

# ROUGH COUNTRY

## SUSPENSION SYSTEMS®

### 2022-UP Tundra Crew Max (Six Linkages)

Thank you for choosing Rough Country for all your vehicle needs.

Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.

If questions exist, please call us @ 1-800-222-7023. We will be happy to answer any questions concerning this product. Check all fasteners for proper torque. Check to ensure for adequate clearance between all components. Periodically check all hardware for tightness.

#### KIT CONTENTS:

Front Motor Left x1  
 Rear Motor Left x1  
 Rear Motor Right x1  
 Front Motor Right x1  
 Idler Linkage Right x1  
 Idler Linkage Left x1  
 Power Board Switch x1  
 Controller Assembly x1 Control  
 Input Wiring Harness x1 Step  
 Boards x2  
 LED Lights x4

#### TOOLS NEEDED:

5mm Allen  
 13mm Socket  
 Pry Tool  
 Wire Stripper Cutter  
 Vinyl Tape  
 Screw Driver

#### HARDWARE INCLUDED:

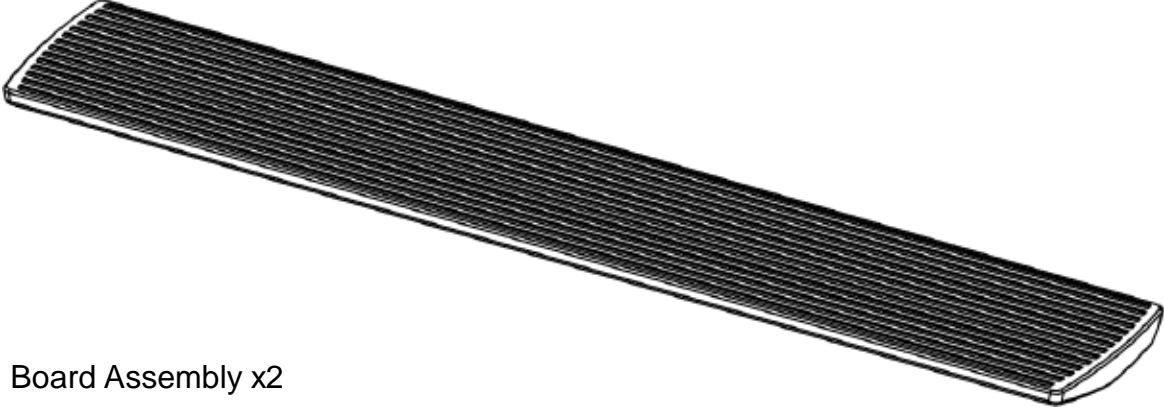
M8x30 Hex Head Flange Bolt x14  
 M8x25 Hex Head Flange Bolt x2  
 M6x25 Socket Cap Screw x12  
 Shim x8  
 Wire Ties x25

#### Wired Magnetic Sensors Module

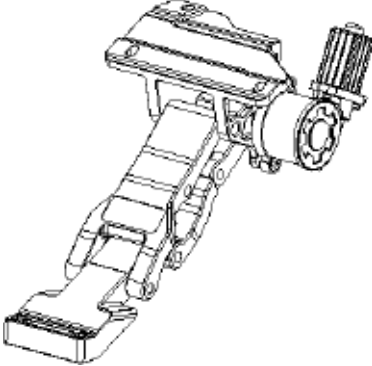
x2  
 Magnet x4



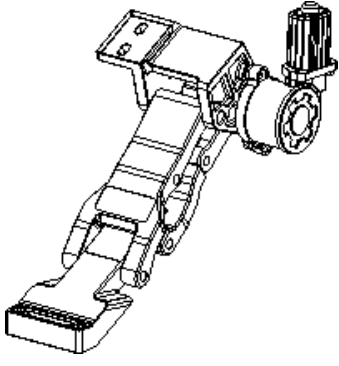
Product Packing List



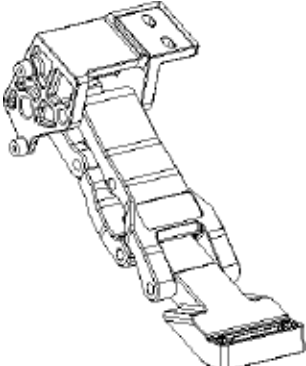
Board Assembly x2



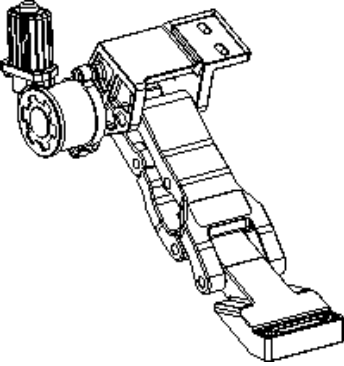
Front Left Motor x1  
Driver Side



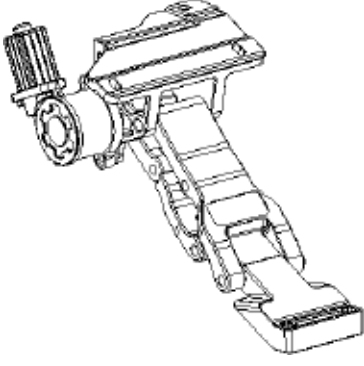
Rear Left Motor x1  
Driver Side



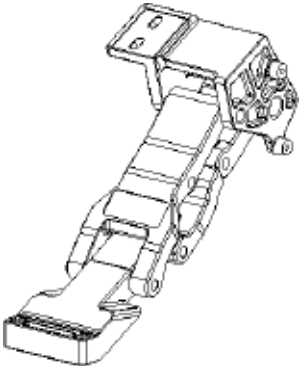
Idler Linkage Left x1  
Driver Side



Rear Right Motor x1  
Passenger Side



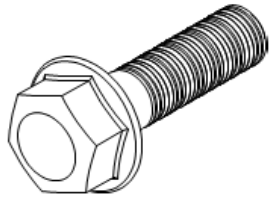
Front Right Motor x1  
Passenger Side



Idler Linkage Right x1  
Passenger Side



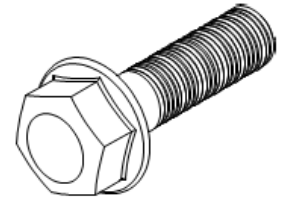
# Product Packing List



M8x30 Hex Head Flange Bolt x14



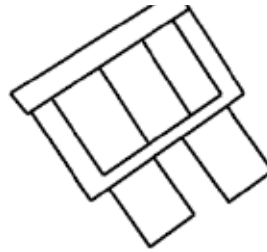
M6x25 Socket Cap Screw x12



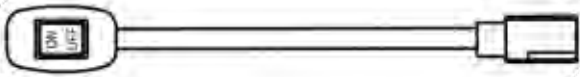
M8x25 Hex Head Flange Bolt x2



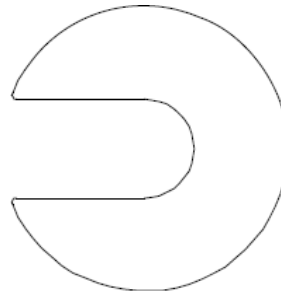
Wire Tie x25



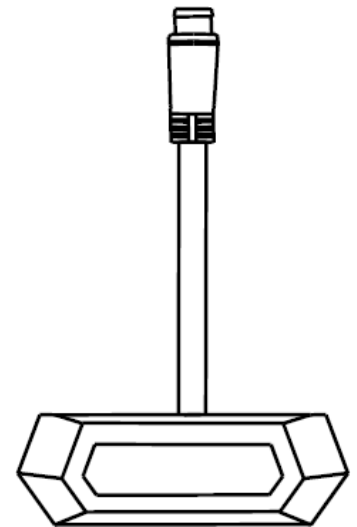
Fuse x2



Power Board Switch x1

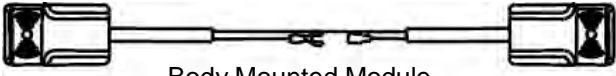


Shim x8



LED Lights x4

Product Packing List

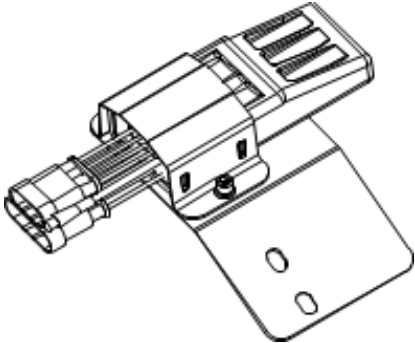


Body Mounted Module

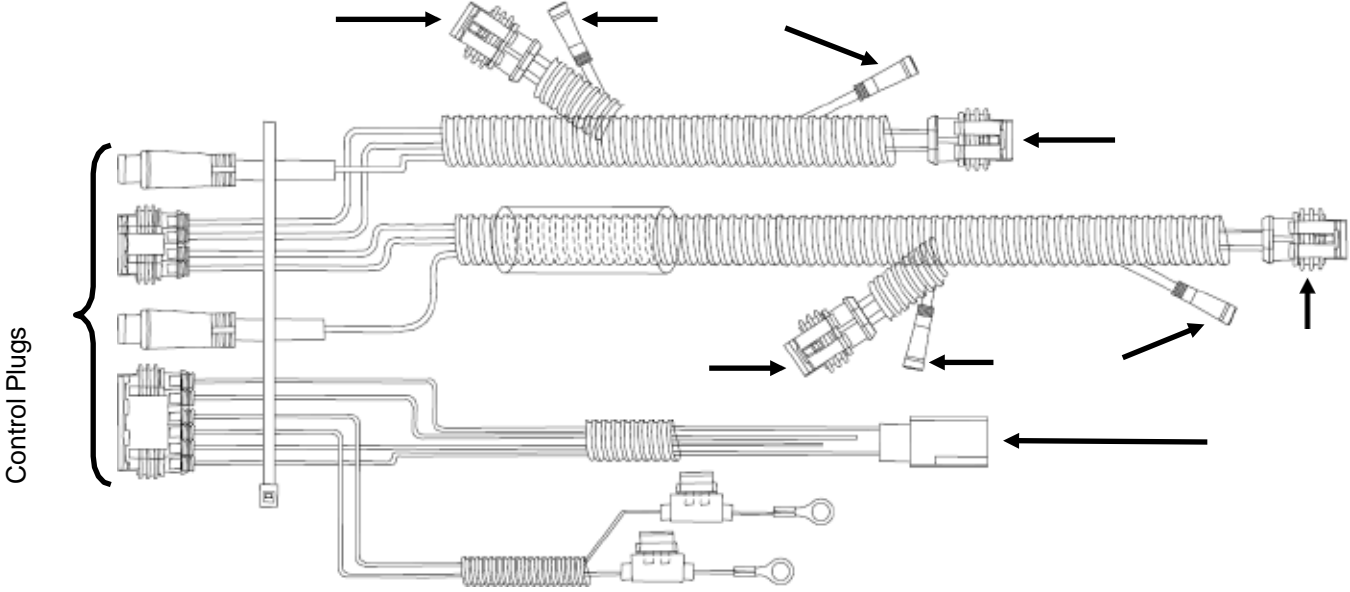


Door Mounted Magnet

Body Mounted Module x2  
Door Mounted Magnet x4



Controller Assembly x1

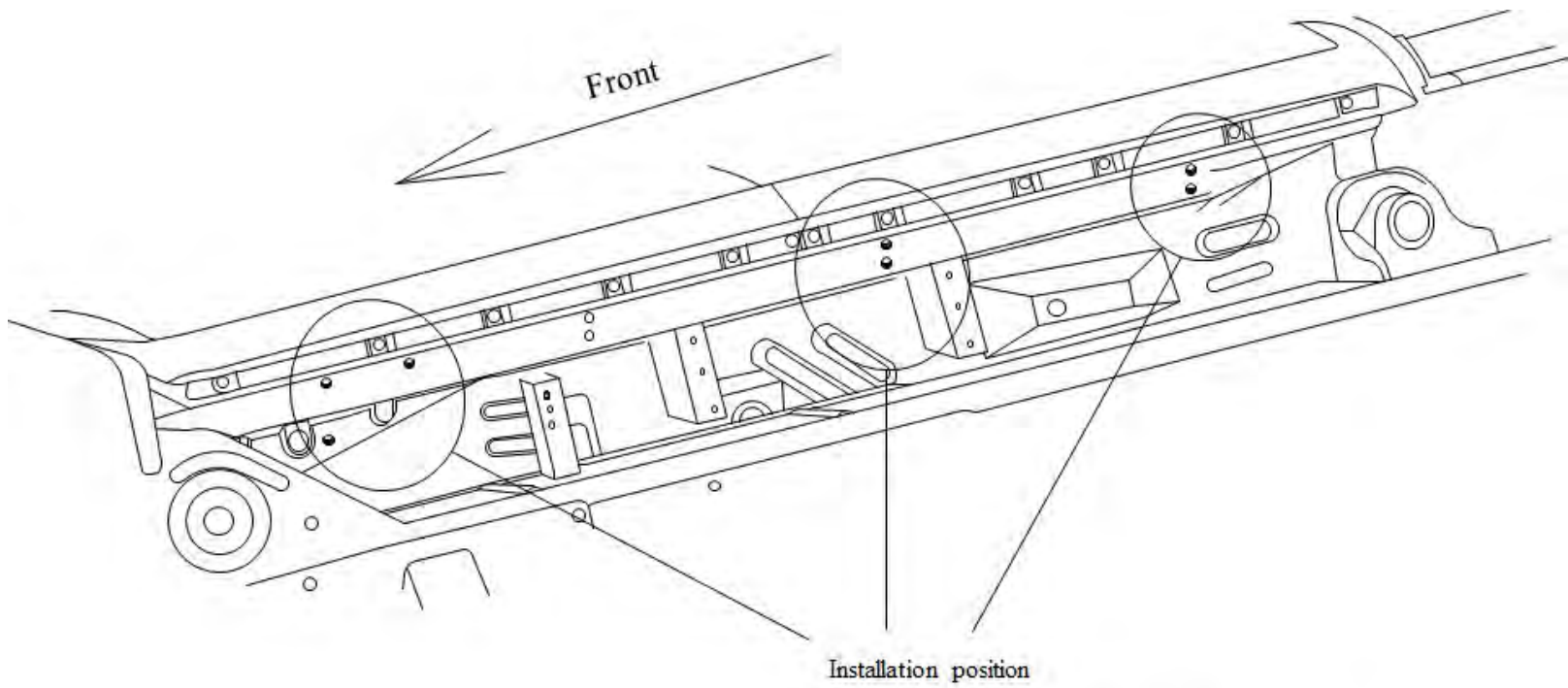


Control Plugs

Wiring Harness x1



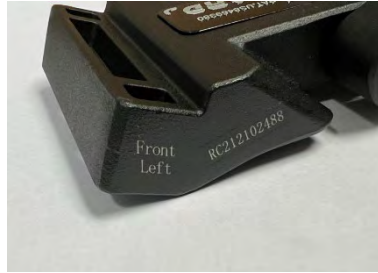
## Mechanical Installation



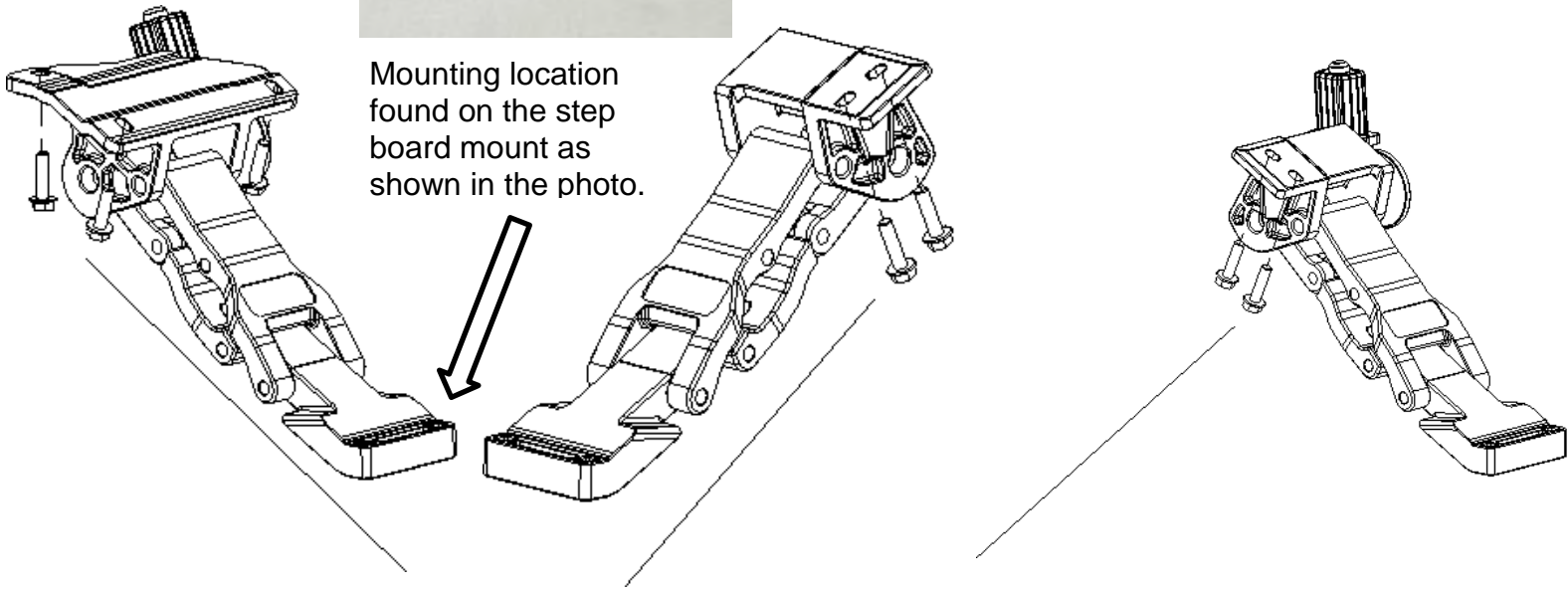
Installation on the driver side.

Installation for the driver side and passenger side are the same. View is of the driver side.

# Motor Linkage Left Installation

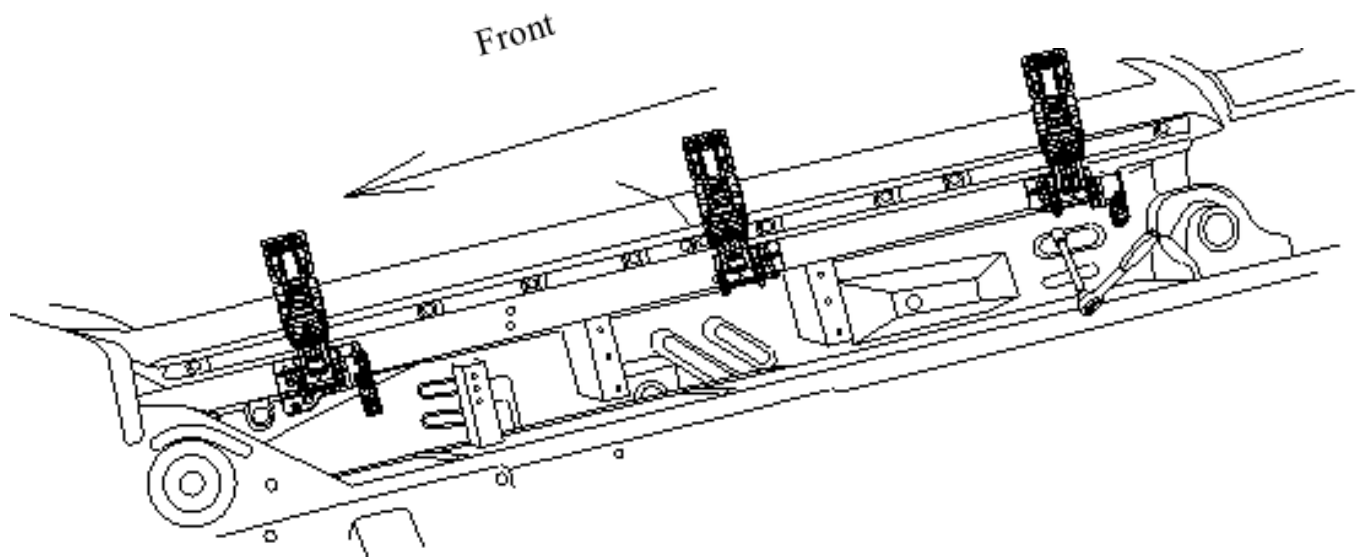


Mounting location found on the step board mount as shown in the photo.



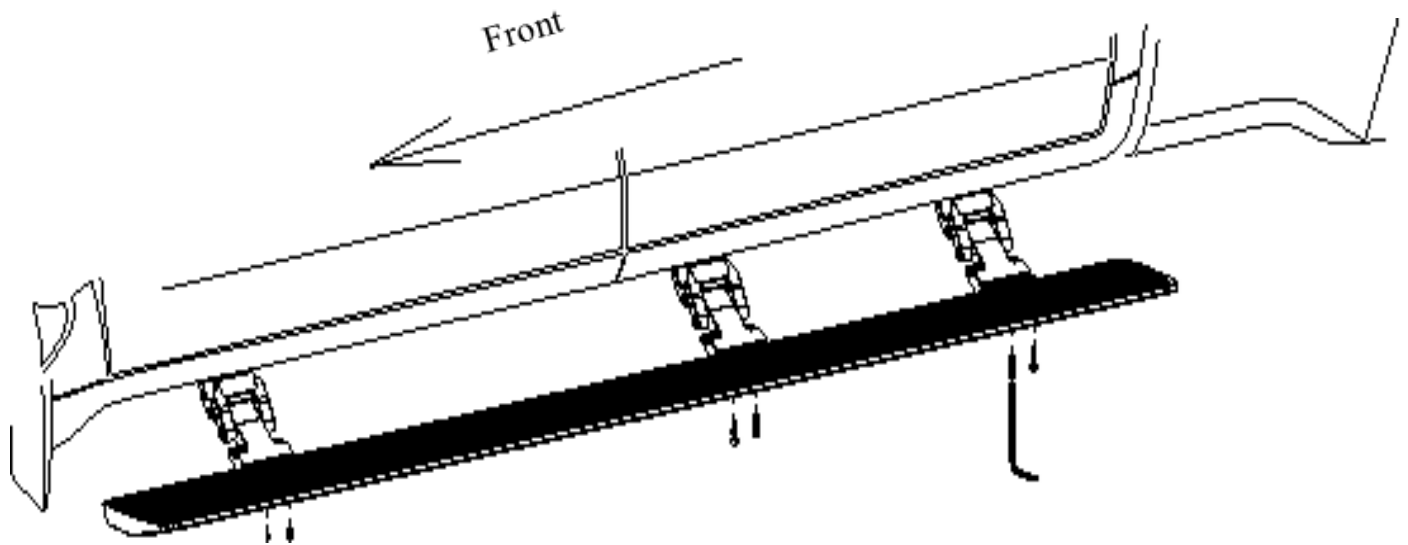
M8x30 Hex Head Flange Bolt





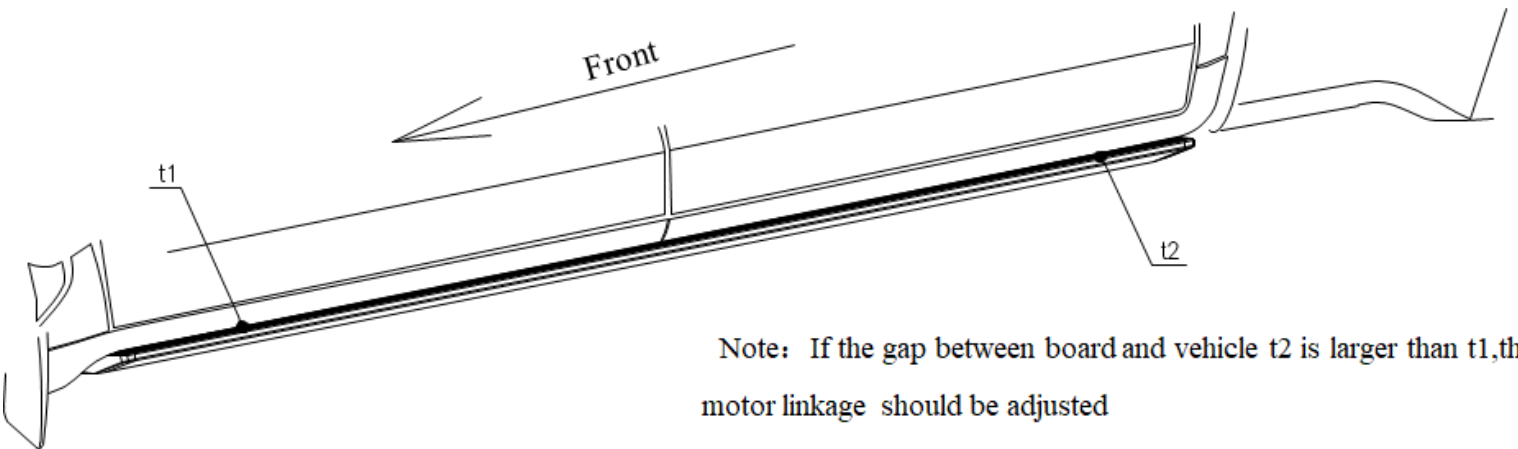
Thread the six (6) M8x30 hex head flange bolts into the corresponding threaded holes in the vehicle body. Do not fully tighten at this time.





Install the board assembly onto the two motors and one idler arm. Adjust the board to the desired position and install the six (6) M6x25 socket cap screws. Torque to 10 ft-lbs.

Repeat for passenger side.

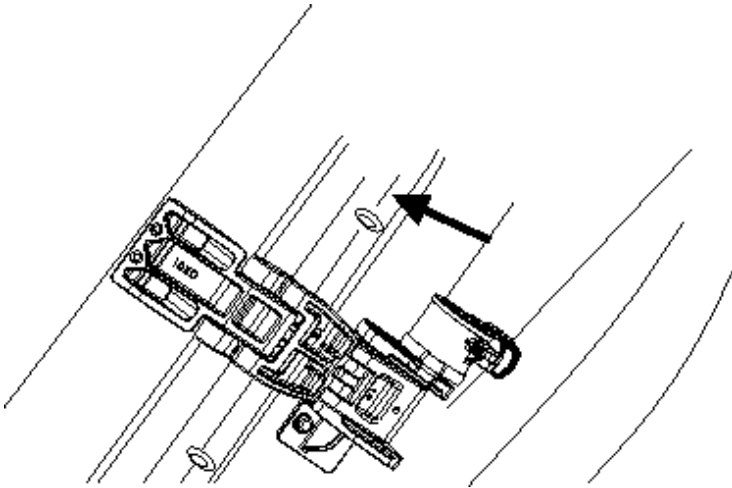


Note: If the gap between board and vehicle t2 is larger than t1, the motor linkage should be adjusted



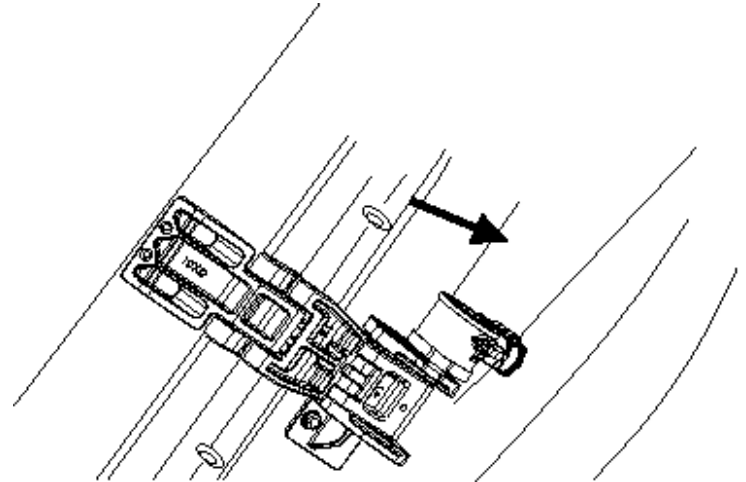


$t1 > t2$



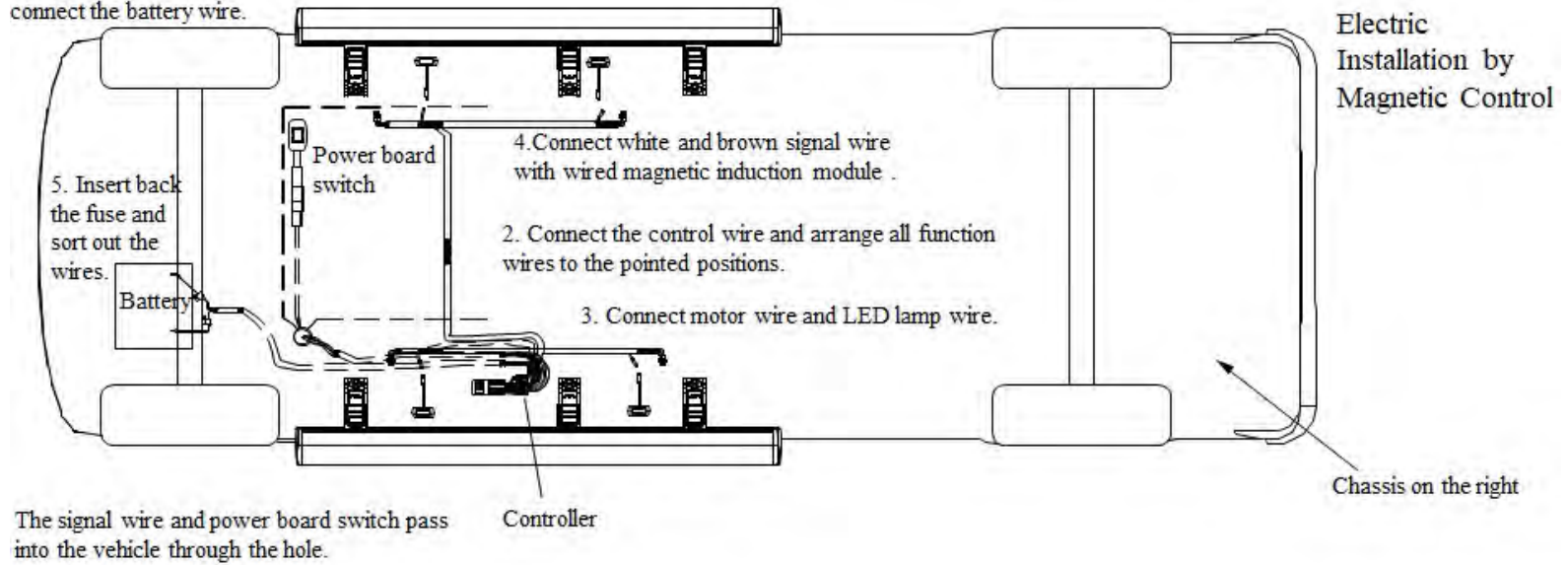
Loosen the two bolts. Move the front motor further out in the arrow direction and retighten bolts. When the gap is reduced, tighten the six motor linkage bolts. Torque to 10 ft-lbs.

$t1 < t2$

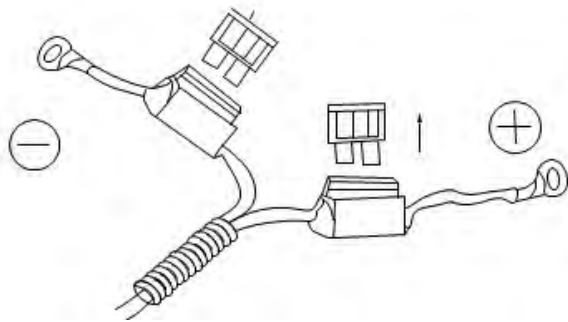


Loosen the two bolts. Move the front motor further inside in the arrow direction and retighten bolts. When the gap is reduced, tighten the six motor linkage bolts. Torque to 10 ft-lbs.

1. Pull out the fuse and connect the battery wire.



The signal wire and power board switch pass into the vehicle through the hole.



Step 1: Find the fused end links of the wiring harness and remove the two fuses. Connect the positive and negative ends of the wiring harness to the respective vehicle battery terminals. **NOTE:** The battery wire should not be modified.

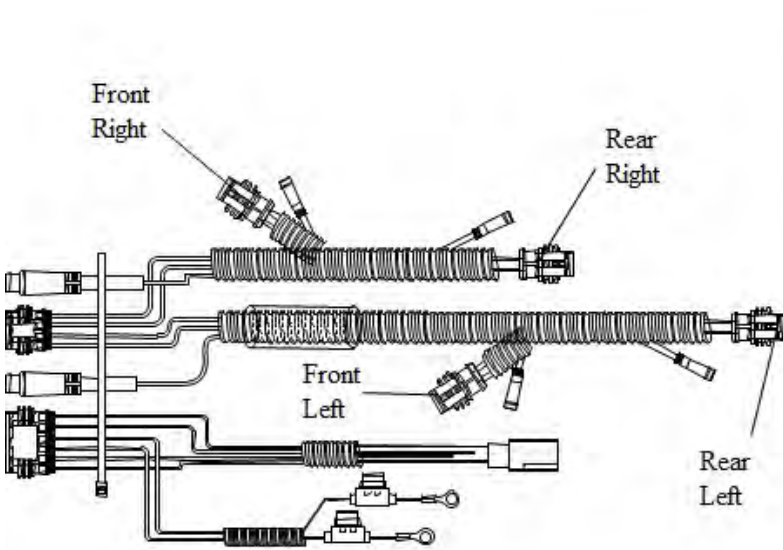
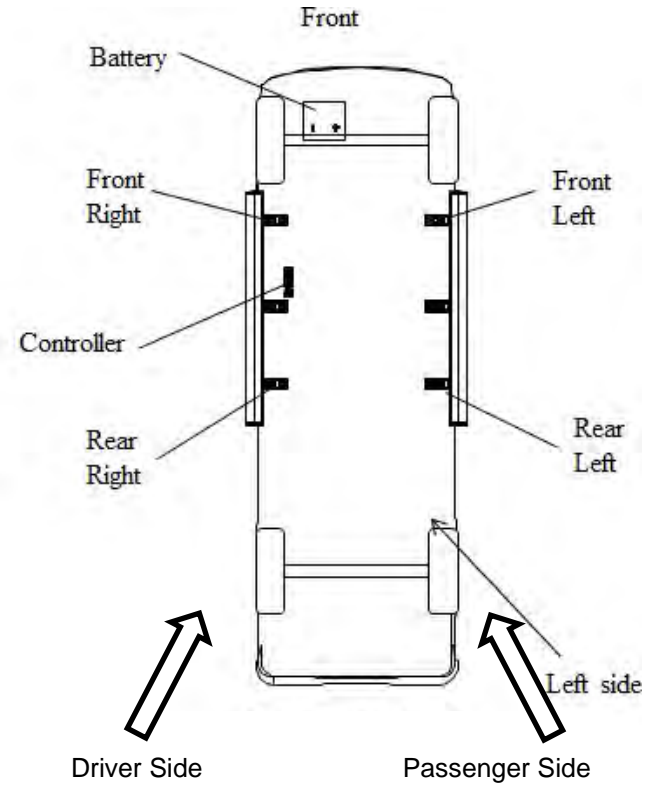
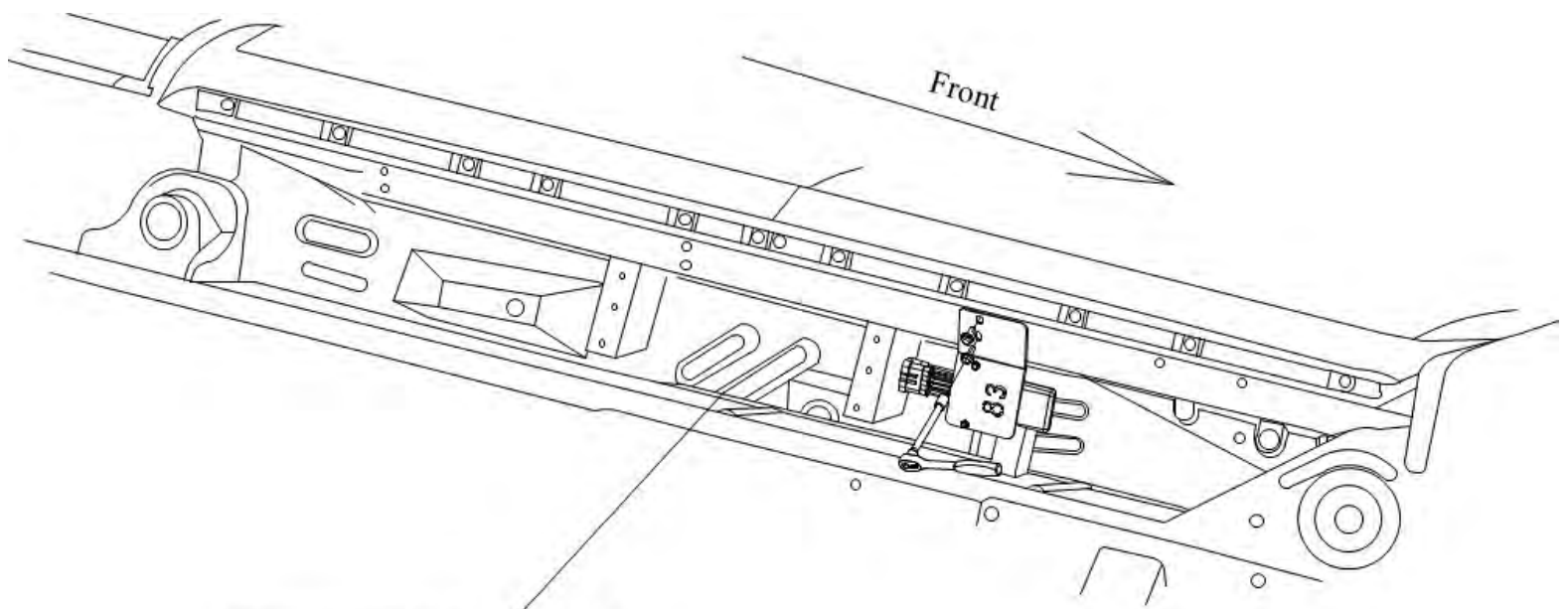


Figure 1



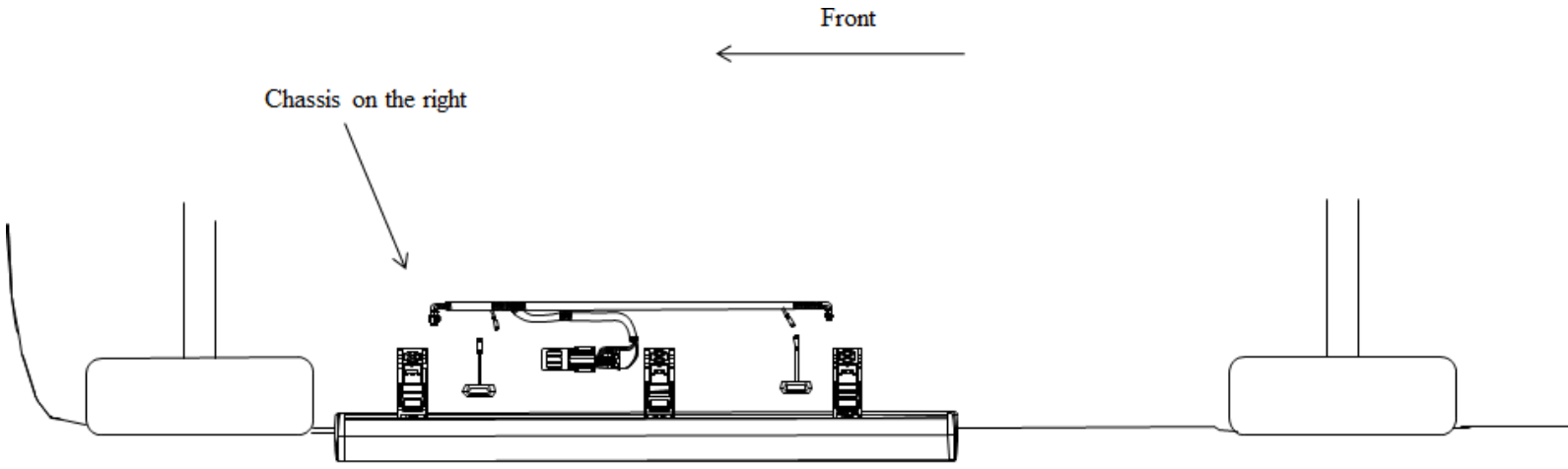
Step 2: Figure 1 is of the wiring harness and Figure 2 is the installation diagram of the vehicle when viewed from below. When installing the wiring harness, make sure the four connectors go to the corresponding motor linkage (ex. Front Right).





Hexagon flange bolt M8 × 25

Step 3: Place the controller assembly over the corresponding holes in the passenger side rocker and screw the M8x25 hex head bolt, spring washer, and flat washer into the threaded holes. Torque to 26 ft-lbs.



Step 4: Run the wiring harness along the frame of the passenger side of the vehicle. Secure the harness with wire ties. Make sure to avoid rubbing and pinch points along the path.



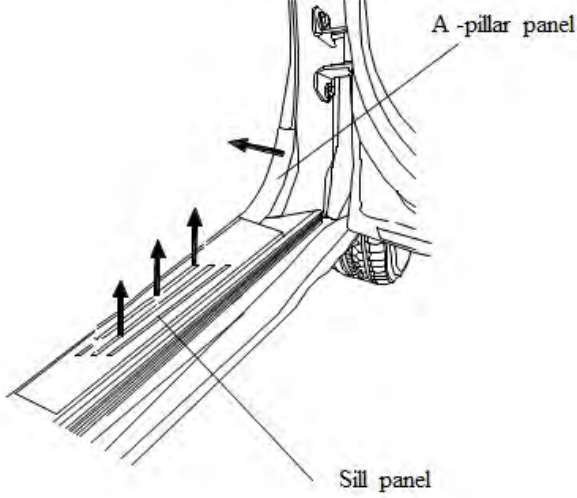


Figure 1

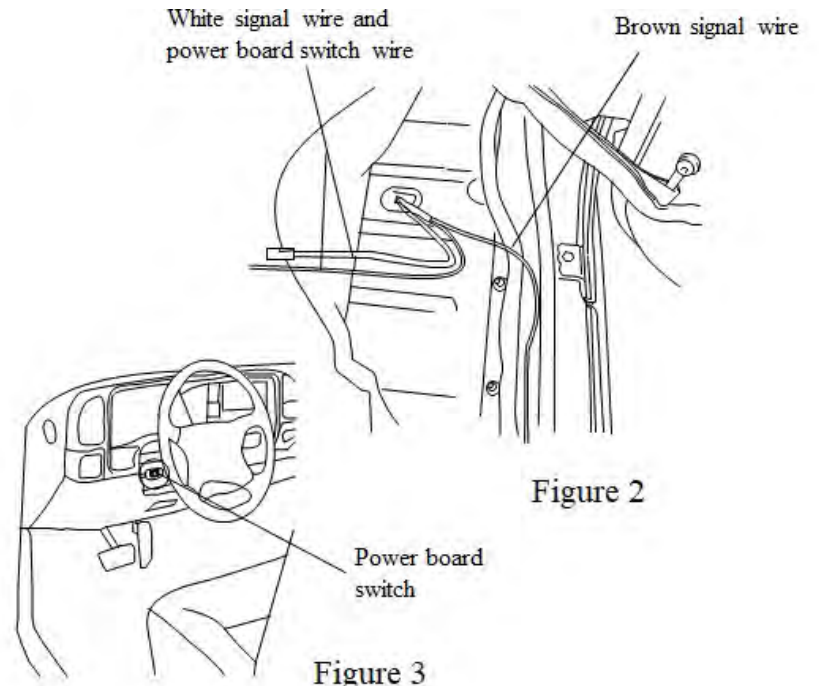
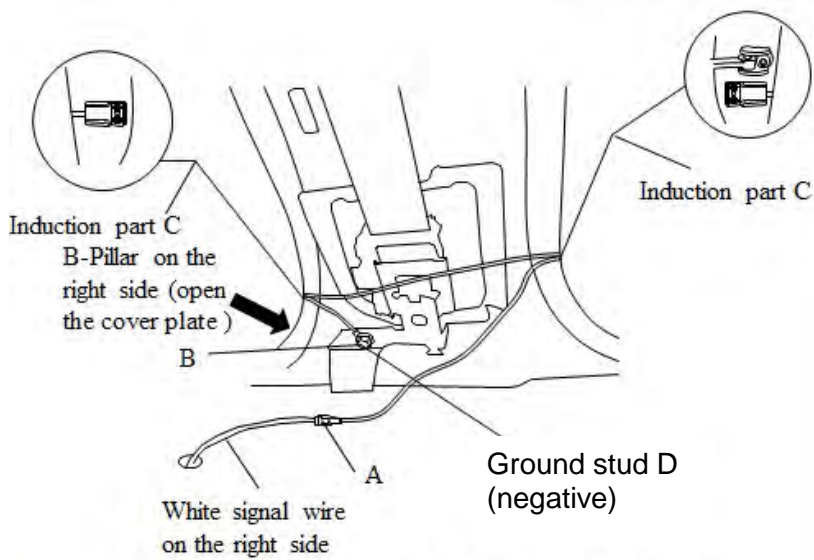


Figure 2

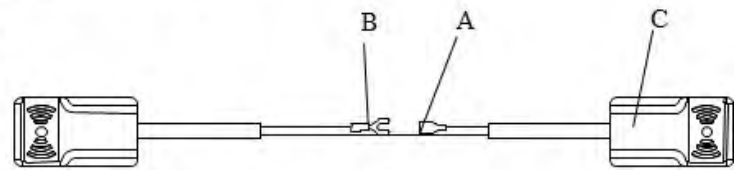
Figure 3

Step 5: Connection of the signal wire: Pry the scuff plate and kick panel in Figure 1. Pull the brown signal wire into the vehicle through the rubber grommet of the chassis on the passenger side in Figure 2. The white signal wire extends to the driver side of the vehicle under the carpet. Stick the power board switch to the left side under the steering wheel in Figure 3.

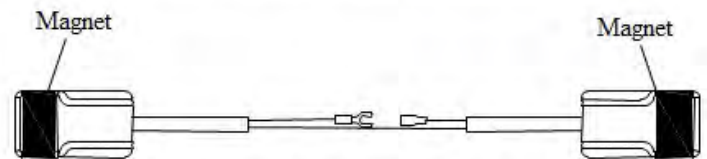
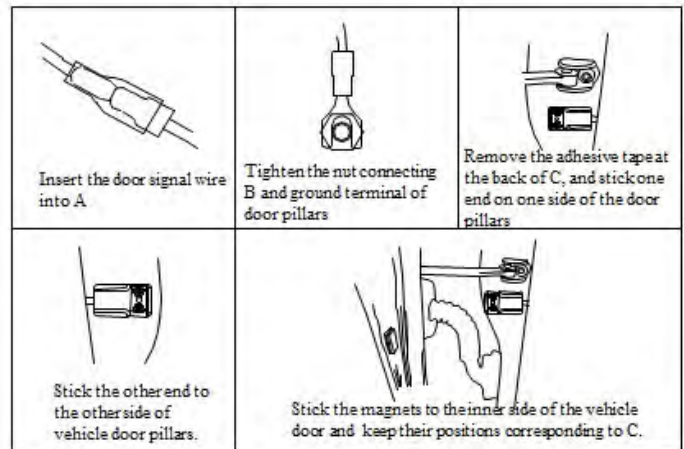
## Magnetic Inductor Installation



Step 6: Open the cover plate of the B-pillar on the passenger side of the vehicle. Expose the part as shown above. Connect the brown signal wire to terminal A of the magnetic inductor. Loosen the ground stud D and connect the fork terminal B to the ground stud and tighten. Stick the induction part C to both sides of the B-pillar and stick the magnet on the vehicle on the inside of the door so it lines up with the induction part C. The installation with the white signal wire is the same as installation with the brown signal wire.

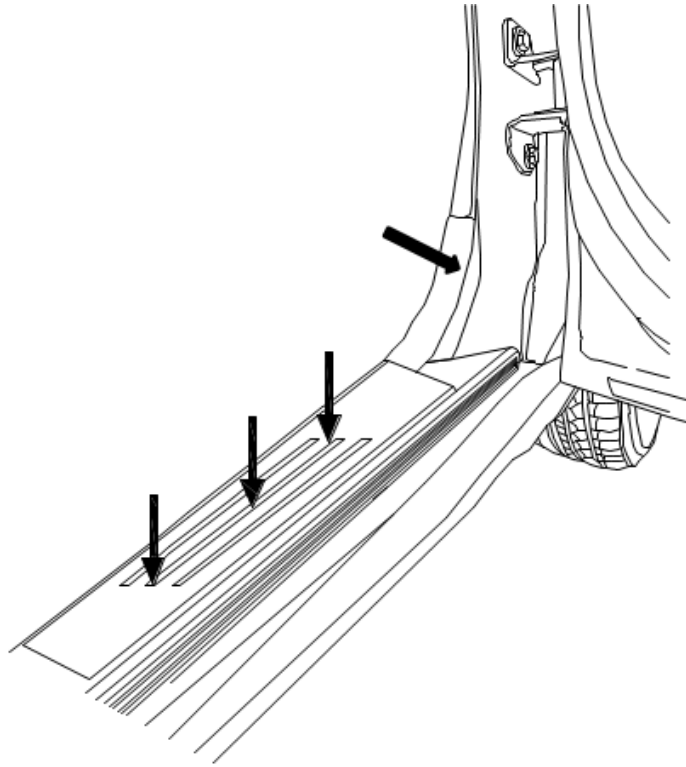


Wire Harness Magnetic Inductor

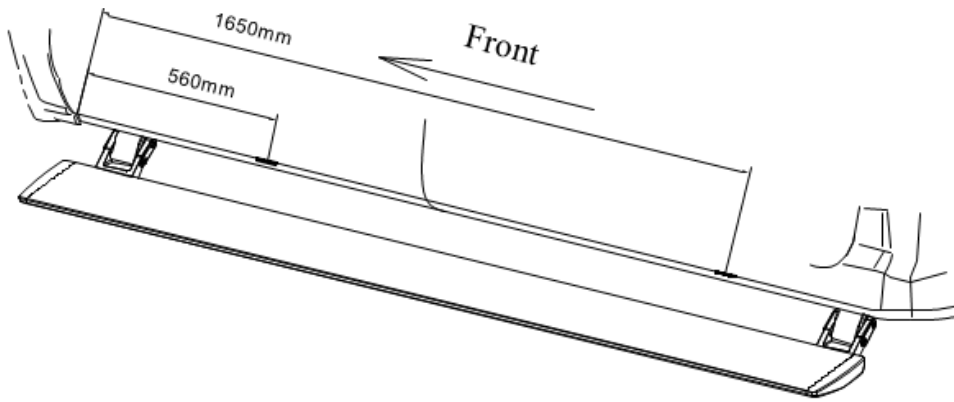


Instruction: The magnet position after closing the door is shown as above picture.

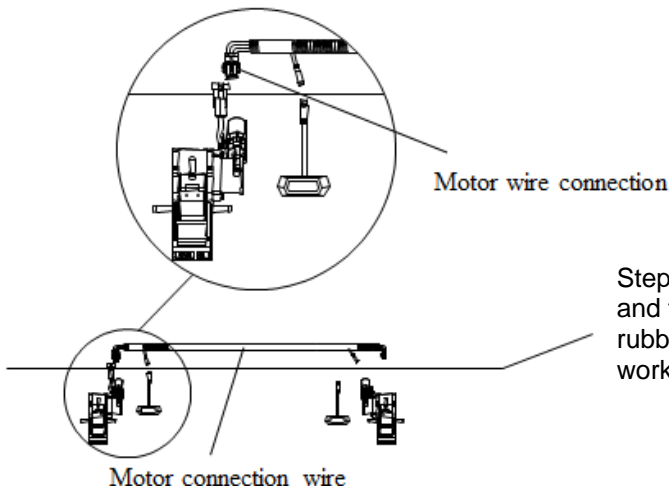




Step 7: Sort out the wiring harness and close the panels. The installation of the white signal wire is the same as the passenger side.

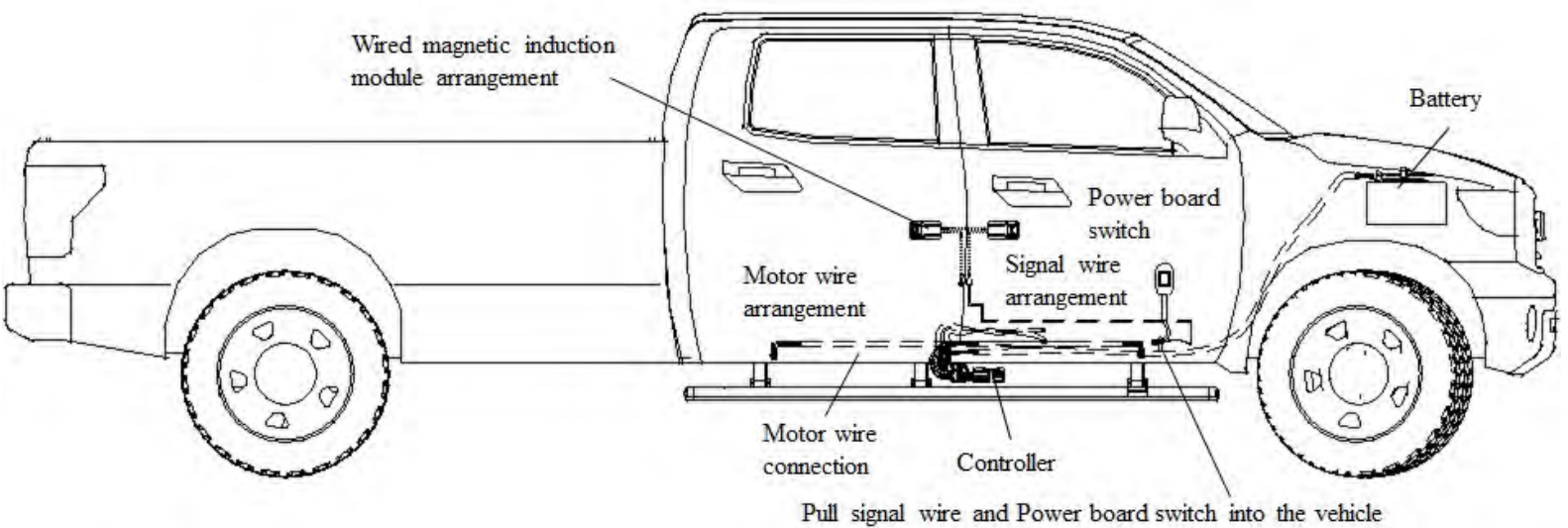


Step 8: Clean the surface where the LED lights will go with a rag and cleaner. Remove the double-sided adhesive sticker behind the LED light and stick it to the side of the car skirt in desired location.



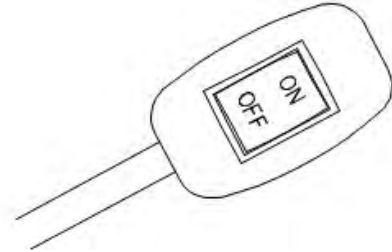
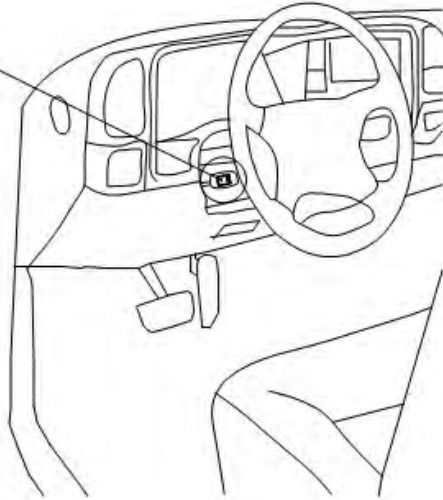
Step 9: Insert the fuses back into the fused links and tidy the wiring harness to avoid pinch points and rubbing. Test to make sure the power board is working normal.

## Summary of Electric Part



Check out the Power board switch of controller to make sure it is off. Insert back the fuse , arrange the wire harness in order. Check if all the wires are connected well and test if the power board can work normally . If it can work normally ,the board installation is completed. (If it can not work normally , please check the completeness of installation of each part.)

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

#### Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16"	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8"	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16"	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2"	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16"	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8"	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4"	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

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