

PRODUCT DETAILS:

Part Number:	QTCL660L	Maximum Towing Braked:	3100	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1800mm	Maximum Static Ball Load:	310	kg
TBM/Lug Part Number:	21201			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other:	YES
Total Installation Time:	90 Mins.		
Bumper Cut Required:	Yes		

Note:

- Electric Brake = Brake Prep Connector
- RPA is disable via switch on dash driver side.

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).

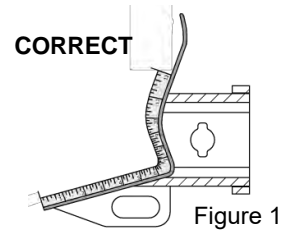


Figure 1

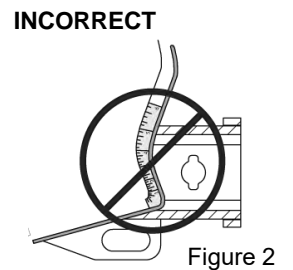


Figure 2

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

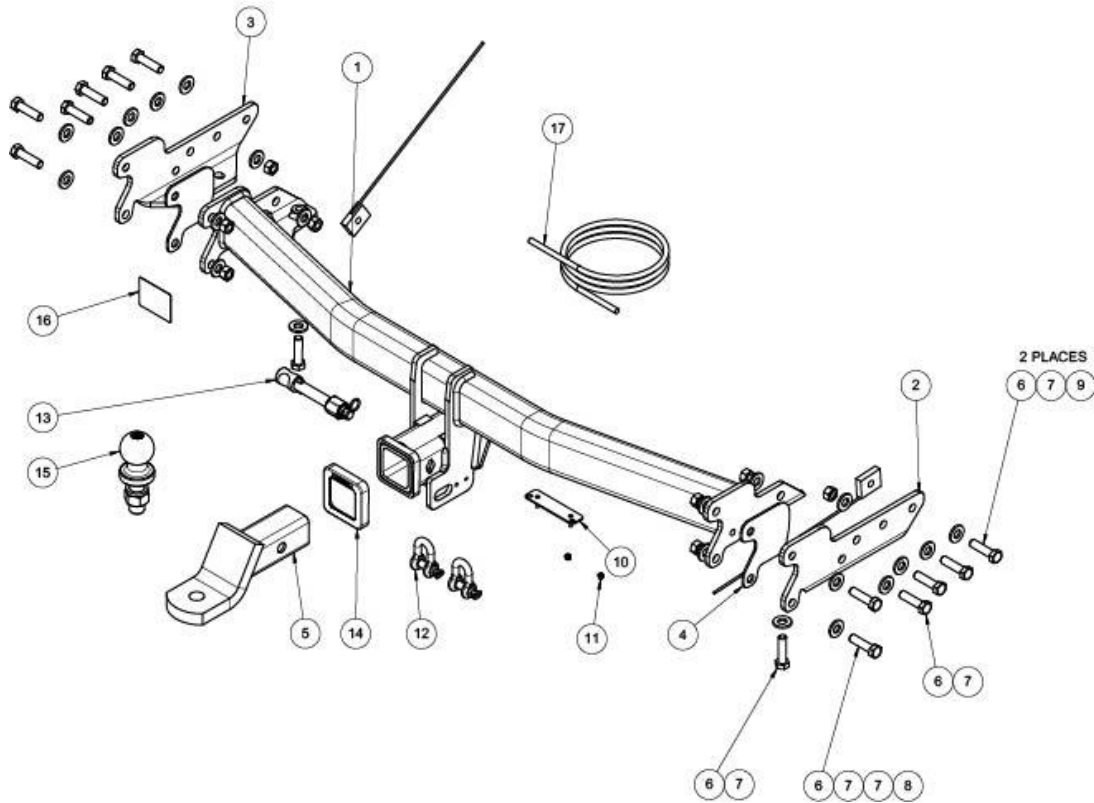
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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.

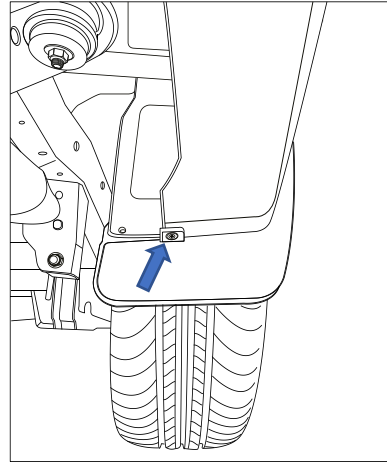
i TOWBAR ASSEMBLY DIAGRAM



ITEM	DESCRIPTION	QTY
1	PAJERO SPORT WELDED ASSEMBLY	1
2	SIDE ARM BRACKET - RHS	1
3	SIDE ARM BRACKET LHS	1
4	SPACER	2
5	TRAILER BALL MOUNT	1
6	SET SCREW HEX HD M12x45x1.25P	14
7	WASHER PLAIN 1/2"	22
8	NUT HEX M12x1.25P	8
9	M12 WIRE PLATE	2
10	PLUG BRACKET	1
11	NUT NYLOC HEX M4x0.7P	2
12	"D" SHACKLE 10mm	2
13	SMART PIN	1
14	HITCH BOX COLLAR COVER	1
15	TOWBALL 50mm	1
16	ACRYLIC COMPLIANCE LABEL	1
17	WIRING LOOM	1

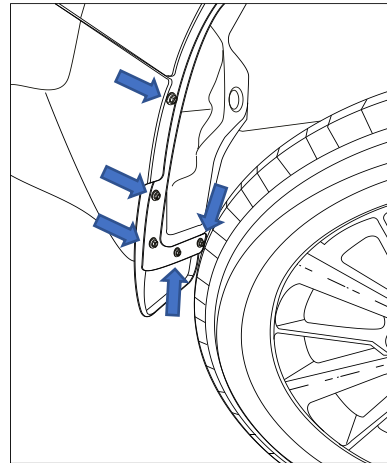
1. Remove 1 x Screw from underside of vehicle, behind rear wheel arch.

Repeat for opposite side of vehicle.



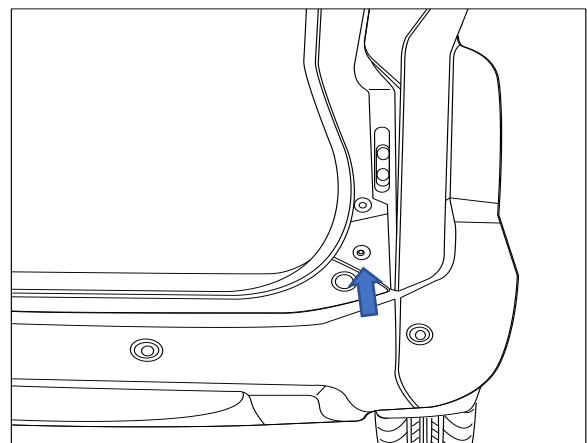
2. Remove 2 x Screws and 2 x push rivets securing mud guard to rear side of rear wheel arch; remove mud guard.
3. Remove 1x screw securing rear bumper to vehicle at rear wheel arch.

Repeat steps 2 and 3 for opposite side of vehicle.



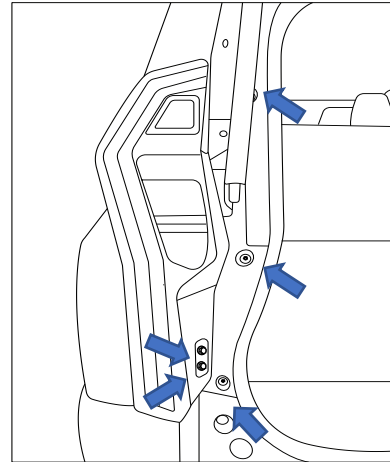
4. Remove 1x Screw securing lower tail light to rear bumper.

Repeat for opposite side of vehicle.

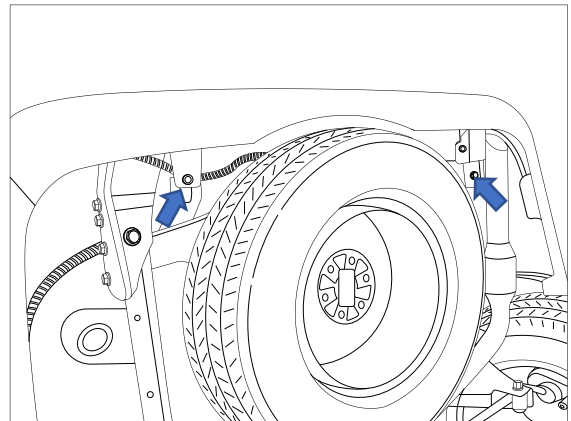


5. Remove the tailgate stopper, secured with 2 x screws.
6. Remove 3 x screws securing taillight. Remove taillight (pull rearwards), disconnect from harness. The clip is positioned behind the rubber grommet in the body cavity.

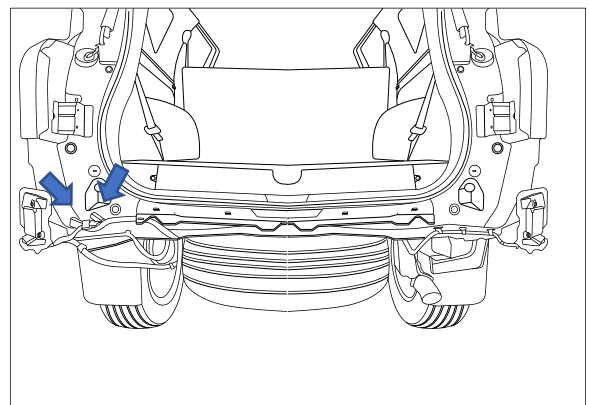
Repeat steps 5 and 6 for opposite side of vehicle.



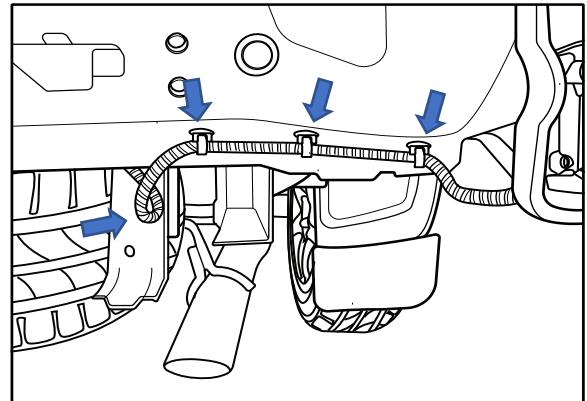
7. Remove 2 x push rivets from underside of rear bumper.



8. Carefully unclip and remove rear bumper. Ensure to disconnect wiring loom connectors located on the LH side.
9. Remove any rear towing or shipping hooks from the left and right hand chassis rails if fitted and discard.
10. Lower spare wheel as per vehicle's Owner's Manual.



11. When fitting the the side arm brackets and cross tube, ensure that any wiring harnesses are not pinched between the bracket being fitted and vehicle rear panel. Remove 1 or more harness fixing points on the left and right hand sides of the vehicle as required to prevent wiring harness damage.

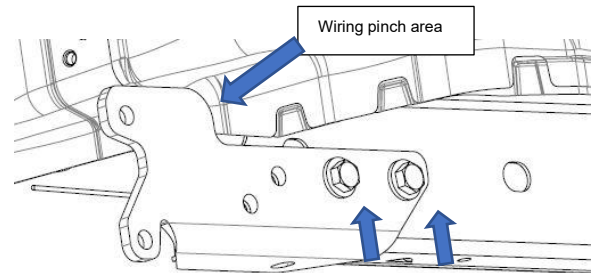


12. Fit sidearm bracket to outside of chassis rail and loosely secure the forward mounting hole with 1 x M12 Set Screw, complete with 1 x Flat washer and 1 x tapped plate on wire.

Loosely secure the 2nd mounting position of the side arm bracket with 1 x M12 Set screw, complete with 2 x Flat washers and 1 x M12 Nut.

Repeat for opposite side of vehicle.

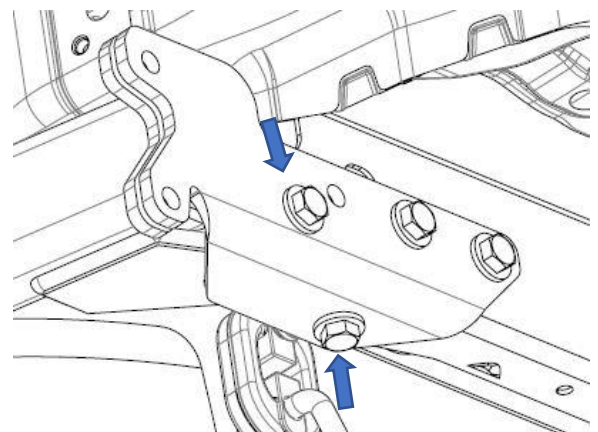
NOTE: Be careful not to pinch wiring loom.



13. Position the crosstube assembly into the chassis rail and loosely secure the side arm along with the chassis rail to the weld Nuts on the crosstube assembly with 2x M12 Set screws, complete with 1x flat washer per set screw.

Repeat for opposite side of vehicle.

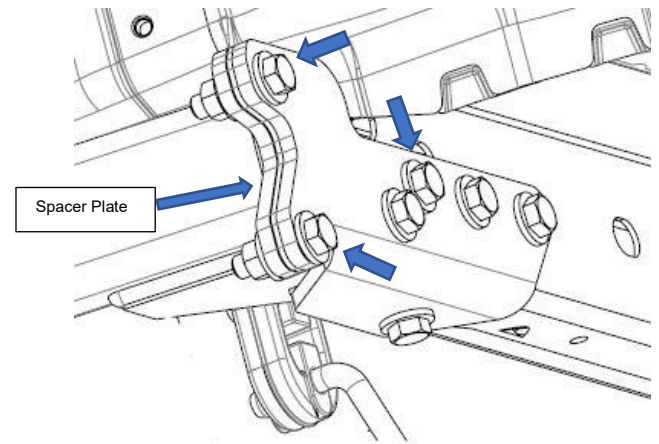
NOTE: Be careful not to pinch wiring loom.



14. Insert spacer plate between the side arm bracket and the crosstube. Loosely secure the crosstube assembly to side arm bracket using 3x M12 Set screws, complete with 2x Flat washers and 1x M12 Nut per set screw. Repeat for opposite side of vehicle.

Position the towbar assembly and tighten all fasteners to the following torque:

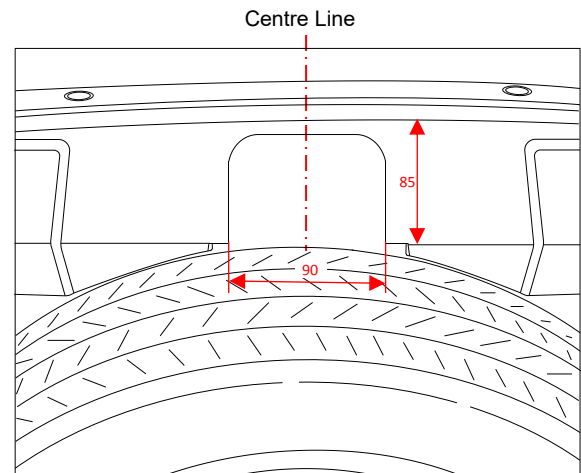
M12 x 1.25 Gr10.9 : 125Nm



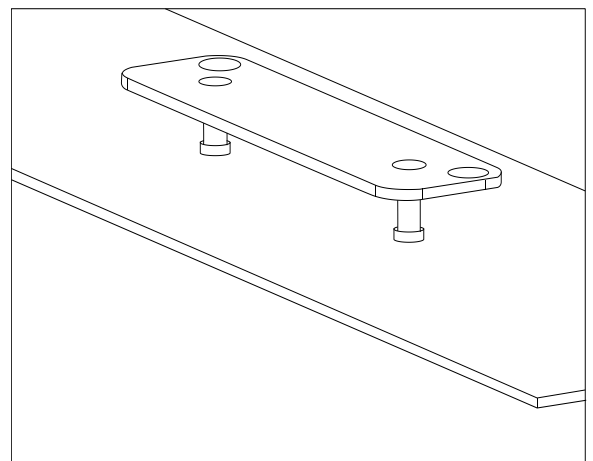
15. For bumper cut.

Determine the centre of the bumper, measure and mark off 90mm wide by 85mm long as measured from the centre of the bottom edge of the bumper.

Note: The top of the cut line should be about 40mm below the bumpers bottom styleline.



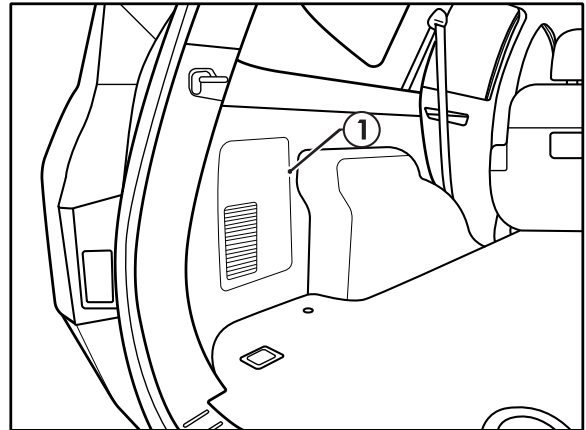
16. Mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket.



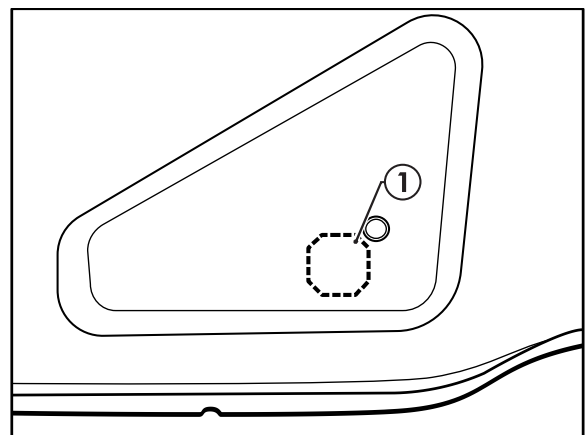
IMPORTANT

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.

17. In the luggage compartment, remove the LHS access panel (1) and the tools inside.

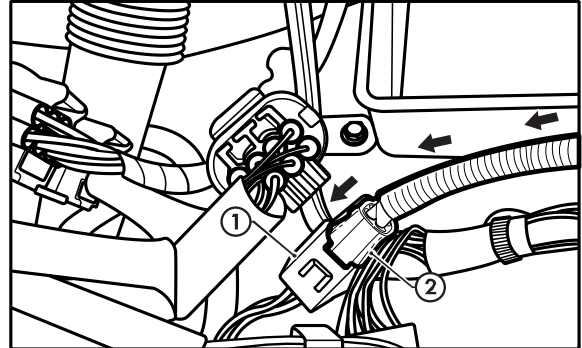


18. At the LHS rear quarter exterior of the vehicle, locate a suitable position on the vehicle sheet metal area and drill out a Ø30mm hole (1). File down and rough or sharp edges after drilling and apply rust inhibitor.

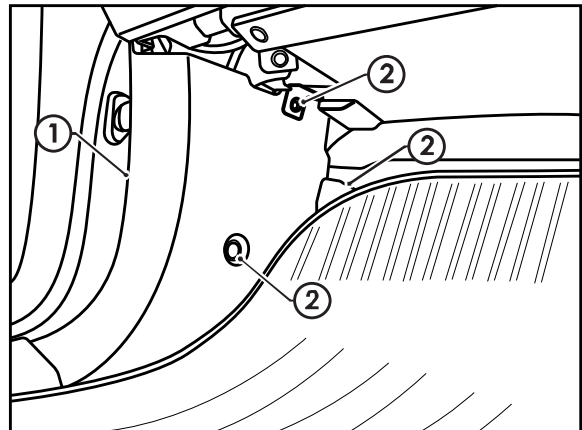


19. In the engine bay, locate the harness with the 4way connector (1) near the battery. Connect the trailer patch engine harness 4-way connector (P/No: 101249-WL) (2) to the vehicle harness connector (1).

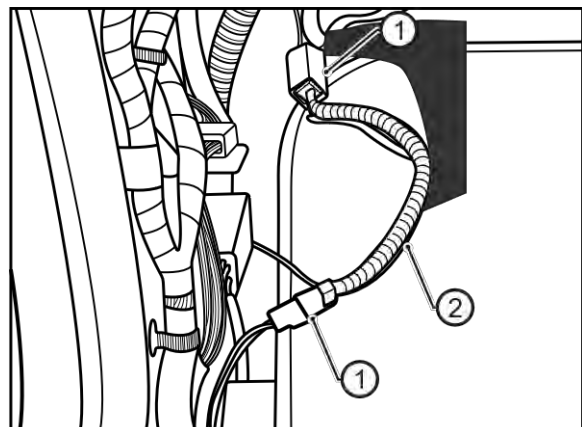
Do not connect the harness ring terminal to the battery terminal yet.



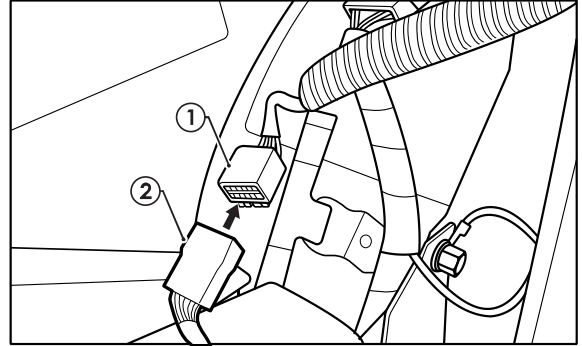
20. Inside the front passenger cabin area, remove the LHS front passenger kick trim (1) by releasing the three fasteners (2).



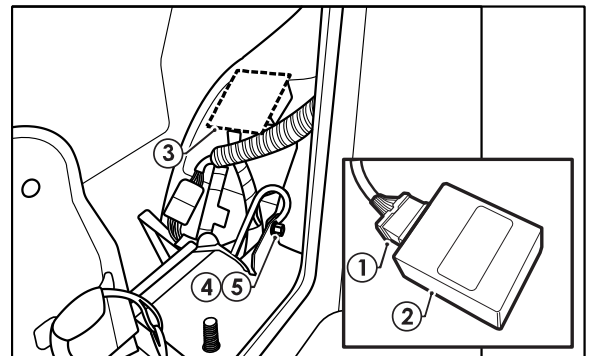
21. Locate the vehicle kick panel harness 4-way (1) and 2-way connectors (1) and patch the kick panel harness patch (P/No: 101249-WL) (2) in between.



22. At the LHS rear quarter tool compartment cavity, locate the break-out connector (1) and connect the trailer patch (P/No: 101249-WL) 10-way connector (2) to the vehicle mating break-out connector (1).

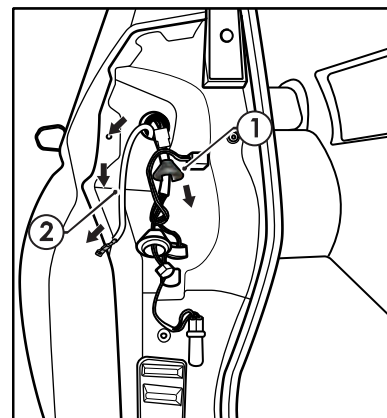


23. Connect the trailer patch ECU connector (1) to the ECU (2). Secure the ECU (2) onto the vehicle LHS wheel arch sheet metal area (3) using double sided tape. **Ensure the ECU is mounted with the connector is facing downwards.**
24. Secure the trailer patch ground ring terminal (4) to the vehicle grounding point (5) using the existing fastener.



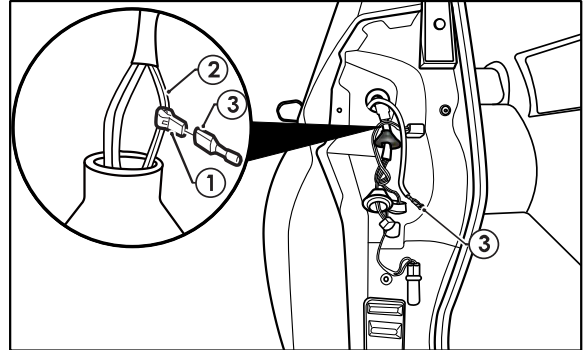
25. At the LHS rear exterior of the vehicle, dislodge the LHS vehicle tail light harness grommet (1).
26. Route a guide wire into the vehicle grommet hole, into the LHS rear quarter interior area and retrieve the trailer patch reverse wire terminal branch (2) to the exterior. Remove the guide wire after routing.

Note: Step 26 & 27 are only if connecting reverse wire.

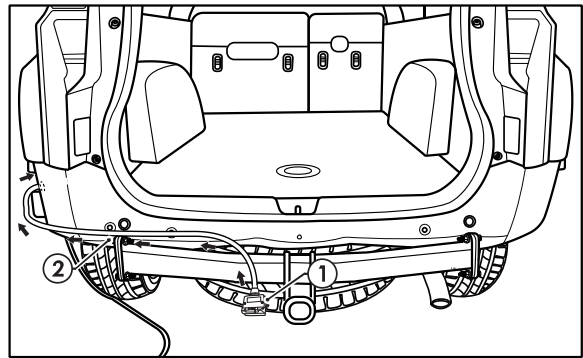


27. On the LHS of the luggage compartment, following the table below, connect the ezy-tap (1) to the vehicle reverse wire (2), then connect the trailer patch terminal (3) to the ezy-tap (1).

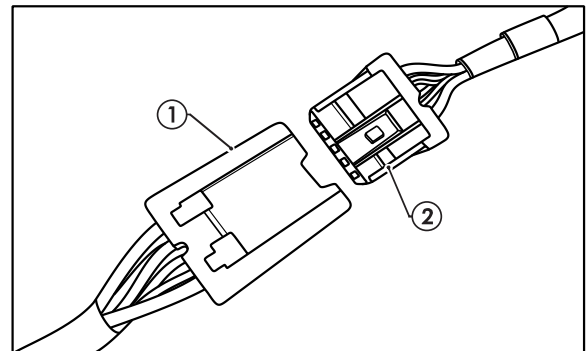
Function	Trailer Patch	Vehicle Connector
REVERSE	BLACK/WHITE	RED/BLACK



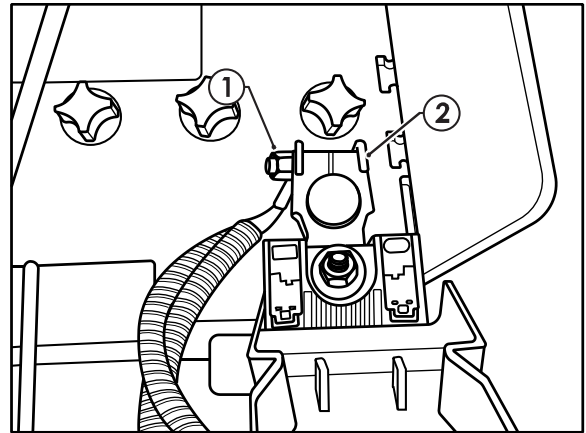
28. At the rear exterior of the vehicle, mount the tail harness socket (1) to the towbar mounting bracket using M4 fasteners (not supplied).
 29. Route the tail harness (tail length: 1800mm) (2) across the LHS.



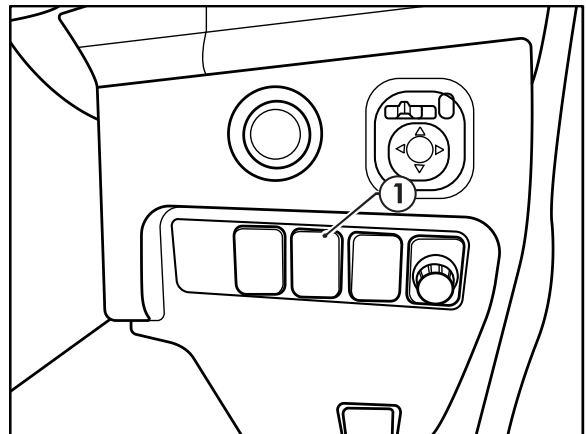
30. Connect the tail harness 8-way connector (1) to the trailer patch 8-way mating connector (2).



31. In the engine bay, connect the power harness ring terminal (1) to the battery positive terminal (2).



32. Refit the tail light.
33. Test the trailer patch function using a light board or multi-meter.
34. Secure all harnesses using cable ties (not supplied).
35. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
36. Place the fitting instructions in the glove box after fitment.
37. The RPA system can be disabled via a switch (1) on the dash.





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)

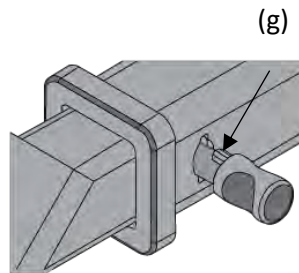
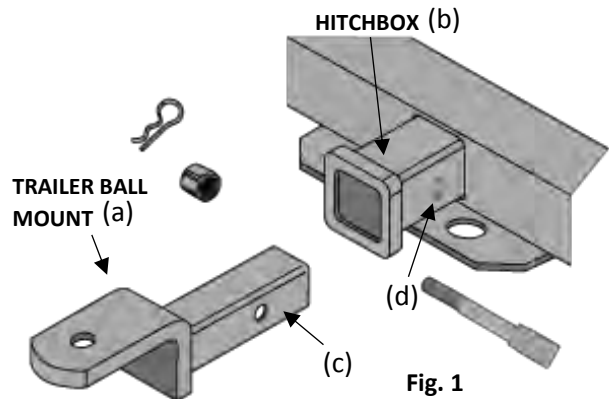


Fig. 2

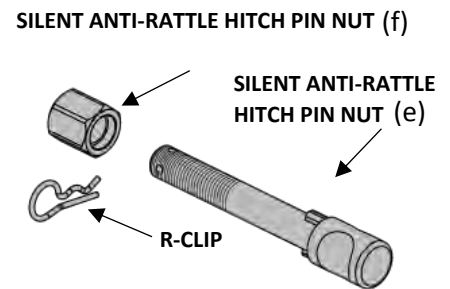


Fig. 3

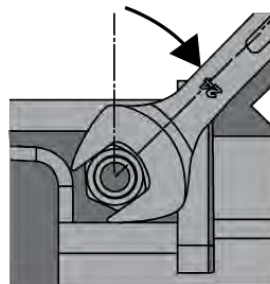


Fig. 4

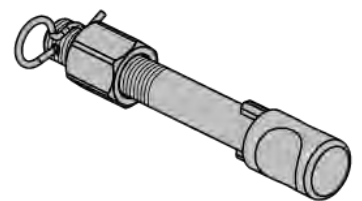


Fig. 5