



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER QTHY277L

HYUNDAI TUCSON NX4 CL4

PRODUCT DETAILS:

Part Number:	QTHY277L	Maximum Towing Braked:	1900	kg
ECU Number:	WLE70022	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	190	kg
TBM/Lug Part Number:	21320			

FITTING DETAILS:

Towbar Installation Time:	80 Mins.	RPA Disable/Other:	YES
Total Installation Time:	110 Mins.		
Bumper Cut Required:	Yes		

Note:

- Use Harness 04936 for RPA disable step 27.

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

BEFORE YOU START:

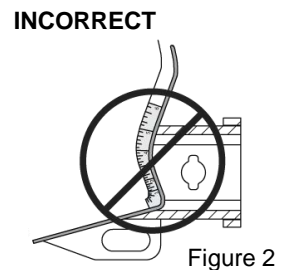
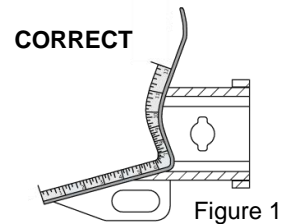
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.

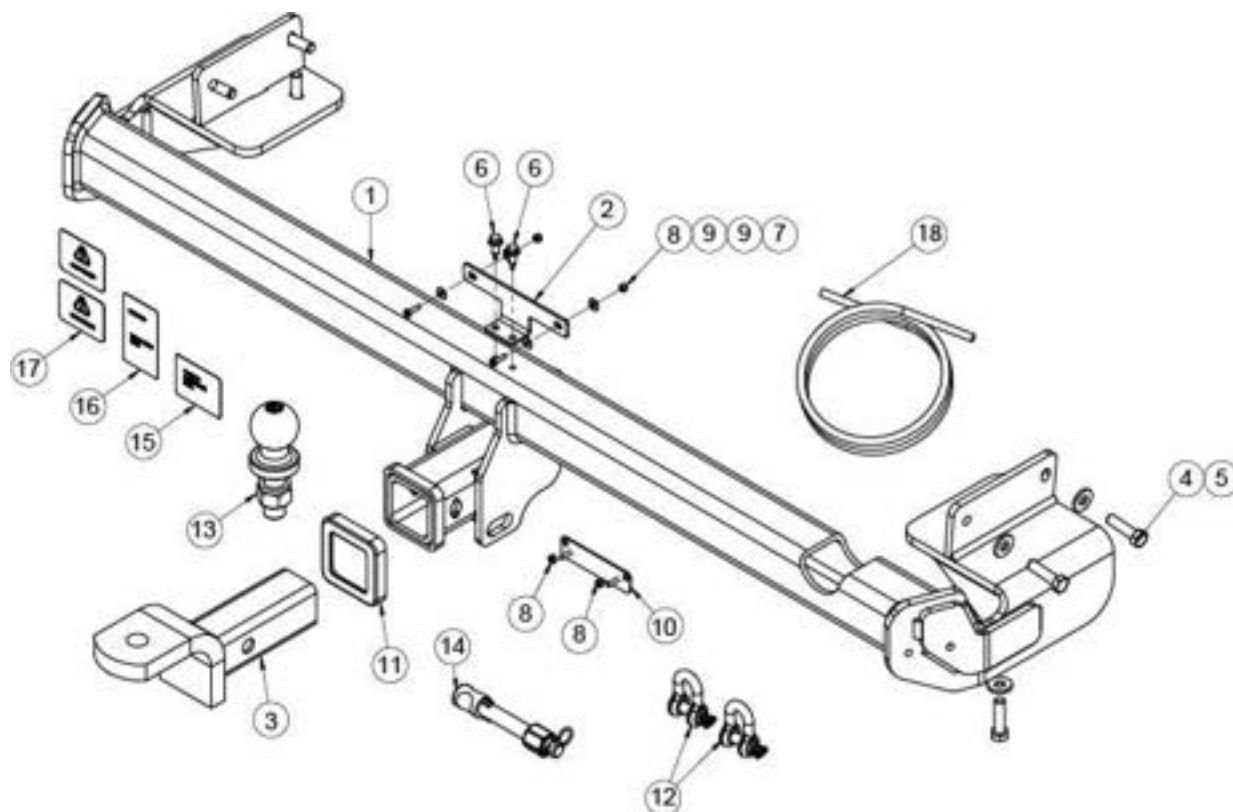
WARNING:

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

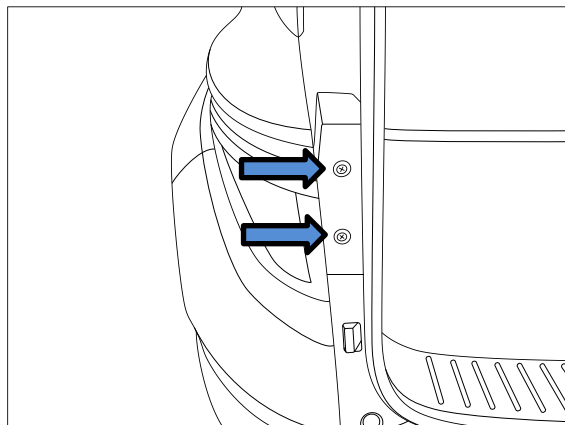


ITEM	DESCRIPTION	QTY
1	HYUNDAI TUCSON WELDED ASSY	1
2	KEY SENSOR BRACKET	1
3	TRAILER BALL MOUNT	1
4	SET SCREW HEX HD M10x45x1.25P	6
5	WASHER PLAIN M10x25x3	6
6	TEK SCREW 14-20 HEX HD 22mm	2
7	SCREW PAN HD M4x16x0.7P	2
8	NUT NYLOC HEX HD M4x0.7P	4
9	WASHER PLAIN 3/16x1/2x20G	4

ITEM	DESCRIPTION	QTY
10	PLUG BRACKET	1
11	HITCH BOX COLLAR COVER	1
12	"D" SHACKLE 10mm	2
13	TOWBALL 50mm	1
14	SMART PIN SILVER	1
15	COMPLIANCE LABEL	1
16	LOAD RATING LABEL	1
17	CAN MODULE WARNING LABEL	2
18	WIRING LOOM	1

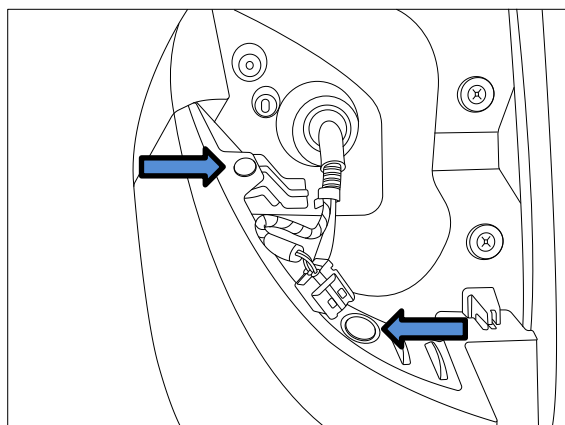
1. Remove 2x screws holding each taillight and disconnect taillights from vehicle.

Repeat for RHS.

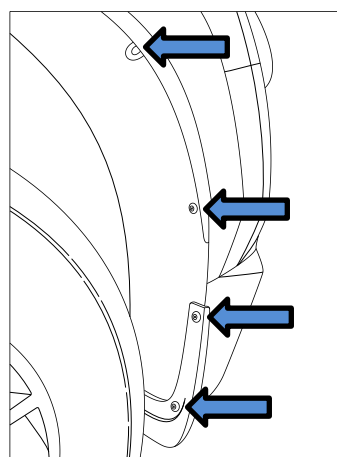


2. On the LHS Remove 2x scrivets on the bumper where the taillight was housed.

Repeat for RHS.

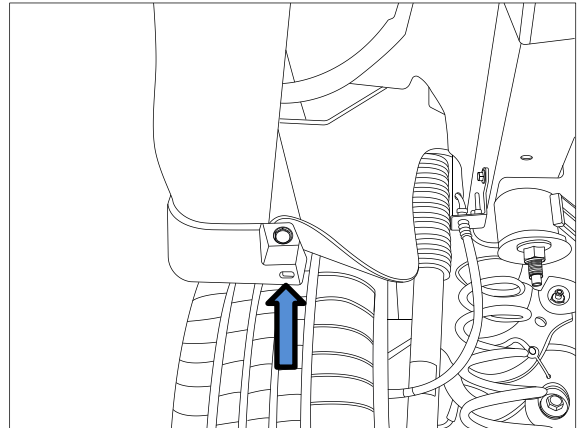


3. On the LHS remove 3x screws and 1x plastic nut holding the splashguard and liner to the bumper.



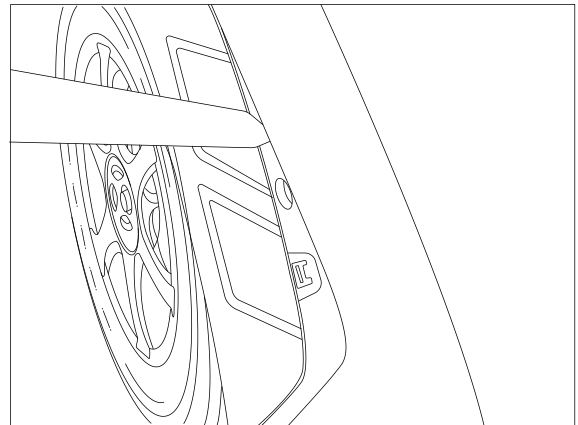
-
4. Remove 1x scrivet from the bottom of the splashguard and remove the splashguard.

Repeat for RHS.

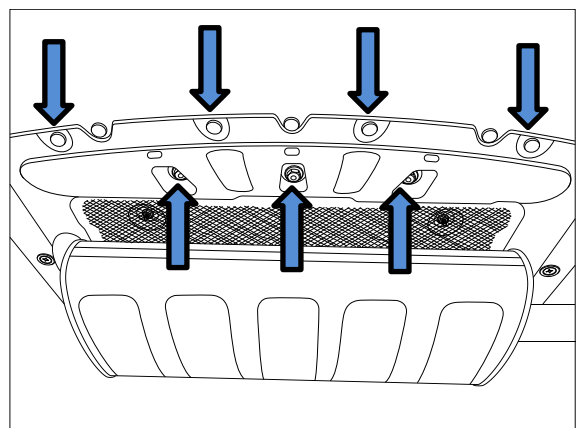


-
5. Apply Masking Tape around the LHS wheel arch trim and unclip the wheel arch trims (a trim removal tool will be useful here).

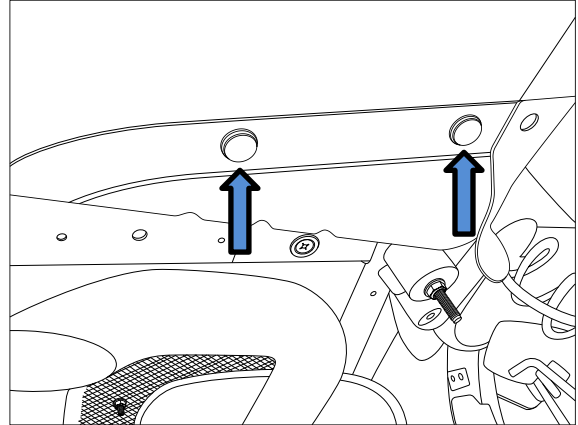
Repeat for RHS.



-
6. Remove 4x scrivets and 3x plastic nuts holding the bumper tray and remove tray.

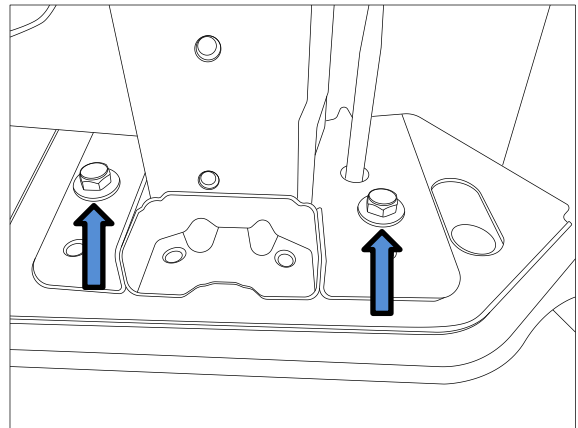


7. On the RHS only, remove 2x scriveners connecting the plastic trim to the bumper.



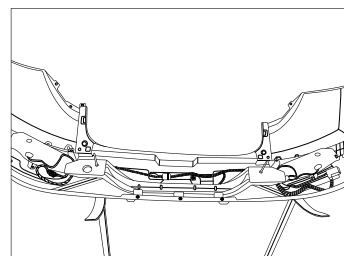
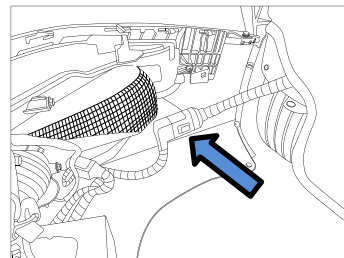
8. On the LHS behind the bumper, remove 2x 12mm bolts securing the impact beam to the vehicle.

Repeat for RHS.

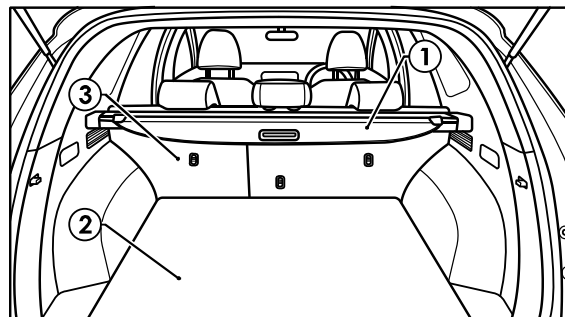


9. Carefully remove the bumper from the vehicle, disconnect any wiring connecting the bumper to the vehicle.

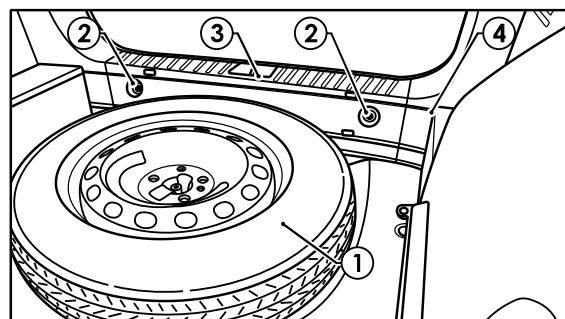
Place on a bumper stand.



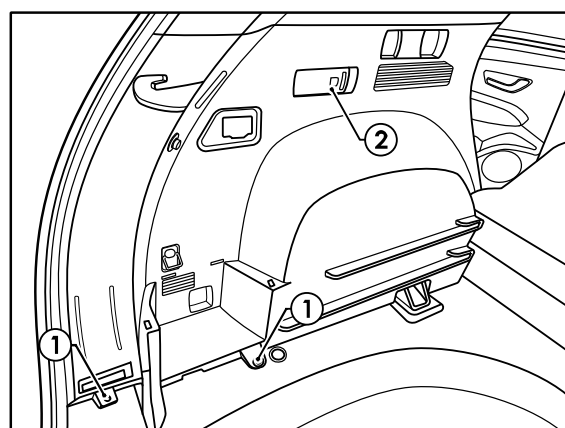
-
10. In the luggage compartment, remove the rear sunshade (1).
Remove the floor carpet (2).
Fold down the LHS rear seat (3).



-
11. Remove the spare wheel (1).
Remove the 2 trim clips (2) securing the rear scuff trim (3).
Remove the rear scuff trim by lifting up.
12. Remove the LHS rear quarter trim (4).

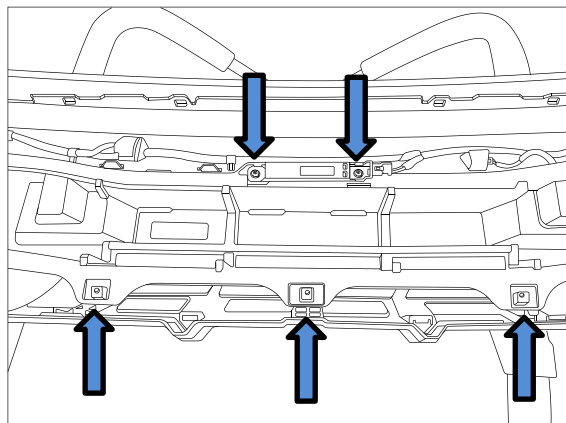


-
13. On the LHS luggage compartment trim, remove two lower screws (1) and screw behind the seat release (2).
14. Fold the LHS luggage compartment trim inwards to gain access to the vehicle prewire connector which is done in step (24).

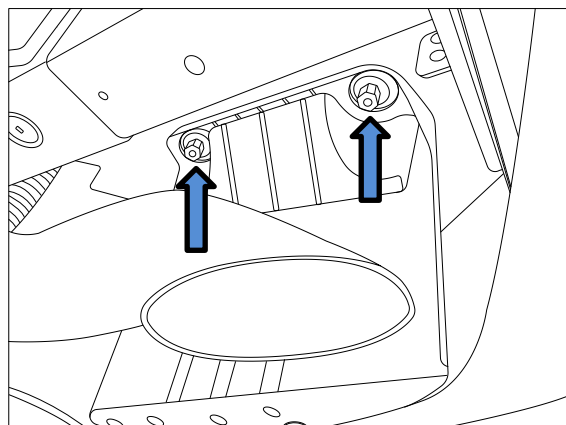


15. If fitted, remove the key sensor from the impact beam (top of image shown right).

Remove 3x scrivenets connecting the impact beam to the rear bumper and discard (bottom of image shown right).



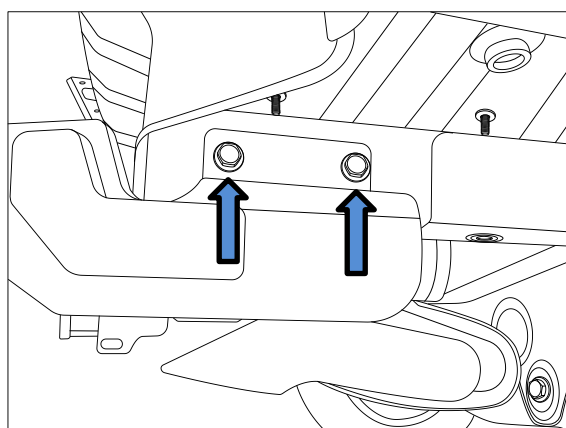
16. On the RHS only, remove 2x plastic nuts from the plastic trim.



17. (Note: a minimum of 2 people is required to lift the towbar onto the vehicle.)

Using 2x M10x45mm Set Screws and 2x M10 Plain Washers per side, loosely attach the towbar to the outside of the vehicle chassis shown right.

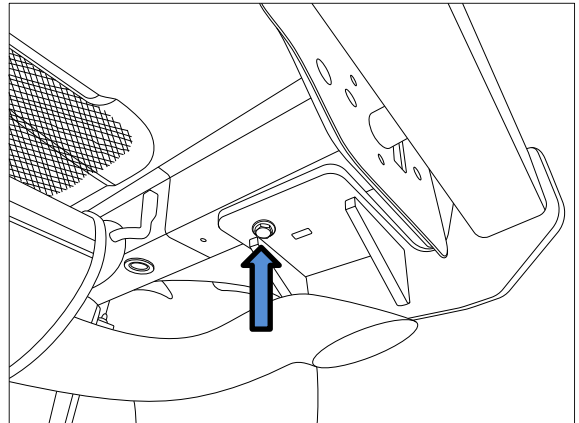
Repeat for LHS



-
18. Using 1x M10x45mm Set Screw and 1x M10 Plain Washers per side attach the towbar to the bottom of the chassis rail

Repeat for LHS

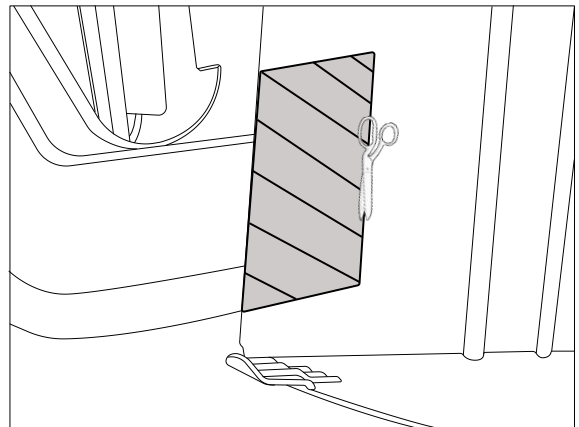
Torque all M10 fasteners to 62Nm.



-
19. Cut the plastic trim to make room for the RH sidearm as shown right.

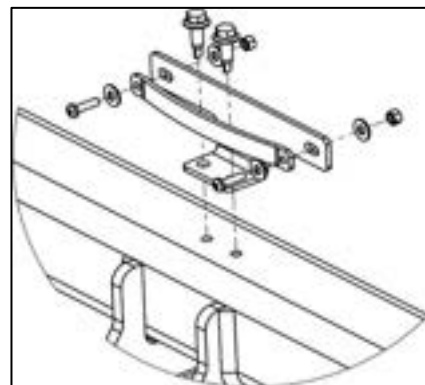
Cut Dimensions: 70mm (W) x 94mm (H).

Once complete reattach x2 plastic nuts which connect the trim to the vehicle.



-
20. If the vehicle is fitted with a kick sensor, use 2x Tek Screws to attach the bracket to the top of the towbar.

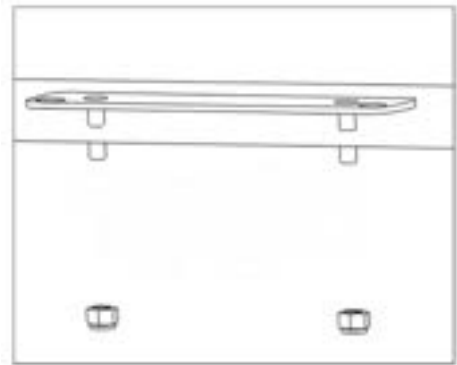
Attach the kick sensor (removed in step 15) to the antenna bracket on the towbar using the supplied M4 fasteners.



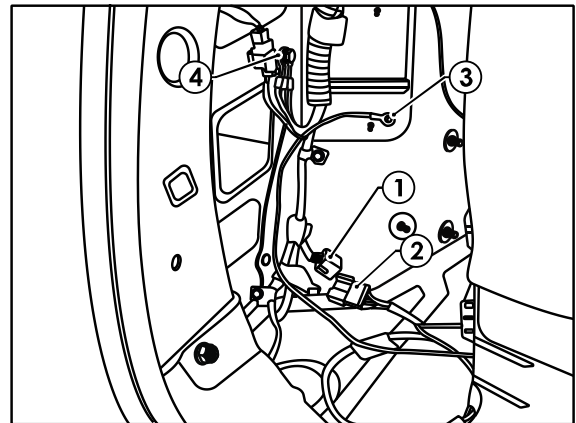
21. Cut out the relevant bumper cut template from the appendix (N-Line or Standard variant). Place template to the bumper inner skin. Mark and cut out the area of the bumper.

Drill 2x ø5mm holes 69mm apart to either side of the bumper cut for the plug bracket. Remove all swarf and rough edges.

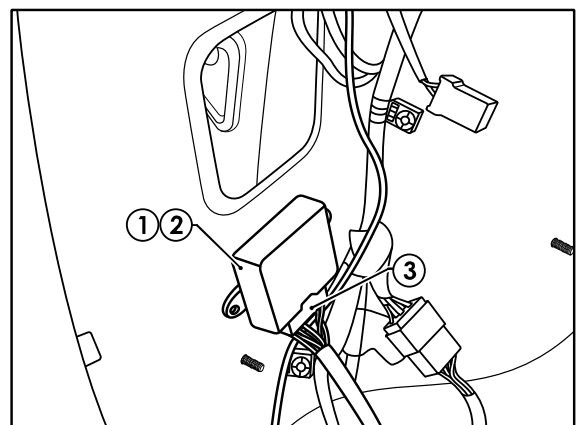
Locate the plug bracket and ensure the harness cable length is long enough.



22. Connect the vehicle prewire connector (1) to the mating connector on the patch harness (WLL90022) (2). Connect the ring terminal (3) to the vehicle earth point (4).



23. Using an alcohol wipe, clean the LHS inner sheet metal area (1) and the underside of the ECU (WLE70022) (2). Connect the trailer patch 18-way connector (3) to the ECU. 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.



24. Remove the blanking grommet (1) on the LHS floor, and drill out to 30mm.

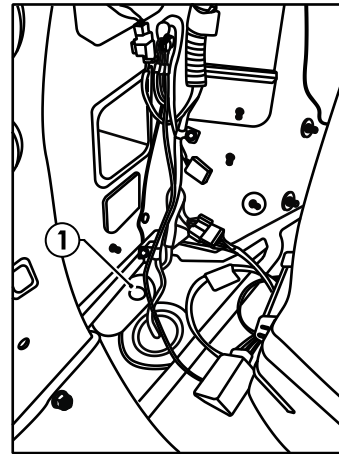
With the rear bumper removed, secure tail harness to towbar

Route tail harness up through chassis hole.

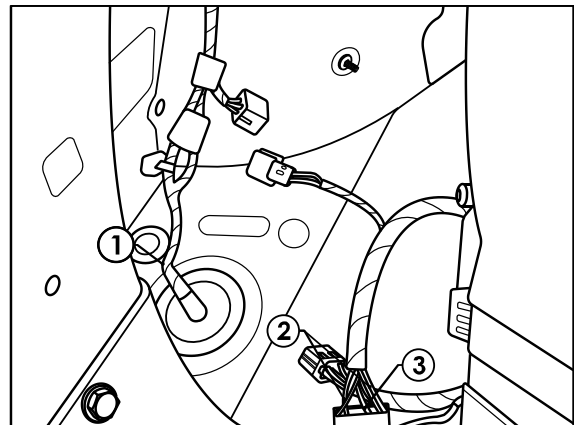
Seat grommet in 30mm hole and route to trailer harness blue connector on patch loom.

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.



25. For RPA disable, cut the Brown/Black wire in the harness coming from the floor (1). Strip, crimp and seal the tail harness GREY and GREY/BLACK wires (2) to the vehicle brown wire (3). (1 wire going to each side of the brown wire).



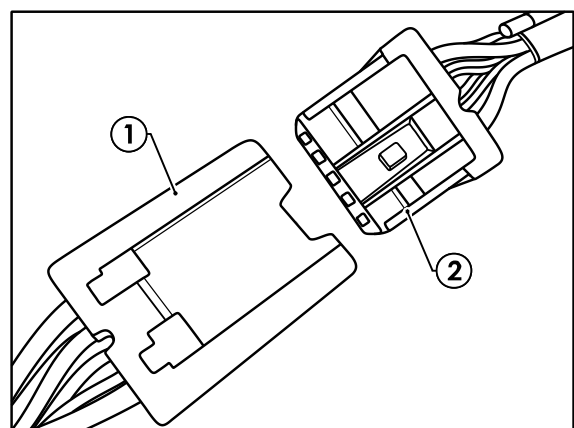
26. Connect the tail harness (tail length 1200mm) 8-way connector (1) to the trailer patch mating 8-way connector (2).

Secure all harness using supplied cable ties.

Test the trailer patch function using a light board or multimeter.

Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles from steps 1- 13 in reverse.

Place the fitting instructions in the glove box after fitment.



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)

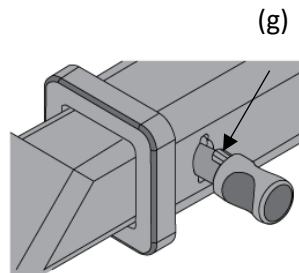
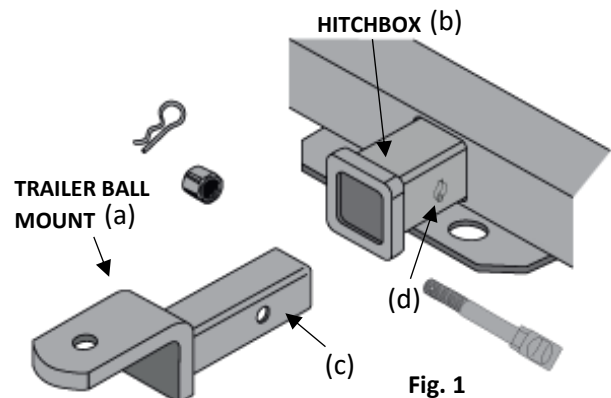


Fig. 2

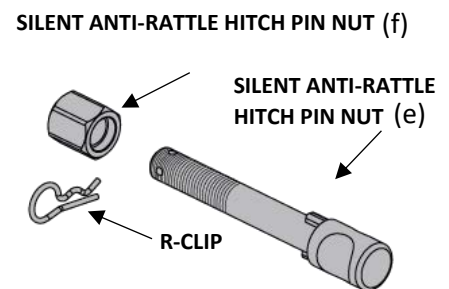


Fig. 3

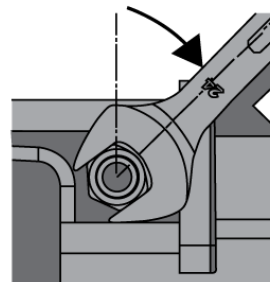


Fig. 4

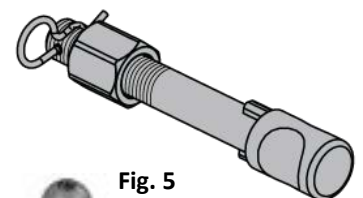


Fig. 5

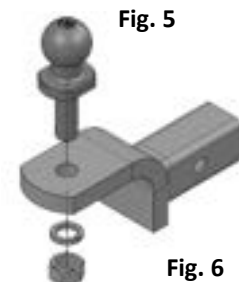
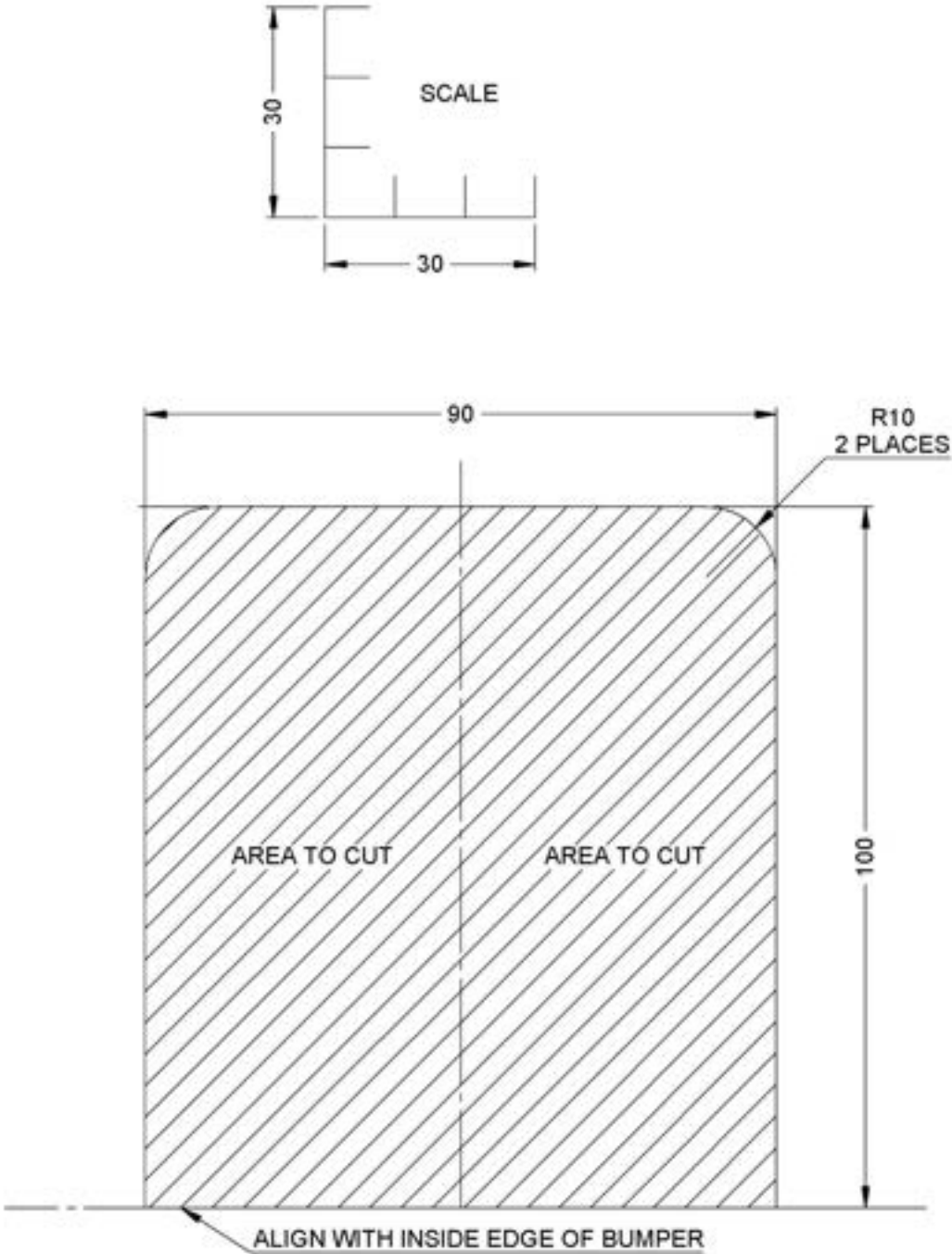


Fig. 6

APPENDIX

Standard Vehicle Bumper Cut

Print A4 Scale



APPENDIX

N-Line Vehicle Bumper Cut

Print A4 Scale

