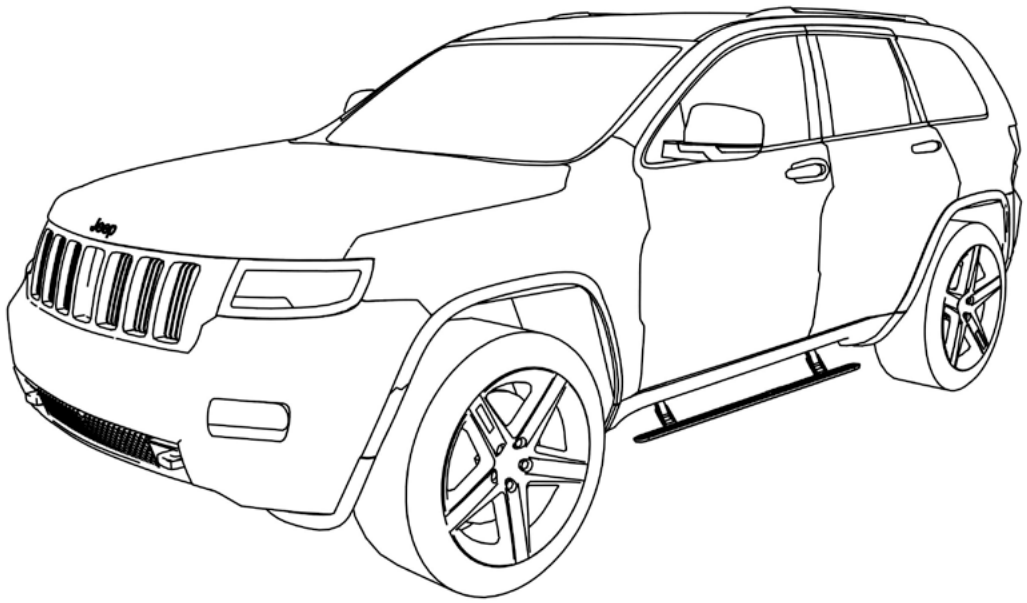
E-BOARD

JEEP GRAND CHEROKEE POWER BOARD



APPLICATION： JEEP GRAND CHEROKEE CE

INSTALLATION GUIDE

Installation Time:

3:00 hrs

Skill Level:

1 2 3 **4**

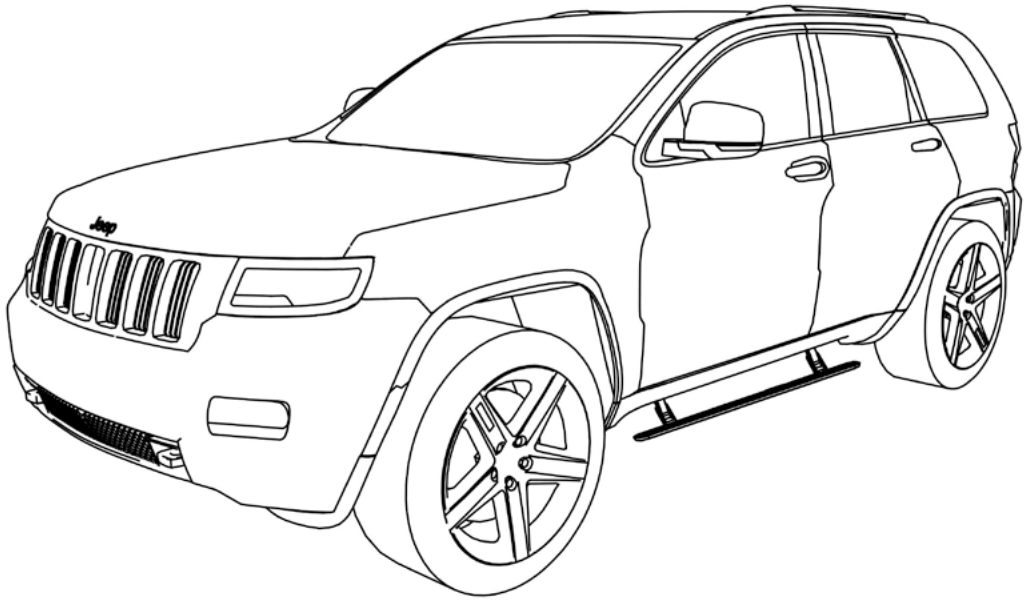
4=Experienced

PART: PST02-1110
PST02-1130

Tools Required:

①5mm Hex Key Wrench
②13mm Socket Wrench
③16mm Socket Wrench
④17mm Socket Wrench
⑤ Pry
⑥ Wire Strippers
⑦ Vinyl Tape
⑧ Screw Driver

www.tyrant4x4.com.au



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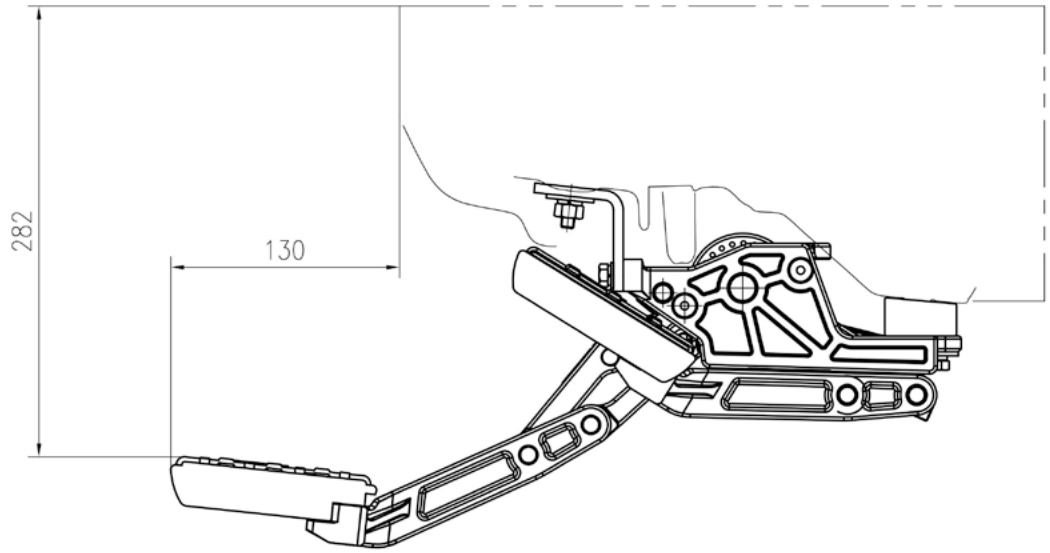
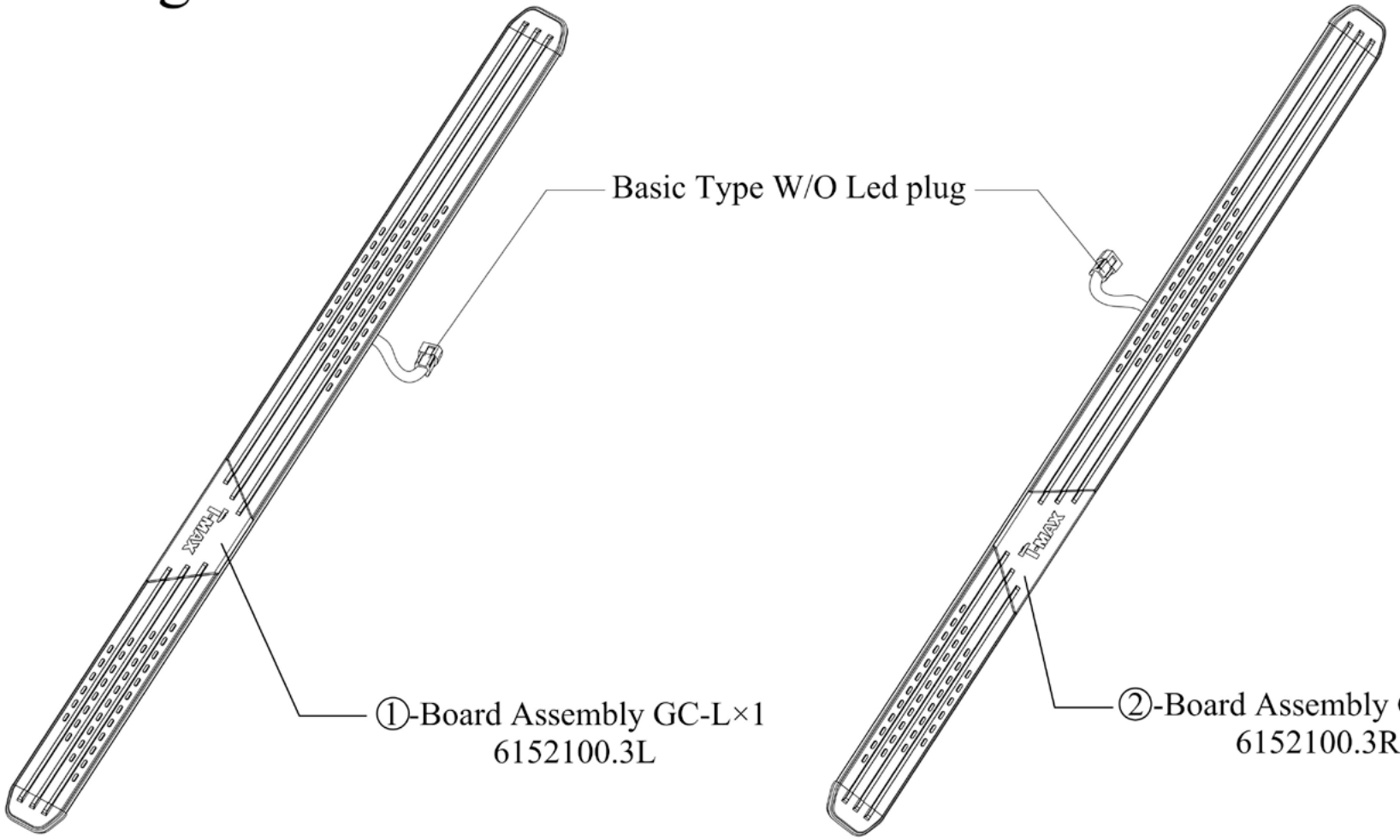
Technical Specifications

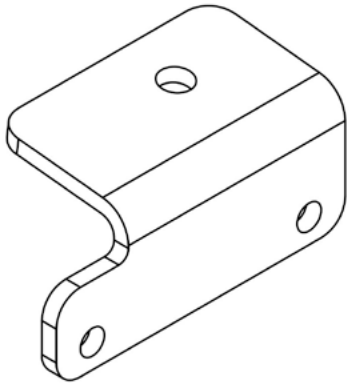


Rated voltage: 12V
Rated load: ⩽300kg
Length: 1.59m
Gross weight: 27kg
Forward extension size: 130mm
(Horizontal distance between the edge of power board and the vehicle door when the board extends)
Board falling dimension: 282mm
(Vertical height difference between the edge of power board and the vehicle door while board extending.)
(Both dimensions of forward and falling are theoretical, which may vary due to uncertainties such as installation error, manufacturing errors of vehicle bottom and etc.)

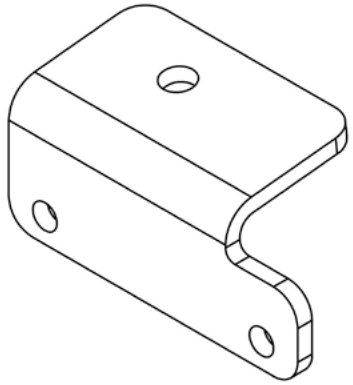
Note: Impact load is not allowed.
Please make sure the children and the aged will keep 200mm safe distance while power board is working to avoid any bumped or jammed.

Packing list

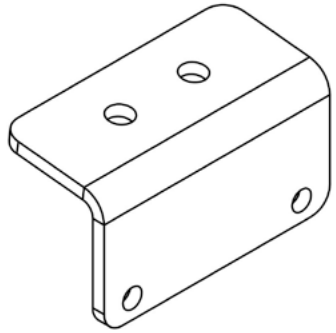




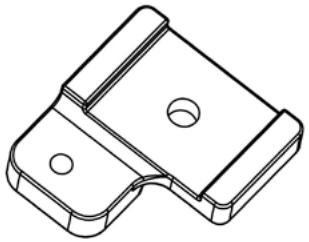
③-Rear Mounting Plate
Left GC-L×1
6152100.0-1L



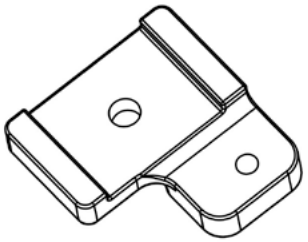
④-Rear Mounting Plate
Right GC-R×1
6152100.0-1R



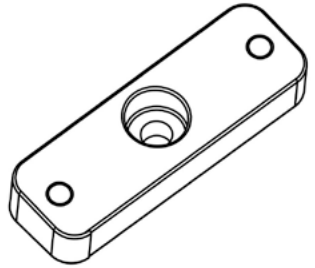
⑤-Front Mounting
plate GC×2
6152100.0-2



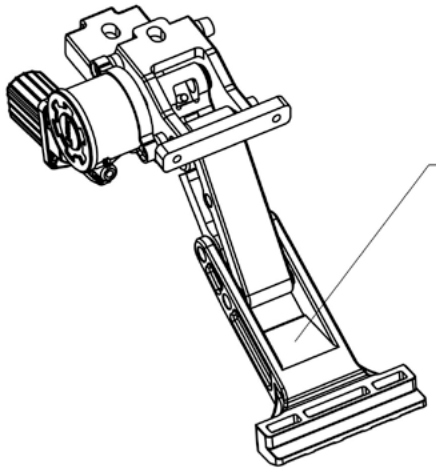
⑥-Rear Mounting Block
Left GC-L×1
6152100.0-3L



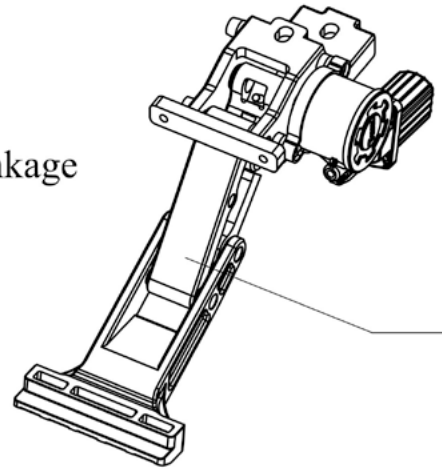
⑦-Rear Mounting Block
Right GC-R×1
6152100.0-3R



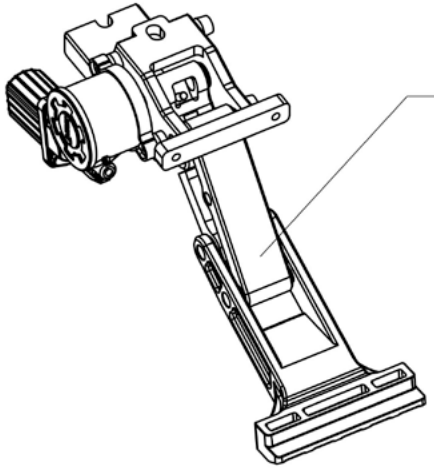
⑧-Front Mounting
Block GC×2
6152100.0-4



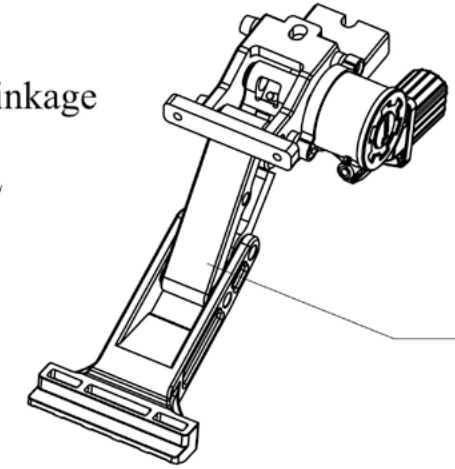
⑨-Front Motor Linkage
Left GC×1
6152100.1L



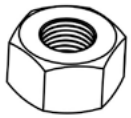
⑩-Front Motor Linkage
Right GC×1
6152100.1R



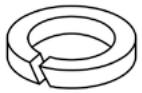
⑪-Rear Motor Linkage
Left GC×1
6152100.2L



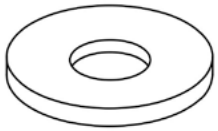
⑫-Rear Motor Linkage
Right GC×1
6152100.2R



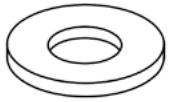
⑬-Hex Nut×4
GB/T6170-2000 M10



⑭-Spring Washer×12
GB/T93-1987 10

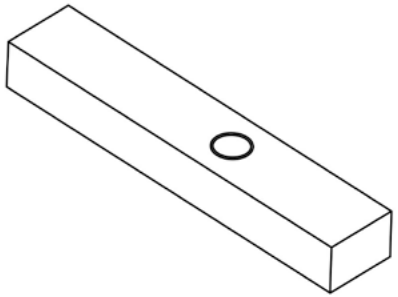


⑮-Big Washer A×10
GB/T96.1-2000 10

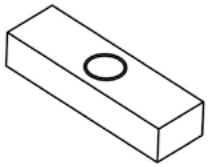


⑯-Flat Washer×2
GB/T95-1985 10

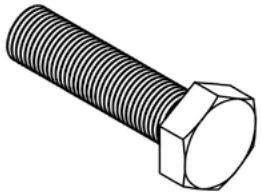
⑰-Stud Bolt A×4
GB/T900-1988 M10×30



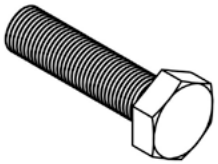
⑱-M10 Tension Block FV×4
6129100.0-2



⑲ -M10 Mounting Nut FV×2
6129100.0-3

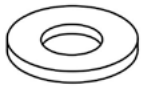


⑳ -Hexagon Head Bolt×8
GB/T5783-2000 M10×35



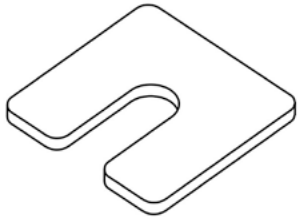
㉑ -Hexagon Head Blot×8
GB/T5783-2000 M8×20

㉒ -Spring Washer×8
GB/T93-1987 8

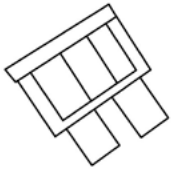


㉓ -Flat Washer×8
GB/T95-1985 8

㉔ -Socket Cap Bolt×8
GB/T70.1-2000 M6×25

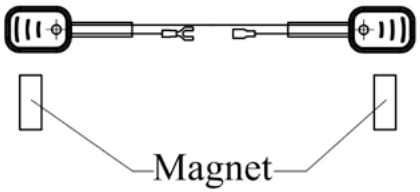


㉕ -Block GC×3
6152100.0-5

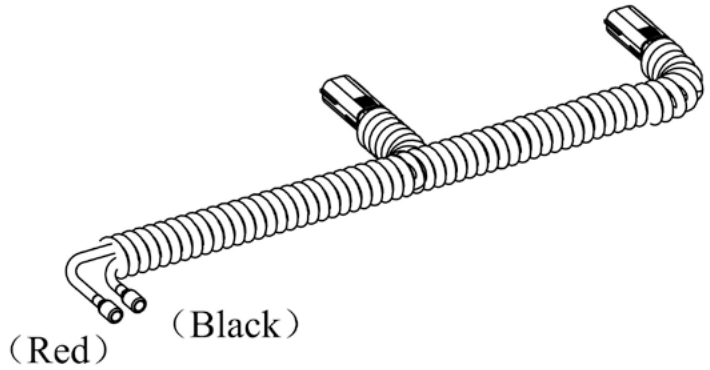


㉖ -25A Fuse×2

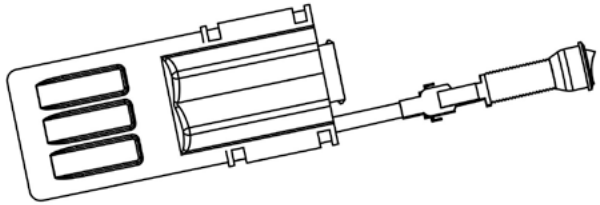
㉗ -Cable Tie×25
GB/T22344-2008 5×300



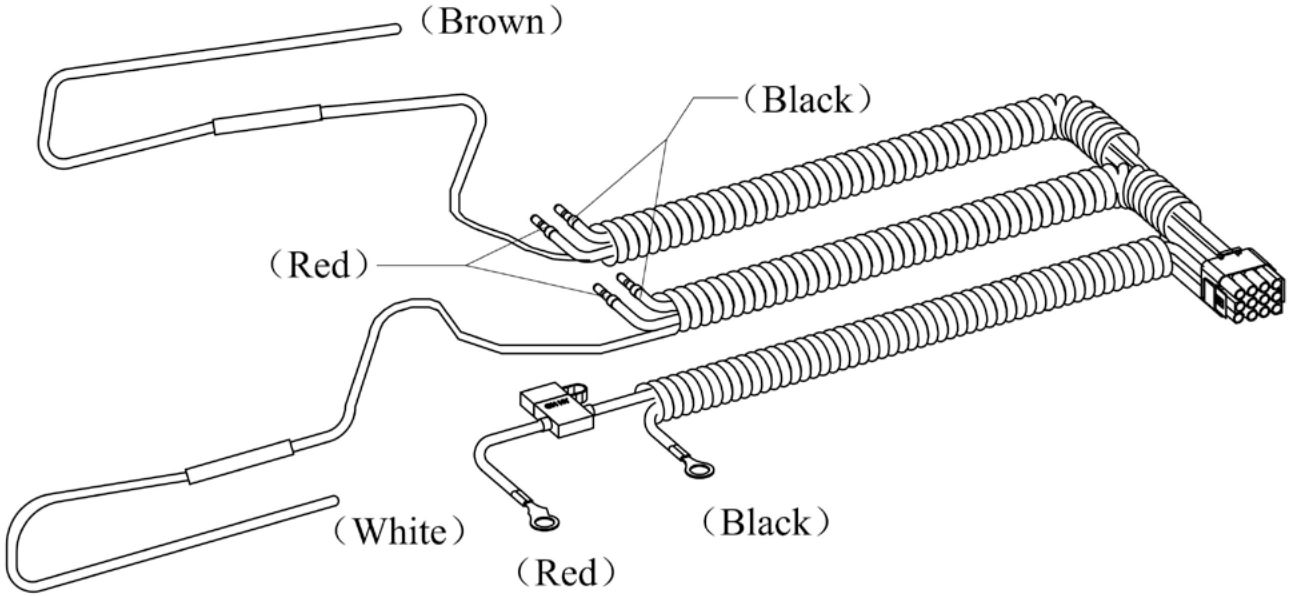
㉘ -Magnetic Inductor×2
-Magnet×4



㉙ -Motor Connection Cable GC×2
6152100.4.3

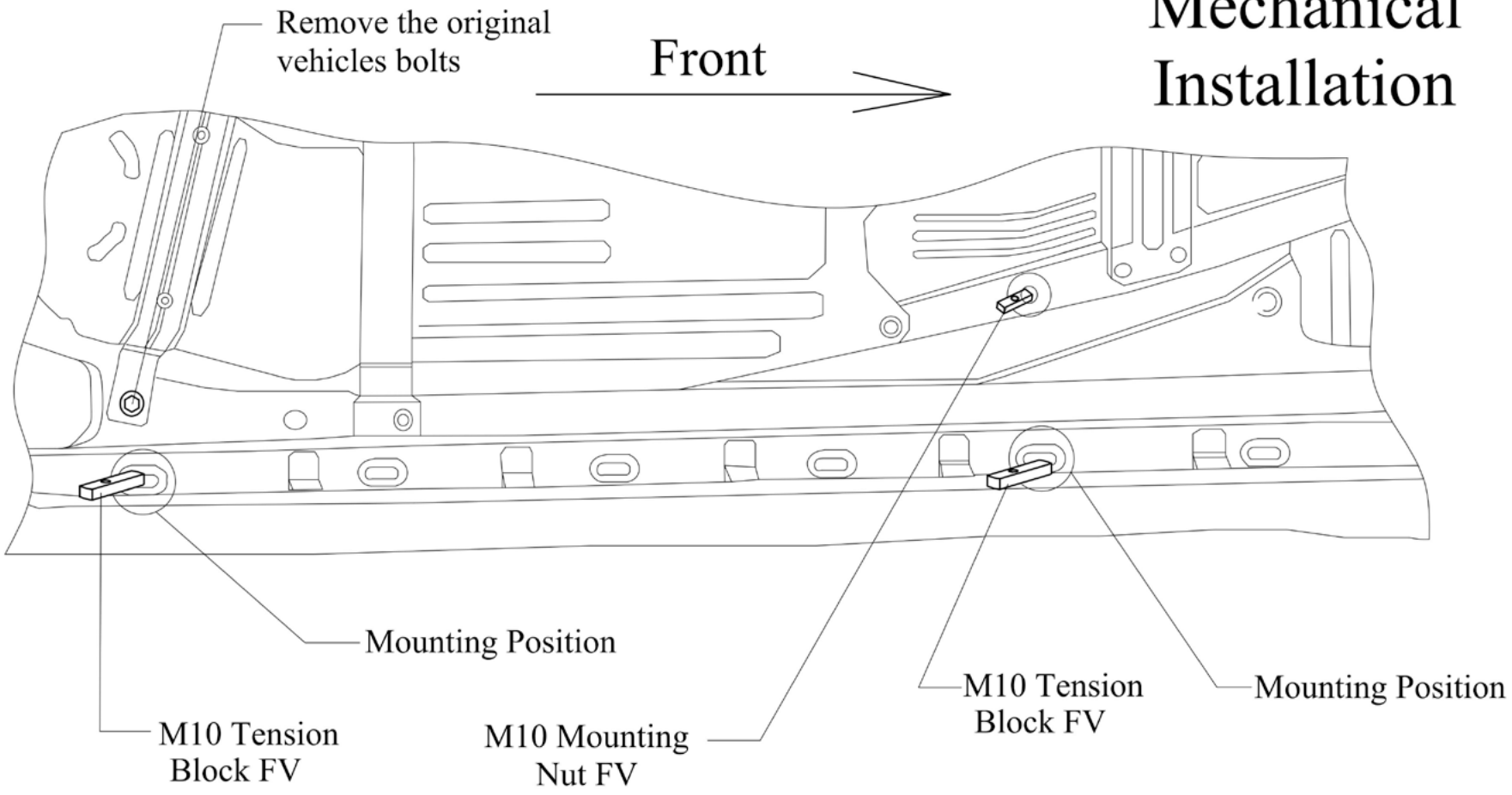


㉚ -Controller Assembly GC×1
6124100.4.4A



㉛ -Control Input Cable GC×1
6152100.4.1

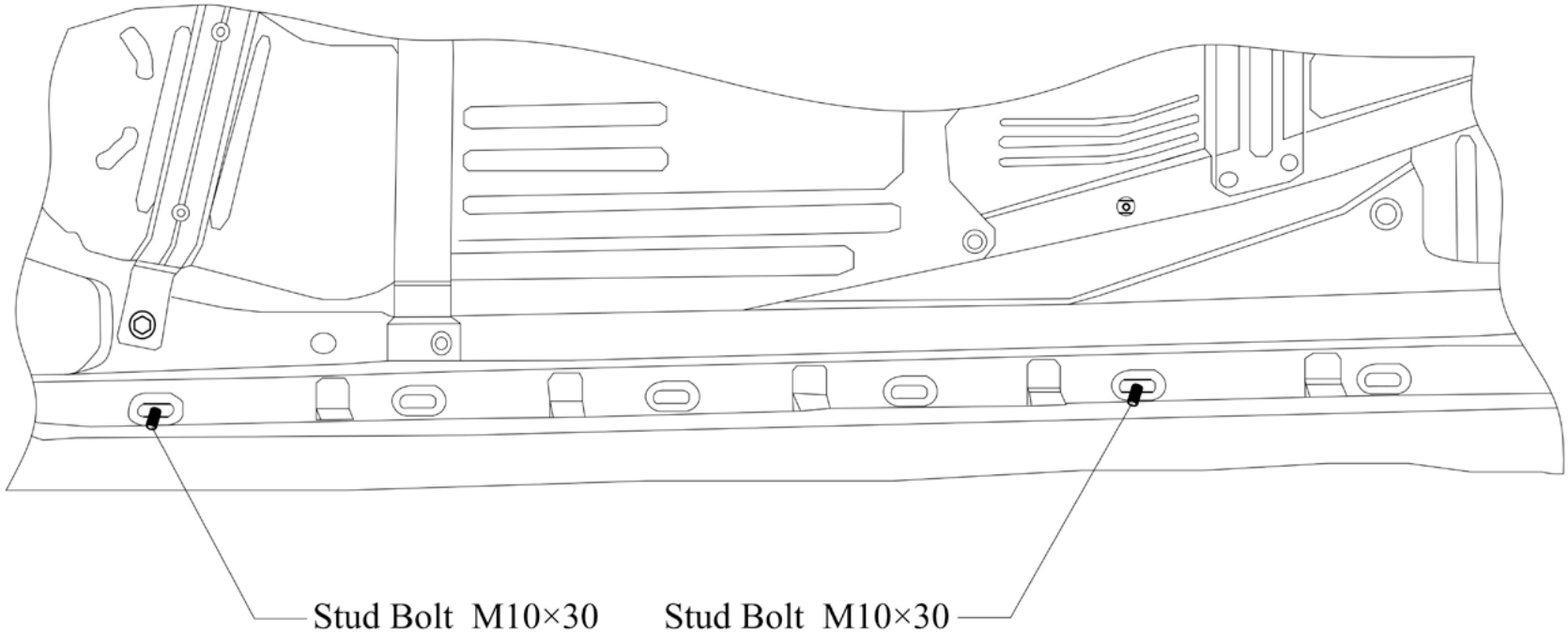
Mechanical Installation



Installation position on the left

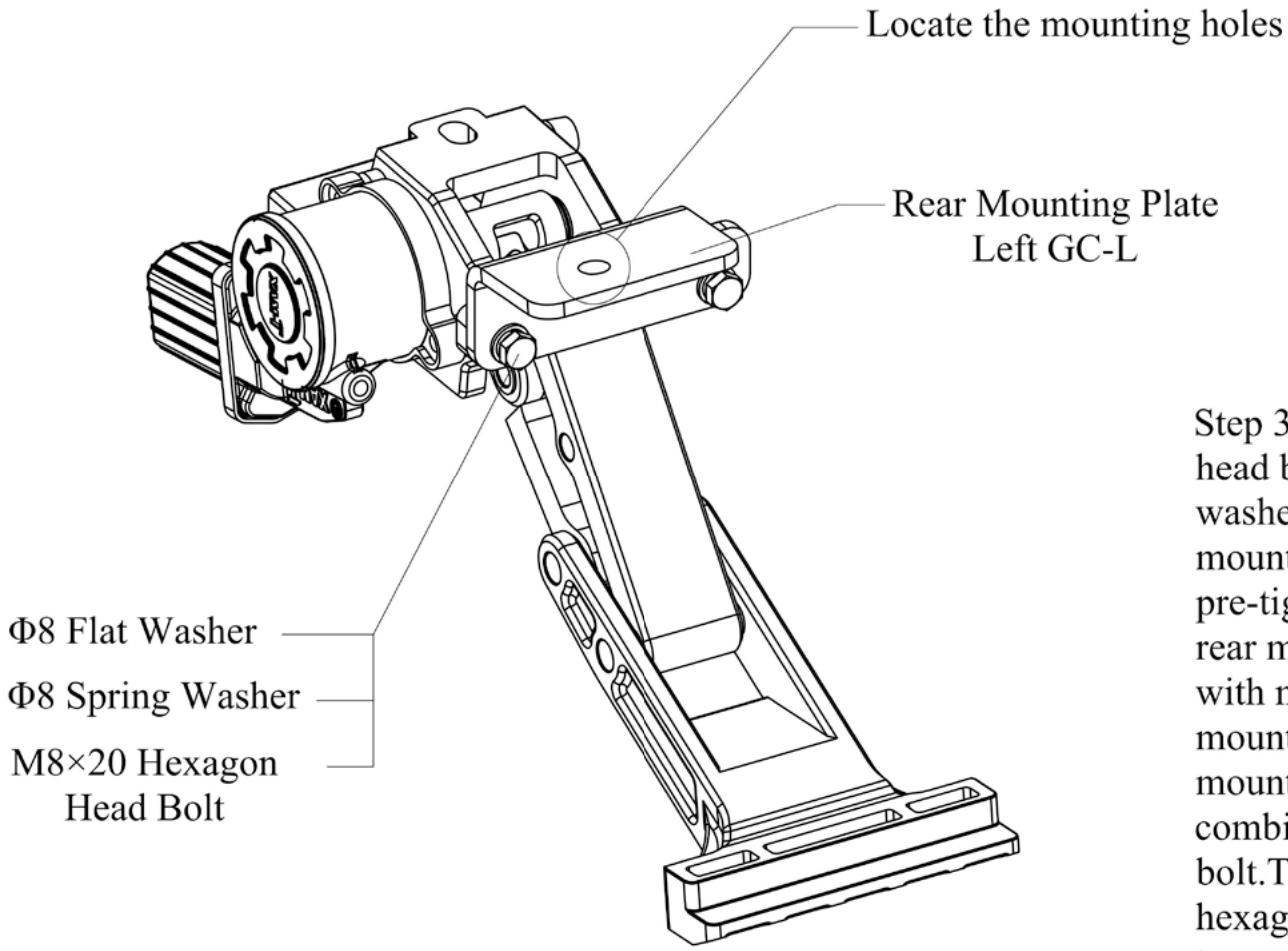
Step 1:Insert M10 tension block FV and M10 mounting nut FV into the mounting position.

Front

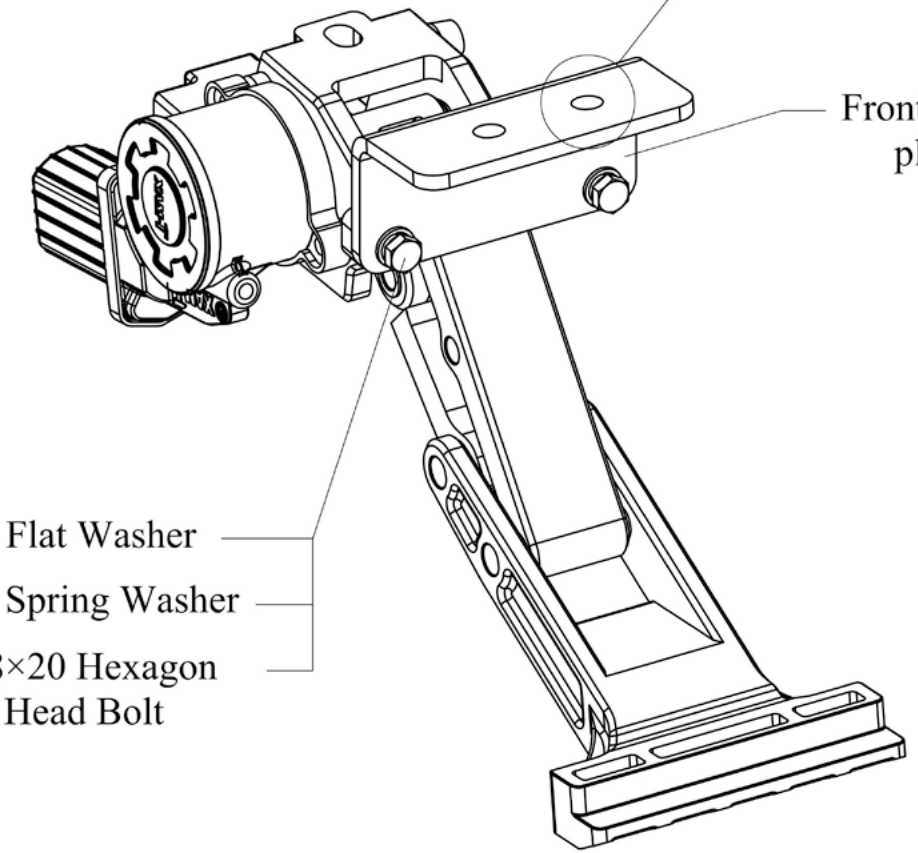


Installation position on the left

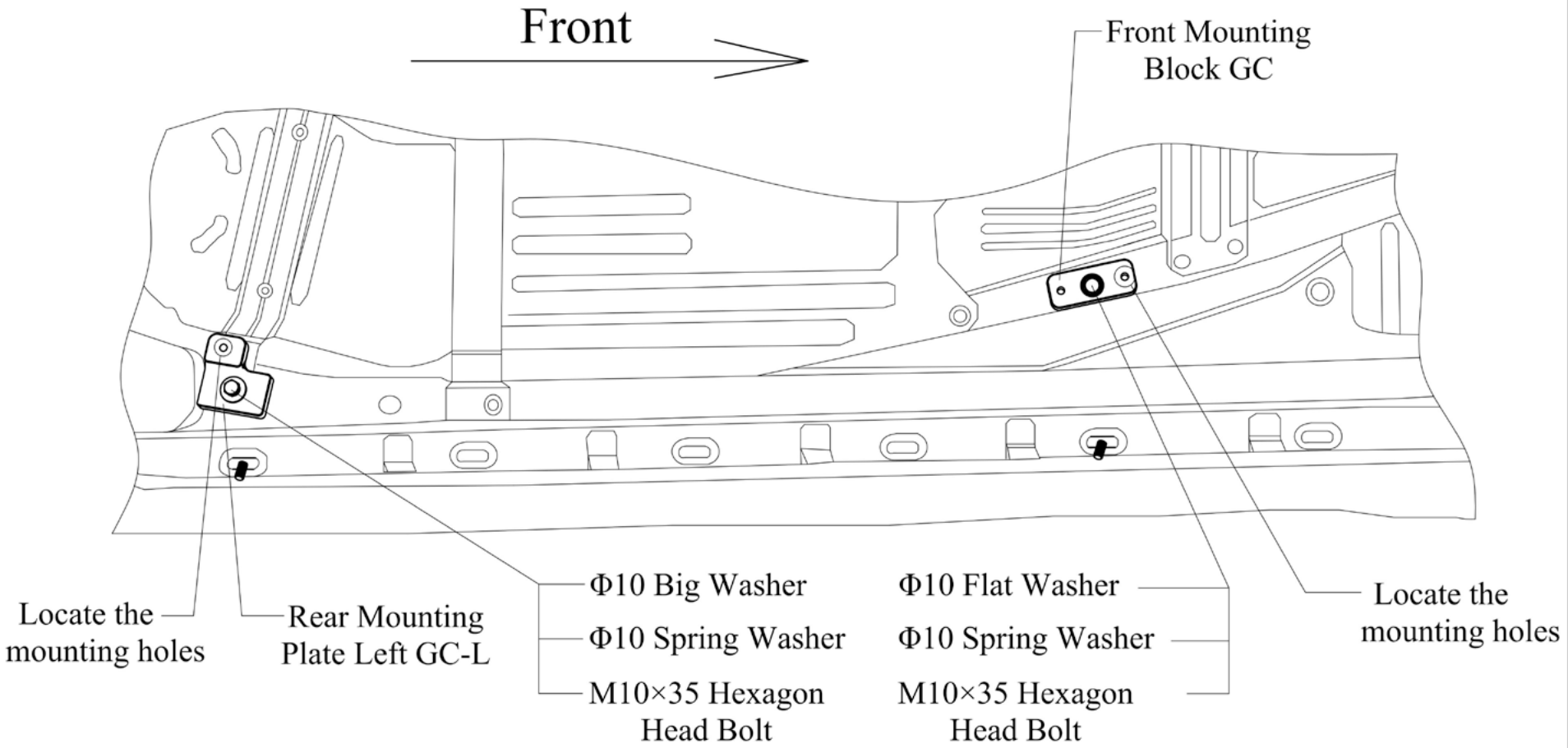
Step 2:Screw stud bolt M10×30 into M10 tension block FV.



Step 3：Screw the hexagon head bolt M8×20 (with spring washer and flat washer) to the mounting holes and pre-tighten it, to make the rear mounting plate combine with motor linkage; The mounting hole on rear mounting plate should be combined with stud bolt.Tighten the above hexagon head bolt (Tighten torque is 30Nm).

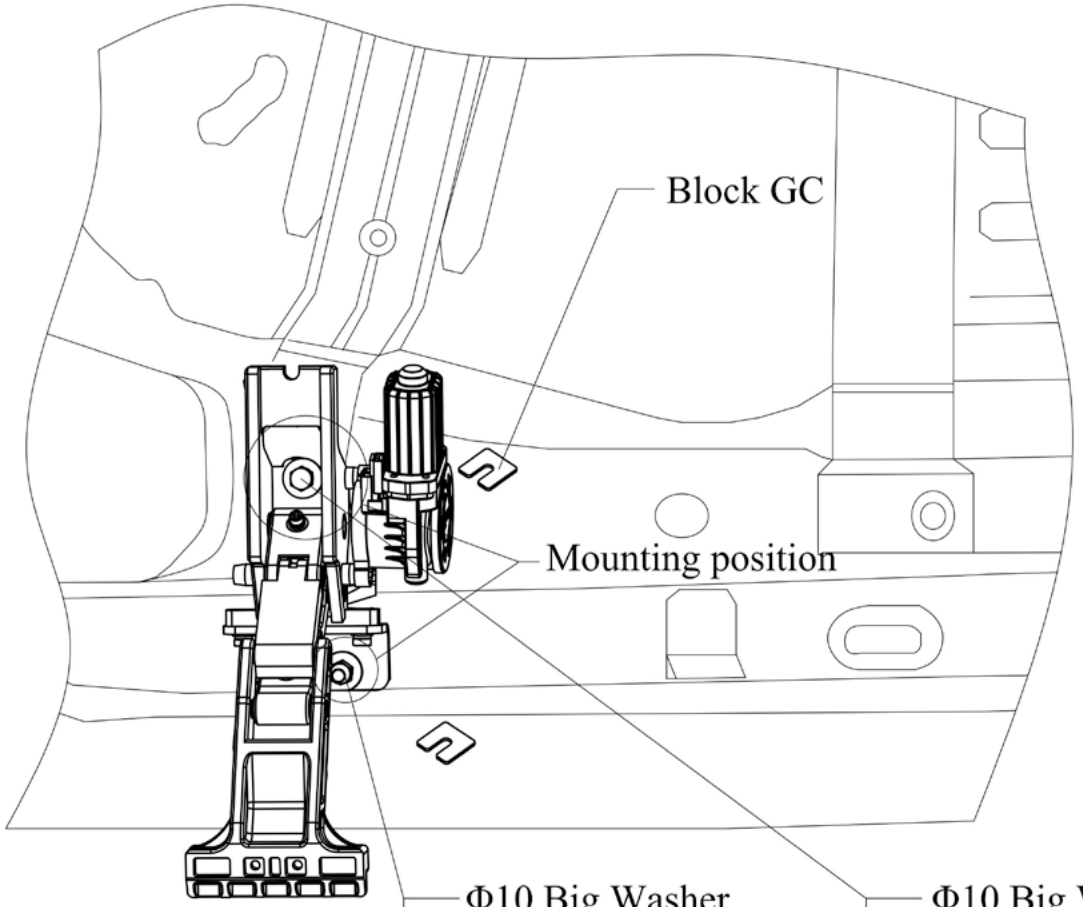


Step 4: Screw the hexagon head bolt M8×20 (with spring washer and flat washer) to the mounting holes and pre-tighten it , to make the front mounting plate combine with motor linkage; The mounting hole on the front mounting plate should be combined with the stud bolt.
Tighten the above hexagon head bolt (Tighten torque is 30Nm).



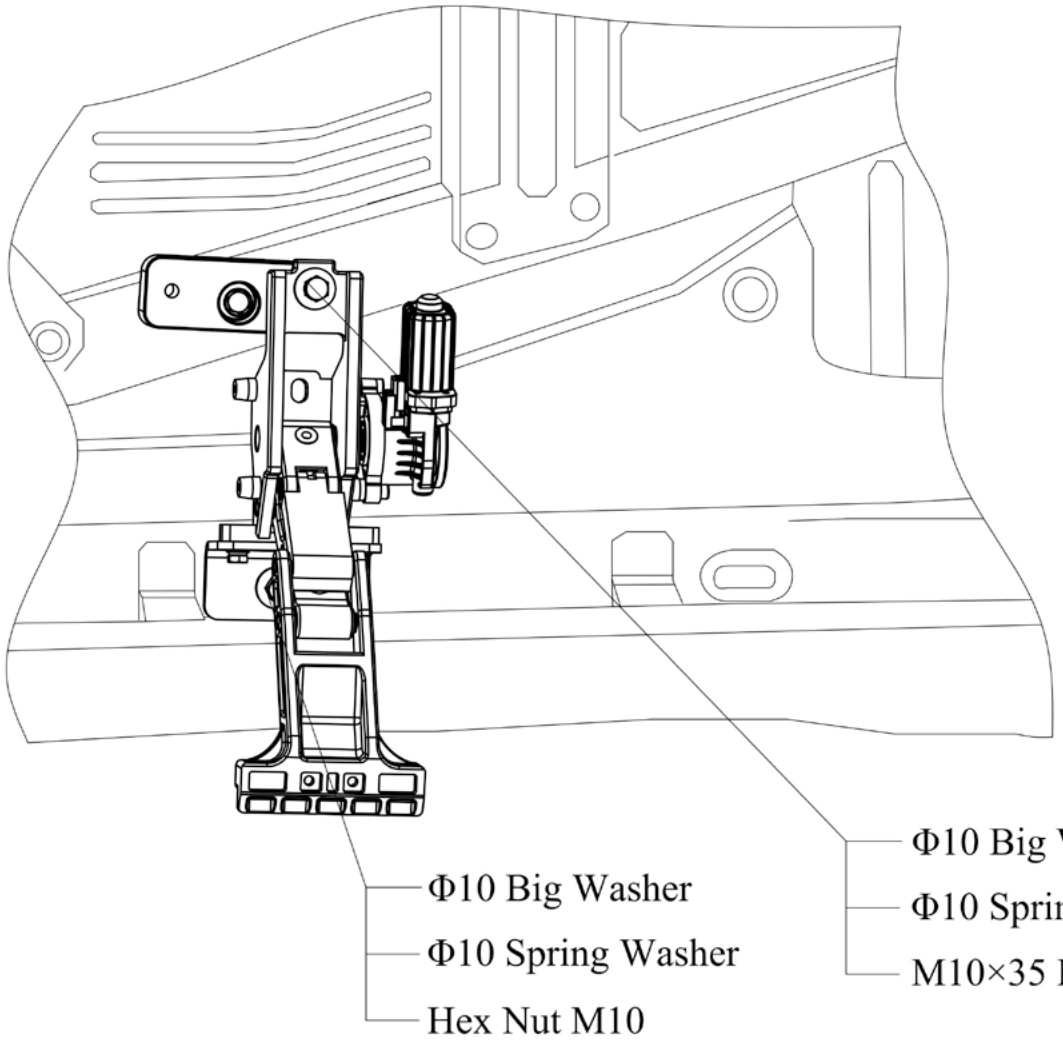
Installation position on the left

Step 5: Screw the hexagon head bolt M10×35 with spring washer and flat washer to the mounting holes, to make the front and rear mounting block combine with vehicle body; Do not tighten the bolt now. The mounting holes on mounting block will be combined with the motor linkage.



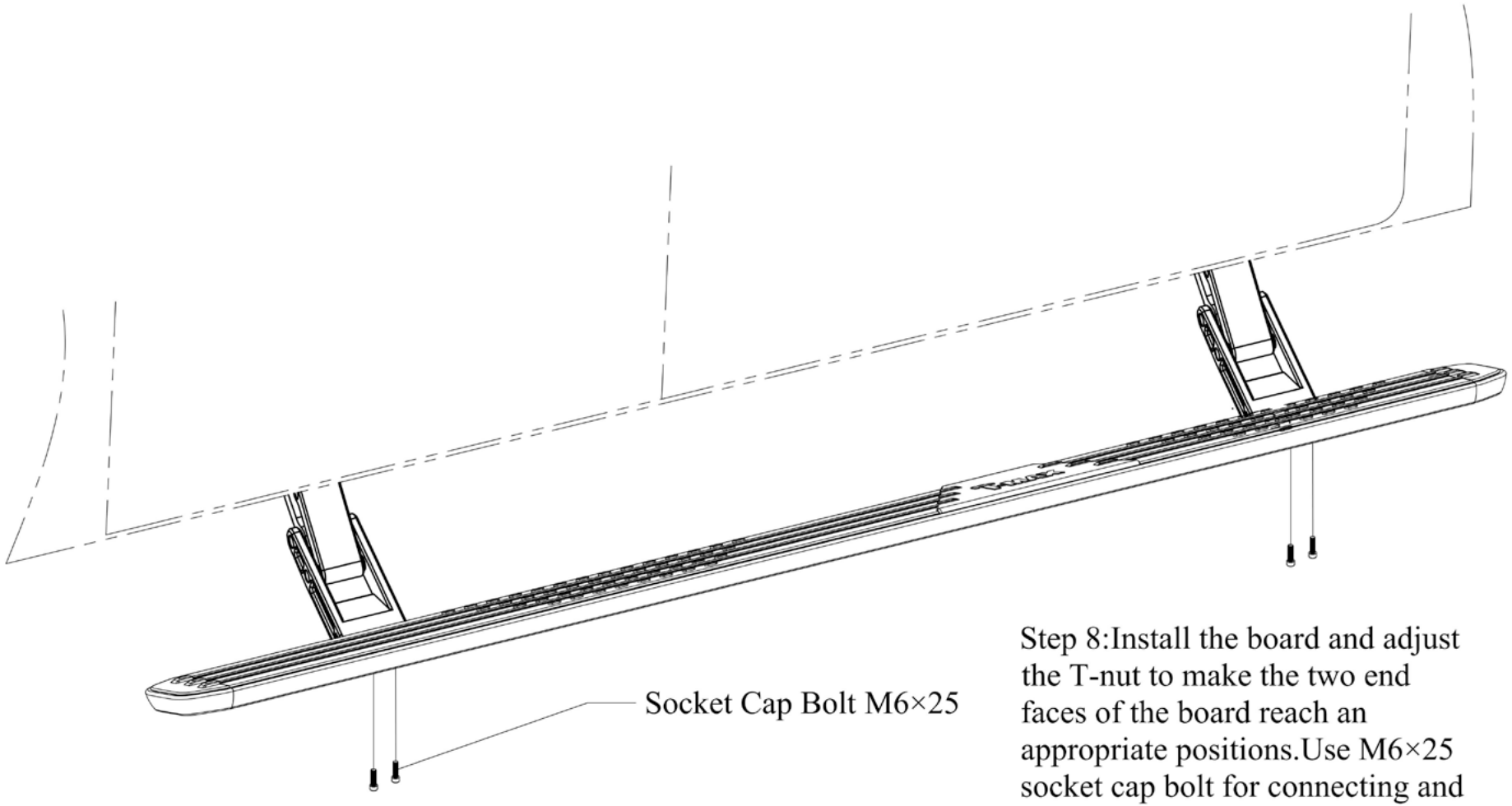
Step 6: Screw the hex nut M10 with spring washer and flat washer to the corresponding blot, and screw the hexagon head bolt M10×35 with spring washer and flat washer to the corresponding holes. Adjust the motor linkage, and then tighten all nuts and bolts. Please note that blocks can be added if there is an aperture between the linkage and board. The block quantity can be adjusted according to the actual situation, and then tighten the above hexagon head bolts and hex nuts(Tighten torque is 30Nm).

On the rear left side



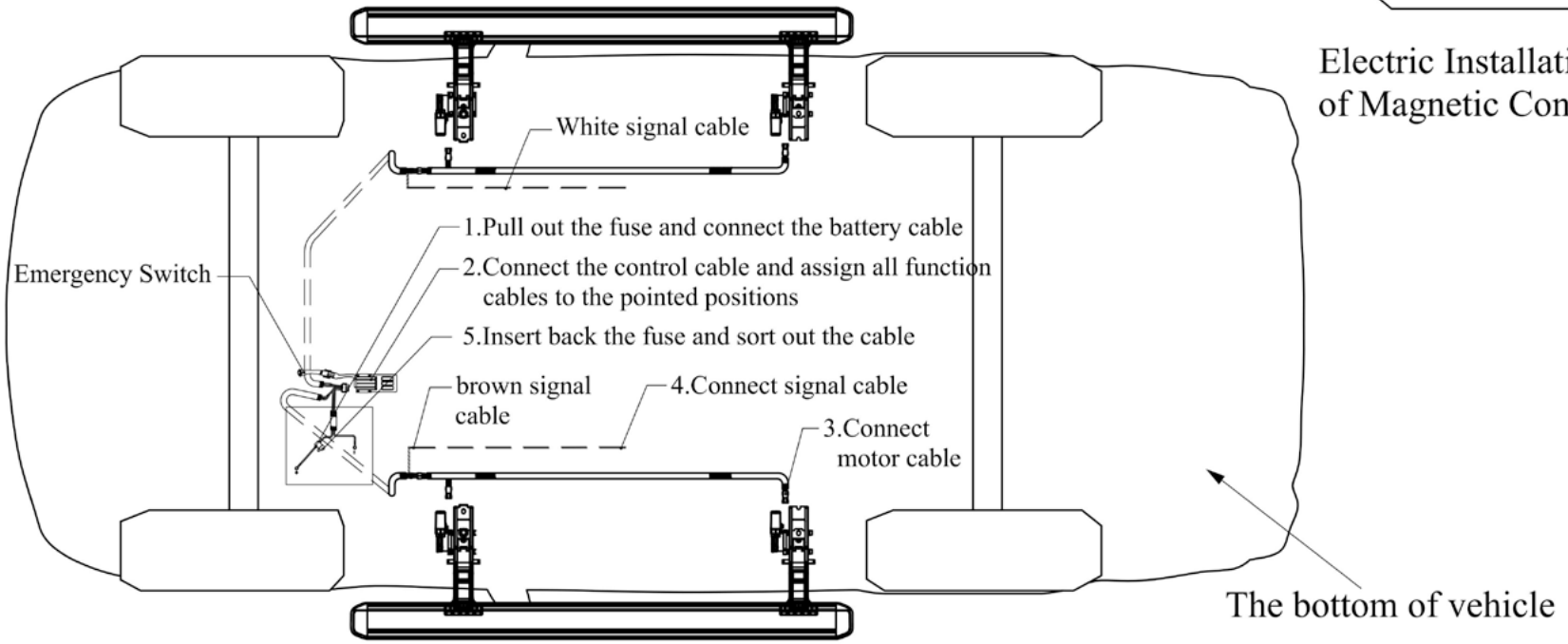
Step 7: Screw the hex nut M10 with spring washer and flat washer to the corresponding bolt, and screw the hexagon head bolt M10×35 with spring washer and flat washer to the corresponding holes. Adjust the motor linkage, and then tighten the above hexagon head bolt and hex nut(Tighten torque is 30Nm).

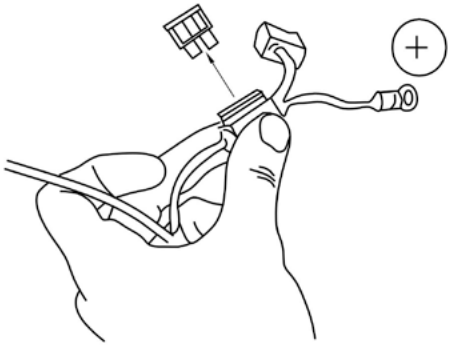
On the front left side



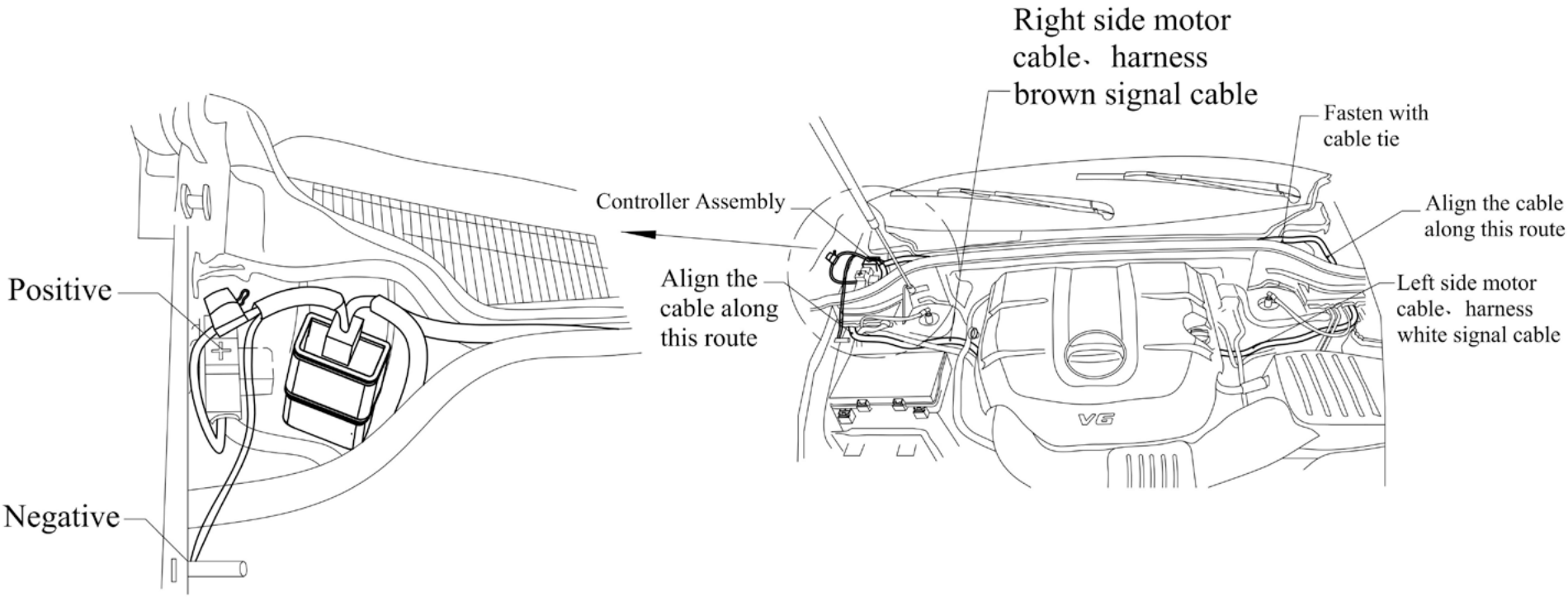
Step 8:Install the board and adjust the T-nut to make the two end faces of the board reach an appropriate positions.Use M6×25 socket cap bolt for connecting and tightening (Tighten torque 14Nm).

Electric Installation of Magnetic Control

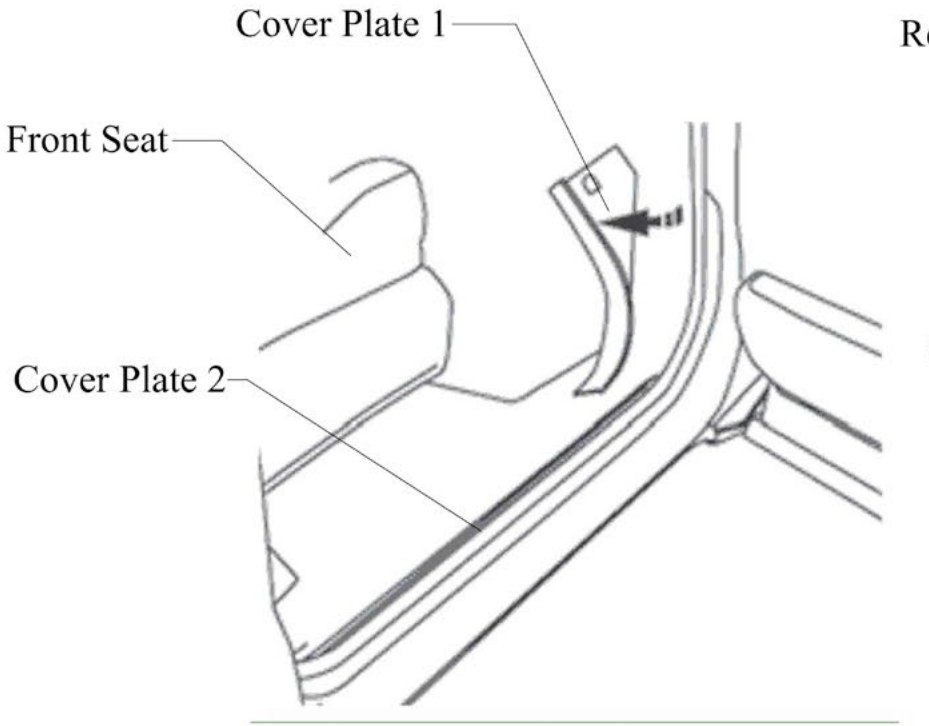


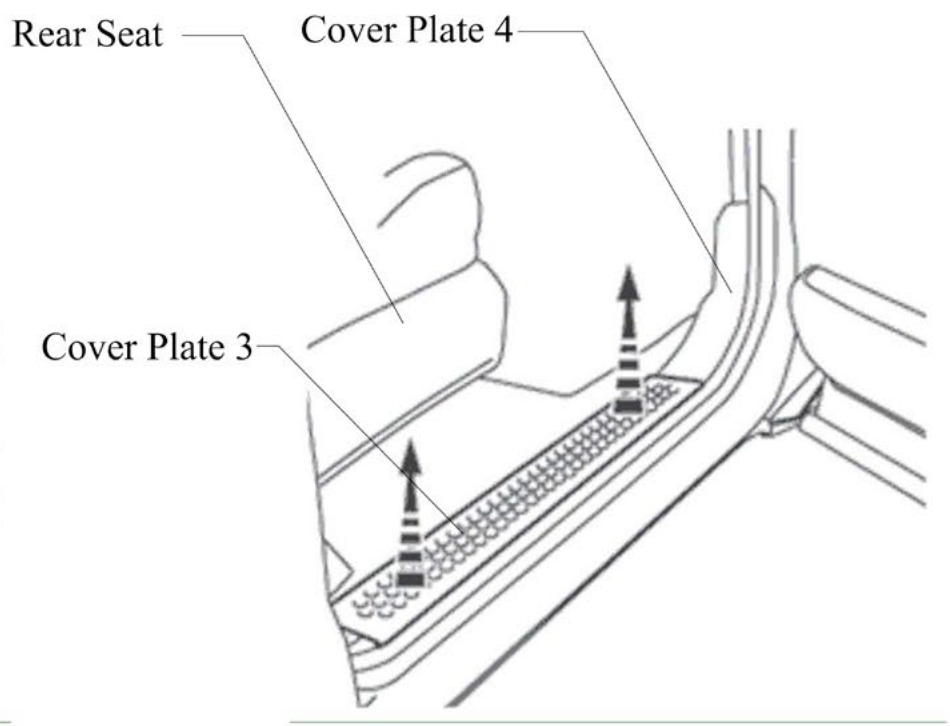


Step 9：Find the control input cable, pull out the fuse (ensuring the safety during installation) and connect the positive and negative to the vehicle battery.



Step 10： As shown in the picture ,fasten controller assembly by cable tie , and assign the cables according to the cable . Motor cable harness and white brown signal cable pass through the vehicle floor to the vehicle bottom and inside , and fix the cable harness on the vehicle by cable tie.



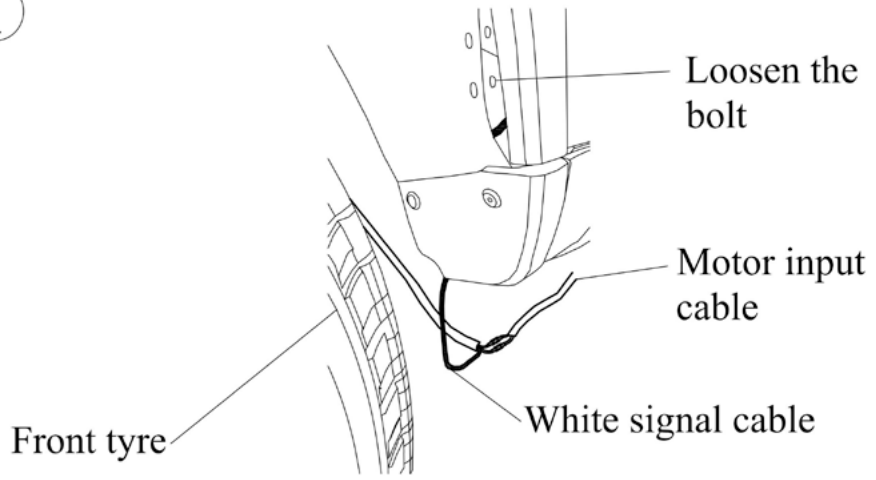


Step 11: Signal Cable Connection: Pry the cover of①、②、③、④show as the picture. The white signal cable pass through the left side vehicle bottom and get into the vehicle, the alignment of signal cable according to the below picture ①、②、③、④and reach middle pillar B . The same installation of the brown signal cable on the right side of vehicle bottow.

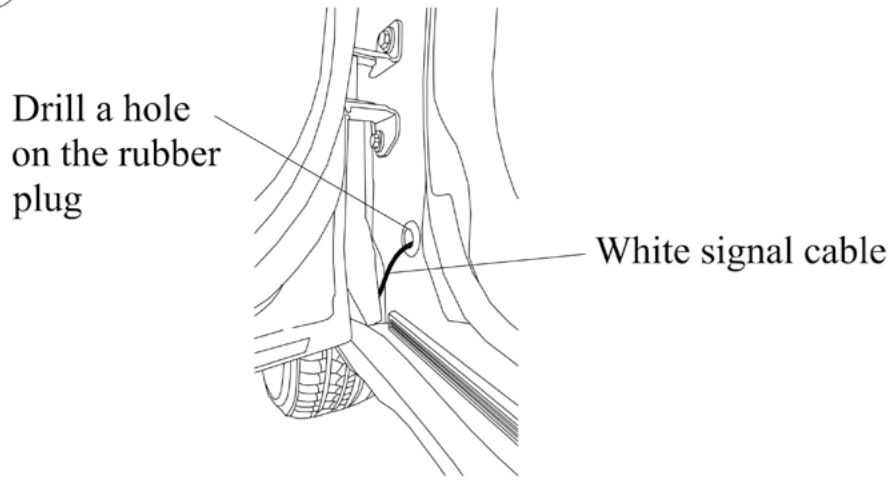
GRAND CHEROKEE

E-BOARD

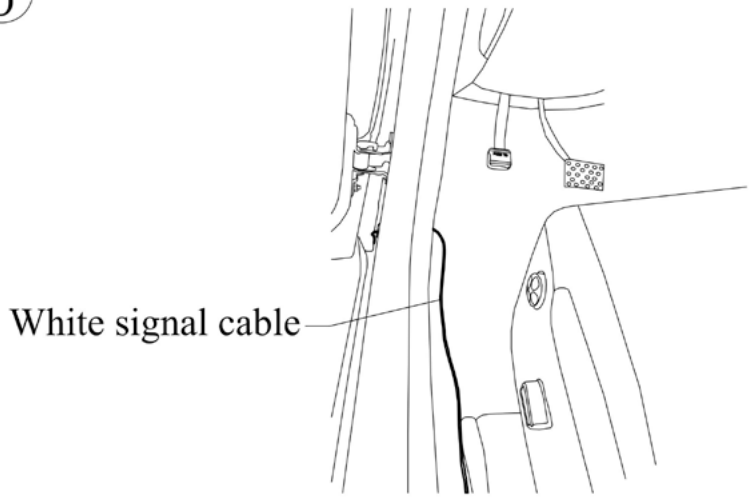
①



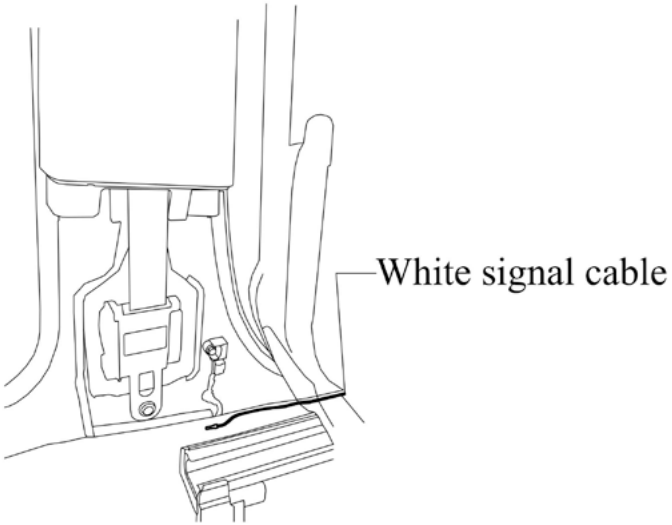
②



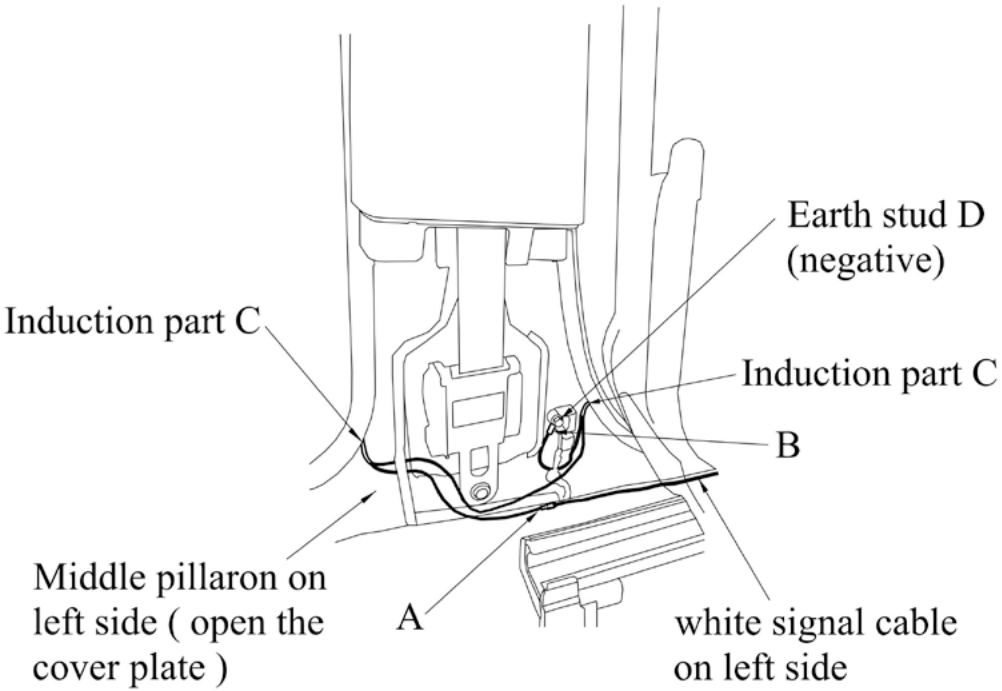
③



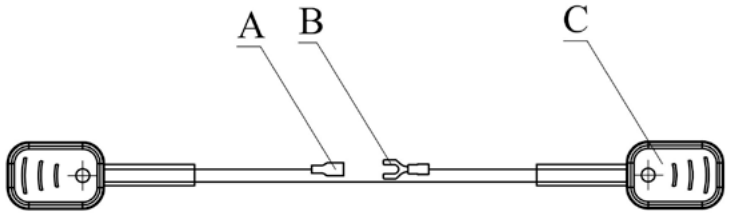
④



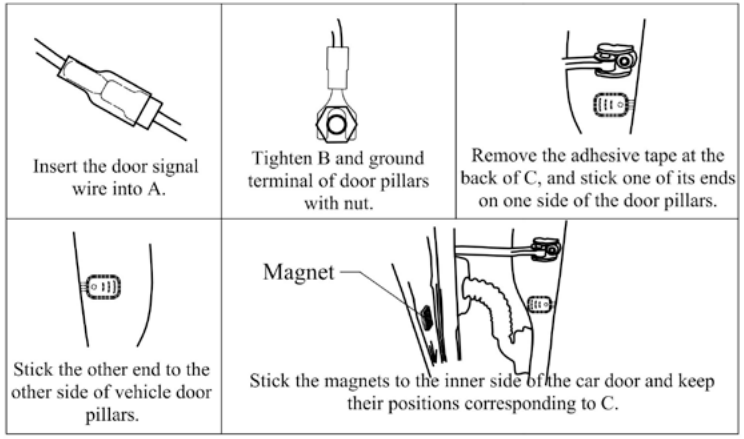
Magnetic Inductor Installation

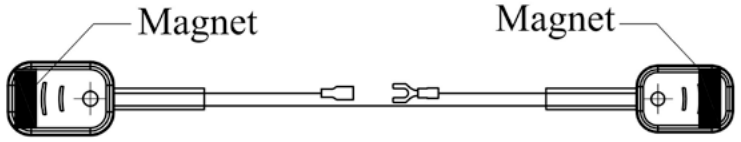


Step 12: Open the cover plate on left side, and connect the white signal cable to terminal A of induction . Then loosen the stud D (negative) , insert terminal B into the stud D . Stick the induction C to the both side of pillar , stick the magnet on the inside of vehicle door which is corresponding with induction part ,finally , close the cover plate. The connection of right side brown signal cable is same as the installation of left side.

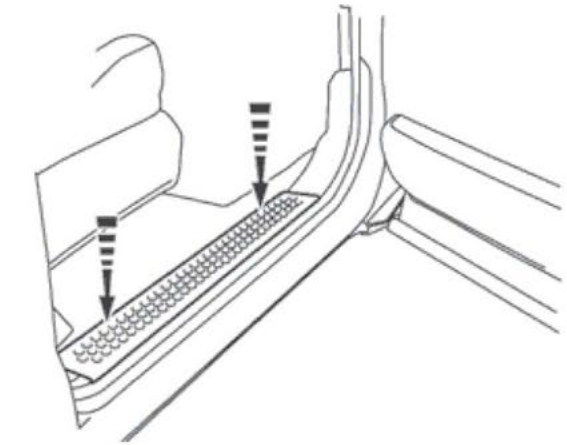


Cable harness induction

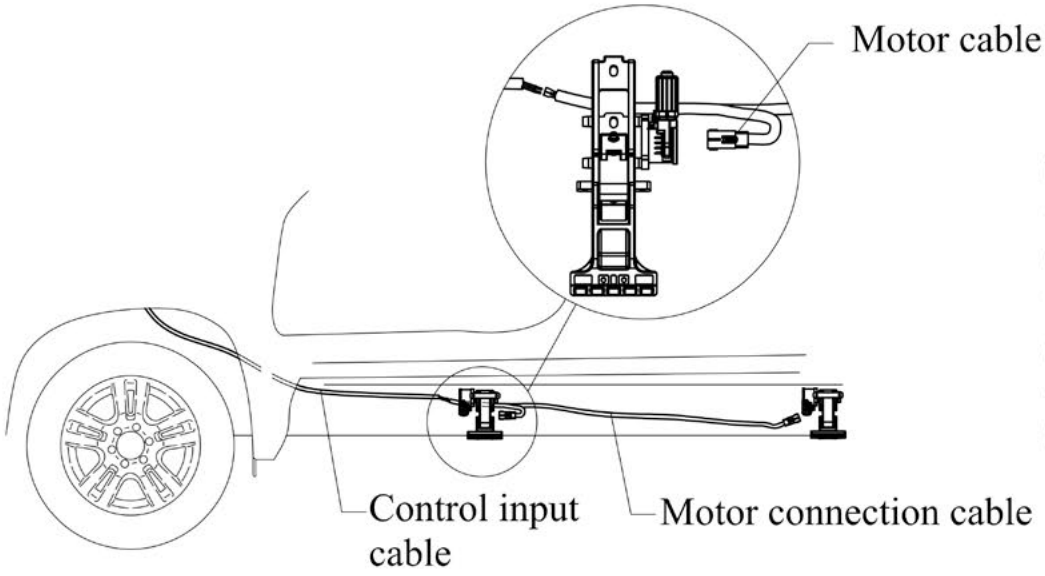




Instruction: When close the door , the magnet corresponding position is as shown above picture.

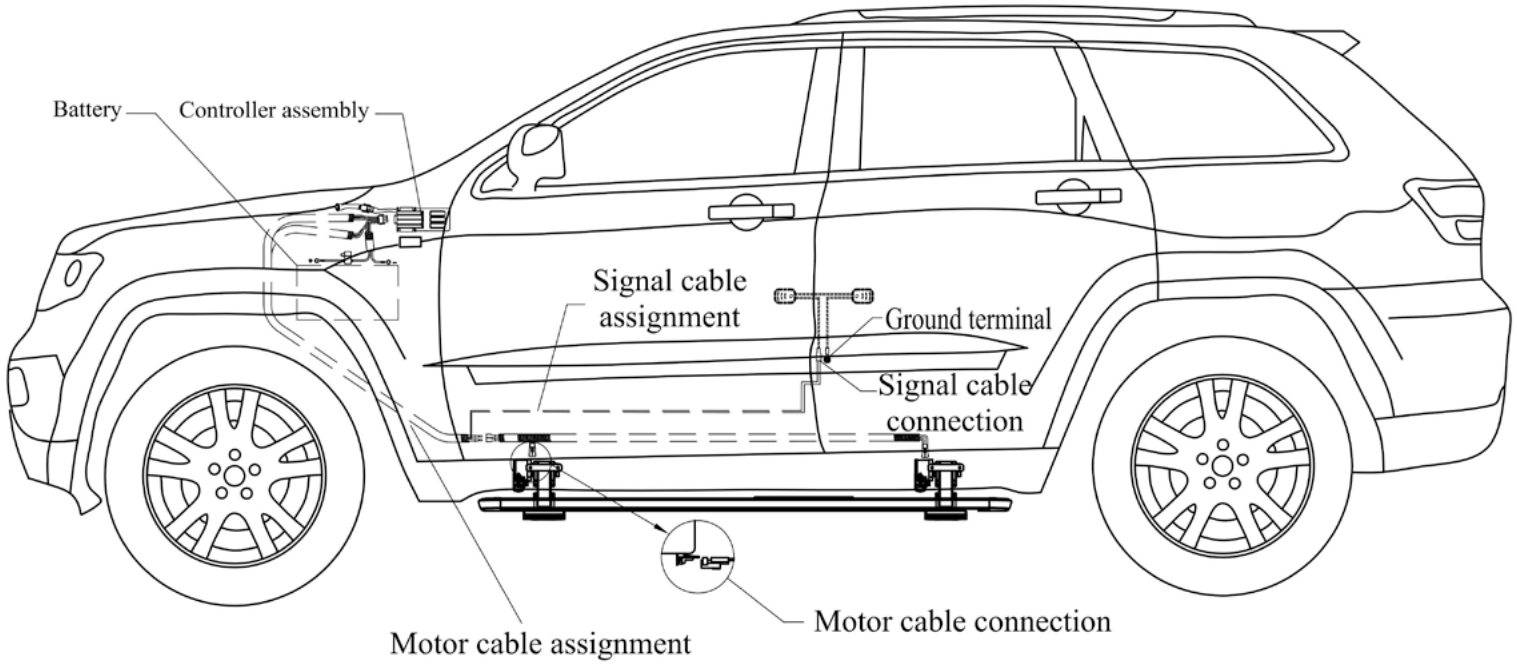


Step 13: Assign the cables in order and close the cover plate.



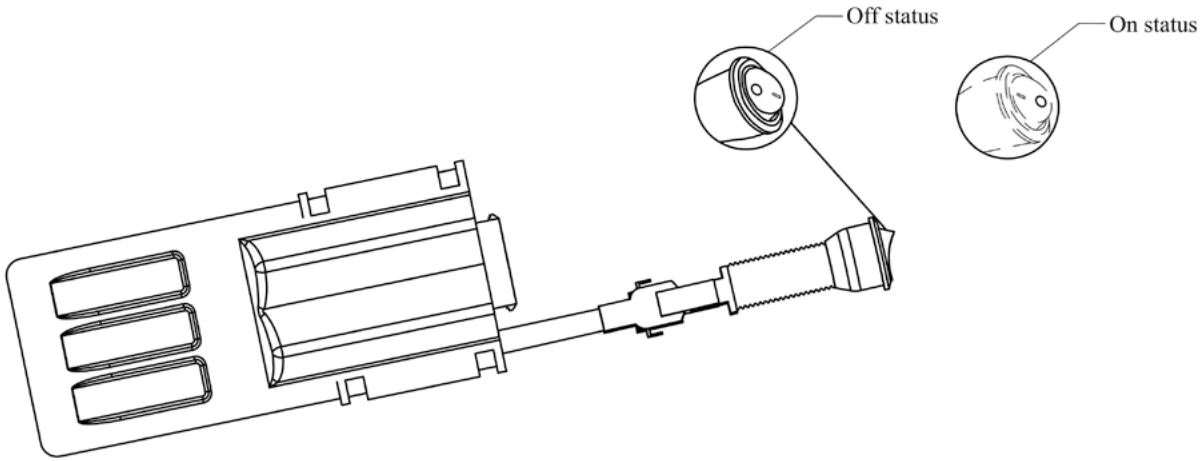
Step 14: Motor cable connection, connect the motor connection cable and control input cable, and assign the cables along with the vehicle beam. Note that the same color cable should be connected together . Fasten the cable on the vehicle beam by cable tie . Same cable installation is for the other side.

Summary of electric part



Step 15: Check the emergency switch and let it on " off " status . Insert back the fuse, assign the cable in order. Check if all the cables are connected well and test if the power board can work normally. If it can work normally, the step installation is completed. (If it cannot work normally, please check the installation of each part.)

Instructions of Emergency Switch



I. Function of emergency switch

Press the red switch button in case of any emergency or product failure to protect vehicle will not damage under these condition. Both steps will go back automatically while the emergency switch button is turned on.

II. The condition for using emergency switch:

1. Product failure;
2. User needs steps not work while the road / off-road situation is tough.
3. Please do not use power board if motor linkage or control wire is damaged.

III. Emergency switch using method:

1. Press emergency switch button, and the emergency switch is "on". And at the same time, the steps will automatically go back and stop working. In case of product failure, please contact with after-sales service.
2. Press the emergency switch button again, and the emergency switch is "off". And at the same time, the power board will return to its normal working status.
3. The original status of emergency switch is "off".

Maintenance		
3 months Periodical Inspection	Inspect the normal operation of the mechanism	
	Inspect damage for each cable connection and the bare part outside of the vehicle beam	
	Inspect screws looseness of motor and power board	
Special Case Inspection	Clean the sediment on time for power board and the linkages	
	Clean the ice on time for power board and the linkages	
Maintenance card		
The power board couldn't work normally when doors open and close	Electrical Malfunction	Fault connection of battery cable: recheck if you swap the battery's poles over, and if the fuse blow out.
		Fault connection of motor cable: recheck if all plugs are connected well.
		Fault connection of door signal cable: recheck the connection of cables according to the diagram.
		Fault of controller: if there is no problem for all cables, please contact our after sales service center.
	Mechanics Malfunction	The foreign material hinders the board work.
		The two mounting surface are not at the same level.

Note: Please contact us if any unknown trouble happened. We will solve it for you as soon as possible. Thank you!

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ACCESSORIES

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