PB-TA-009

CLEARVIEW® POWER BOARDS ELECTRIC SIDE STEPS



TOYOTA LAND CRUISER 76 SERIES

1984 - CURRENT

POWER BOARDS INSTALLATION GUIDE

Version 2.3

Thank you for choosing Clearview Accessories®

Clearview Accessories began in 2006, as a family-run business owned by entrepreneur, Mike Cowan and his son-in-law, Jay Praag. In the years that followed, Mike and Jay turned their small family business with three full-time employees, into one of Australia's most respected 4WD and Touring Brands.

With a strong passion for the automotive industry, quality design and discipline in professional workmanship, our trust is built within our values of creating high-quality ADR-compliant designs.

Since our inception, our unrelenting commitment to creating solutions found nowhere else, has helped us establish our position as a leader in manufacturing unique 4WD and touring accessories. With an entrenched enterprising spirit, we are dedicated to creating value for and delighting our customers.

From humble beginnings, Clearview Accessories has grown and today manufactures a range of unique, quality products for your next off-road adventure!

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Due to Clearview's Continuous Improvement Program, information may change without notice. Clearview takes no responsibility for the result of incorrect use of these installation instructions.

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Kit Contents

DESCRIPTION	QUANTITY	PARTS SUPPLIED
Front Bracket Assembly	1 x Right (RF) 1 x Left (LF)	
Rear Middle Bracket Assembly	1 x Right (RM) 1 x Left (LM)	
Rear Bracket Assembly	1 x Right (RR) 1 x Left (LR)	
Socket/Hex Head Bolt	16 x (M6 x 35mm) Hex Head	
Spring Washer	16 x M6 (Black)	
Flat Washer	16X - M6 Washer OD - 16mm	
U Shape Packing Washer	10	
Running Board With LED	2	
Cable Tie	20	
Control Unit (ECU)	1	
Wire Harness Set	1	
Plastic Wire Feeder	1	

NB: *The following instruction is for installation of the Right-Hand Side Power Board. Follow same instruction for installation of the Left-Hand Side Power Board.*

CAUTION **WARNING**

- Read through the fitting instructions before installation of Clearview Accessories.
- Always install the accessory following the fitting instructions. Failure to do so may cause damage to the vehicle or the accessory.
- Ensure all recyclable discarded vehicle accessory components and packaging are recycled following local recycling regulations.
- Safely store and protect any removed vehicle components.
- Remove all metal swarf and dust from all vehicle surfaces if the surface is used for accessory installation.





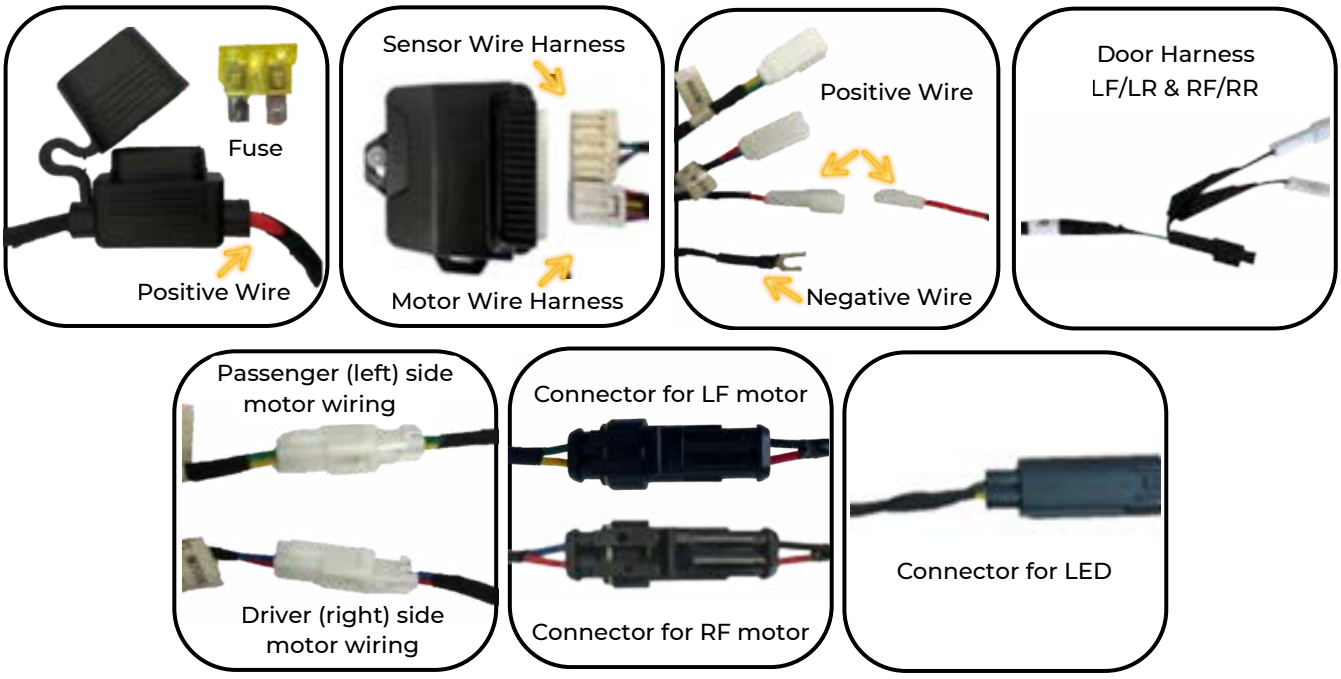
IMPORTANT
Clearview recommends installation of the Power Boards to be performed by a professional as installation will require vehicle trim removal, wire routing and electrical work. The installation should take approximately 3-4 hours. Incorrect installation may cause damage to your vehicle and possible personal injuries.



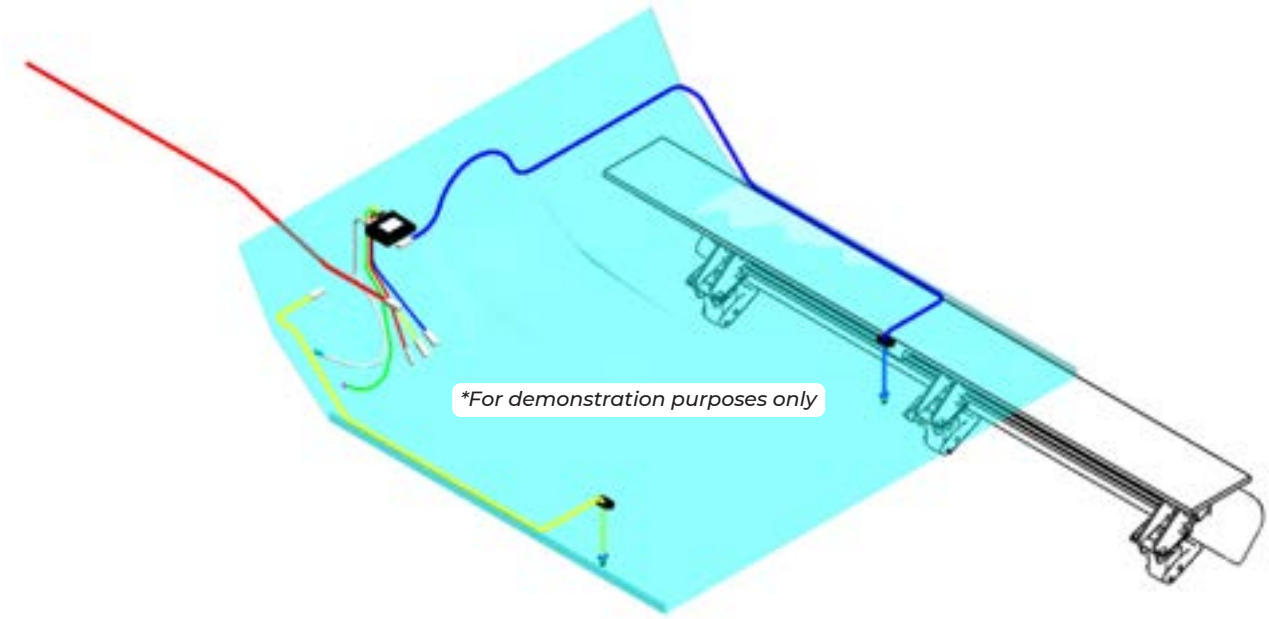
NB: *The following instruction is for installation of the Right-Hand Side Power Board. Follow same instruction for installation of the Left-Hand Side Power Board.*

IMPORTANT
Clearview recommends this installation to be completed by a professional. Incorrect installation may cause damage to your vehicle and possible personal injuries.

Control unit and wiring reference



Position of Control Unit and Wiring Harness Reference



NB: *The following instruction is for installation of the Right-Hand Side Power Board. Follow same instruction for installation of the Left-Hand Side Power Board.*

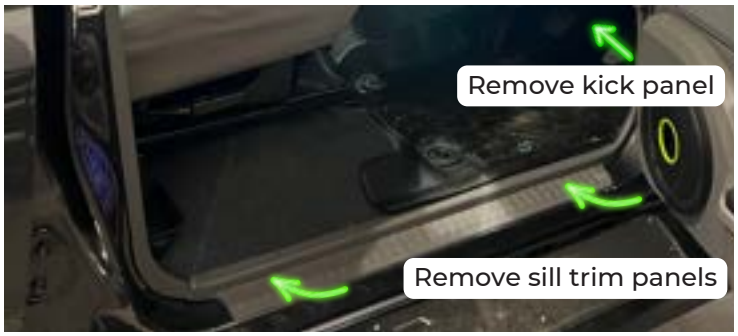
IMPORTANT
Clearview recommends this installation to be completed by a professional. Incorrect installation may cause damage to your vehicle and possible personal injuries.

Step 1

Removal of interior trim and routing of wiring

1.1 Remove Driver-side interior trim underneath in footwell area:

- Un-clip the door sill panels and the kick panel trim.
- Remove driver's rear passenger door sill panel



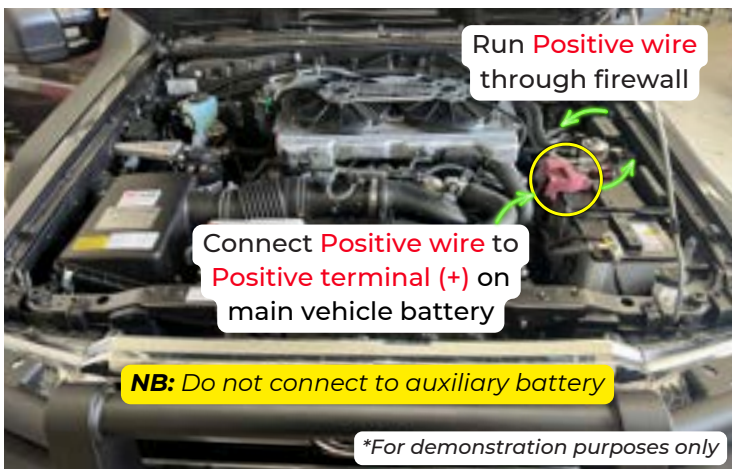
REPEAT for Passenger Left-hand side

1.2 Remove the fuse from POSITIVE (Red) wire supplied, then connect wire to vehicle main battery POSITIVE terminal (+) located in the engine bay (not the auxiliary battery). Ensure connection is secure.



Feed POSITIVE wire through vehicle firewall into the Passenger's (Left) side of vehicle cabin.

NB: Plastic wire feeder may be required for this step and subsequent steps.

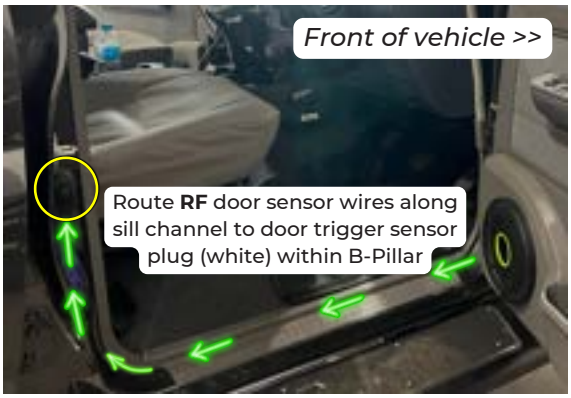


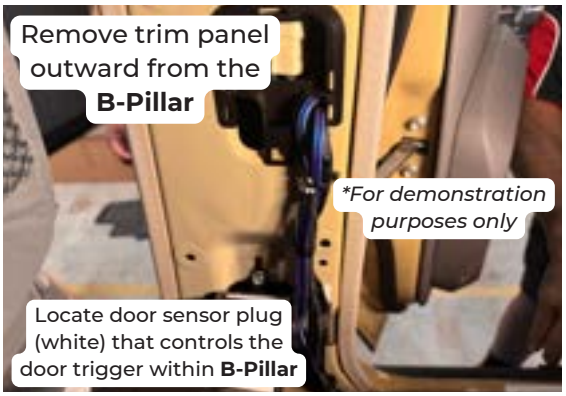
1.3 Route **RF** (Right Front) & **RR** (Right Rear) door sensor wire connectors under the vehicle dash using the plastic wire feeder and bring them across to the Driver's (Right) side.



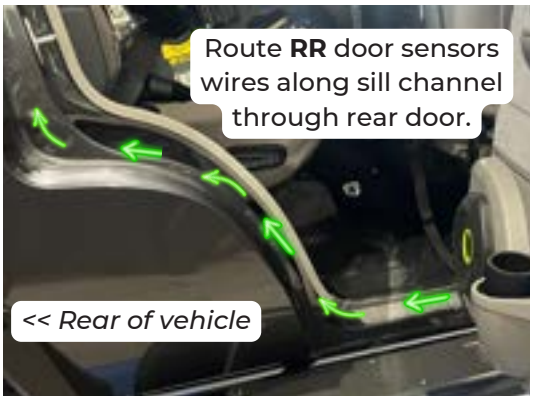


1.4 Route **RF** (Right Front) door sensor wires along the sill channel to each connector behind the B-Pillar.

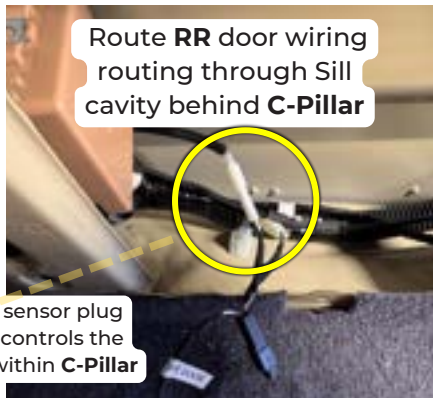




1.5 Route **RR** (Right Rear) door sensor wires along the sill channel to each connector behind the C pillar.







REPEAT above steps for LF (Left Front) and LR (Left Rear) door sensor wires.

1.6 Reconnect each door's wiring sensor connector and screw it back into its original position.





REPEAT for LF (Left Front) and LR (Left Rear) sensor connectors.

Step 2 Installation control unit and wiring

2.1 Layout ECU and Wire Harness set in Passenger footwell area.

- Connect the motor wire harness (small white power plug) and sensor wire harness (large white plug) to the control unit.
- Once connectors are plugged in, leave the control unit in Passenger's side (Left) floor area, tidy up at the end, this will help with ensuring enough slack/length in the wiring for the subsequent steps.

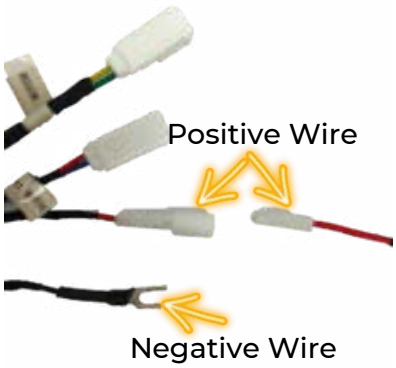


IMPORTANT
Clearview recommends this installation to be completed by a professional. Incorrect installation may cause damage to your vehicle and possible personal injuries.

NB: The following instruction is for installation of the Right-Hand Side Power Board. Follow same instruction for installation of the Left-Hand Side Power Board.

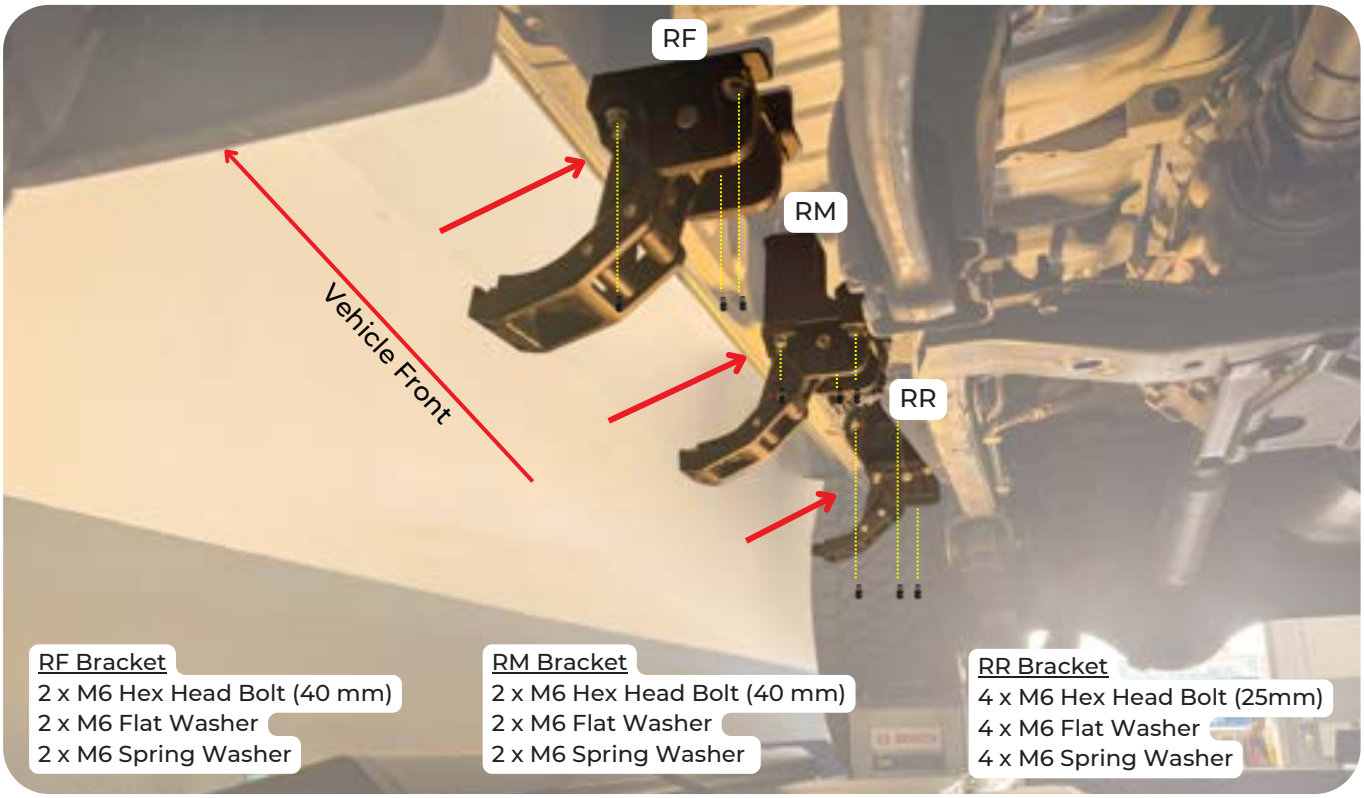
2.2 Connect the **NEGATIVE (Black) wire** from the motor wire harness to a ground point on the Passenger's side of the chassis, near where the control unit is to be mounted.

- Connect the POSITIVE (Red) wire from **Step 1.2** to the corresponding connector found on the motor wire harness.



Step 3

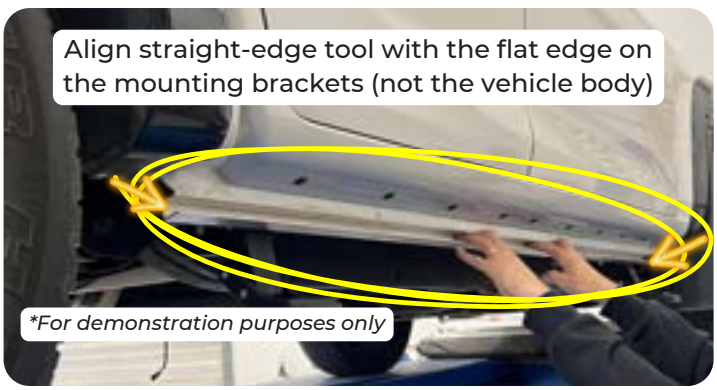
3.1 Mount **RF** (Right Front), **RM** (Right Middle) & **RR** (Right Rear) brackets to the underbody of the vehicle sill panel using the supplied hardware (nuts, bolts and washers, etc.)



IMPORTANT

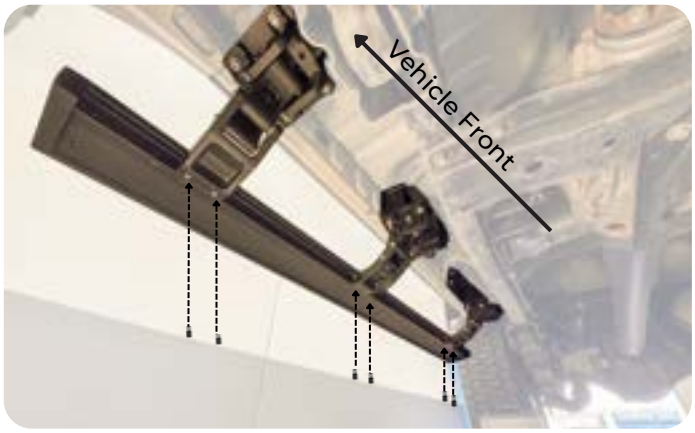
Clearview recommends a straight-edge tool to be used when mounting the top mounting brackets.

- This provides a guide to keeping them level and straight alongside the vehicle.
- Ensure the straight-edge tool is aligned with the flat edge on the mounting brackets only, not touching the body and/or tyres etc.



3.2 Ensure the running board is correctly located on the bracket (running board can slide on square groove of lower arm to the left or right direction) and that it will not make contact with the sill of the vehicle.

- Use M6 bolts and M6 spring washers provided, mount running board to bracket. Ensure not to cross-thread when locating/screwing in position.
- Do not tighten bolts fully, as you may need to adjust the position of the running board later in Step 5.



3.3 Adjust remaining hardware accordingly, where required, so all mounting brackets remain level and straight along the vehicle. This is to ensure the boards can move freely and work as they should.

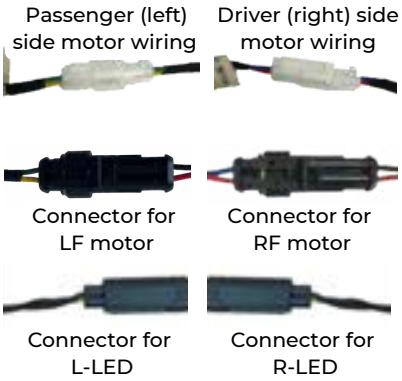
REPEAT Steps 3.1 to 3.3 when mounting the **LF** (Left Front) **LM** (Left Middle) & **LR** (Left Rear) Mounting Brackets and running boards to the Left-Hand Side of the vehicle.



HANDY TIP: In some instances, it may help to slightly loosen the hardware demonstrated in **Step 3.2** to assist with alignment of the boards to their desired position.

Step 4 Connecting Power to the motor brackets

4.1 Connect motor wires to corresponding connectors on the motor wire harness.



- Passenger side wires are: Green / Yellow, and Driver side wires are: Red / Blue

- Route **RF (Right-Front)** Driver-side motor wire and **R-LED** connector under the vehicle dash and bring it across to the driver-side footwell, then route both through the rubber grommet in vehicle floor and connect wires to the motor and LED connector on the **RF** Bracket Assembly.

- Route **LF (Left-Front)** Passenger-side motor wire and **L-LED** connector through the rubber grommet in vehicle floor and connect wires to motor and LED connector on the **LF** Bracket Assembly.

NB: Holes for routing can be found under floor carpet/vinyl depending on vehicle variant.



- *Remember to place grommets back into floor panel of vehicle and feed the end of the Wiring Looms with small plug through the hole in the grommet.*

HANDY TIP: When removing the rubber grommets, you may either cut a single hole or a cross/+ pattern in each grommet, sized to allow the plug on the wiring looms to pass through.



4.2 Re-insert fuse into positive wire and test motor by opening and closing vehicle doors, or by using the door switch button.

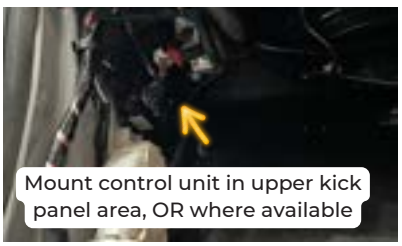


4.3 Tidy up all electrical wires and cable tie wires to the chassis where possible to minimise risks of wires getting caught on objects.



- You may also apply electrical tape/heat shrink/conduit to wiring and connectors to provide additional protection.

4.4 Mount control unit in the Passenger side upper kick panel area, OR where available should there be limited space or other accessories in the way etc.



***NB:** The control unit should not be placed in the vehicle engine bay, as exposure to heat and moisture may cause damage to the unit.*

Step 5 Installing running board

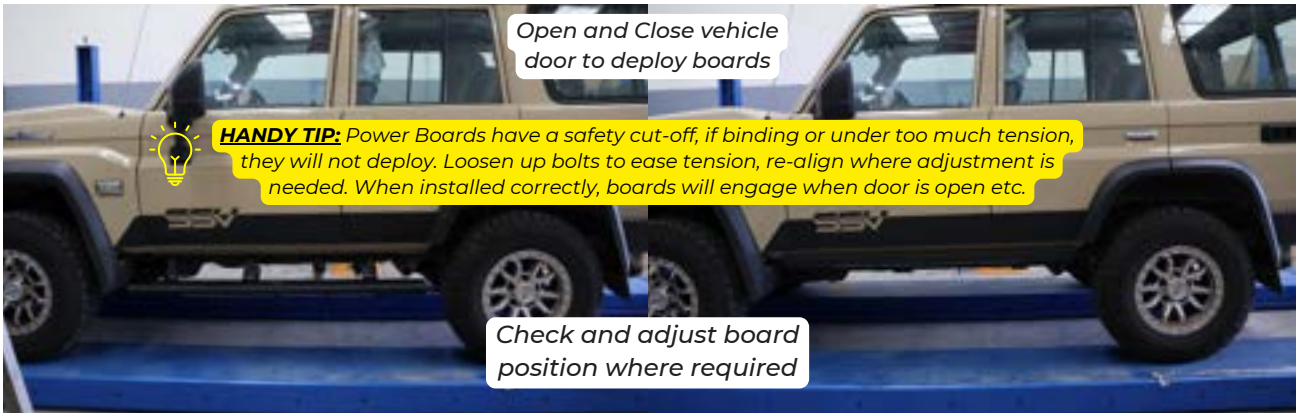
5.1 Open vehicle door to deploy the motor bracket. Use M6 bolts and M6 spring washers provided, mount running board to bracket. Ensure not to cross-thread when locating/screwing in position.



- Do not tighten bolts fully, as you may need to adjust the position of the running board.

5.2 Open and close vehicle door to check position of power board.

- Adjust position of brackets, as well as running board if necessary and only tighten all bolts (M6 & M8 bolts) once position is finalised.



5.3 In some cases, the 'U Shape' packing washers may need to be placed in between the front side of the bracket assembly and vehicle bracket mounting points to position the Clearview Power Boards correctly.

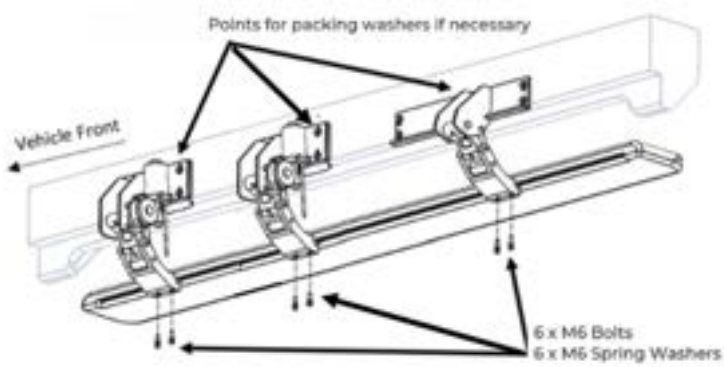


- In these few instances, the M8 bolts used to hold the mounting bracket to vehicle will need to be loosened to insert the 'U Shape' packing washer.

5.4 Fix LED cable in board to the side of motor brackets with plastic clips provided, then plug LED to corresponding connector plug (if you haven't already done so in Steps 2 OR 4).

5.5 Cycle the board 2-3 times to allow idler/motor bracket to settle.

- Once the running board is correctly positioned, tighten all bolts.



NB: If Power Boards are not working as they should, please go back and REPEAT ALL STEPS to help troubleshoot or help pinpoint the fault/cause/issue etc.

Unscrew and Screw the M6 Bolts from the board which will be pre-assembled in the block

Normal Operation: Clearview Power Boards will deploy automatically when vehicle door is opened and retract when door is closed.

Manual Operation: On occasions, you may want the Clearview Power Boards to be deployed even when vehicle door is closed to access vehicle roof. To do this, open vehicle door first so Clearview Power Boards are deployed. Step your foot on the running board and close your vehicle door at the same time, the Clearview Power Board should remain deployed. To reset, open and close your vehicle door again.

Reset Clearview Power Boards: Clearview Power Boards are equipped with a safety cut-off feature in the case where normal operation is obstructed. To resume operation, simply clear the obstruction, open and close vehicle door. Although Clearview Power Boards are equipped with the safety cut-off feature, we strongly advise to keep hands and feet away from moving components when Power Boards are in operation.



Caring for your Clearview Power Boards

Whilst the motors don't require maintenance, regular routine cleaning will help ensure the continued smooth operation of your Clearview Power Boards.

- Using a garden hose, rinse away any loose dirt and grime that has built up on the Power Boards, their arms, and the areas around them.
- Fill a bucket with warm water and mild car wash, and gently clean the Power Boards with a soft towel. Any hard-to-remove substances can be spot-cleaned with a road grime & tar remover, ensuring to re-wash that area afterwards. Rinse well with clean water afterwards.
- Dry the Power Boards and their motorised arms with another soft towel.
- If your powder-coated Power Board arms are losing their shine, you can apply a thin layer of high-grade non-abrasive car wax after they've been cleaned. Wipe all the wax off once it's dried and the powder coat should look like new again! Use a car wax brand that contains a UV blocker or UV inhibitors. Do not use compound-type waxes as they contain abrasives that can harm the powder coating.
- Avoid detailing sprays to give a high shine on the tread or step as it can make it slippery and unsafe to stand on.
- Stay away from harsh chemicals as they can degrade the protective finish or discolour it.
- Stay within the load-bearing limits of your Power Boards. If more than one person stands on a power board and exceeds its capacity, it could bend the board or break the arms.

Maintaining Powder Coated Surfaces

Whilst powder coating is a lot more durable and longer lasting than paint, it can still be affected by dust, dirt, salt water, constant exposure to the weather, and collisions. Harsh chemicals and solvents can also damage the powder coating. Once damaged, the surface is a lot more vulnerable to fading and failure.

Whilst the powder coat acts as a protective "shell" over the mirror base, it isn't damage-proof. Chips or scratches can let moisture, dirt and/or salt particles in, harming the surface underneath and causing the powder coat to chip or crack. Once it does, its shell can be picked away and peeled off. Ongoing maintenance is important to increase the life of the finish of your powder-coated surfaces.

With the right maintenance, you can increase the life of the finish of your powder-coated surfaces:

- We recommend regularly inspecting your powder coat and wiping any dust off with a soft cloth. Clean, good-quality microfibre cloths are recommended.
- We recommend regular washing with highly diluted mild soap and water. Use a soft towel to gently clean. Rinse and dry with another soft towel.

It's important in coastal areas to regularly clean any powder-coated surfaces as salt will stick to the coating, dulling its appearance. This can leave your powder-coated surface looking chalky.
We don't recommend paint touch-ups to cover imperfections as paint won't adhere to powder-coated surfaces. A local professional can quote to repair the powder coating.

Pressure Washing Warning

When using a power washer on your vehicle – please take care not to subject the Power Board to the pressured water spray. High-pressure water washing of the Power Boards can affect the electrical operation by forcing water into electrical connections. Although the Power Board components are sealed, they are not designed to handle high-pressure water directly. Damage resulting from water ingress from high-pressure devices is not covered under warranty.

Can I perform the installation myself?
We recommend installation to be completed by professionals, as there is electrical wiring involved, as well as removal of vehicle trims.

What is the fitting time?
Allow approximately 3-4 hours. However, this time estimate will be dependent on experience.

Can I install Power Boards with my current side step?
No, any existing side steps will need to be removed in order to install the Power Boards.

Where does your Power Board mount to?
The Power Boards mount to the cabin underbody. Usually around the inner surface of the vehicle cabin underbody. It does not mount to the chassis rail directly like many other side steps.

Can I modify the boards to suit a vehicle?
No, the Power Boards are designed to be vehicle-specific. The brackets are designed to suit the underbody shape of individual vehicles, modifying them will affect the fitment and geometry of the brackets. Controller units are also vehicle-specific, so they will not work if plugged into an incorrect vehicle.

Do I need to cut wires in my vehicle to install the Power Boards?
The Power Boards include suitable plugs for the vehicle, so no wires need to be cut.

How much weight can the Power Board support?
The boards are rated to 300kg on each side.

I already have something plugged into my OBD-II port, where am I going to plug the Power Board harness to if it uses the OBD-II port?
Power Boards that obtain signal from vehicle OBD-II port will come with a harness that has a piggyback plug, so when the Power Board is connected into the OBD-II port, there will still be a free OBD-II connector for ScanGauge or other equipment.

How does your Power Board work?
The Power Boards obtain door opening and closing signal from the vehicle, which is sent to a controller unit. The unit then sends a signal to the motors, which then opens and retracts the side boards.

How does your Power Board obtain signal to deploy side boards?
The Power Boards obtain door signals in one of several ways, depending on the vehicle model. It can obtain a signal from one of the following:

- OBD-II Port (On board diagnostics)
- Steering column connector
- Door switch
- Air conditioning controlling unit

Please refer to Power Boards model list to see where the boards obtain their signal from in specific vehicles.

Can I use the Power Boards as rock sliders when off-roading?
The Power Boards are not designed to be used as rock sliders, as this may damage the brackets/motors/boards and cause them to malfunction. The brackets and motors will also become catch points if they're used as rock sliders.

Are the motors and plugs waterproof for river crossing?
The motors are IP68-rated, meaning they are dustproof and safe for complete water immersion.

Clearview® Power Boards are designed and manufactured to the highest quality standards. We stand behind our Power Boards with a 12-month Manufacturer's Warranty.

Clearview Accessories® warranty applies to the original purchaser only. Please ensure that your receipt is kept in a safe place. A receipt will be required to make a warranty claim on any Clearview® product. If we determine that a Clearview® Power Board is defective in materials or workmanship during the Warranty, we will either repair or replace the product. Repair or replacement is solely at the discretion of Clearview Accessories®.

Please ensure that you fit the Clearview® products in accordance with the product information provided and all relevant vehicle safety and compliance laws; and use the Clearview® product for the purpose for which it was originally designed. This warranty does not apply to failure or damage caused by incorrect or faulty fitment, accidental or intentional damage, alteration, acts of nature, vandalism, collision, road hazards or adverse conditions, misuse, abuse or neglect of the Clearview® product, including improper repair or maintenance or failing to repair and maintain the product, failure of other products, operation of the product outside of its environmental or technical specifications, or repair or modification carried out by anyone other than Clearview Accessories®. No charges will be accepted for external labour or materials without prior advice or clearance from Clearview® claims team. Clearview Accessories® warranty does not cover any scratches or chips.

Clearview® Power Boards are designed to be vehicle-specific. When purchasing Clearview® Power Boards, carefully select your product according to ADR compliance laws and vehicle specifications. Clearview® Power Boards are not designed to be modified for convenient use on alternative vehicles. Alteration, modification, or manipulation of our products will void all warranty with Clearview Accessories®.

All claims under this warranty should be lodged through our website warranty section https://www.clearviewaccessories.com.au/about/warranty/ with the detail of the fault, proof of purchase, proof of identification and vehicle fitment details where relevant. If your claim is accepted for defects in material or workmanship Clearview® will, at its discretion, offer to repair, replace parts, or return and refund.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. In the event of a minor failure, the company reserves the right to choose to repair or replace the product.

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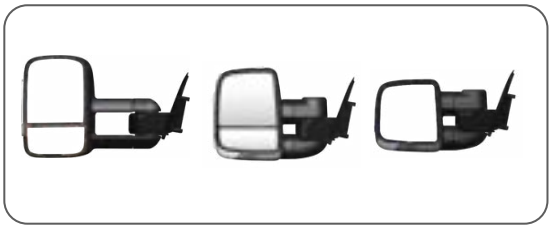
IEW
OWING MIRRORS
SSV

Towing Mirrors



Power Boards & Swing Boards



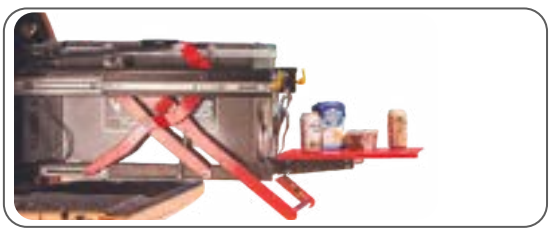
Rock Tamers



Tyre Spider



Easy Slides



Power Slides



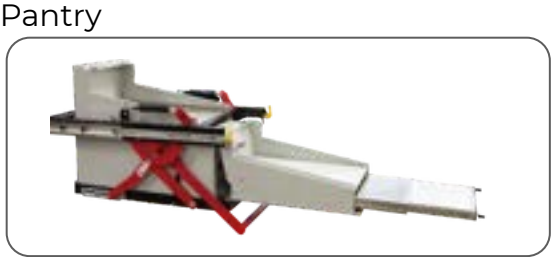
Expanda Slides



Fridge Cage



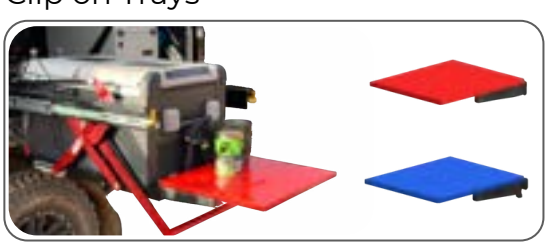
Pantry



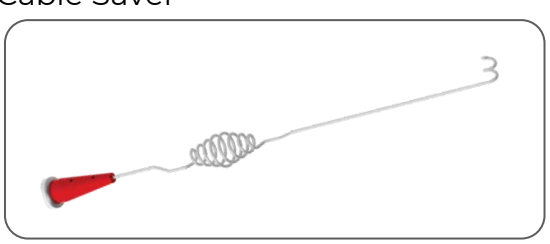
Cutlery Set



Clip on Trays



Cable Saver





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