

PRODUCT DETAILS:

Part Number:	QTSU33L	Maximum Towing Braked:	1200	kg
ECU Number:	04826	Maximum Towing Unbraked:	400	kg
Tail Harness Length Required:	1200 mm.	Maximum Static Ball Load:	120	kg
TBM/Lug Part Number:	21319			

FITTING DETAILS:

Towbar Installation Time:	90 Mins.	RPA Disable/Other:	YES
Total Installation Time:	135 Mins.		
Bumper Cut Required:	Yes		

Note:

- Electric Brake Input Location: Near Blue Connector
RPA Disable: Via switch on dashboard

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

BEFORE YOU START:

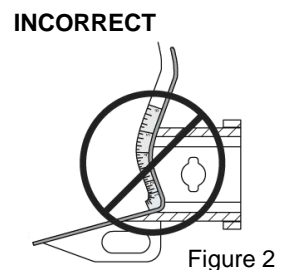
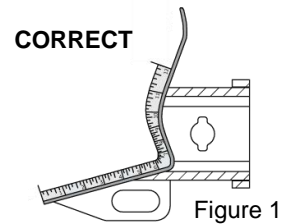
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.

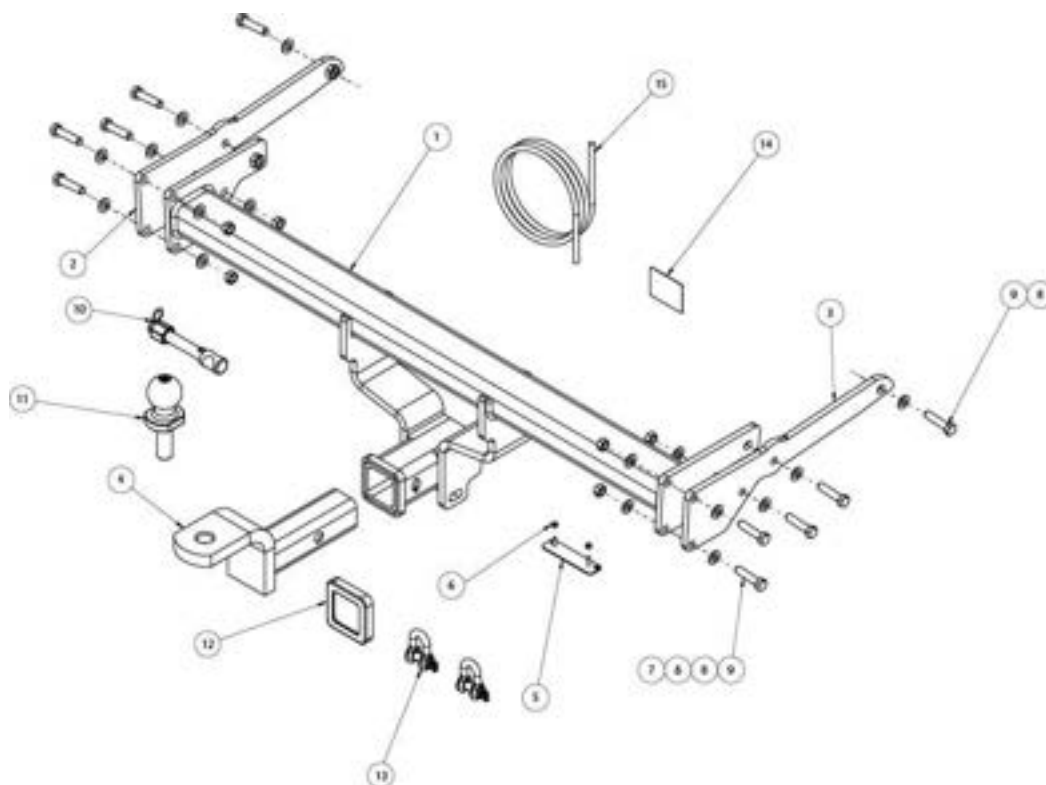
WARNING:

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.

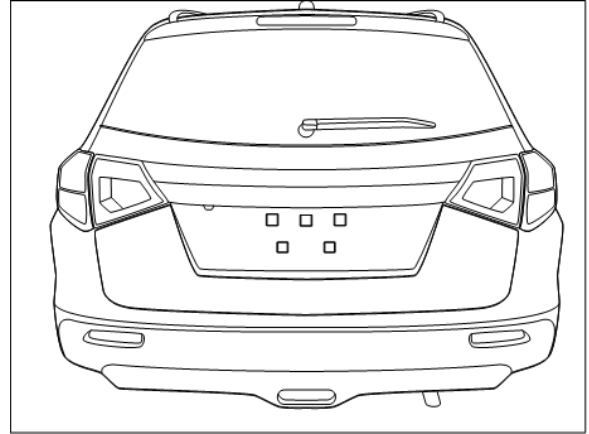


TOWBAR ASSEMBLY DIAGRAM



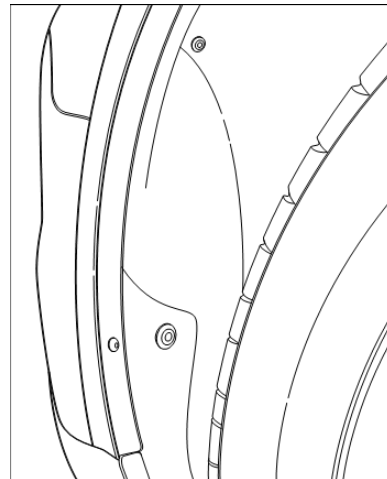
ITEM	DESCRIPTION	QTY
1	SUZUKI VITARA WELDED ASSEMBLY	1
2	SIDEARM ASSEMBLY LHS	1
3	SIDEARM ASSEMBLY RHS	1
4	TRAILER BALL MOUNT	1
5	PLUG BRACKET	1
6	NUT NYLON LOCK HEX M4x0.7P	2
7	NUT HEX M10x1.5P	6
8	WASHER PLAIN M10x21x1.6	16
9	SET SCREW HEX HD M10x45x1.5P	10
10	SMART PIN	1
11	TOWBALL 50mm	1
12	HITCH BOX COLLAR COVER	1
13	"D" SHACKLE 10mm	2
14	H.R STICKER	1
15	ACRYLIC COMPLIANCE LABEL	1
16	WIRING LOOM	1

1. Remove 2 x bolts and 2 x scrivenets from the underside of the bumper.



2. In the wheel arch remove 1 x screw and 1 x scrivenet.

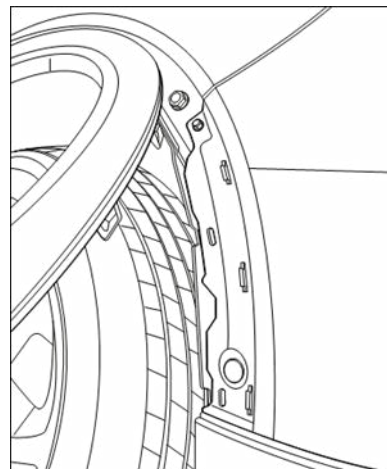
Repeat for opposite side.



3. Peel back wheel arch trim.

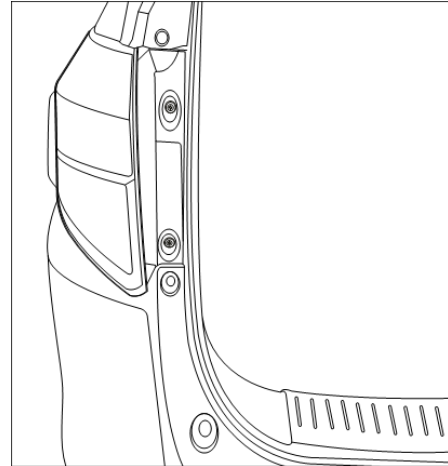
Underneath the wheel arch trim remove 1 x scrivenet and 1 x screw.

Repeat for opposite side.



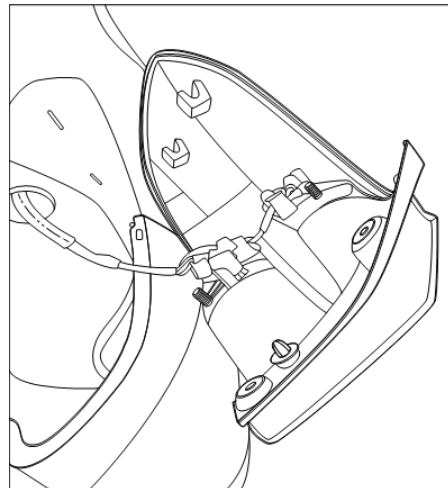
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4. Remove 2 x screws securing tail light and 2 x bolts securing top side of bumper.

Repeat for opposite side.

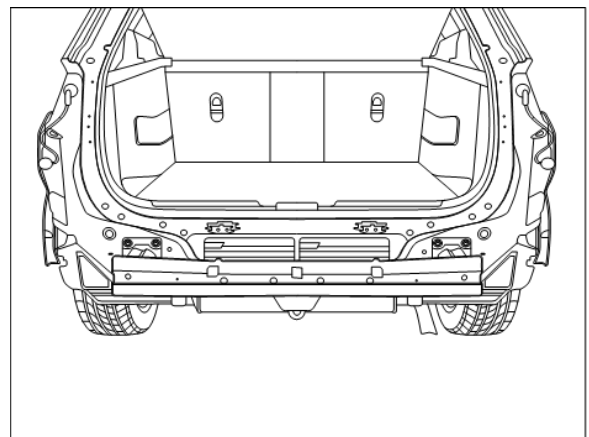


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5. Carefully remove & disconnect tail light. Keep in a safe place for re-attachment.

Repeat for opposite side.

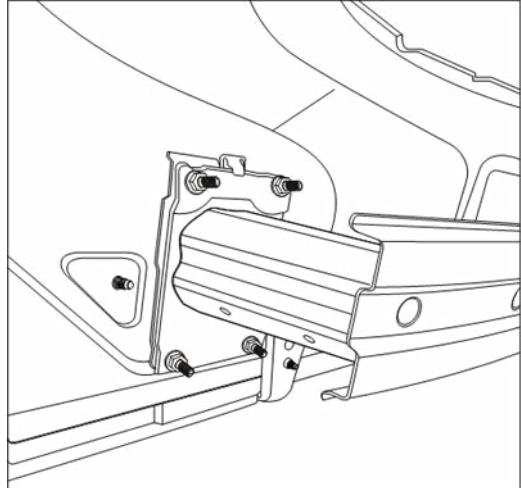


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6. Carefully remove the bumper by peeling away at the edges, ensuring to disconnect wiring connections. Keep in a safe place for re attachment. Disconnect any factory fitted parking sensors



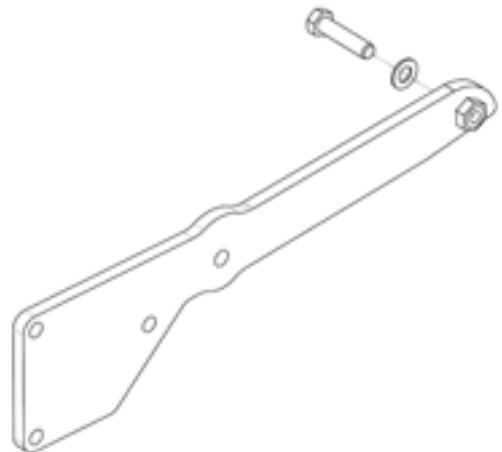
7. Remove and discard impact beam, secured to chassis with 4 x nuts per side.

Ensure wiring is detached from impact beam prior to removing.



8. Insert sidearm into chassis rail and loosely secure with 1 x M10 bolt complete with 1 x washer using the mounting point towards the front of the vehicle.

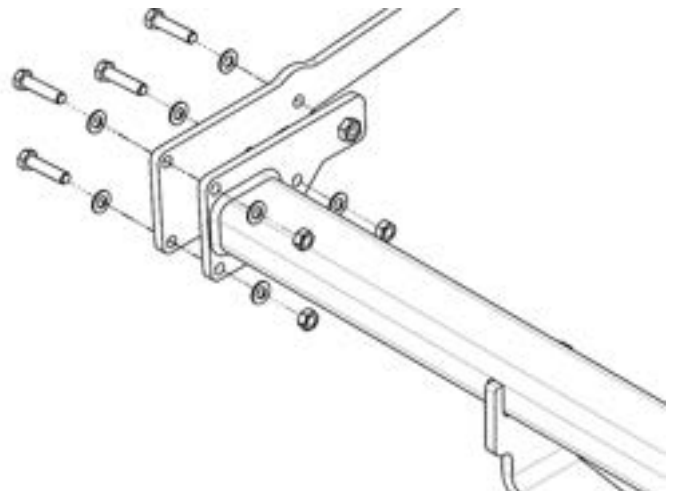
Repeat for opposite side.



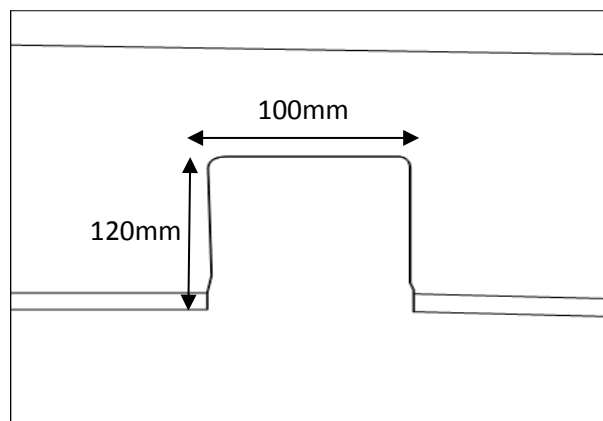
9. Using two people, lift centre section of towbar up to sidearms and secure with aligning holes on sidearms with 6 x M10 bolts complete with 2 x washers and 1 x nut per bolt, and 2 x M10 bolts complete with 1 x washer per bolt (secured into centre section captive nut).

Torque all fasteners as follows:

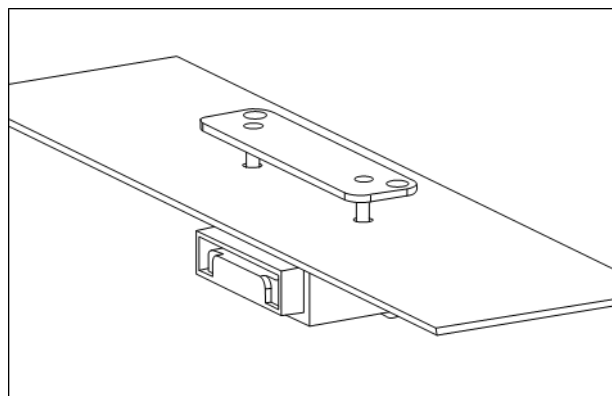
M10x1.5P G10.9 = 62 Nm



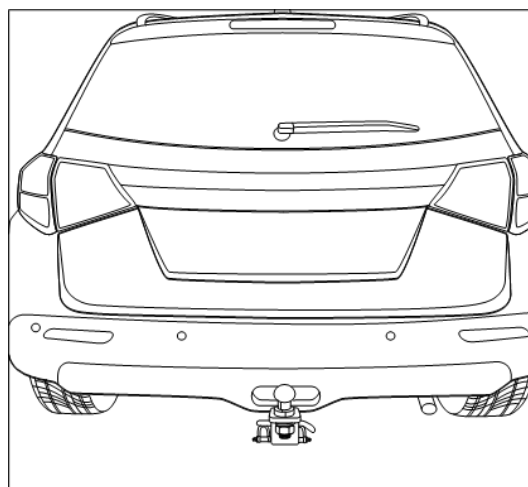
10. On bottom edge of the bumper locate the centre vertical. Cut approximately 100mm wide and 120mm up from the edge as measured along outside face of bumper.



11. Mark out and drill 2x $\varnothing 5$ mm holes 69mm apart on bumper skin to support plug bracket. Feed bracket threads through drilled holes prior to reinstalling bumper.



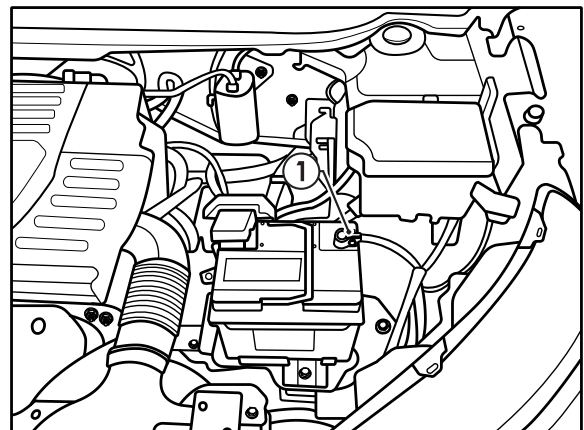
12. Re-attach bumper by following steps 1-6 in reverse.



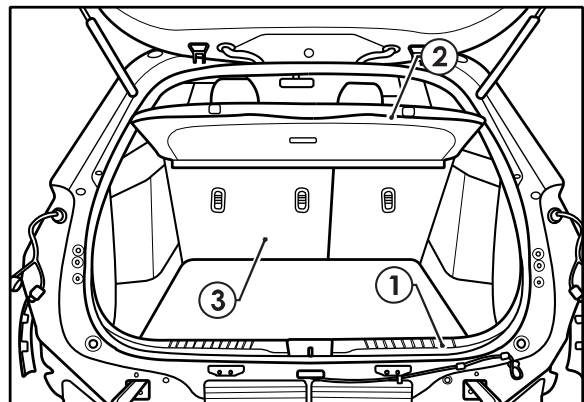
IMPORTANT

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.

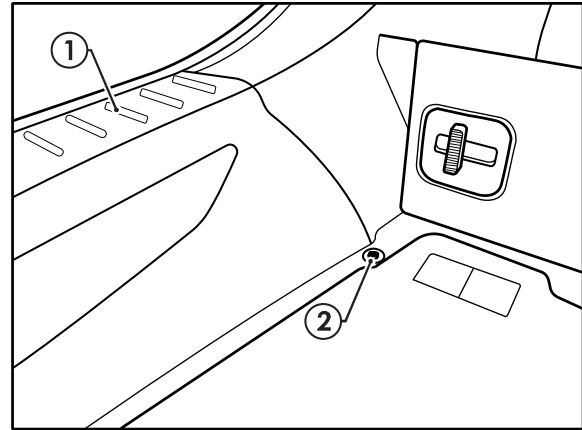
13. In the engine bay, disconnect the vehicle battery negative terminal (1).



14. In the luggage compartment, remove the boot liner (1).
15. Remove the spare wheel floor cover.
16. Remove the rear sunshades (2).
17. Fold the rear seats down (3).



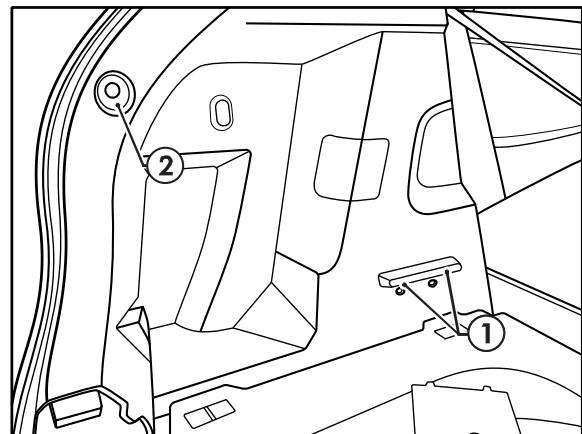
18. On the rear sill trim (1), remove the two scrivenets (2).
19. Dislodge the rear sill trim by pulling in an upwards direction and carefully disconnect the smart key antenna if fitted.



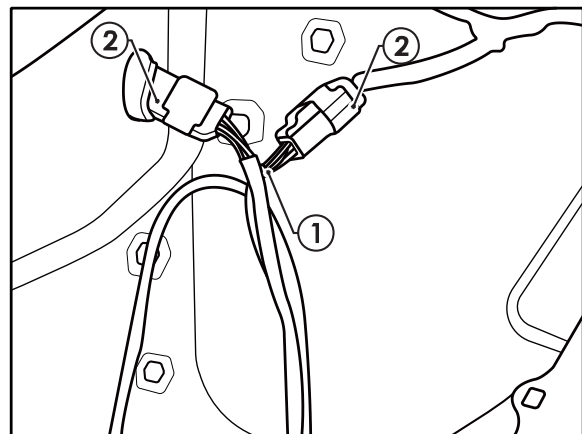
20. Remove the LHS and RHS luggage compartment bolts (1).
21. Remove the LHS and RHS (2) clips next to the weather seal.

Note: Twist and pull the clip to remove.

22. Dislodge the LHS and RHS trim.

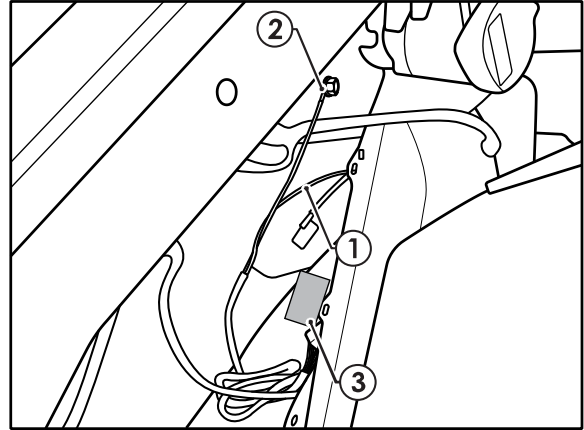


23. On the LHS of the luggage compartment, disconnect the tail light assembly connector.
24. Connect the supplied Trailer Patch (102239-WL) LHS (labelled LHS) mating connectors (1) in between the tail light assembly connectors (2).
25. Round the long branch of mating connectors (labelled RHS) to the RHS of the vehicle.
26. Patch in the RHS mating connectors between the vehicle harness and the tail light harness.

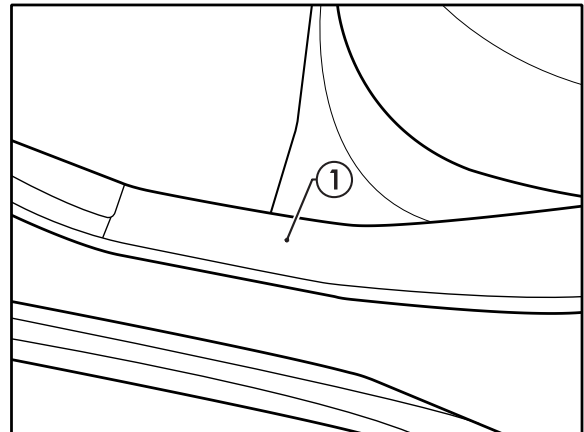


27. In the vehicle below the LHS tail light, route the orange wire (1) towards the front of the vehicle.
28. Secure the ground wire terminal (2) to a suitable area on the vehicle chassis.
29. Using an alcohol wipe, clean the LHS inner sheet metal area (3) and the underside of the ECU (04826).
30. Connect the trailer patch 12-way connector to the ECU.
31. Apply double sided tape to the ECU and secure it to the vehicle sheet metal.

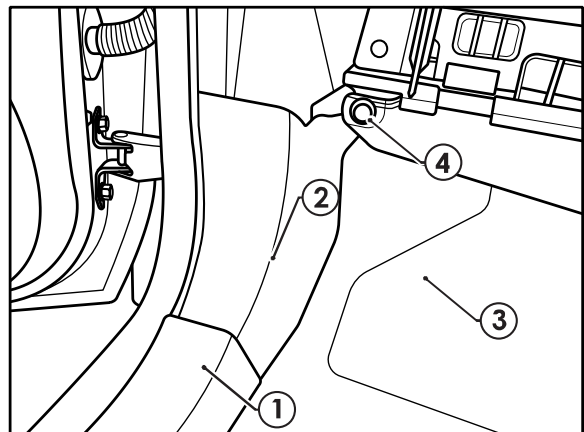
Note: Mount the ECU, ensuring the connector is orientated downwards.



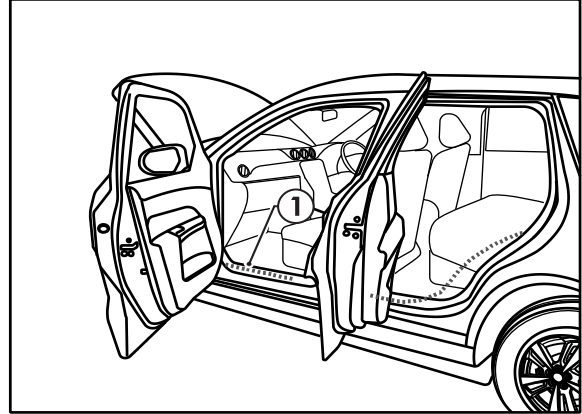
32. At the rear LHS rear passenger door, remove the sill trim (1).



33. In the driver's kick panel area, remove the LHS front sill trim (1).
34. Remove the LHS driver's kick panel (2).
35. Remove the carpet under the glove box (3) by removing the 3 scrivenets (4).
36. Remove the black cover on the fuse box.

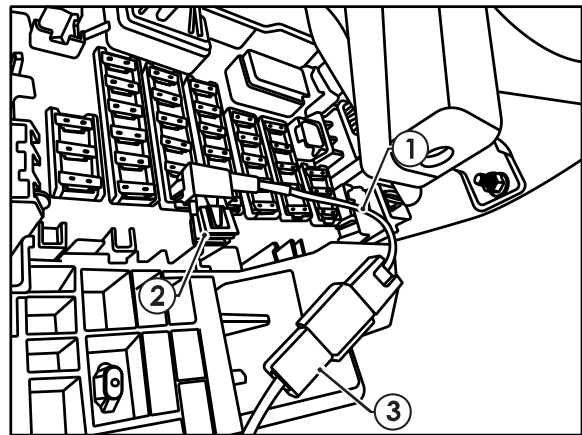


37. Route the orange power wire (1) up to the vehicle fuse box on the LHS of the vehicle. Tuck the wire behind the B pillar trim as the wire is routed.



38. On the vehicle fuse box, remove the vehicle fuse and discard.
39. On the Add-A-Fuse (1), insert the supplied 20 amp fuses (2) into the Add-A-Fuse top and bottom slot.
40. In the orientation shown, insert the Add-A-Fuse into the slot where the previously removed fuse was located.
41. Connect the Add-A-Fuse (1) to the main harness (3).

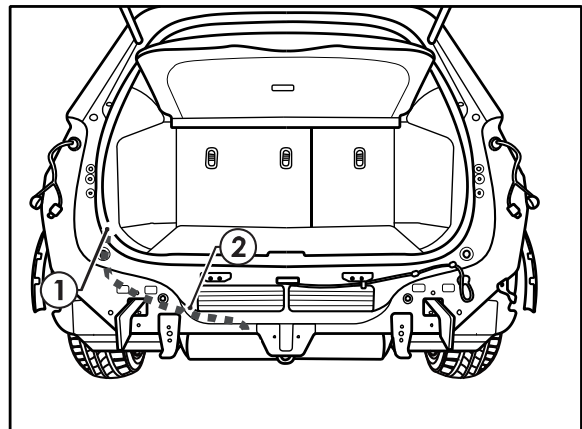
Note: To maintain correct electrical operation, ensure you insert the fuse adaptor into the allocated slot and in the orientation shown.



42. In the luggage compartment, drill a 30mm grommet hole (1) in a suitable location to enable the tail harness to be routed from the towbar to the ECU.
43. With the rear bumper removed, secure tail harness (2) to towbar.
44. Route tail harness up through chassis rail and previously removed vehicle blanking grommet.
45. Seat grommet in 30mm blanking hole and route to trailer harness blue connector on wiring loom

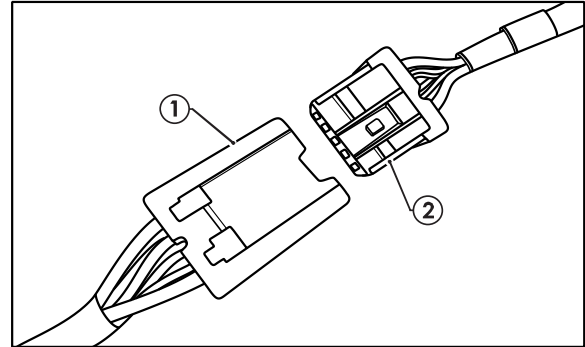
Note: Keep harness routing clear of all sharp edges, moving parts and places of extreme heat.

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



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46. Connect the tail harness (tail length 1200mm) 8- way connector to the trailer patch mating 8-way connector.

Note: Factory RPA system can be disabled via a switch on the dash.



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47. Secure all harness using supplied Cable Ties.
48. Test the trailer patch function using a light board or multi-meter.
49. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
50. Place the fitting instructions in the glove box after fitment.
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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 (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)

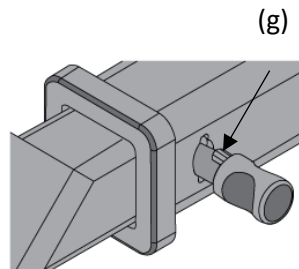
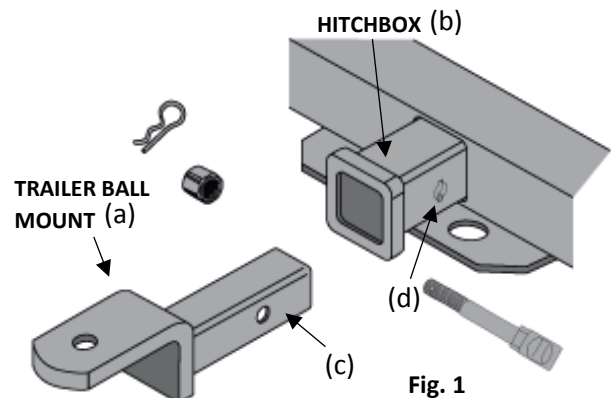


Fig. 2

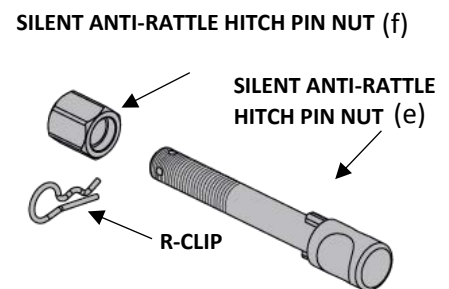


Fig. 3

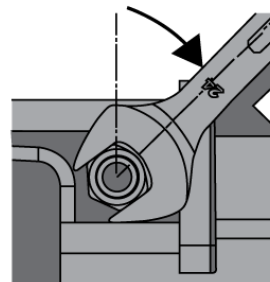


Fig. 4

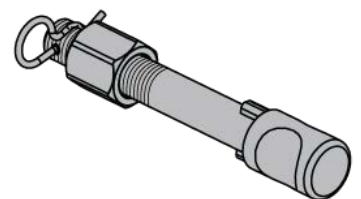


Fig. 5