

PRODUCT DETAILS:

Part Number:	QTTS003L	Maximum Towing Braked:	1000	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	100	kg
TBM/Lug Part Number:	21248			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other:	NO
Total Installation Time:	120 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.



WARNING

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).

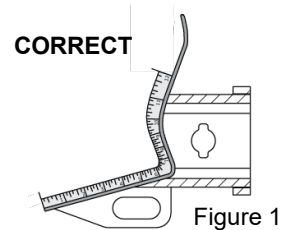


Figure 1

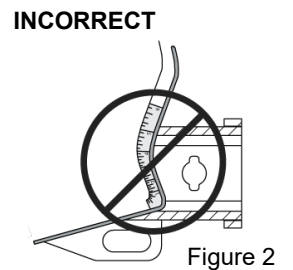


Figure 2

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

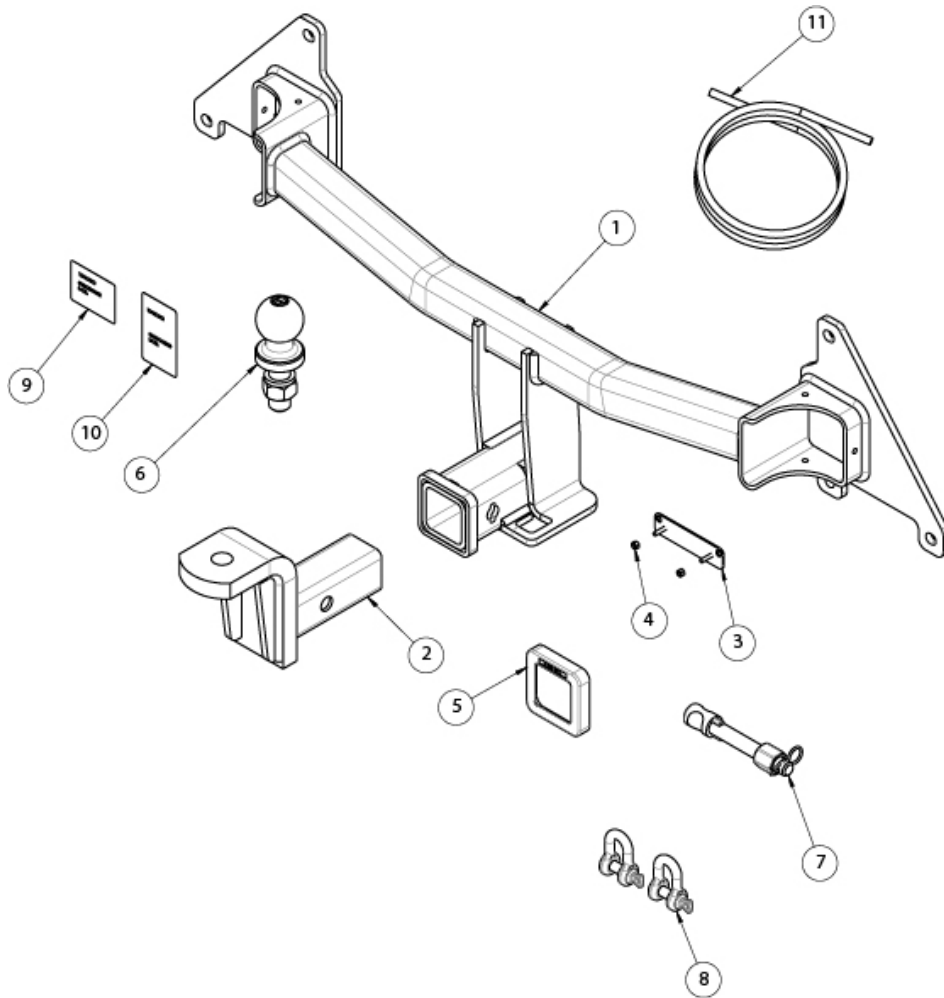
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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

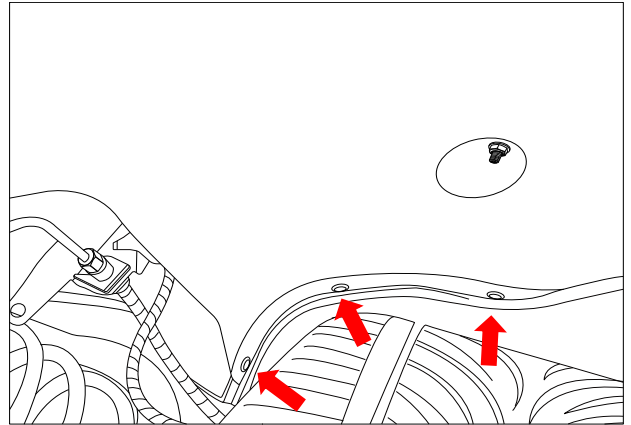


ITEM	DESCRIPTION	QTY
1	TESLA MODEL 3 CL4 MY23	1
2	TRAILER BALL MOUNT	1
3	PLUG BRACKET	1
4	NUT NYLOC HEX HD M4x0.7P G8	2
5	HITCH BOX COLLAR COVER	1
6	TOWBALL 50mm	1

ITEM	DESCRIPTION	QTY
7	SMART PIN SILVER	1
8	D-SHACKLE 10mm	2
9	COMPLIANCE LABEL	1
10	LOAD RATING LABEL	1
11	WIRING LOOM	1

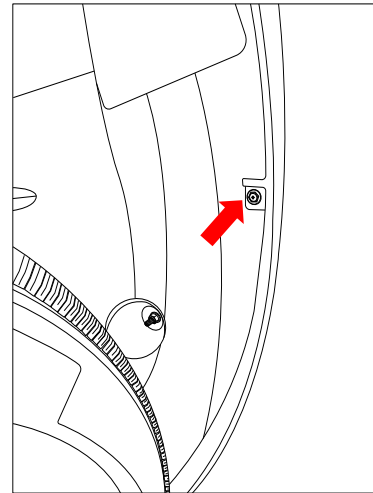
1. In rear wheel arch remove 3 x scrivets along the bottom of the lining.

Repeat for opposite side.

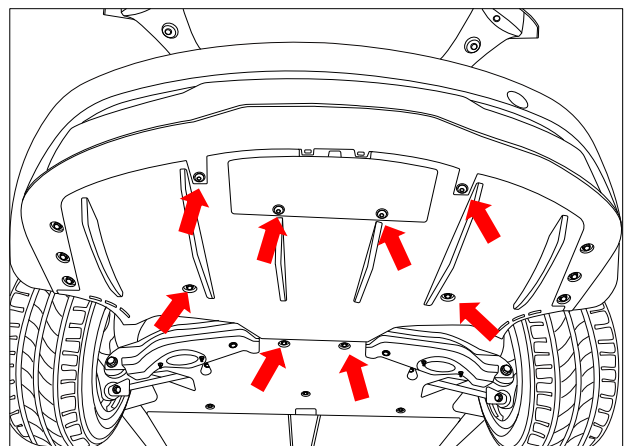


2. In the wheel arch remove the 1x Torx securing bumper.

Repeat for opposite side.

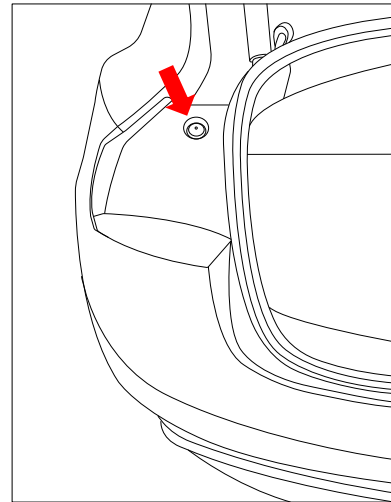


3. Under the bumper, remove the access panel by disengaging the 2 x lock screws
4. Unclip the 2x flaps to expose screws. Remove the 6x screws securing the underbody protector.



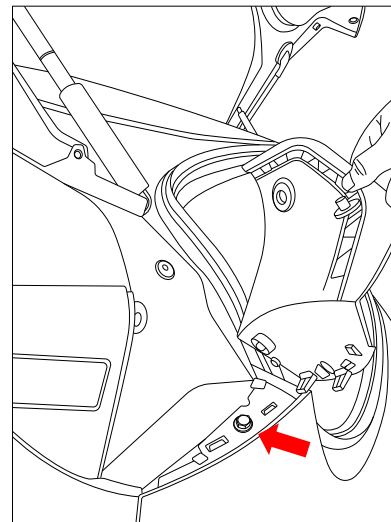
5. Open boot and remove the retaining screw from the cover.

Repeat for opposite side.

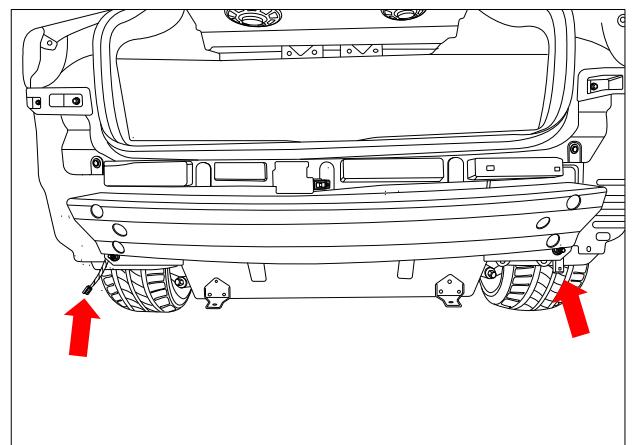


6. Remove the cover and remove the exposed 1 x bumper Hex screw.

Repeat for opposite side.

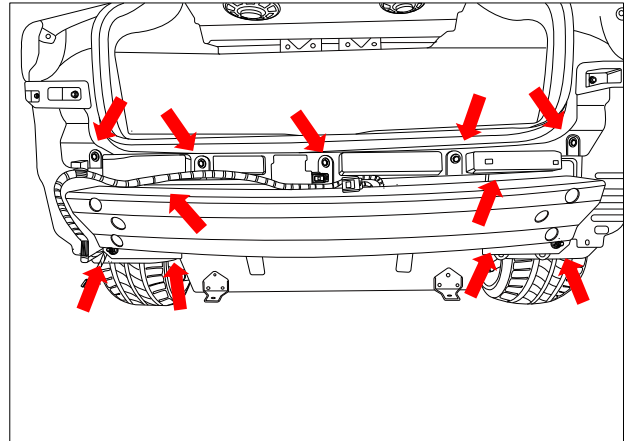


7. Peel bumper away from the sides and remove, along with the underbody protector, from vehicle and set aside. Ensure to disconnect the 2 x wiring looms located on the right and left underside by the wheel arch.



8. Remove and discard the impact beam secured with 3x flange nuts per side. To assist removal, loosen off the 5x screws running across the plastic bumper retainer.

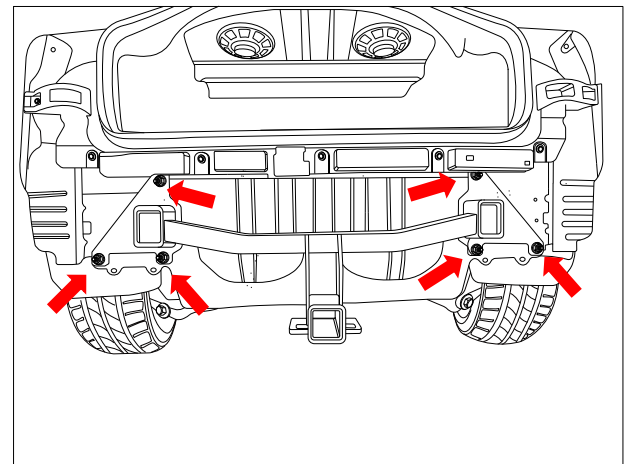
Retain the flange nuts for towbar installation.



9. Position towbar onto the studs and secure with the (previously removed) 3x flange nuts per side.

Torque the M10 x 1.5 nuts to 62Nm.

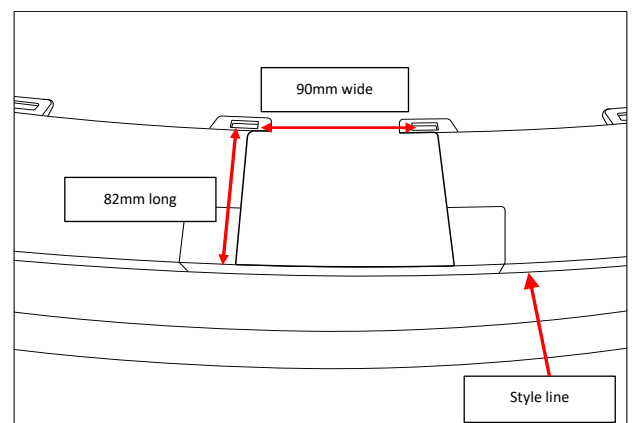
10. Re-secure the plastic bumper retainer with the 5x screws.



11. For bumper cut.
Identify the centre of the bumper. Measure, mark and cut out a section 82mm long from the bottom edge of the bumper and 90mm wide (45mm either side of the bumper centreline).

Note: The cut should stop just short of the lip of the bottom style line.

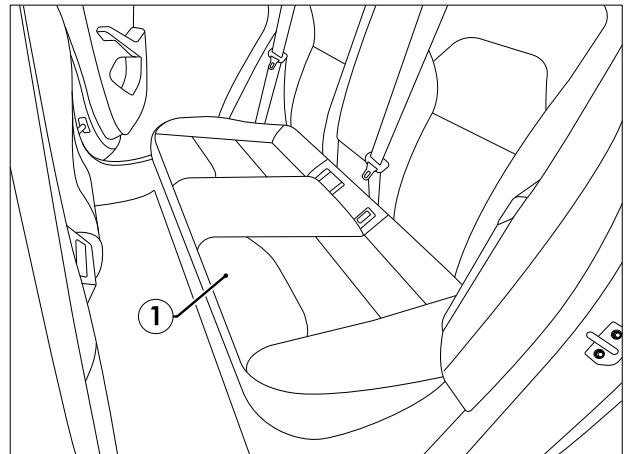
Ensure to not cut through any wiring harness on the inside of the bumper.



IMPORTANT

Due to possible vehicle variations, always confirm any noted vehicle colour wires with a multi-meter to ensure the correct function is identified before soldering or scotch locking. For vehicle wires denoted with two colours (example; RED/GREEN) the first colour will always be the main wire colour while the second colour is the thinner trace colour on the wire.

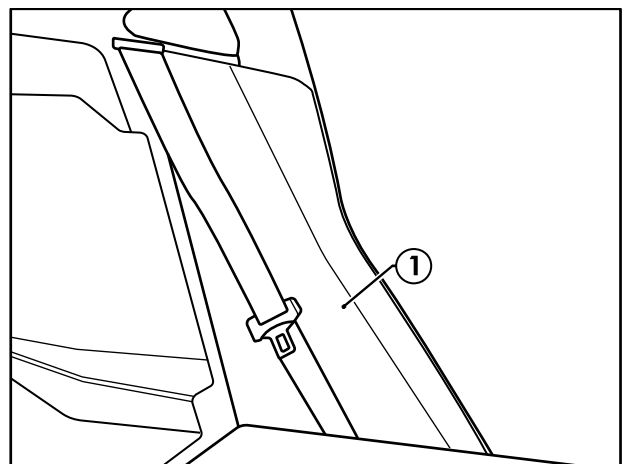
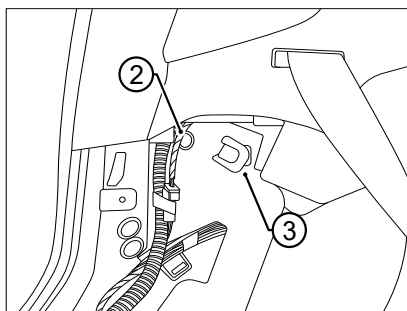
12. Remove the rear seat cushions (1) disconnecting any attached connectors.



13. Remove the LHS rear seat bolster (1).

Repeat for RHS.

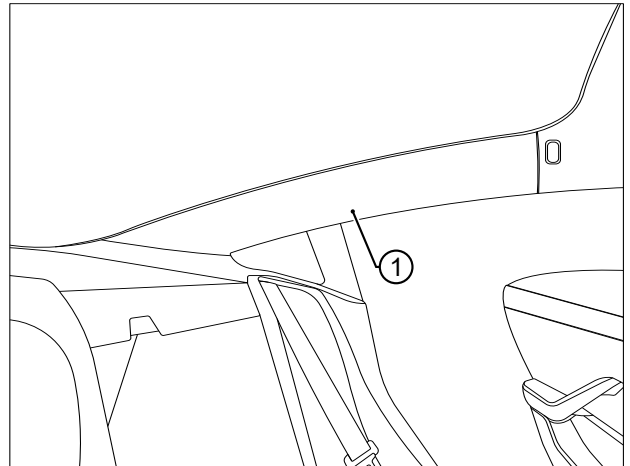
Remove the push clip (2) and bolster clip (3) located beneath the RHS bolster.



14. Remove the LHS siderail trim (1).

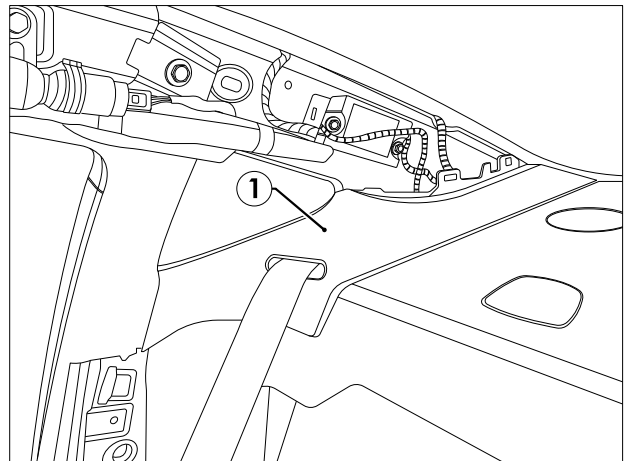
Repeat for RHS.

Note: Care must be taken not to break clips.

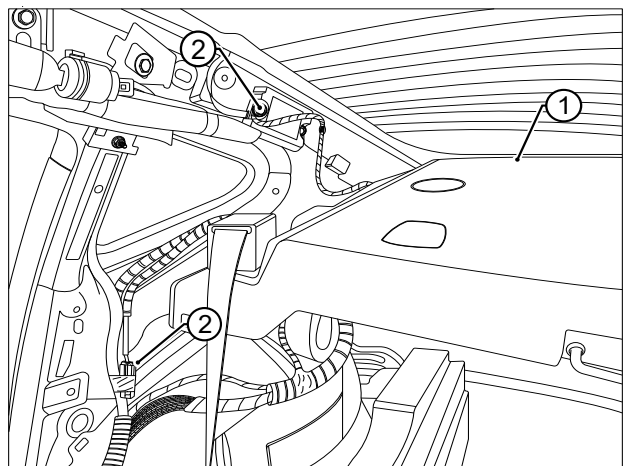
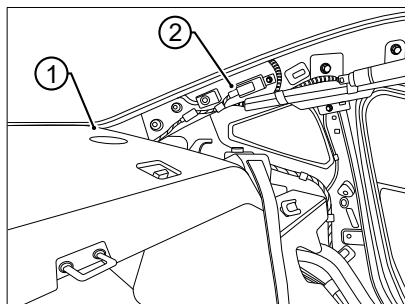


15. Remove the RHS upper C-pillar trim (1).

Repeat for LHS.



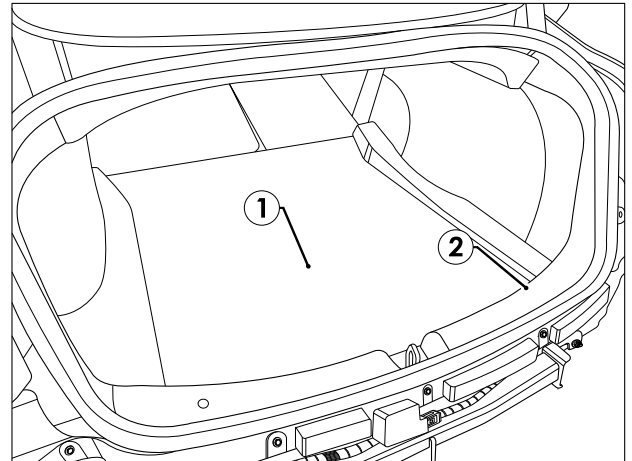
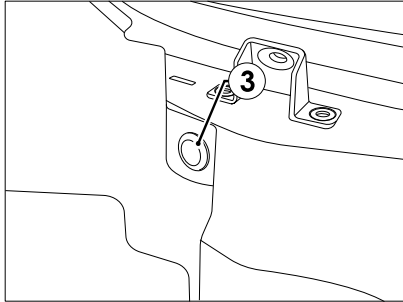
16. Remove the parcel shelf (1), disconnecting any attached connectors (2).



17. Remove the boot floor panel (1).

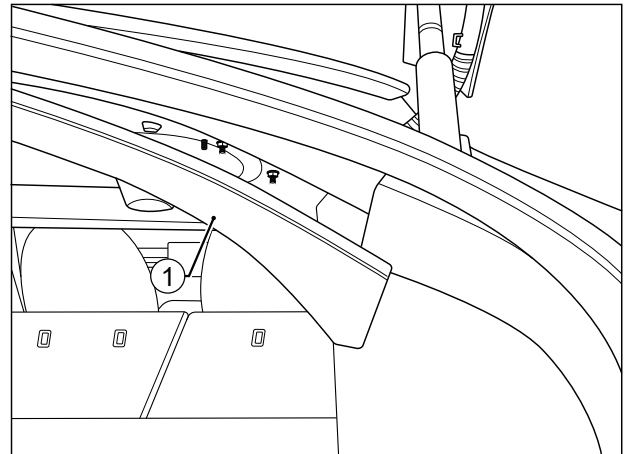
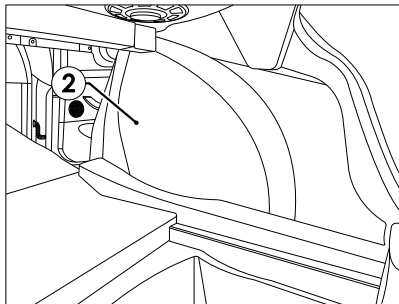
Remove the boot sill trim (2).

On the RHS, remove the push clip (3) located beneath the sill trim.



18. On the RHS, dislodge the cargo roof trim (1).

Remove the RHS boot side trim (2), disconnecting any attached connectors.

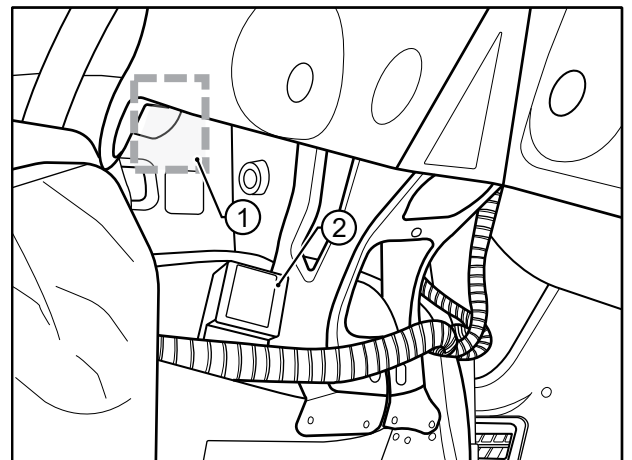


19. Using an alcohol wipe, clean the RHS inner sheet metal area above the wheel arch (1) as well as the underside of the ECU (04826) (2).

Connect the trailer patch 12-way connector to the ECU.

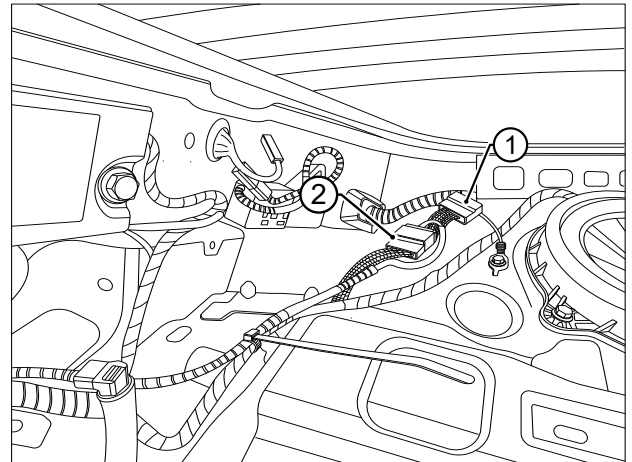
Apply double sided tape to the ECU and secure it to the vehicle sheet metal.

Note: Mount ECU with the connector orientated downwards.



20. Route the T-patch (1) on the wiring harness up to the rear of the parcel shelf, following the vehicle harness.

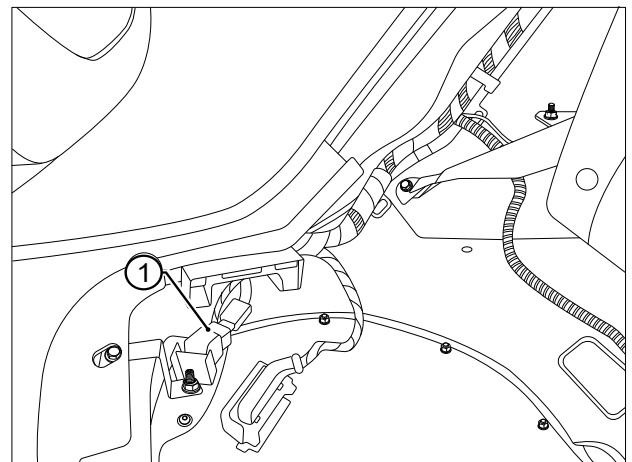
Patch in the 20-way T-patch connectors in between the black connectors (2) on the parcel shelf.



21. Route the power ring terminal on the wiring harness down the C-pillar to the power distribution post (1), following the vehicle harness.

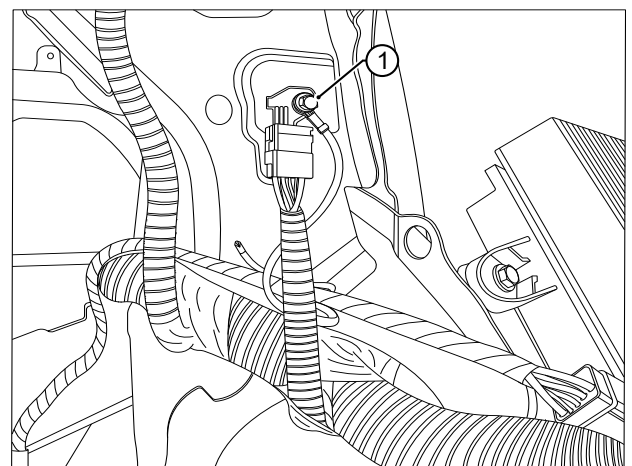
Secure the ring terminal to the post using the existing nut.

Note: Take care to not cause any short circuits while removing and replacing the nut.



22. Route the remainder of the harness rearwards from the ECU, following the vehicle harness.

Secure the ground ring terminal to the vehicle ground point (1) using the existing bolt.

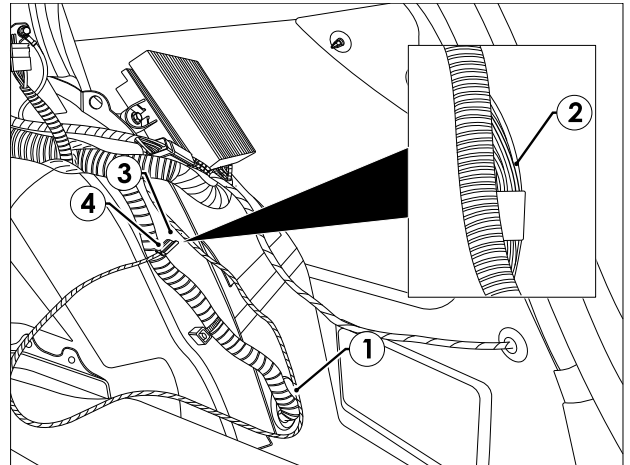


23. For Reverse:

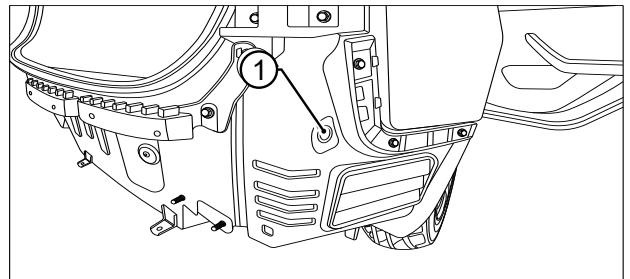
- Inside the vehicle harness leading to the large grommet (1), locate the thin BLUE wire (2).
- Probe the wire to verify it carries the reverse signal, as there may be other blue wires in the harness.
- Clamp the supplied ezy-tap (3) onto the wire.
- Connect the mating male terminal (4) on the wiring harness to the ezy-tap.

Function	Trailer Patch	Vehicle Harness
Reverse	Black/White	Blue

Note: The first colour specified is the main colour and the second colour is the trace colour.



24. Drill a 30mm hole (1) in the location shown to enable the tail harness to be routed from the towbar to the patch harness.



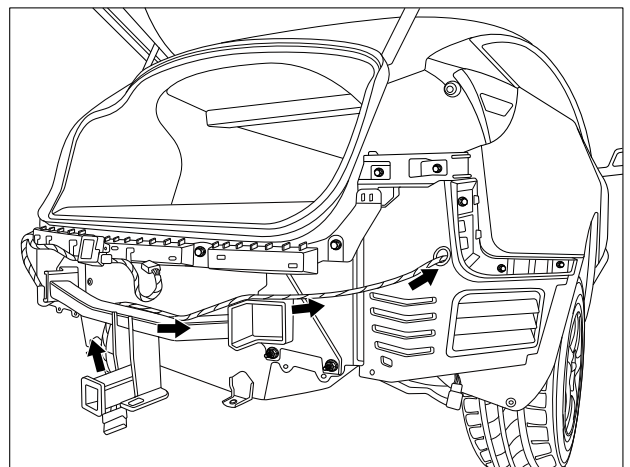
25. With the rear bumper removed, secure tail harness to towbar.

Route tail harness through previously drilled 30mm hole.

Seat grommet in 30mm hole and route to trailer harness blue connector on patch loom.

Note: Keep harness routing clear of all sharp edges, moving parts and places of extreme heat.

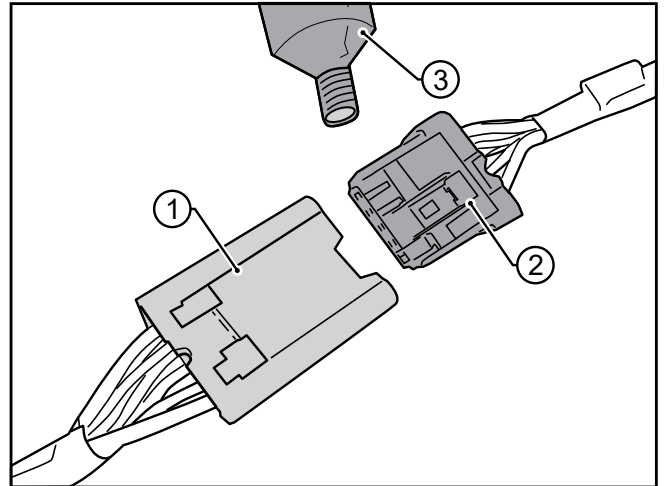
Note: Ensure grommet is seated correctly and makes a good seal.



26. Connect the tail harness (tail length 1800mm)

8-way connector (1) to the trailer patch mating 8-way connector (2).

Use silicone grease (3) to seal the blue connectors.



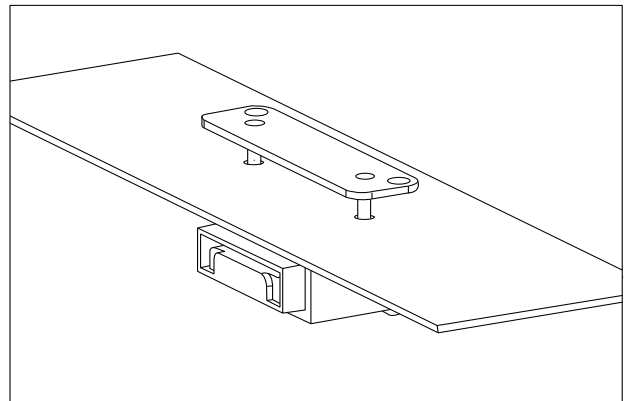
27. For the plug bracket.

Find an appropriate position on the bottom of the bumper, mark out and drill 2 x $\varnothing 5$ mm holes 69mm apart to support plug bracket.

28. Refit all removed parts and secure all fastener, ensuring there are no squeaks or rattles.

29. Refit the bumper and underbody protector following steps 1-7 in reverse.

30. Secure all harness using supplied cable ties. Test the trailer patch function using a light board or multi-meter.



Note: All connection to vehicle must be connected prior to testing.



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)

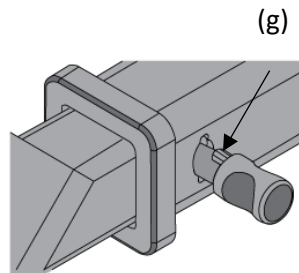
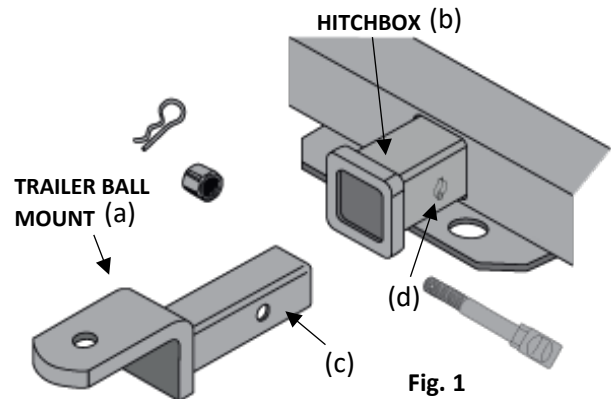


Fig. 2

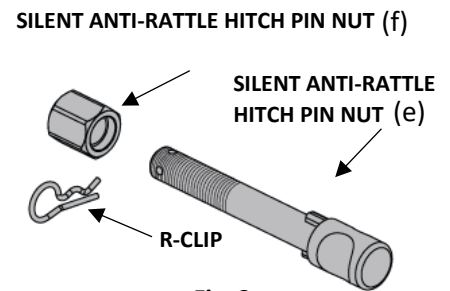


Fig. 3

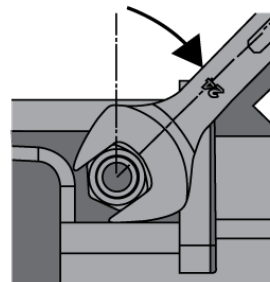


Fig. 4

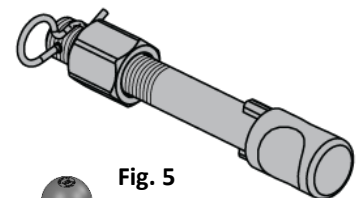


Fig. 5

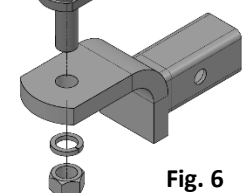


Fig. 6