

PRODUCT DETAILS:

Part Number:	QT1147L	Maximum Towing Braked:	750	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1800 mm	Maximum Static Ball Load:	75	kg
TBM/Lug Part Number:	21325			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other:	NO
Total Installation Time:	90 Mins.		
Bumper Cut Required:	Yes		

Note:

- RPA disable via infotainment system.



Electrical vehicles include a high voltage battery, which can lead to property damage and personal injury if handled incorrectly.

DO NOT unplug any orange high voltage cables unless the vehicles have been properly isolated by a high voltage trained technician. Serious injury or death may occur.

TRAILBOSS RECOMMENDS THAT INSTRUCTIONS ARE READ AND UNDERSTOOD COMPLETELY PRIOR TO FITMENT.

BEFORE YOU START:

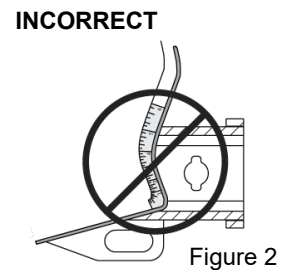
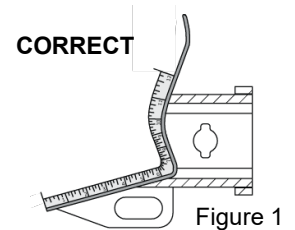
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

Bumper Cuts

Vehicle and bumper variations can and do occur during vehicle manufacture after initial towbar design. Fitment of towbar to vehicle and accuracy of bumper cut must be assessed prior to any bumper modifications made. Incorrect bumper cuts are not covered under Trailboss warranty.

NOTE: Bumper cuts need to be approached with care, refer to notes below.

- Bumper centreline – where the centreline of the bumper needs to be determined, the installer must assess centre point by measurement of bumper width or determining two symmetrical reference points to give centreline.
- Bumper edge – To assist with accurate bumper cut measurement, reference to the start of the bumper edge is now being commonly used.
 - Measure from bottom edge along bumper and around corner to the 70 mm point (Figure 1).
 - Do not measure from visible bumper front of corner, upwards (Figure 2).



Drilling

- For any required drilling during installation, ensure that the area is clear of fuel, electrical & other components that may be damaged.
- All holes drilled into metal body panels shall have all burrs & swarf removed then coated with a suitable rust preventative paint.

Bolts/Fasteners

- Ensure that all hardware is fastened to correct torque as specified in this fitting instruction.
- All fasteners supplied with this product are used to achieve a specified clamp loading. If replacement is required ensure that fasteners of the same grade and class are used.

NOTE: Achieving correct torque is critical to proper installation and responsibility of the installer. Towbar failures attributed to tension issues from over tightening or under tightening are not covered by Trailboss warranty.

Product Labels

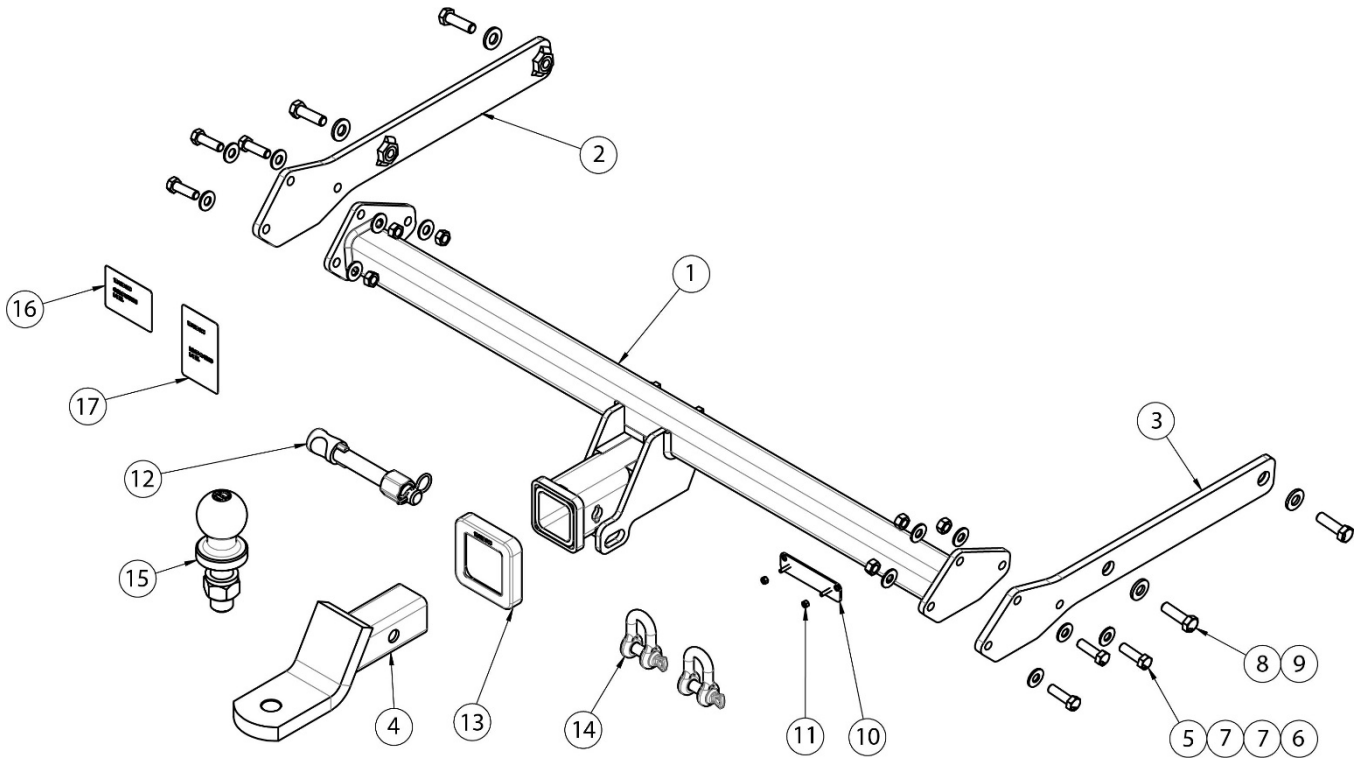
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

WARNING:

Do not, drill, cut, weld or otherwise modify the towbar.

FOR TOWING PURPOSES ONLY - This towbar is designed and tested by Trailboss to adhere to ADR 62/02 which provides only for the expected load demands of towing.

i TOWBAR ASSEMBLY DIAGRAM

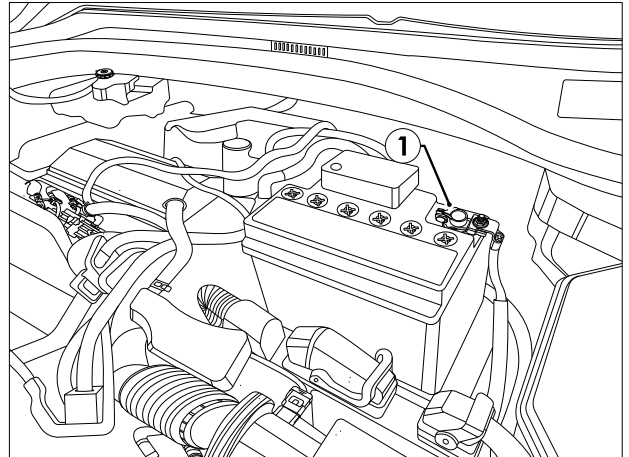


ITEM	DESCRIPTION	QTY
1	CROSSTUBE ASSEMBLY	1
2	SIDE ARM ASSEMBLY, LH	1
3	SIDE ARM ASSEMBLY, RH	1
4	TRAILER BALL MOUNT	1
5	BOLT HEX HD M10x35x1.5P GR10.9	6
6	NUT HEX HD M10x1.5P G10	6
7	WASHER PLAIN M10x23x2mm	12
8	BOLT HEX HD M12x35x1.75P GR10.9	4
9	WASHER PLAIN M12x27x3.0mm	4

ITEM	DESCRIPTION	QTY
10	PLUG BRACKET	1
11	NUT NYLOC HEX HD M4x0.7P G8	2
12	SMART PIN SILVER	1
13	HITCH BOX COLLAR COVER	1
14	D-SHACKLE 10mm	2
15	TOWBALL 50 mm	1
16	COMPLIANCE LABEL	1
17	LOAD RATING LABEL	1

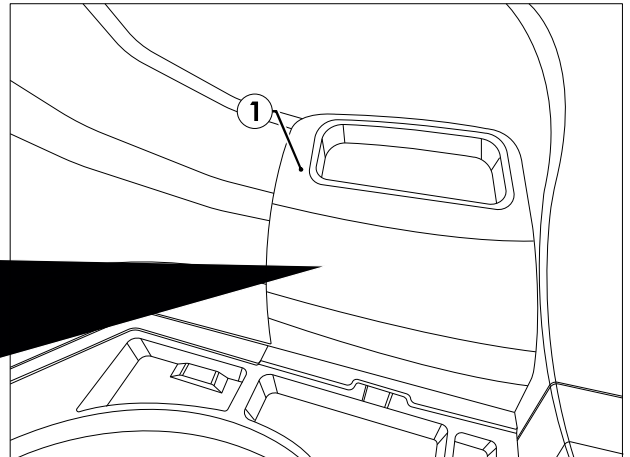
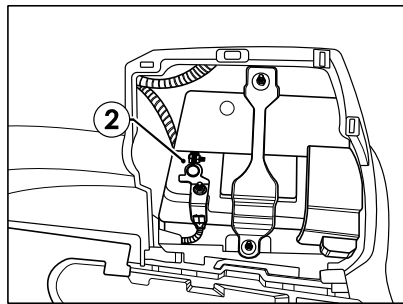
1. For ICE models:

In the engine bay, disconnect the negative battery terminal (1).



2. For HEV models:

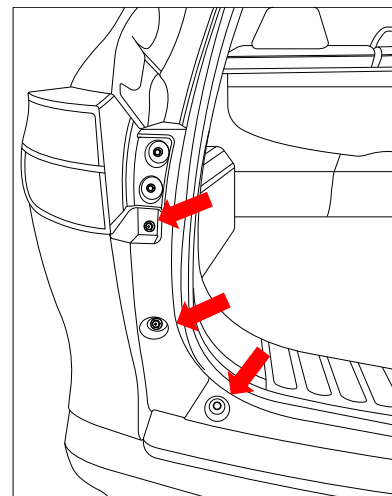
On the RHS rear cargo trim, remove the battery access panel (1).
Disconnect the negative battery terminal (2).



3. Open tailgate to reveal the bumper mounting fasteners.

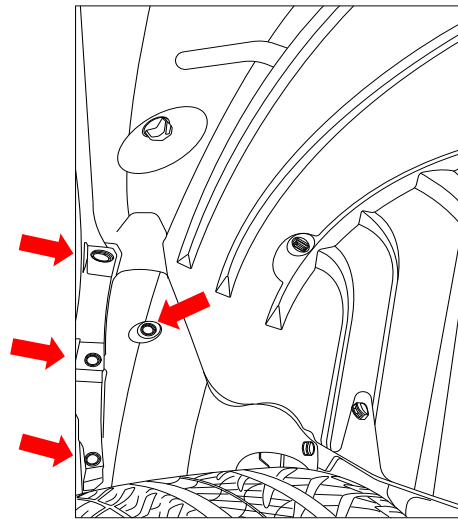
4. Remove the 2 x hex screws and 1 x Philips screw from each side.

Repeat for other side.

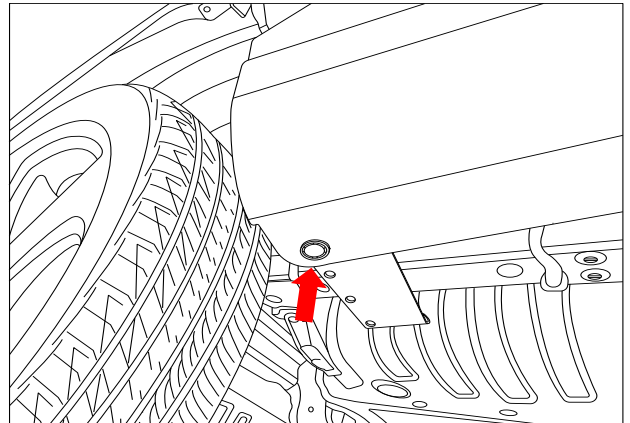


5. In the wheel arch, remove 4 x scrivets.

Repeat for other side.



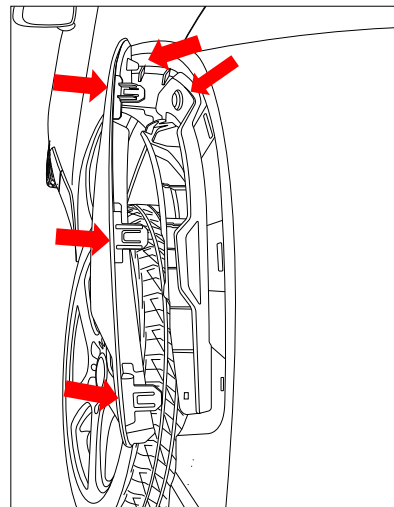
6. Remove 1 x scrivet from under the bumper.



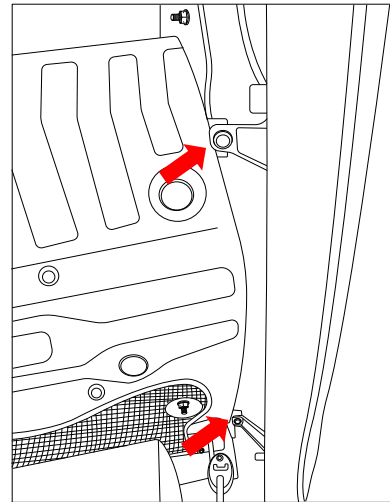
7. On the wheel skirting, apply outward force to the top centre area to unclip 3x push in clips and then use a small flat head screwdriver to unclip the remaining 3x skirting clips.

8. Remove the exposed 1x scrivet securing the bumper.

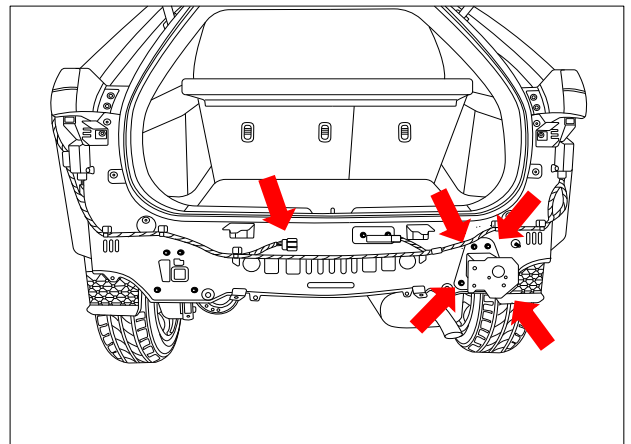
Repeat for other side.



9. Remove 2x scrivets from under the bumper.

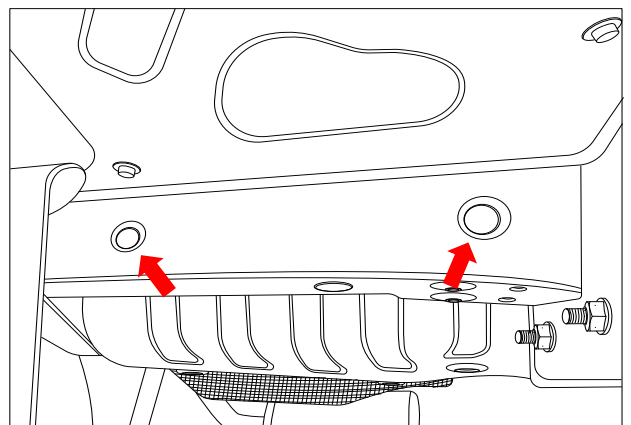


10. Peel bumper away from the sides and remove. Ensure to disconnect the wiring loom located near the top centre of the bumper.
11. Remove and discard the recovery mounting on the RH side secured with 4x hex bolts. Remove and discard LH side and impact beam if fitted.



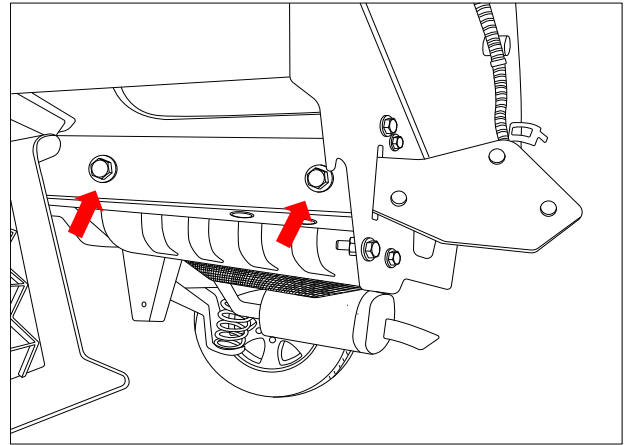
12. On the outside of the chassis rail, remove the sealant from the 2x mounting hole locations. Ensure to clear the area for the washer to sit flush on the chassis.

Repeat for the other side



13. Insert the side arm into the chassis rail and loosely secure with 2 x M12x35x1.75 Gr10.9 bolts complete with 1 x washer per bolt. Ensure that the weld nuts are positioned towards the inside of the vehicle when installing the side arms.

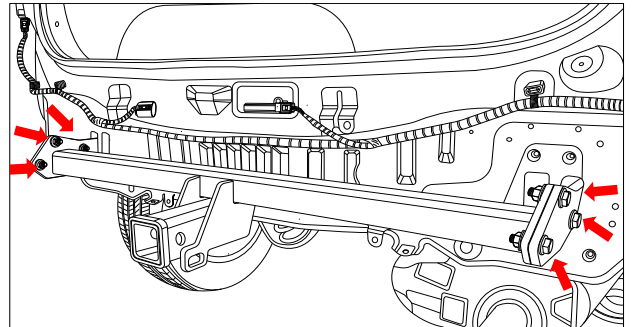
Repeat for the other side.



14. Position the crosstube assembly to the side arms and loosely secure each side with 3x M10 x 35x 1.5 Gr10.9 bolts complete with 2 x washers and 1 x nut per bolt.
15. Tighten all fasteners to the following torque.

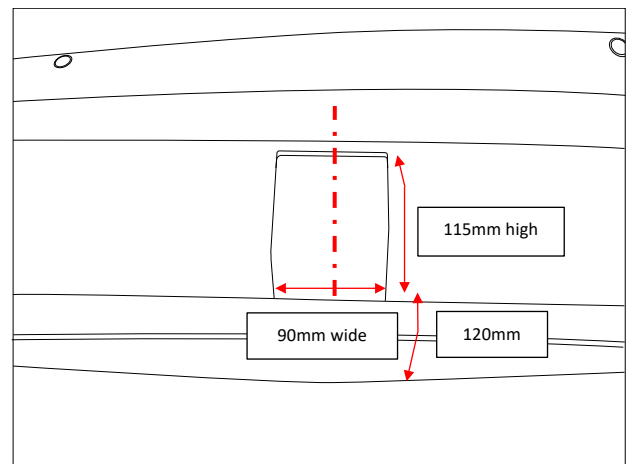
M12x35x1.75 Gr10.9 : 109Nm

M10x35x1.5 Gr10.9 : 62Nm

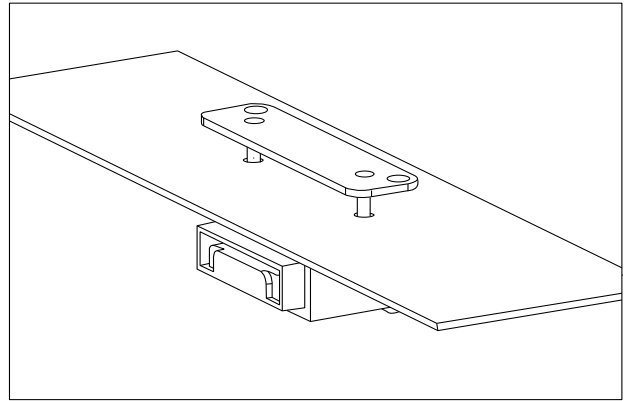


16. For bumper cut.
Identify the bumper centre line and mark off a box section 90mm wide by 115mm high, the start position measured 120mm away from the bottom of the bumper edge.
Cut out this section.

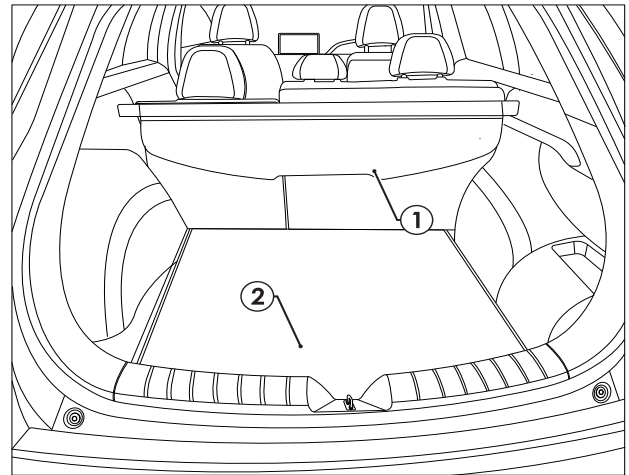
Note: Only the painted section of the bumper should be cut.
Ensure that you do not cut through any wiring on the inside of the bumper.



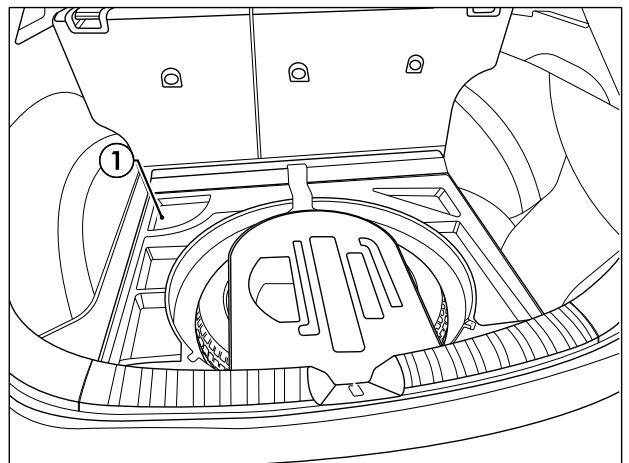
17. For the plug bracket.
Find an appropriate position on the under body protector, mark out and drill 2 x \varnothing 5mm holes 69mm apart to support plug bracket.



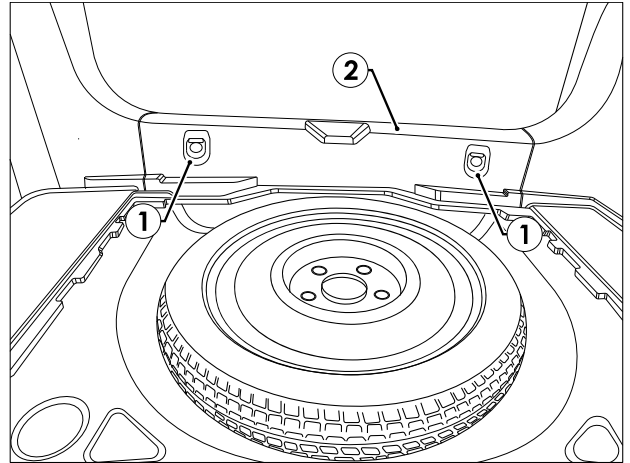
18. Remove the cargo cover (1).
Remove the floor boot (2).



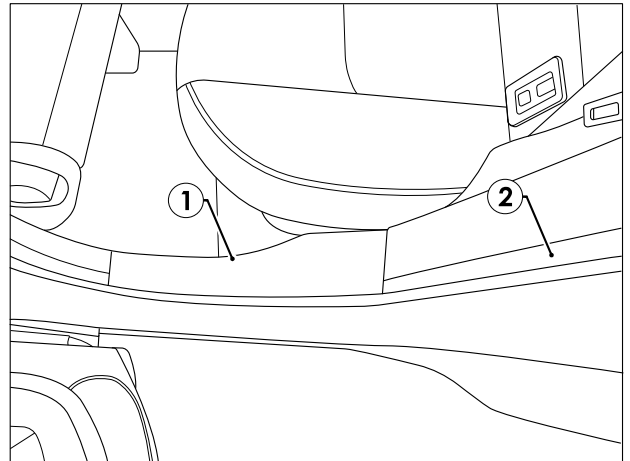
19. Remove the LHS boot tray (1).



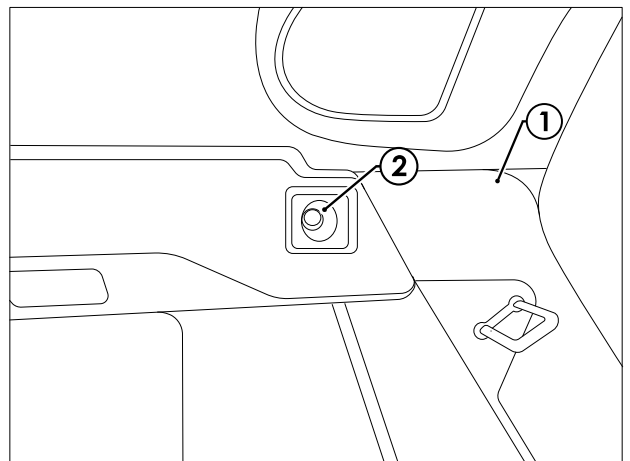
20. Remove the 2x cargo trim down points (1).
Remove the boot sill trim (2).



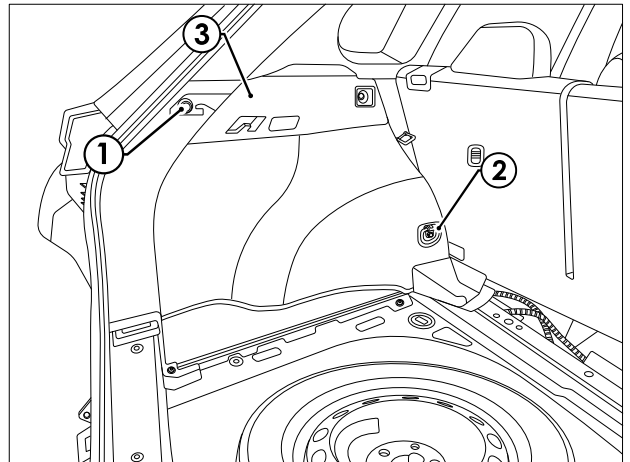
21. Remove the LHS rear door sill trim (1).
Dislodge the door seal (2) along the C-pillar.



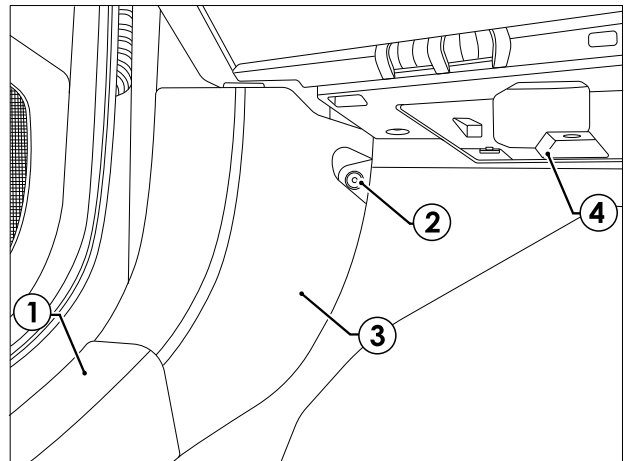
22. Dislodge the LHS C-pillar trim (1).
Remove the 1x hex head screw (2).



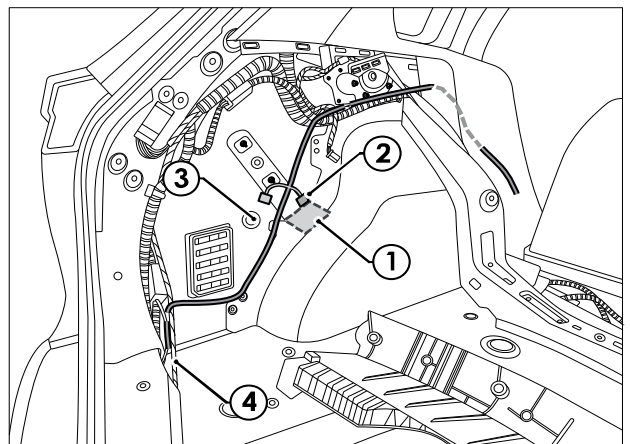
23. Remove 1x push clip (1).
Remove the 1x cargo tie down point (2).
Remove the LHS cargo trim (3).



24. At the LHS front footwell, remove the door sill trim (1).
Remove the plastic nut (2) to remove the kick panel (3).
Remove the under dash trim (4).

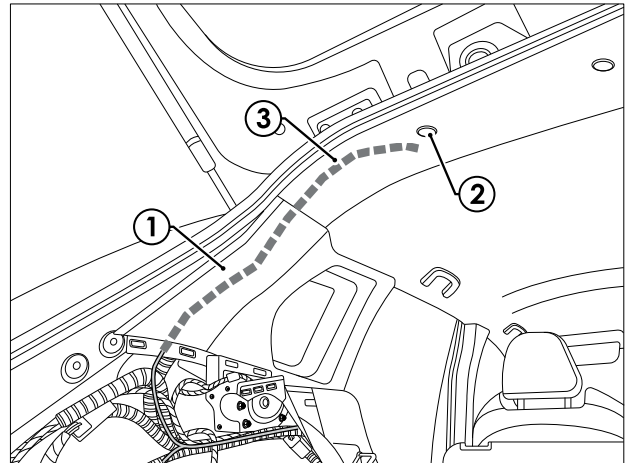


25. Using an alcohol wipe, clean the LHS wheel arch area(1) and the underside of the ECU.
Secure the ECU to the sheet metal using double sided tape.
Connect the trailer patch 12-way connector (2) to the ECU.
Remove the vehicle blanking grommet (3).
Secure the ground ring terminal to the vehicle ground (4) using the existing ground bolt.
Route the rest of the harness down the LHS C-pillar.



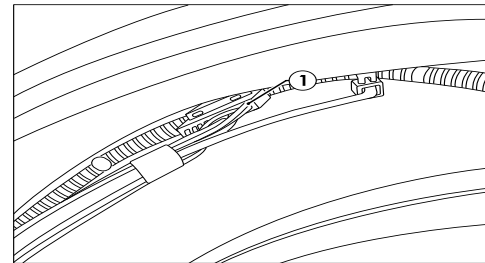
26. Note: This Step is for reverse light signal only

Dislodge the D-pillar trim (1)
 Remove 1x headliner clip (2)
 Dislodge the headliner (3) to access the 13-way grey connector underneath.
 Untape the BLACK/WHITE wire from the trailer patch harness and route it up the D-pillar to grey connector, following the vehicle harness.

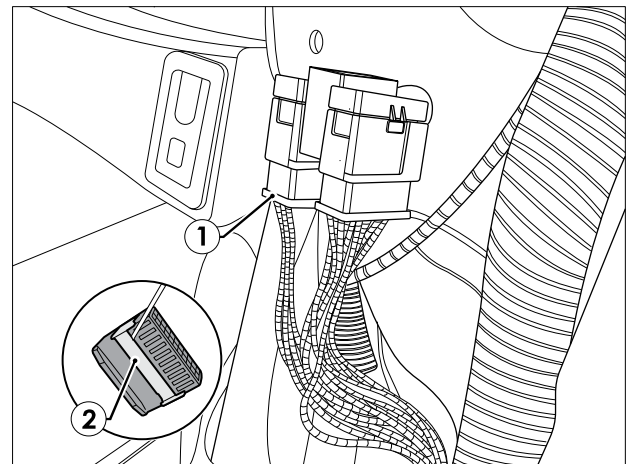


27. Note: This Step is for reverse light signal only

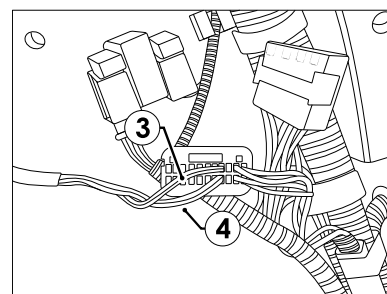
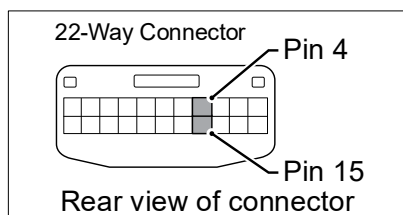
Splice in the BLACK/WHITE wire at Pin 8 of the grey connector (thick GREEN wire) (1)



28. Underneath the LHS C-pillar trim, locate the two 22-way Connectors.
 Unplug the connector (1) with fewer wires (90980-12B53).
 Disengage the secondary lock on the connector (2)
 House the terminal on the GREEN/BLACK wire (3) at Pin 4 of the connector.
 House the terminal on the YELLOW/BLACK wire (4) at Pin 15 of the connector.
 Refit the secondary lock and plug the connector back in.



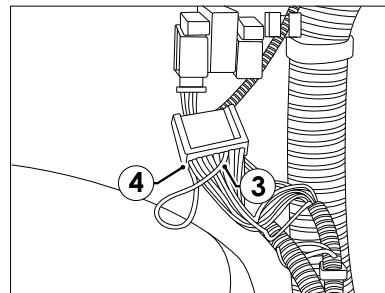
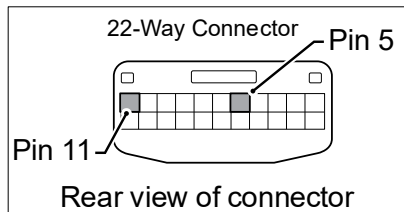
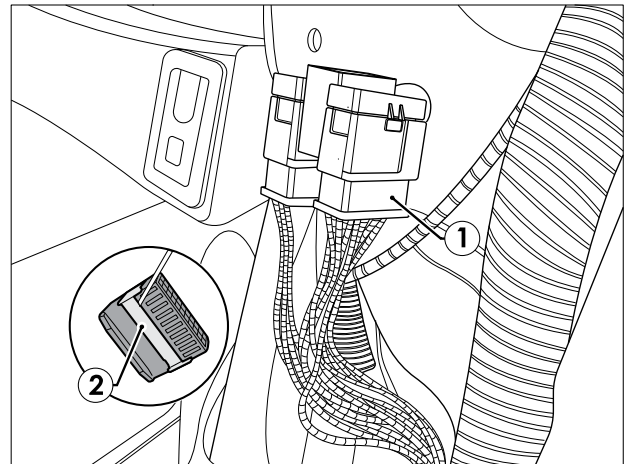
Note: Connector has Part Number labelled 90980-12B53.



Rear view of connector

29. Unplug the connector (1) with more wires (90980-12B51).
 Disengage the secondary lock (2) on the connector.
 House the terminal on the BROWN/BLACK wire (3) at Pin 5 of the connector.
 House the terminal on the RED/BLACK wire (4) at Pin 11 of the connector.
 Refit the secondary lock and plug the connector back in.

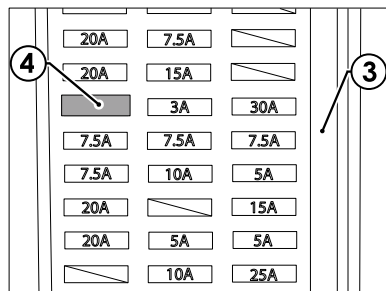
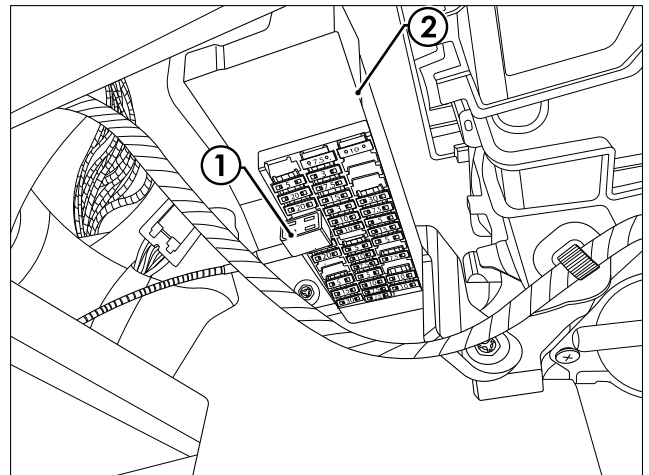
Note: Connector has Part Number labelled 90980-12B53.



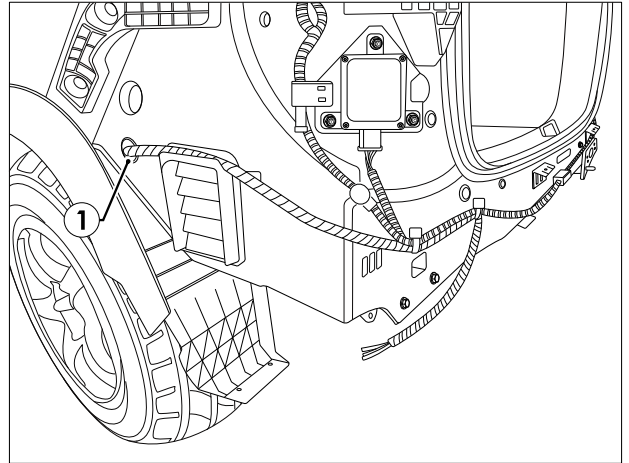
Rear view of connector

30. Route the fuse tap (1) on the trailer patch harness towards the LHS front footwell, following the vehicle harness.
 Under the LHS dash, locate the fuse panel (2) and remove the cover (3)
 Install the fuse tap into the fuse panel as shown (4)

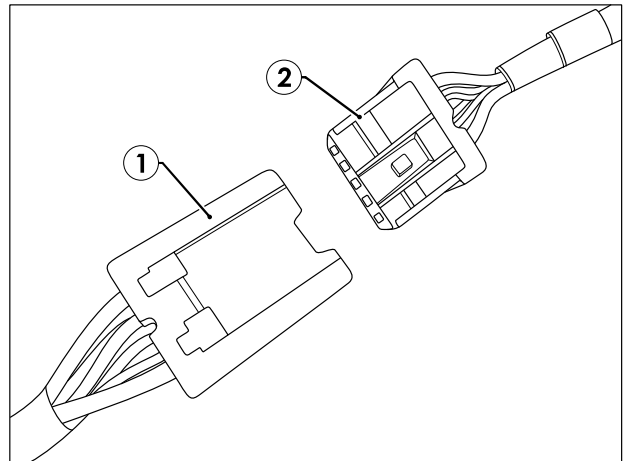
Note: Ensure fuse tap is orientated as shown.



31. With the rear bumper removed, secure tail harness to towbar.
Route tail harness through the grommet hole (1) into the vehicle.
Seat the tail harness grommet in the grommet hole.



32. Connect the tail harness (tail length 1800mm) 8-way connector (1) to the trailer patch mating 8-way connector (2).
Secure all harness using supplied cable ties.
Test the trailer patch function using a light board or multi-meter.
Re-fit all removed parts (step 3-10, 19-25 reverse) and secure all fasteners, ensuring there are no squeaks or rattles.
The RPA function can be disabled via the infotainment system.
Place the fitting instructions in the glove box after fitment.





CUSTOMER INFORMATION

PLACE THESE INSTRUCTIONS IN THE
VEHICLE'S GLOVEBOX AFTER INSTALLATION

**THANK YOU FOR PURCHASING TRAILBOSS. WITH CORRECT MAINTENANCE AND CARE
THIS PRODUCT WILL PROVIDE A LIFETIME OF TROUBLE-FREE OPERATION.**

TOWBAR MAINTENANCE AND CARE:

1. Trailboss recommend that the towbar LUG or TBM (Trailer Ball Mount) Pull Pin and R-clip are removed and stored when not in use. Removal of LUG or TBM (Trailer Ball Mount) is advisable when not in use to assist with any of the following.
 - Ensure rear number plate is not obscured.
 - Allow maximum available departure angle and prevent any potential interference.
 - Prevent possible interference with vehicles reverse sensors or camera detecting a tow ball mount as an obstruction during reversing.
 - Removes towball mount as an obstruction for when moving around the rear of the vehicle.
2. Trailboss recommends routine inspection of your towbar to ensure trouble free towing.
 - Bolt security and tension should be regularly inspected and checked for correct tension. Replace any worn or defective parts with suitable grade & class fasteners. Inspection should be requested to coincide with vehicle major services.
3. It is the owner's responsibility to ensure towing and down ball weight capacities of the towing vehicle are not exceeded.
 - Towing and down ball weights allowable may differ according to model variations. Please refer to owner's manual or vehicle dealer to confirm exact rating for your vehicle model variant.
 - It is not uncommon for the vehicle tow rating to differ from the towbar rating. When this occurs, the lesser rating must be adhered to.
 - For vehicles fitted with enhanced vehicle functions that may be altered/changed when towing i.e Trailer sway mitigation, blind spot detection, adaptive cruise control etc. Please consult owner's manual to understand changes enabled when towing and after towing.

WARRANTY INFORMATION:

Trailboss Towbars are covered by a Lifetime Warranty.

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.

For further details please contact customer service on 1800 812 017.

PRO SERIES SILENT ANTI-RATTLE HITCH PIN

Your Trailboss towbar is equipped with a Pro Series Silent Anti-Rattle Hitch Pin technology to help reduce towbar tongue rattle in most driving conditions. Please ensure below instructions are understood and routine maintenance is carried out to ensure best towing experience.

Regularly inspect for wear and check the tightness of the Silent Anti-Rattle Hitch Pin. Follow instructions below to re-tighten the nut as necessary when movement and noise in the tow ball mount is noted.

- Before towing, ensure R-Clip is properly installed and hitch pin nut is installed and tensioned. Replacement parts are available from your Pro Series Distributor.

TOWBALL MOUNT REMOVAL/INSTALLATION

STEP 1

Insert Trailer Ball Mount (TBM) (a) into towbar hitchbox (b), aligning hole in TBM shank (c) with hole in hitchbox (d) (Fig. 1)

STEP 2

Insert Silent Anti-Rattle Hitch Pin (e) through hole in hitchbox and hole in TBM shank (g); ensure the locators are inserted into the notches in the hitchbox (Fig. 2)

STEP 3

Screw Silent Anti-Rattle Hitch Pin Nut (f) onto Smart Pin (g); tighten Smart Pin Nut until finger tight, ensuring TBM is restrained from up and down movement.

STEP 4

Tighten Silent Anti-Rattle Hitch Pin Nut by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig. 4).

STEP 5

Install Silent Anti-Rattle Hitch Pin R-Clip through the hole that provides best clearance or easiest access. (Fig. 5)

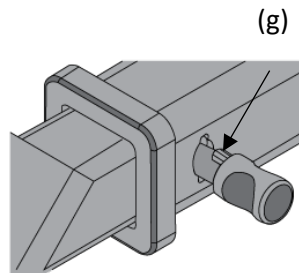
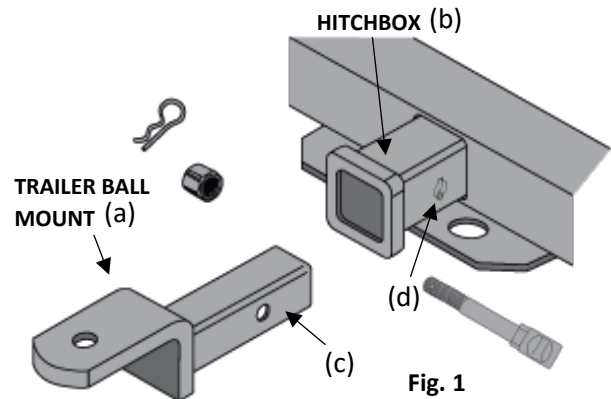


Fig. 2

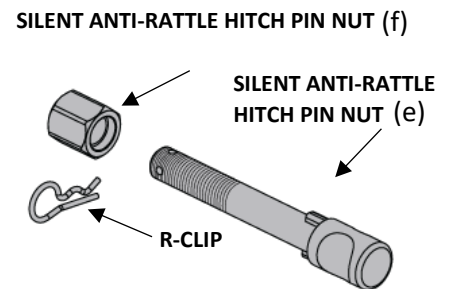


Fig. 3

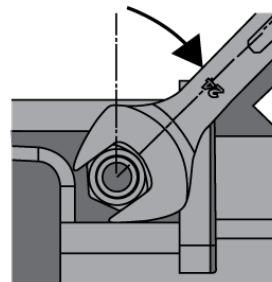


Fig. 4

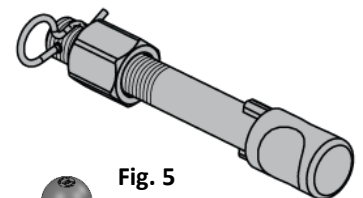


Fig. 5

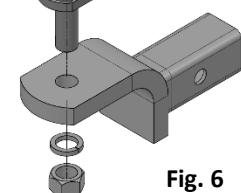


Fig. 6