. Then check the 6 pin and 4 pin connectors at the controller to be sure it’s secure. If the steps did retract when flipping the switch a few times. Check the door magnets and sensor alignment to be sure they are in spec per the instructions. Be sure to double check the grounds on the chassis.**

My steps are operating in reverse. They go up when I open the door and drop when I close the door.

**Disconnect the harness to the motors and swap connections. Disconnect the harness to each front motor and plug it into the rear motor on the same side and vice versa.**

My steps were working fine, now they won’t go up

**Check the door magnet and sensor alignment on the front and rear doors to make sure they’re in spec per the instructions. Check that the ground terminal to the truck is making good contact. Check the fuses on the positive and negative power wiring harness leads.**

My LED lights aren’t working.

**Check the round wiring connectors for each LED light. Make sure that the small arrows on the mating plug and connector are aligned and the connection is tight and secure. Check the two round connectors at the controller. Make sure that the small arrows on the mating plug and connector are aligned and the connection is tight and secure. Open a door on the Driver side of the truck and check to see if the LED lights are illuminated on the Passenger side. If opening a Driver side door is causing the Passenger side LED lights to come on, simply swap the two LED Power wires at the controller. These are two small round connectors.**

I open the driver side door and the passenger side LED lights turn on.

**Swap the two round connectors at the controller, making sure the small arrows on each plug are aligned and the connections are tight and secure.**

My running boards are squeaking.

**Using a water hose, spray the hinges on the front and rear motors to remove any dirt, sand, or mud. Dry with a towel and generously lubricate all the hinges using a PTFE LUBE.**