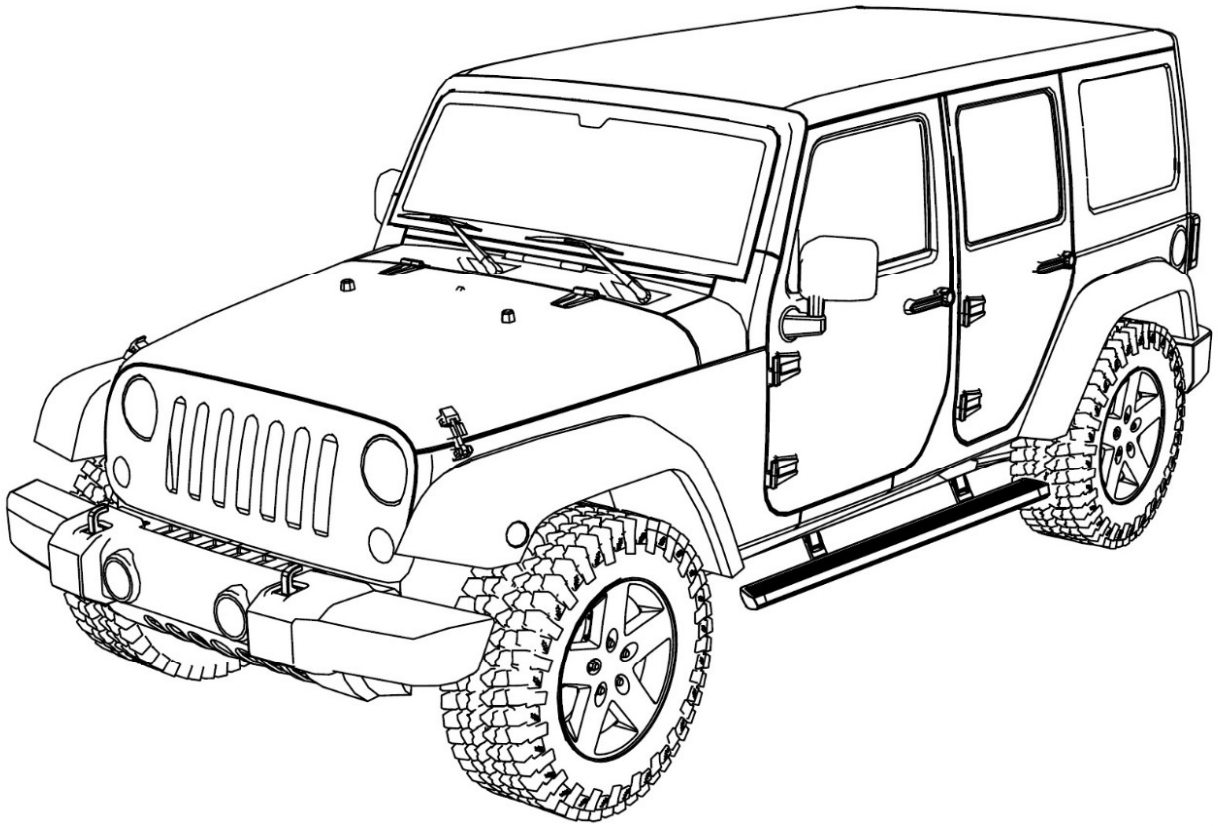
E-BOARD

# Jeep Wrangler JL POWER BOARD



APPLICATION： Jeep Wrangler JL Unlimited 4 Door 2018-2019

## Jeep Wrangler JL POWER BOARD

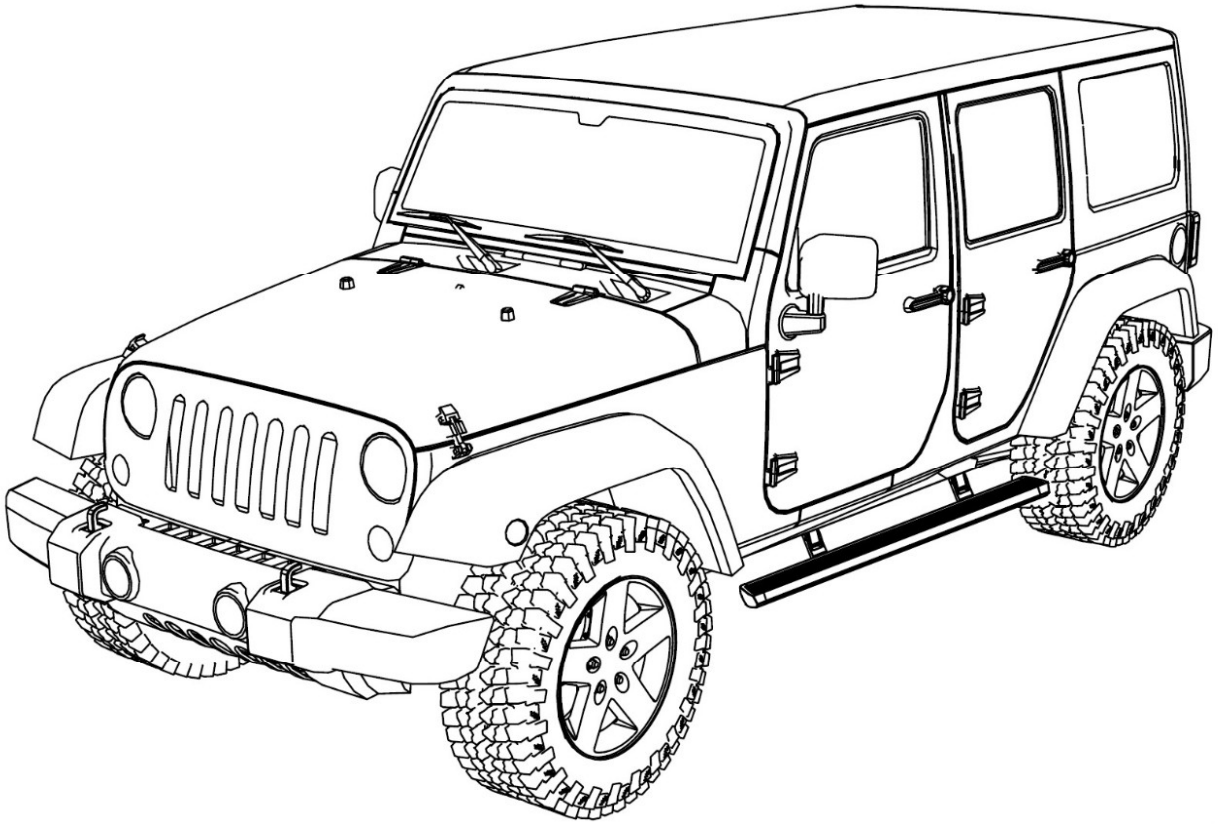
## INSTALLATION GUIDE

INSTALLATION TIME

00:00

PRODUCT NUMBER： PST01-0410/PST01-0430

TOOLS REQUIED：① 5mm Hex Key Wrench (Allen Wrench)
② 13mm Socket Spanner
③ 18mm Socket Spanner ④ Vinyl Tape
⑤ Wire Stripper ⑥Scissors



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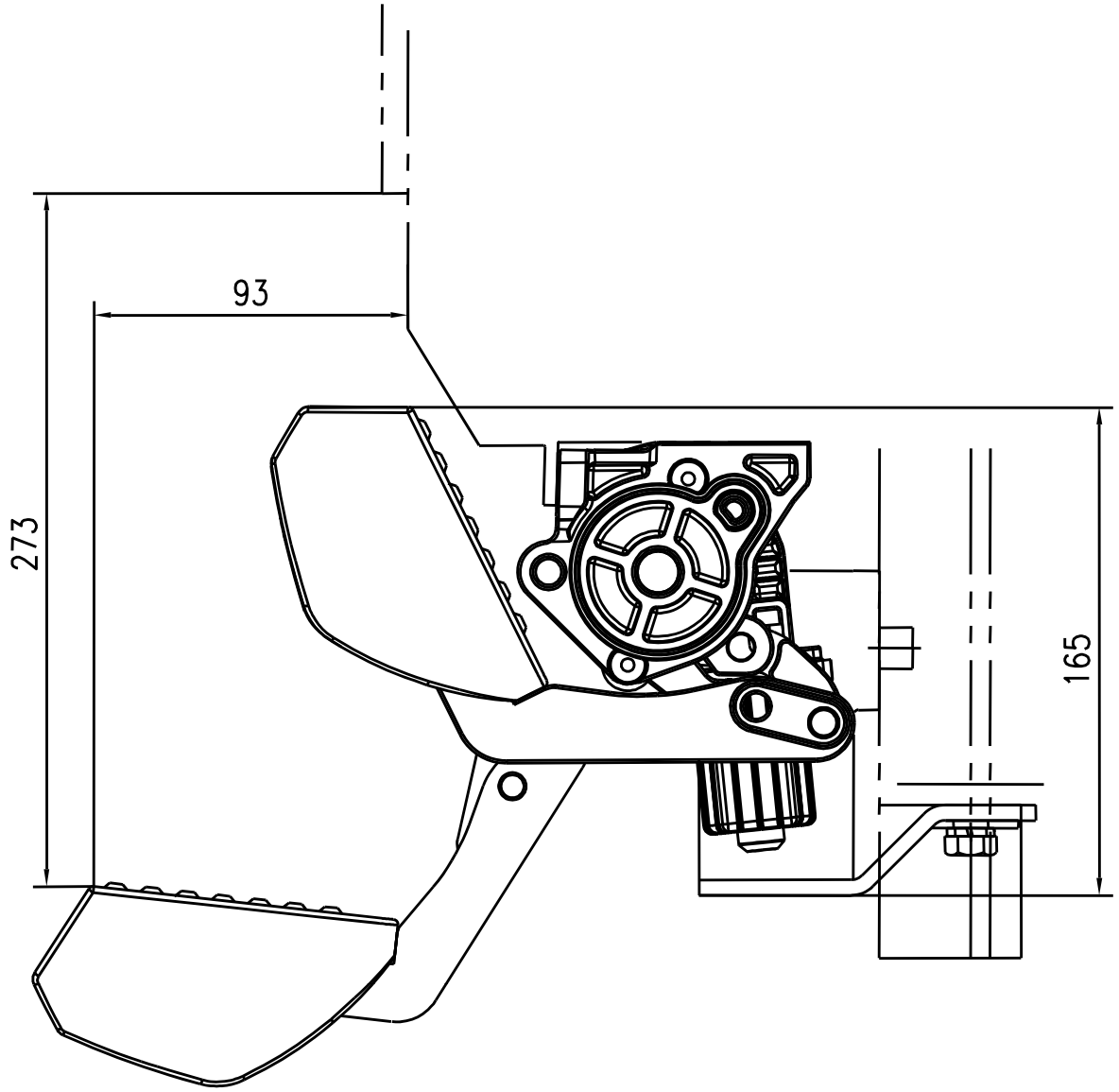
The product is developed and produced by T-MAX, and the related patents are blow.
Patents:US8,469,380;US9,656,609;US9,308,870;US9,688,205;US9,669,766

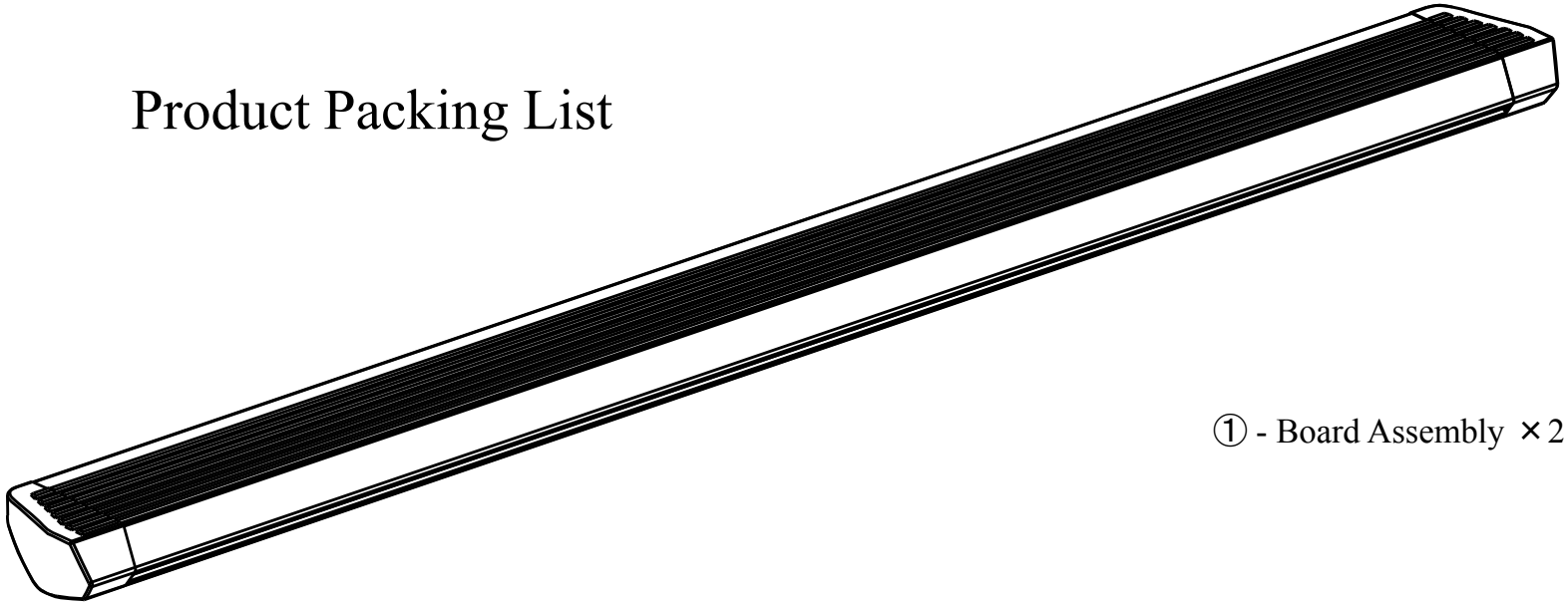



## Product Technical Specification

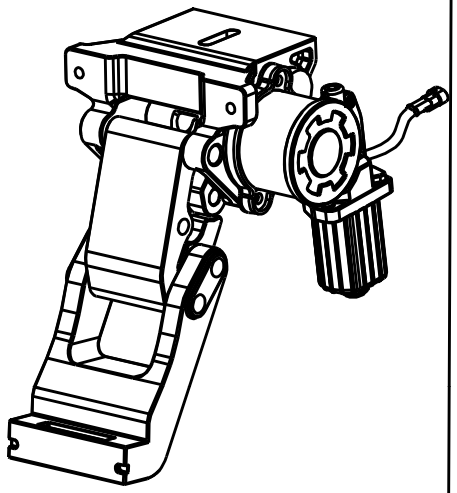
Rated Voltage: 12V
Specified Load: ≤350kg
Gross Weight: 29.4kg
Forward extension size: 93mm
(Horizontal distance between the edge of power board and the vehicle door when the board extends)
Board falling dimension: 273mm
(Vertical height difference between the edge of power board and the vehicle door 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 20cm safe distance while power board is working to avoid any bump or jam.

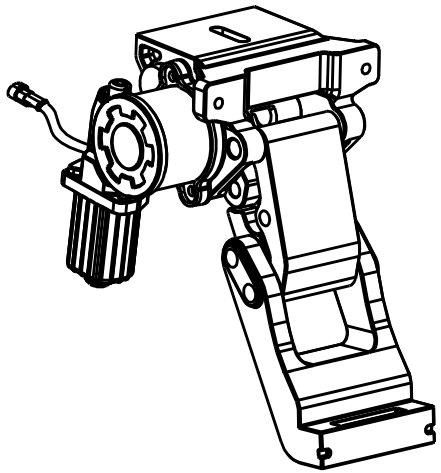
## Product Packing List



① - Board Assembly ×2



② - Front Motor Linkage Left ×1
6124151.1L



③ - Front Motor Linkage Right ×1
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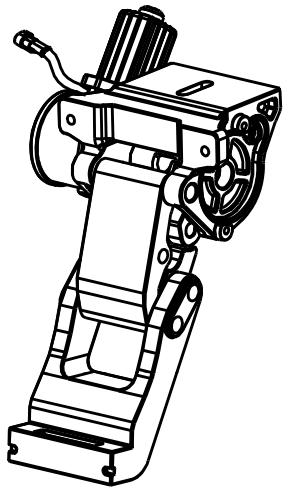
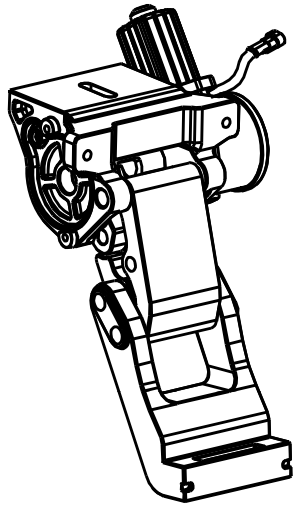
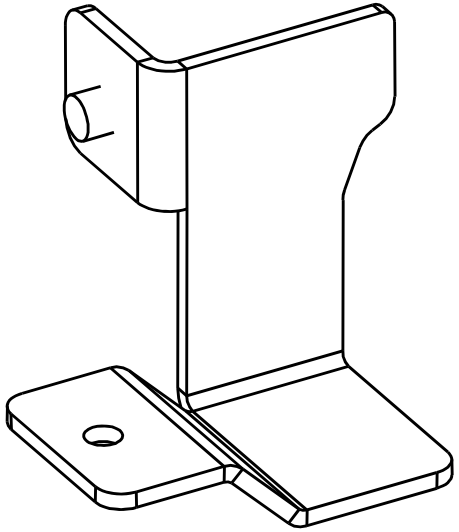


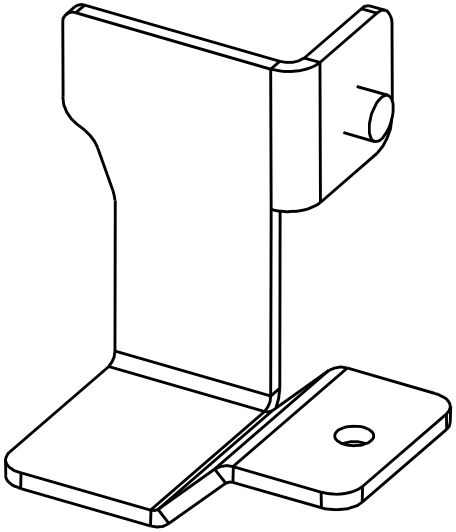
④ - Rear Motor Linkage Left ×1
6124151.2L



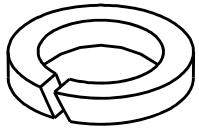
⑤ - Rear Motor Linkage Right ×1
6124151.2R



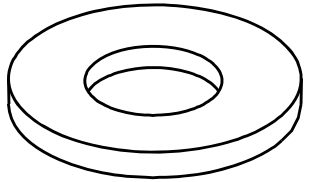
⑥ - Motor Protective Bracket Left ×1
6124151.0-2L



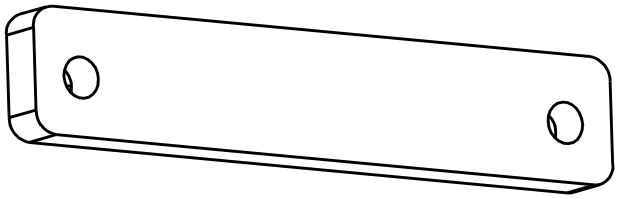
⑦ - Motor Protective Bracket Right ×1
6124151.0-2R



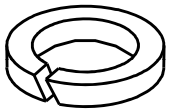
⑧ -Spring Washer×2
GB/T93-1987 12



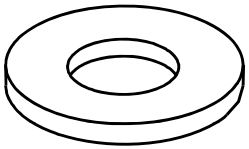
⑨ -Larger Washer Grade A×2
GB/T96.1-2002 12



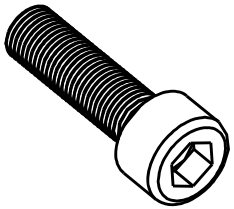
⑩ - Mounting Bracket×2
6124151.0-1



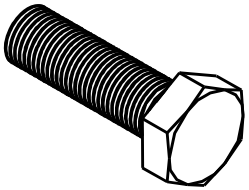
⑪ -Spring Washer×14
GB/T93-1987 8



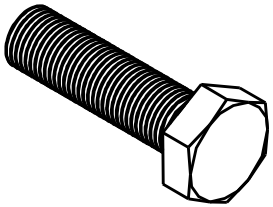
⑫ -Larger Washer Grade A×14
GB/T96.1-2002 8



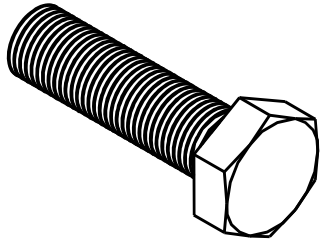
⑬- Socket Cap Screw ×8
GB/T70.1-2000 M6×25



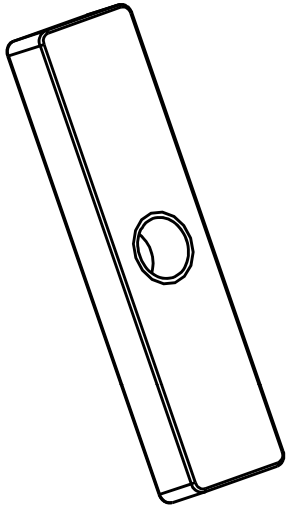
⑭-Hexagon Head Bolt×6
GB/T5781-86 M8×25



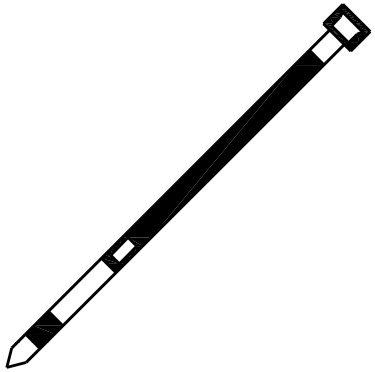
⑮ -Hexagon Head Bolt×8
GB/T5781-86 M8×35



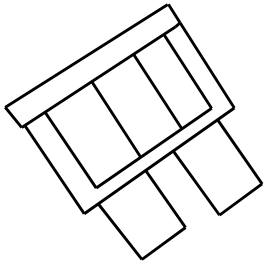
⑯ -Hexagon Head Bolt×2
GB/T5781-86 M12×35



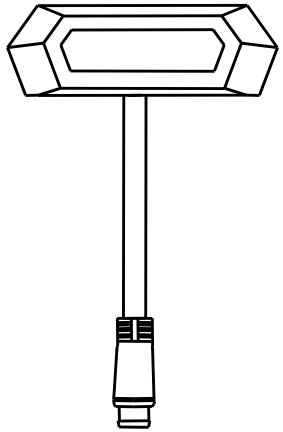
⑰ -M12 Tension Block×2
6124100.0-4



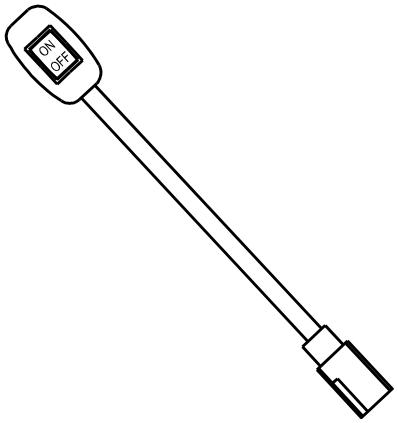
⑱ -Wire Tie×25
GB/T22344-2008 5×300



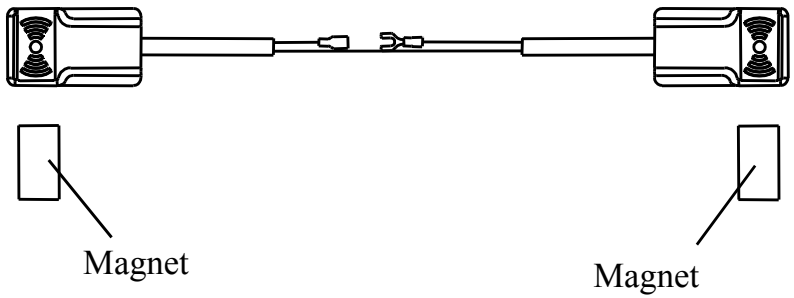
⑲ - Fuse×2



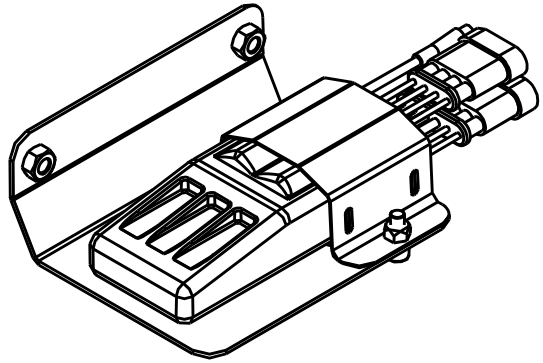
⑳ -LED Lamp ×4
6161100.4.8
（Optional）



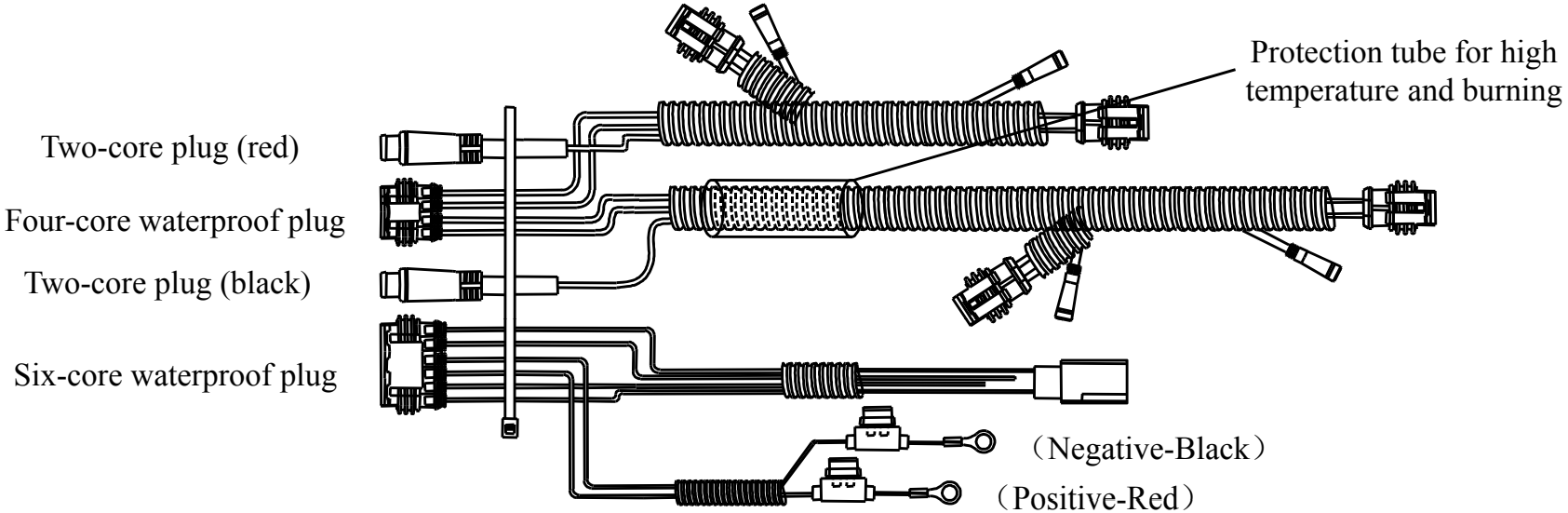

㉑ - Power Board Switch ×1
6124151.4.9




㉒ -Wired Magnetic Induction Module ×2
- Magnet ×4

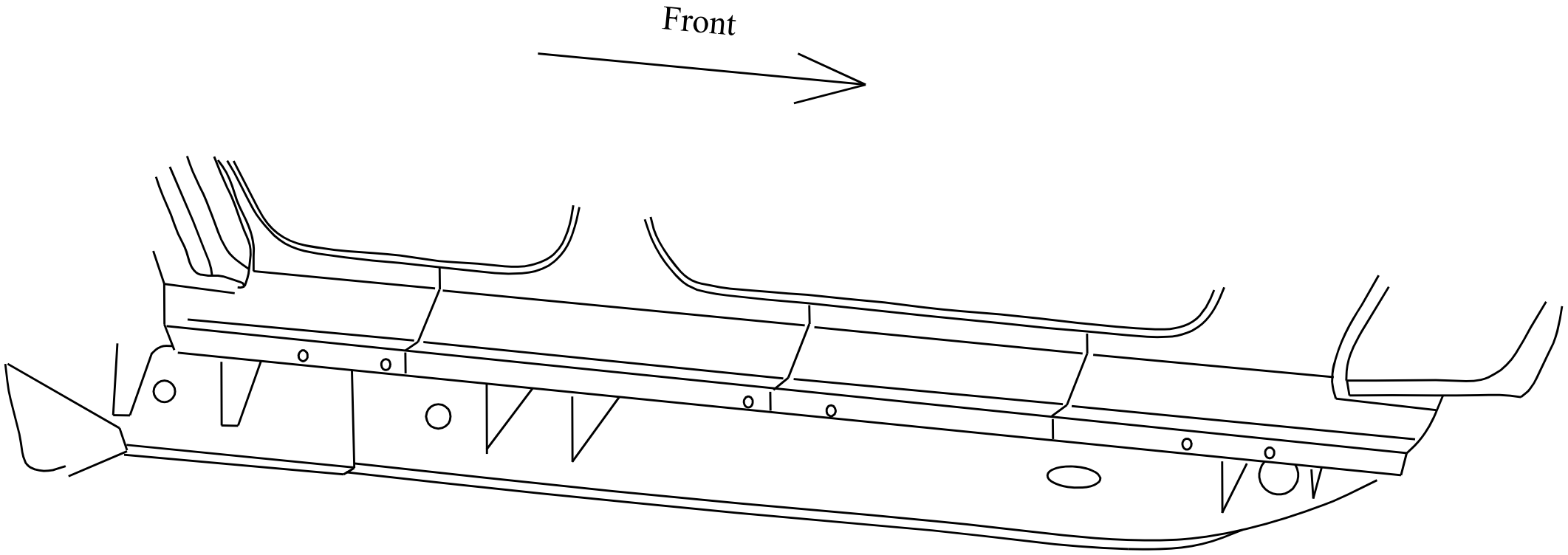


㉓ -Controller Assembly×1
6124151.4.4ZJ

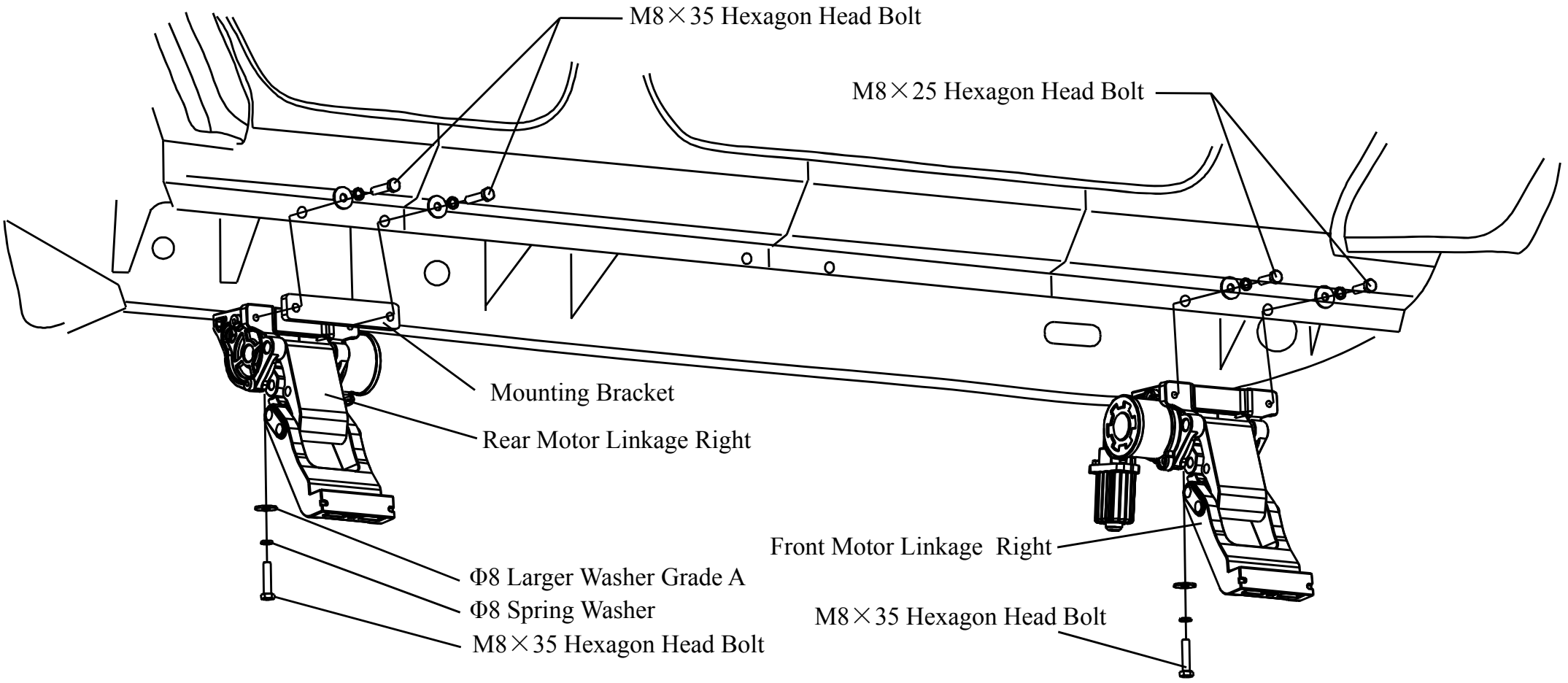



㉔ - Control Input Wire ×1 6124100.4.1

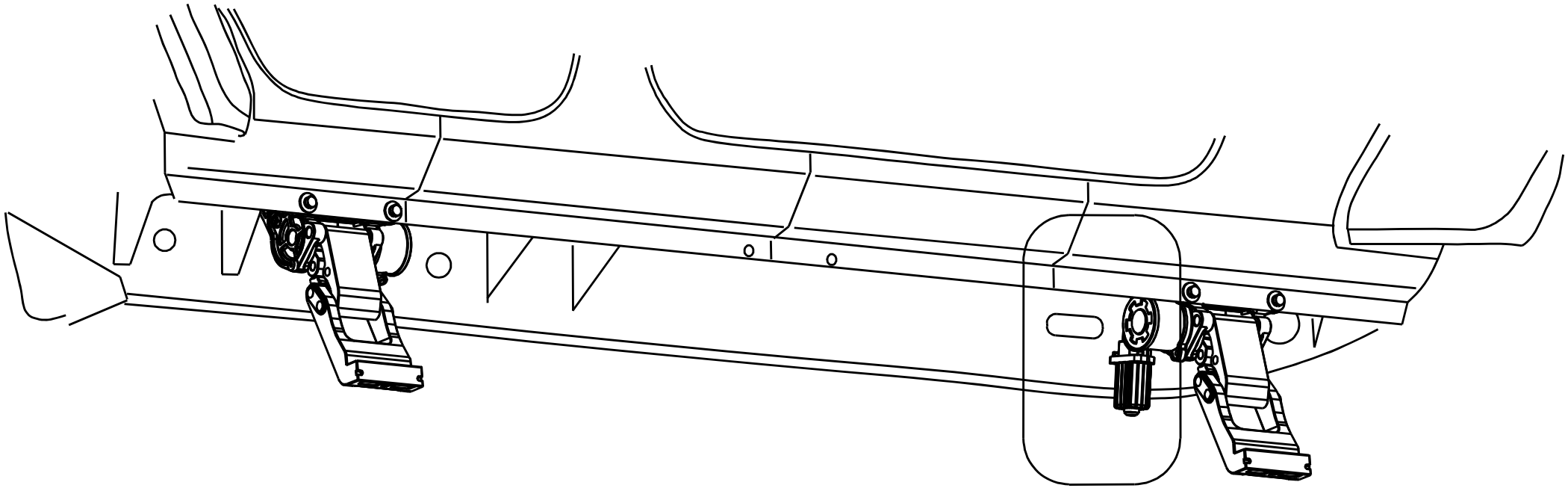
# Mechanical Installation




The picture shows chassis of the vehicle on the right side.

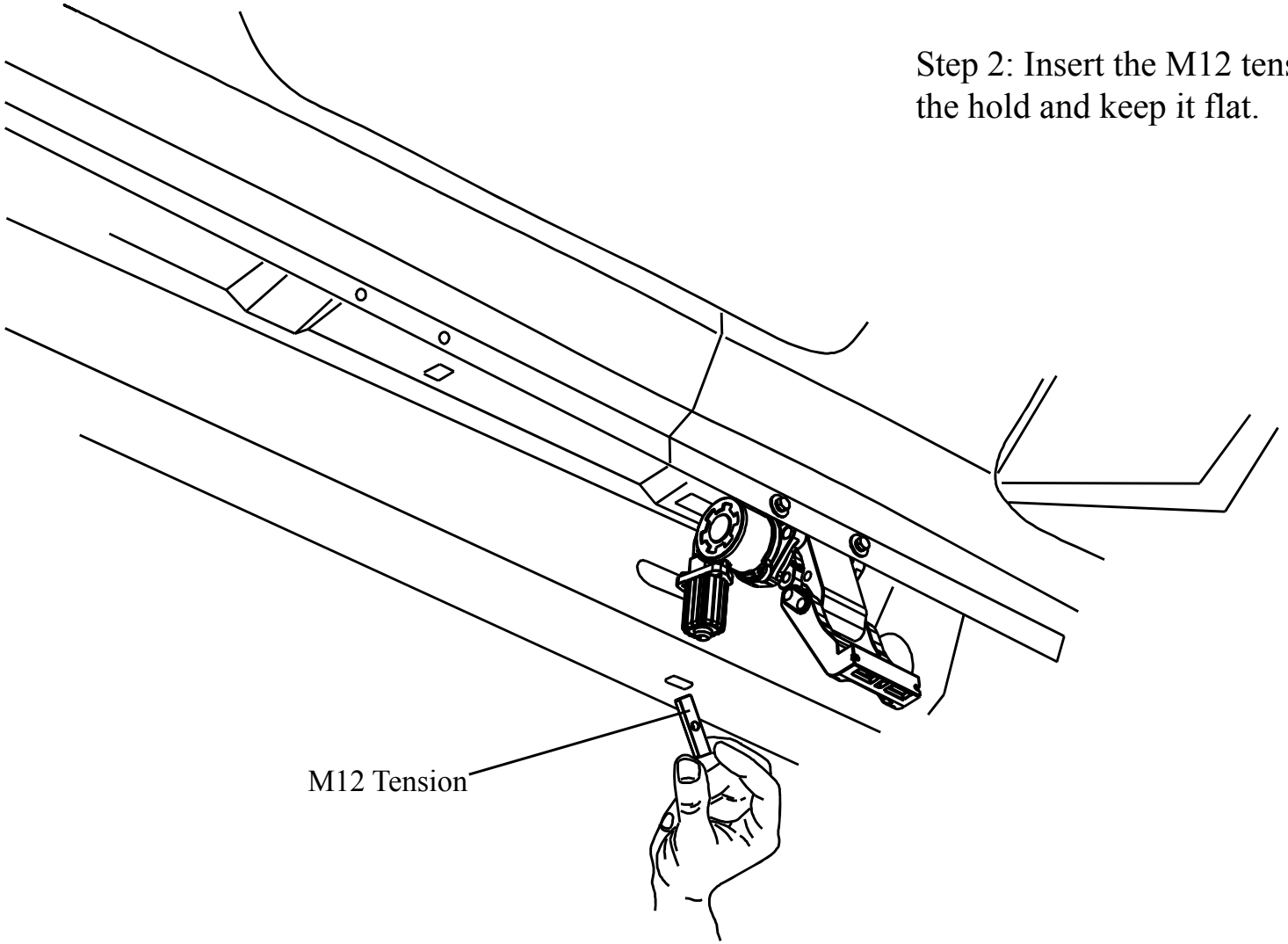



Step 1:Insatall the motor linkage shown as in the picture, screw all the bolts but not tighten.

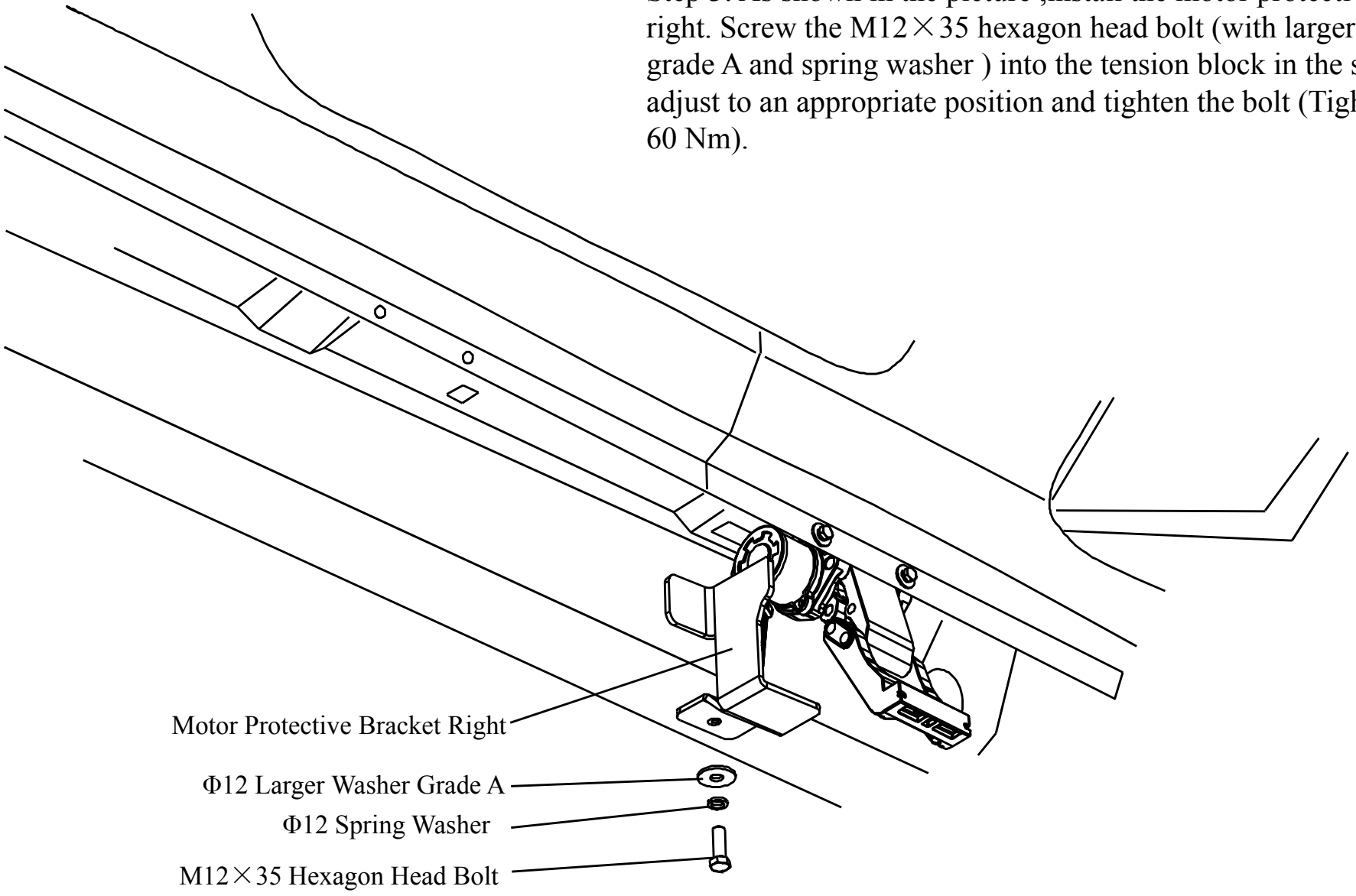


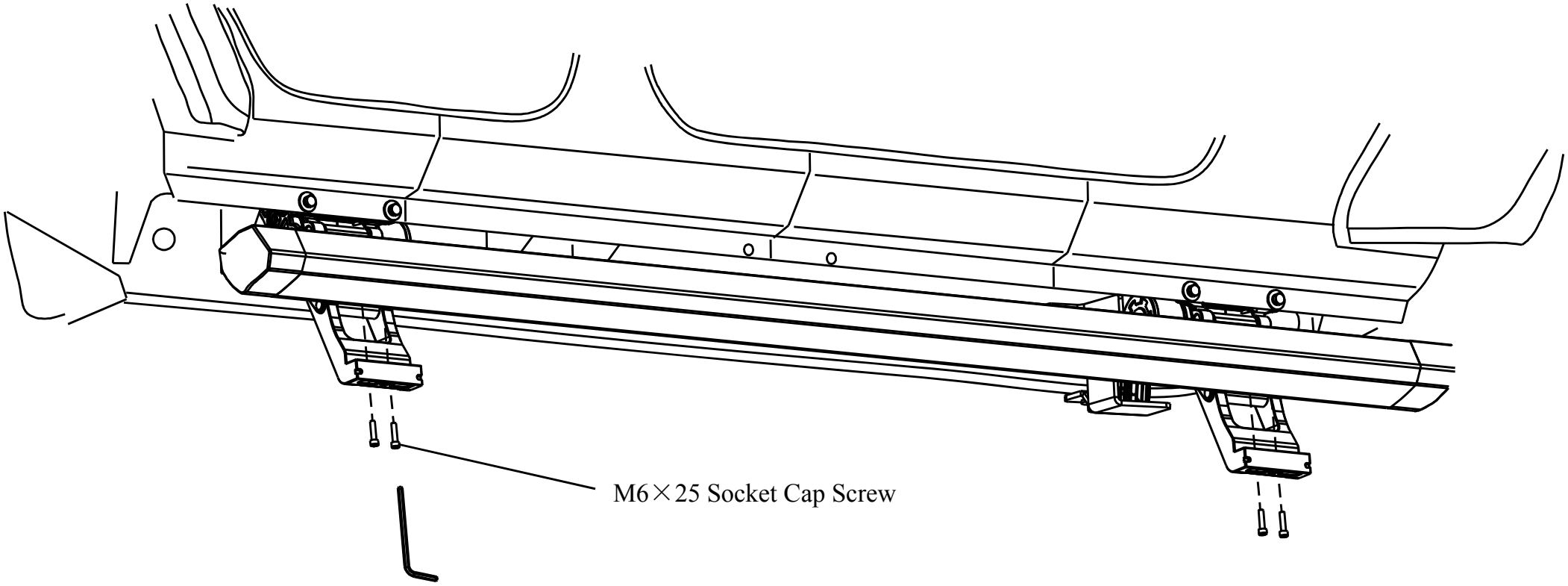
As shown in the picture, install the motor protective bracket in the square position.

Step 2: Insert the M12 tension block into the hold and keep it flat.



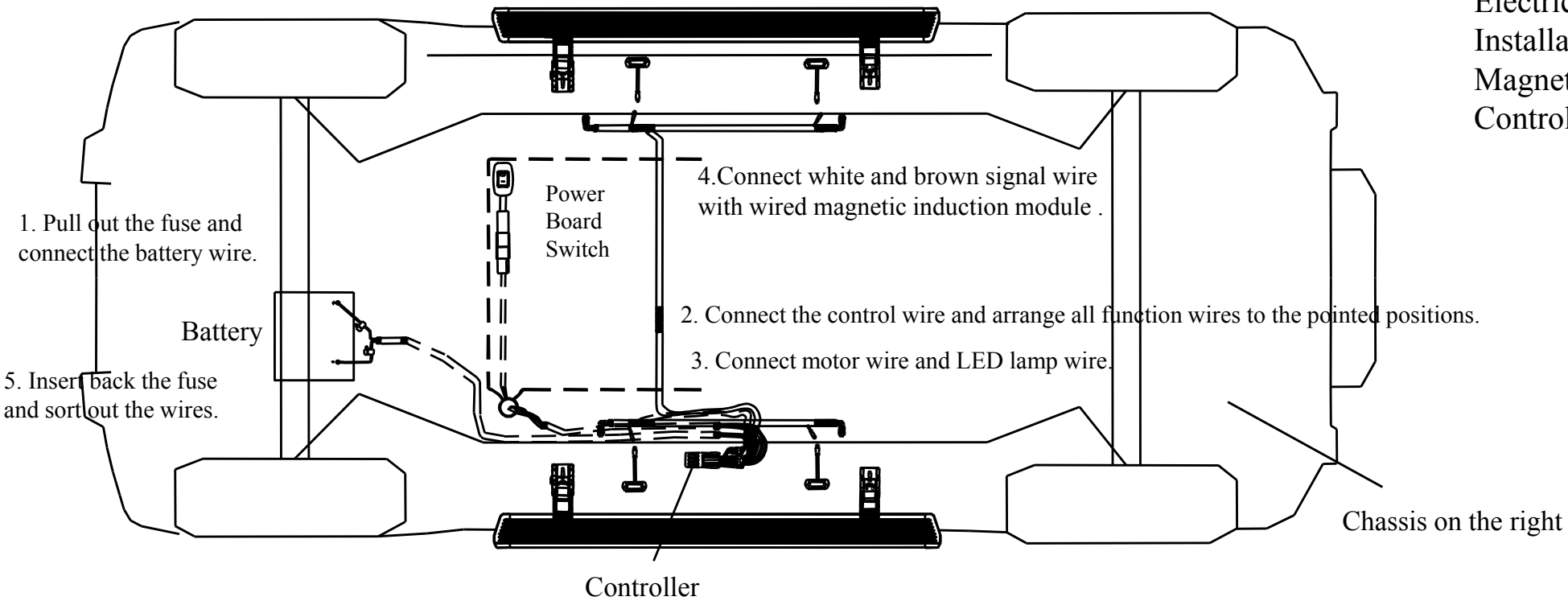
Step 3: As shown in the picture ,install the motor protective bracket right. Screw the M12×35 hexagon head bolt (with larger washer grade A and spring washer ) into the tension block in the step 2. Then adjust to an appropriate position and tighten the bolt (Tighten torque is 60 Nm).

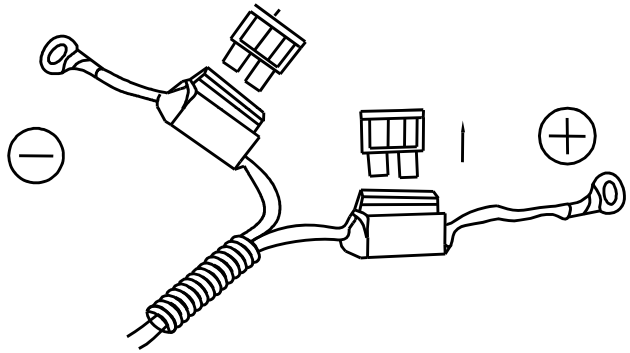





Step 4:As shown in the picture, tighten socket cap screw to connect board and motor linkage (Tighten torque is 12Nm). Finally ,tighten the bolts in step 1(Tighten torque is 35Nm).

Electric Installation of Magnetic Control



Step 1: Find out the control input wire and pull out the fuse (ensuring circuit safety during installation) and connect the positive and negative pole of wire harness to vehicle battery respectively.
**Note: Battery wire can not be modified privately.**

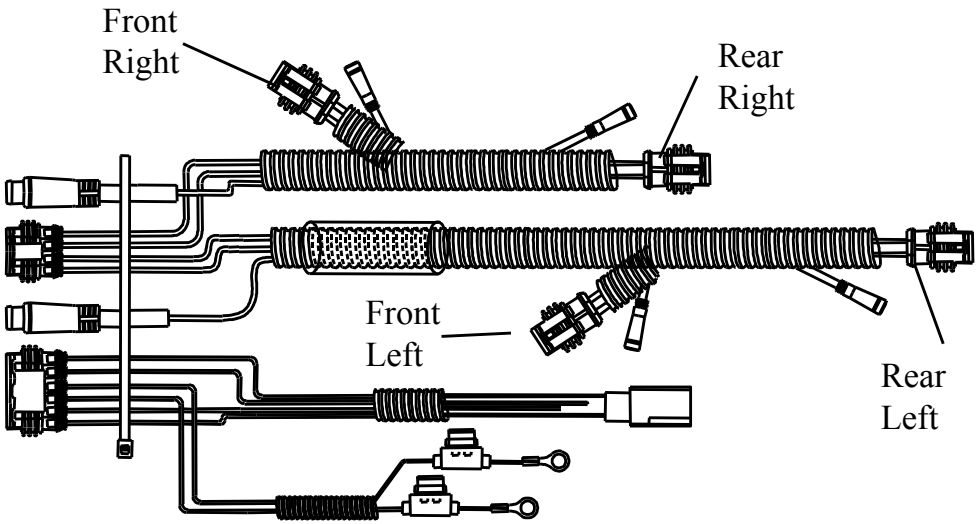
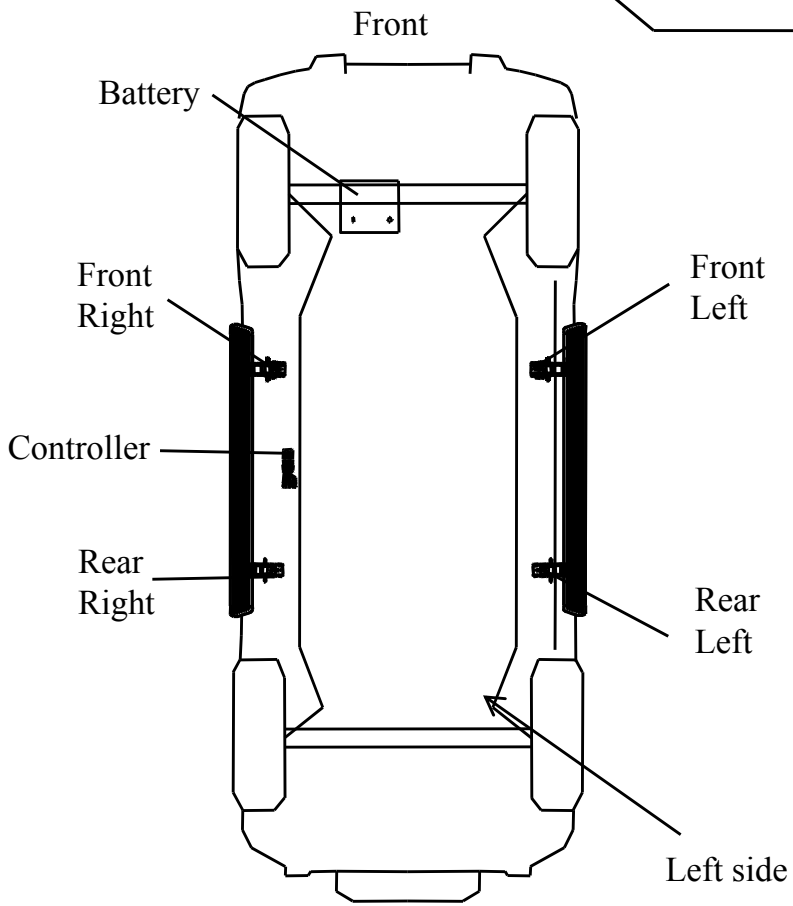


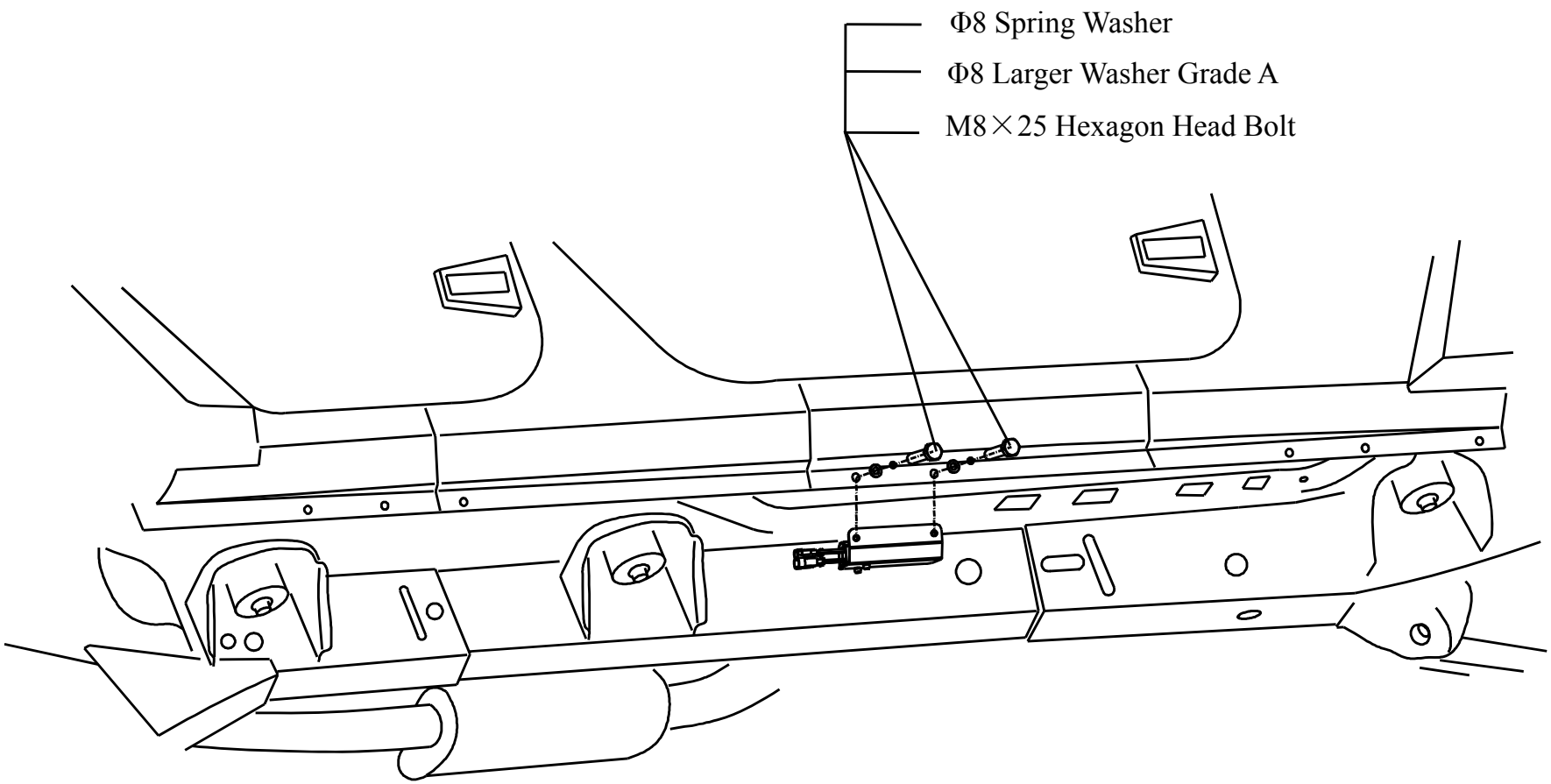

Figure 1



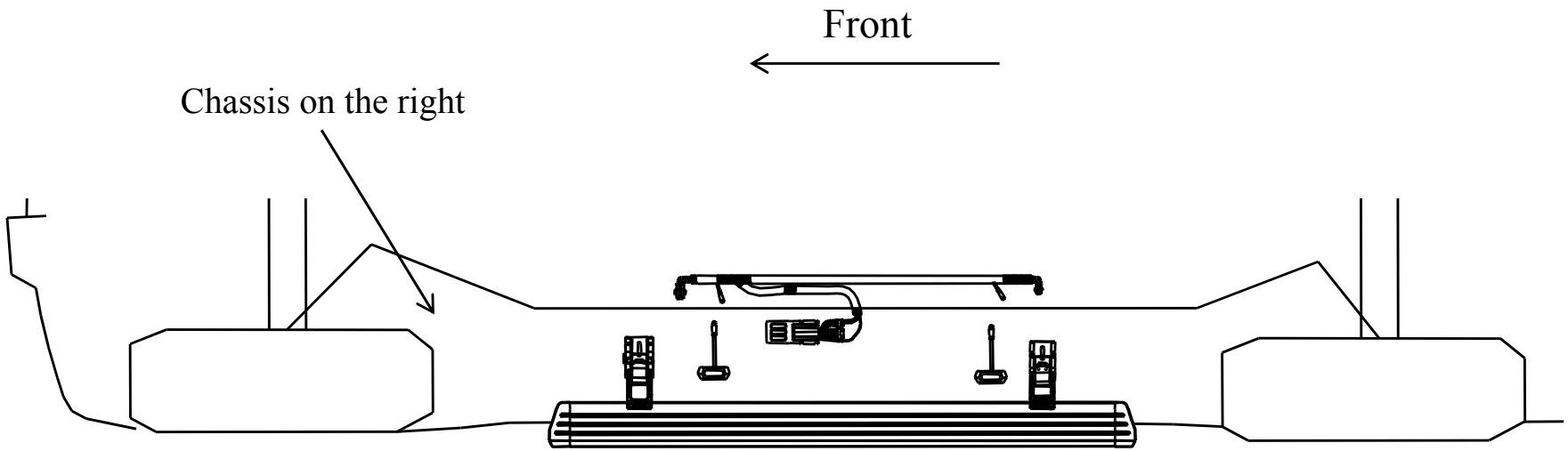

（upward view）

Figure 2

Figure 1 is the wire harness diagram and figure 2 is the installation diagram.
When install the wire harness, make sure the four connectors are connected with the four motor linkages by "front left，rear left，front right and rear right".




Step 2: Install the controller assembly, tighten bolts (Tighten torque is 35Nm).




Step 3：The arrangement of motor wire and LED lamp wire: Arrange the motor connection wire along the beam as shown in the picture, the motor wire plug extends to motors of linkage. At least , adjust the wire harness to make sure it is tidy and beautiful.
The other side uses the same way for installation.

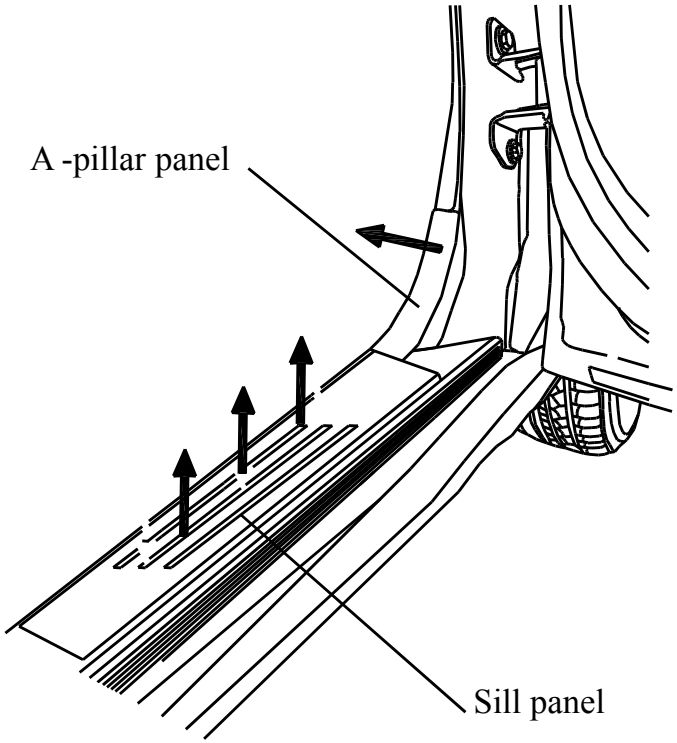



Figure 1

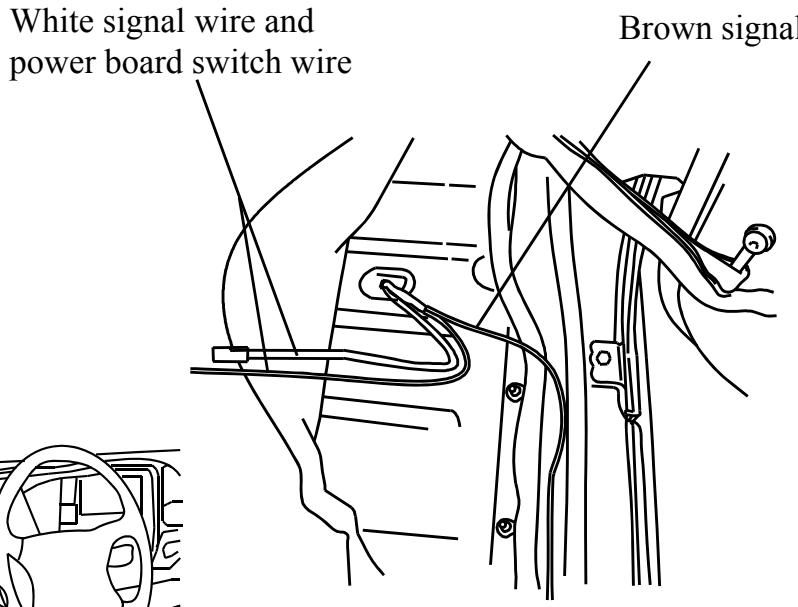



Figure 2

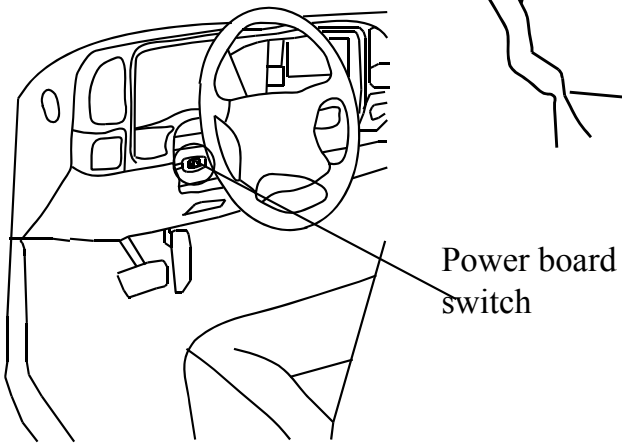
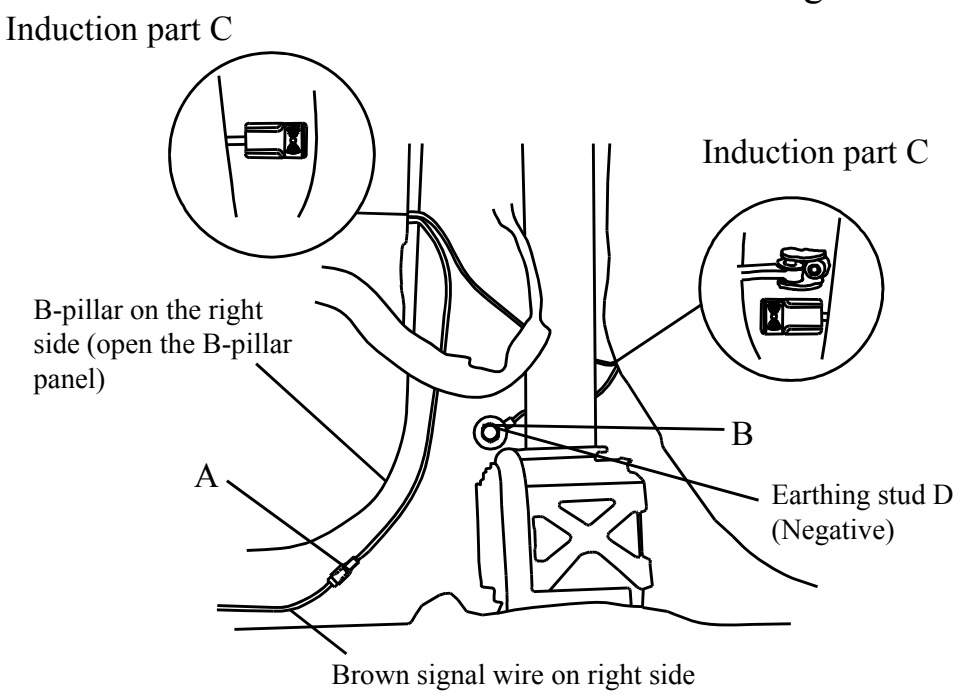


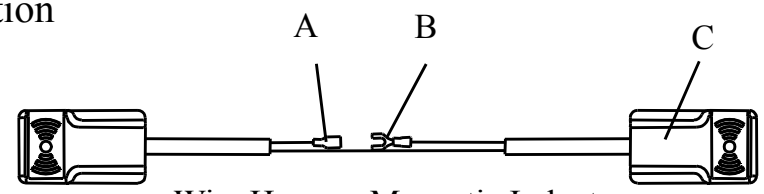

Figure 3

Step 4: Connection of signal wire: Pry the sill panel and A-pillar panel in figure 1. Pull the brown signal wire into the vehicle through the rubber grommet of chassis on the right side in figure 2. Then the white signal wire extends to the left side of the vehicle under the carpet, and stick the power board switch to the left side under the steering wheel in figure 3.

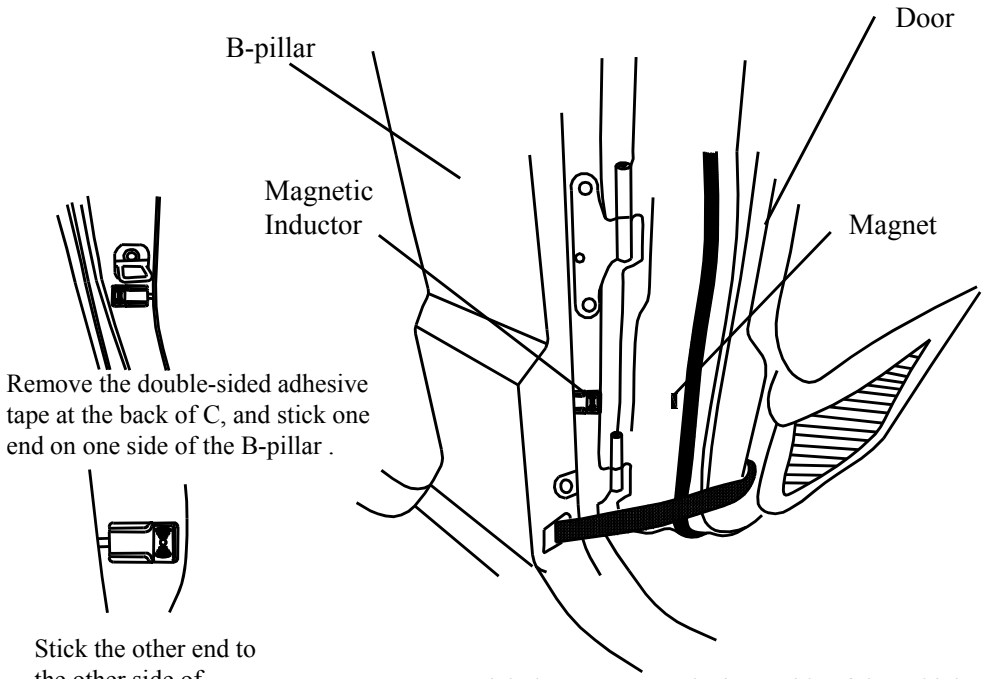
## Magnetic Inductor Installation

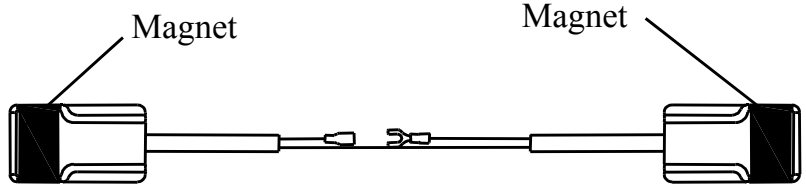



Step 5: Open the B-pillar panel on the right side of the vehicle door, expose the above part (as shown above), connect the brown signal wire to female insulated terminal A, loosen the earthing stud D (ensure there is no oil paint interface of stud and B-pillar), connect fork type terminal B to the earthing stud , and then tighten the earthing stud. Stick the induction part C to the both side of B-pillar, stick the magnet on the inside of vehicle door which is corresponding with induction part C. (The double-sided adhesive tape will be thicker on magnet because of the large gap of rear vehicle door.) The connection of white signal cable and cable harness induction on the left side are same as the installation of the right side.

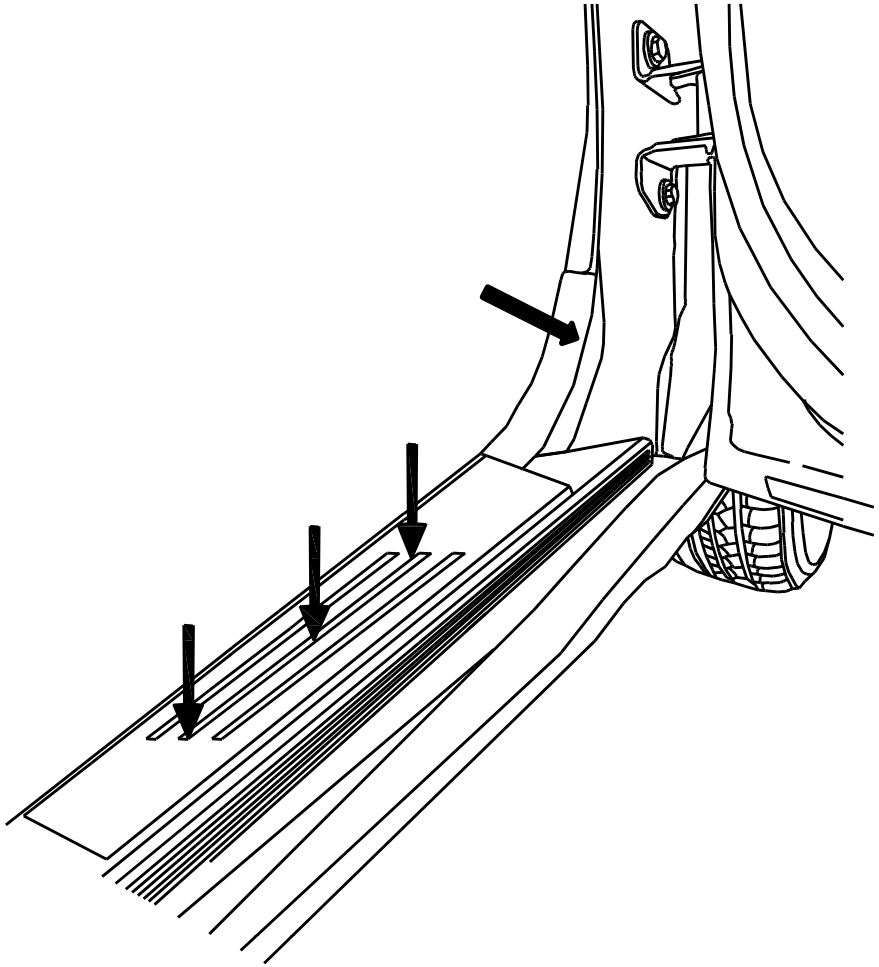



Wire Harness Magnetic Inductor

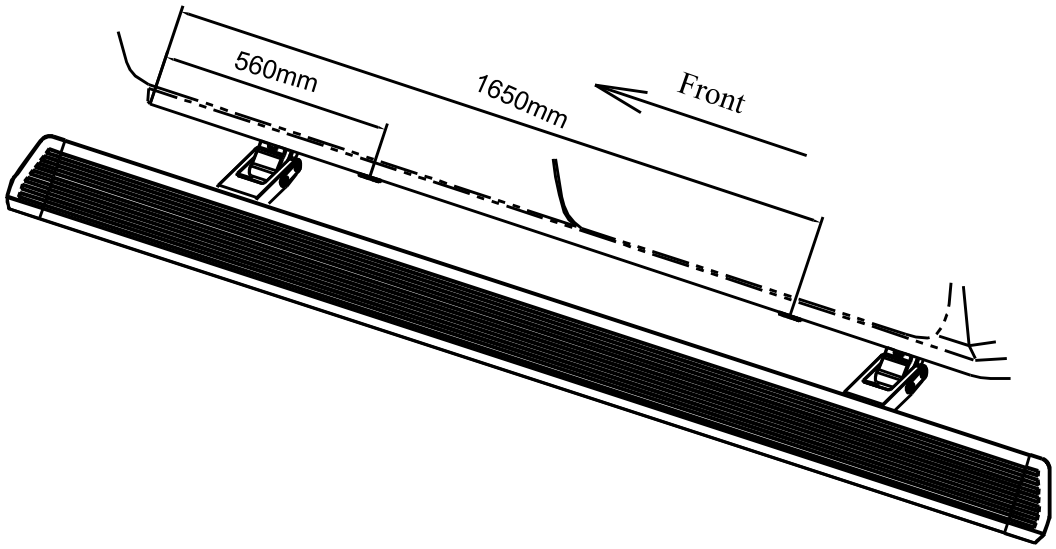


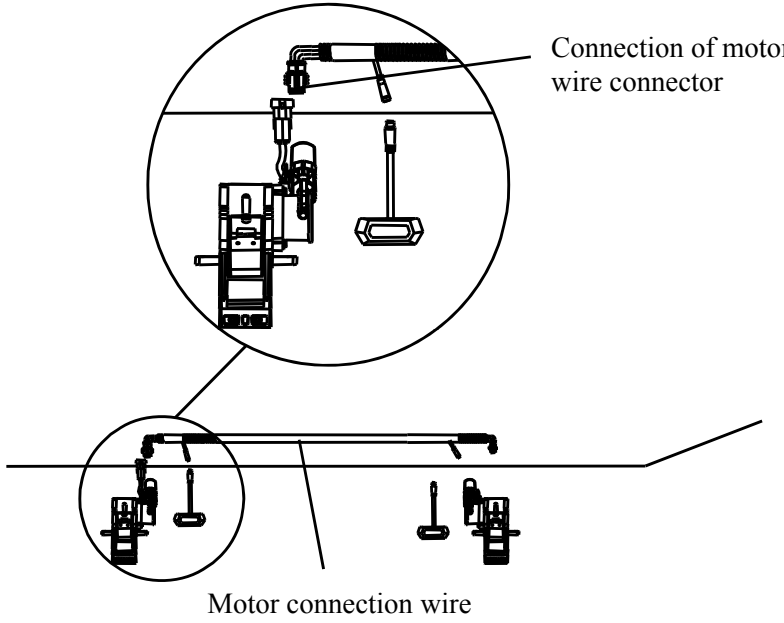

Instruction: The magnet position after closing the door is shown as above picture.



Step 6：Sort out the wire harness and close the panels. The installation of white signal wire on the left side is same with the right side .

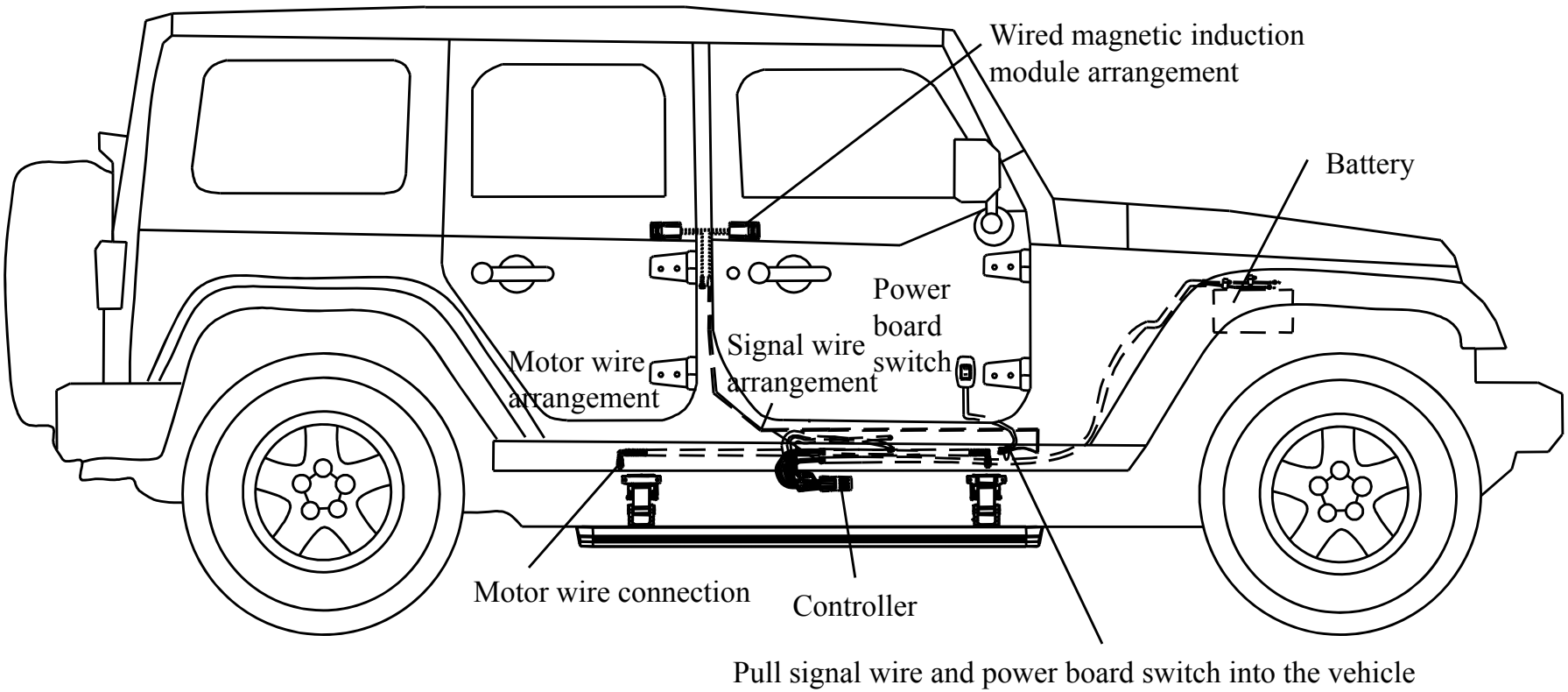



Step 7: Installation of LED lamp : Tear off the double-sided adhesive tape behind the LED lamp and stick it to the thin wall blow the apron. The distance from designated pasting position of front and rear LED lamp to front door line of front door is shown as the picture (The distance of the front lamp is 560mm, and the rear lamp is 1650mm).




Step 8: Installation of motor wire: Connect the connector of motor connection wire with control input wire and arrange the wire harness along with the vehicle beam . At the same time, notice that the connectors of the same color wire should be connected to each other. Connect motor connector with the connector of motor connection wire. Then fasten the wire harness on the vehicle beam by wire tie to make the wire harness neat. Same wire installation is for the other side.

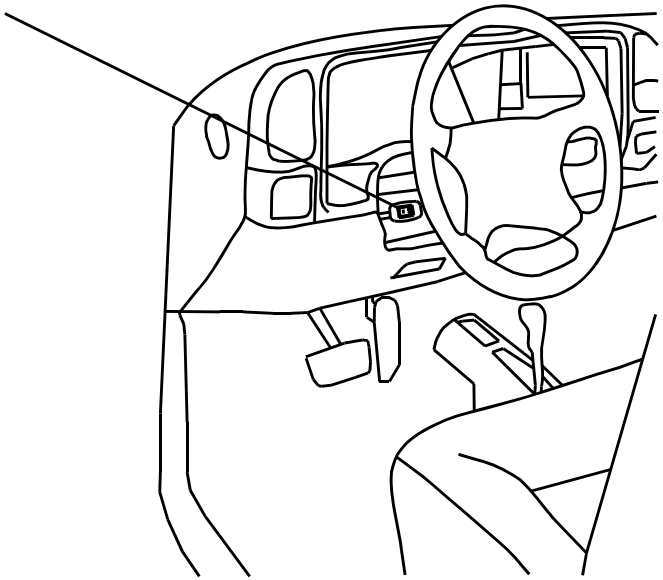
## Summary of Electric Part

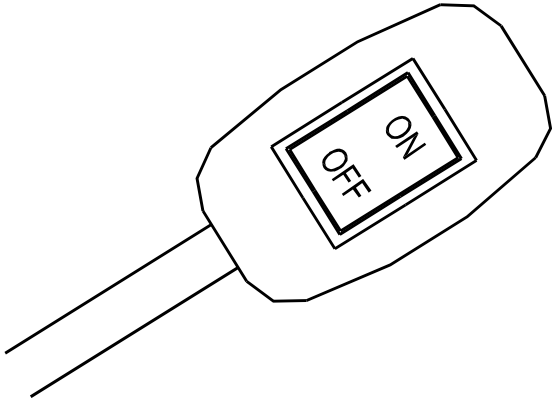



Step9: Check out the power board switch of controller to make sure it is off. Insert back the fuse , arrange the wire harness in order. Check if all the wires are connected well and test if the power board can work normally . If it can work normally ,the board installation is completed. (If it can not work normally , please check the completeness of installation of each part.)

## Instructions of Power Board Switch

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.

| 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 screw's 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 burns 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 with our after sale service center. |
| | Mechanics Malfunction | An object is blocking the board. |
| | | The two installation surfaces are not at the same level. |

Note: In the using process , you may meet some other unknown trouble. Please contact us timely to feedback the problems , we will solve them for you as soon as possible. Thank you!

# T-MAX Product Warranty Instructions

Thank you very much for choosing our product!

I Maintenance Instruction

1、During warranty period, T-MAX provides free maintenance for any malfunction related to the manufacturer. Warranty period lasts 24 months or 5 kilo in 2 years after sale. For individual related faults, T-MAX provides paid maintenance.

2、T-MAX promises to provide lifetime maintenance for Way Past Warranty and only charges for necessary material and labor. The charging standard refers to the ATM fee scale of local T-MAX terminal service provider.

3、For all replaced parts, T-MAX ensures to provide maintenance within 12 months after the replacement.

4、The ownership of the old parts from the replacement belongs to T-MAX（Hangzhou） Technology Co., Ltd.

5、Within the limit of law, the interpretation of warranty policy belongs to T-MAX（Hangzhou）Technology Co., Ltd.

II Situations below will not offer free warranty:

1、No warranty certificate；

2、Fault caused by customer's misusing or Incorrect installation

3、Fault caused by none professional maintenance staff's disassembly

4、Fault caused by force majeure.

5、Fault, scratch and torn due to movement or falling

6、Fault caused by improper maintenance or misusing

III Precautions：

1、In the case of extreme off-road，electric pedal is not recommended to avoid the damage of the pedal;

2、After extreme off-road，start maintenance for electric pedal to protect the performance and the longevity of the pedal;

3、Electrical parts: Check the control lines in T-MAX Terminal Services branch regularly;

4、Mechanical parts: Pedal and pedal components should be cleaned up promptly when sediment appears;

5、Power board should be using frequently. The idle time should not exceed three months;

6、Power board need maintenance regularly in T-MAX terminal service branch;

7、Forbidding high temperature when using the power board;
8、The heads of both sides of the single pedal are made of plastic. They are pedal's exterior decorating parts. Do not board;
9、Do not put thick mats or other debris on power board to avoid the danger of wrong stripping on the pedal;
10、After initial installation, please pay attention to check for looseness. Tighten screws if necessary. Usually after 3-5 times retractable rear door switch pedal in place, the power board could be fixed finally and checked regularly;
11、How to exclude unexpected failures of power board?
The board couldn't activate when doors open and close
① Electrical fault: the connection point and line failure, the gate control trigger line failure, controller failure, the electrical motor cable failure, motor failure; send to local T-MAX Terminal Services branch to detect and repair.
② Mechanical faults: a foreign object obstruction pedal movement, the installation of two pedal mounting surfaces is not at the same level; send to local T-MAX Terminal Services branch to detect and repair. Pedal when the door is reflected insensitively。
Gate control signal is error. Send to local T-MAX Terminal Services branch to check the wiring
according to the control wiring diagram.

## Warranty card

| | | | |
|---|---|---|---|
| **Product Type** | | **User name** | |
| **Product Name** | | **Tel** | |
| **Factory number** | | **Address** | |
| **Date of purchase** | | | |
| **Shop of purchase** | | | |

## Maintenance records

| Date | Fault Descriptions | Fault Reasons | Result | Note |
|---|---|---|---|---|
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**Produced by**

**T-MAX(HANGZHOU)TECHNOLOGY CO.,LTD**