

PRODUCT DETAILS:

Part Number:	QTDS865L	Maximum Towing Braked:	2000	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	200	kg
TBM/Lug Part Number:	21232			

FITTING DETAILS:

Towbar Installation Time:	90 Mins.	RPA Disable/Other:	NO
Total Installation Time:	130 Mins.		
Bumper Cut Required:	Yes		

Note:

- RAP disable via "Vehicle Cluster Information Display" (Step 38).
- Autonomous rear braking disable via "Vehicle Cluster Information Display" (Step 40).

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

BEFORE YOU START:

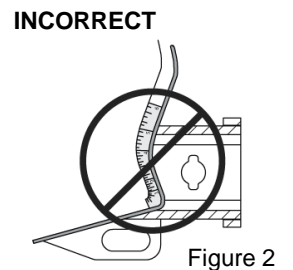
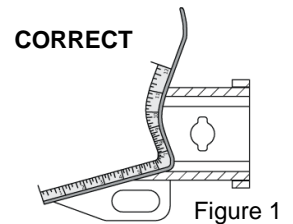
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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

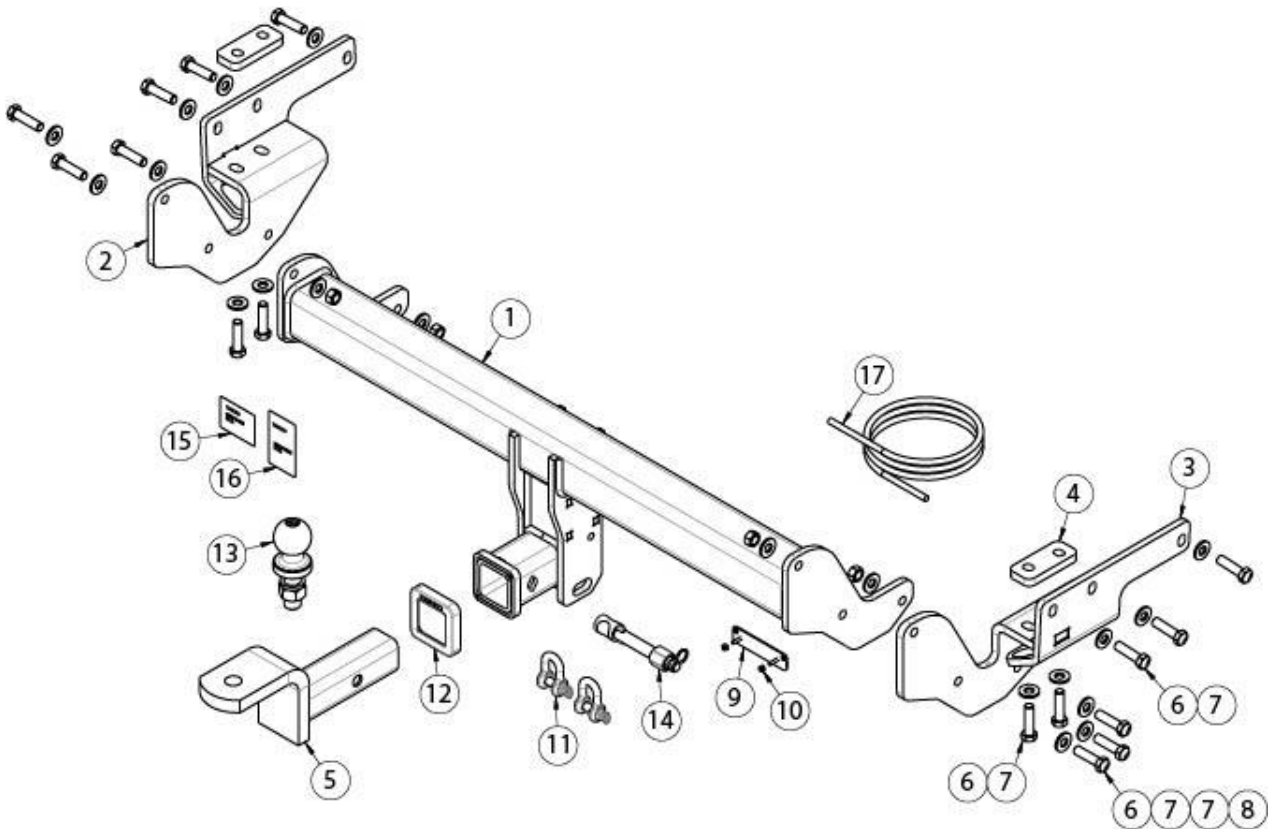
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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

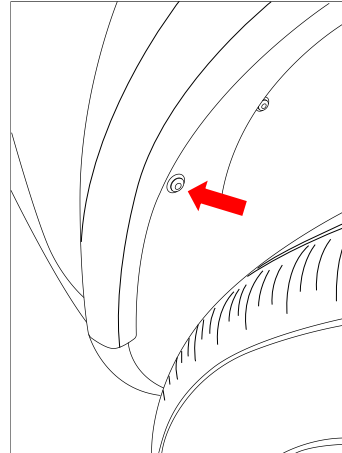


ITEM	DESCRIPTION	QTY
1	X-TRAIL CROSSTUBE ASSEMBLY	1
2	SIDE ARM ASSEMBLY, LH	1
3	SIDE ARM ASSEMBLY, RH	1
4	CHASSIS SEAT SPACER	2
5	TRAILER BALL MOUNT	1
6	SET SCREW HEX HD M12x45x1.25P	16
7	WASHER PLAIN M12x27x3.0	22
8	NUT HEX HD M12x1.25P	6
9	PLUG BRACKET	1

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

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1. In the wheel arch, remove 1 x scrivet.

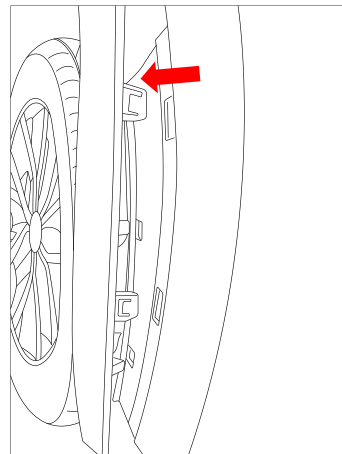
Repeat for other side.



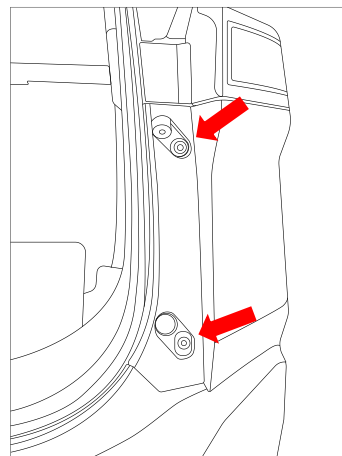
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2. Unclip the wheel skirt to expose the upper bumper screw.

Remove 1 x screw.

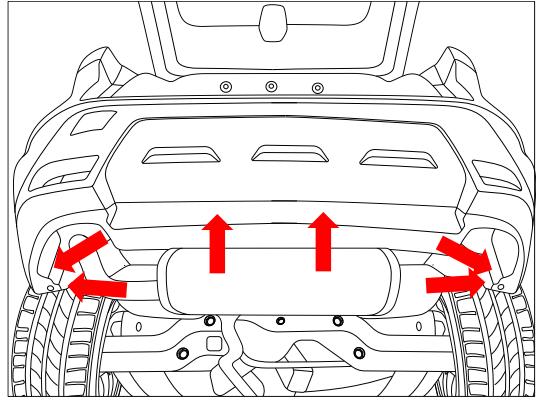
Repeat for the other side.



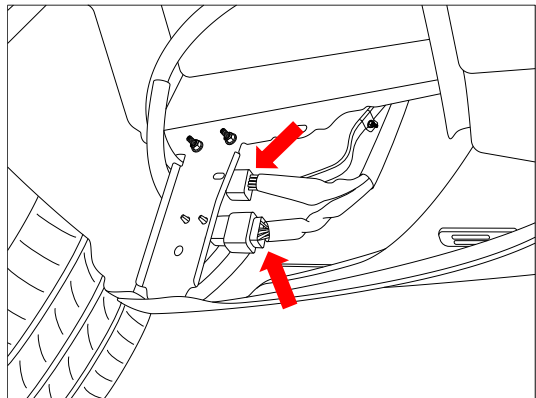
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3. Open the luggage door and remove the exposed 4 x screws (2 per side).



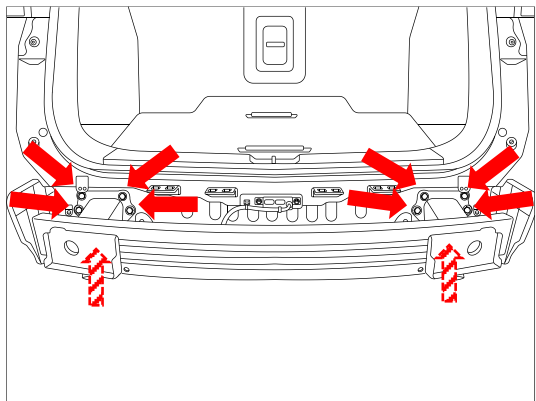
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4. Along the underside of the bumper, remove the 4 x scrivenets and 2 x screws.



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5. Inside the bumper on the RH side, disconnect the 2 x wiring connectors.

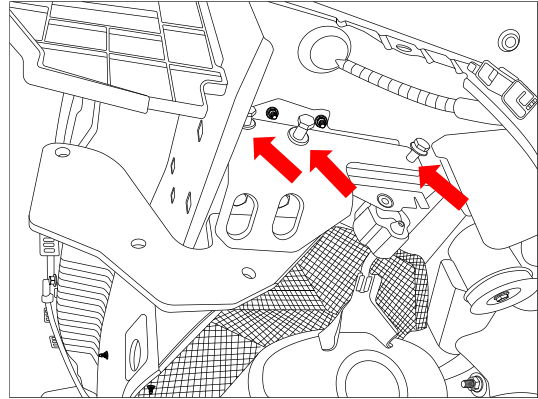


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6. Peel away bumper from the sides and remove from vehicle.
7. Remove and discard the impact beam secured with 5 x bolts per side.



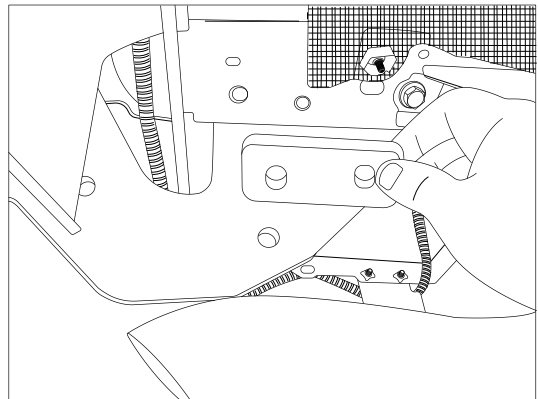
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8. Position the side arm to the chassis rail and loosely secure to the side with 3 x M12 bolts complete with 1 x washer per bolt.

Repeat for the other side.



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9. Insert the spacer plate, between the bottom of the chassis and the side arm, and loosely secure the side arm from the bottom with 2 x M12 bolts complete with 1 x washer per bolt.

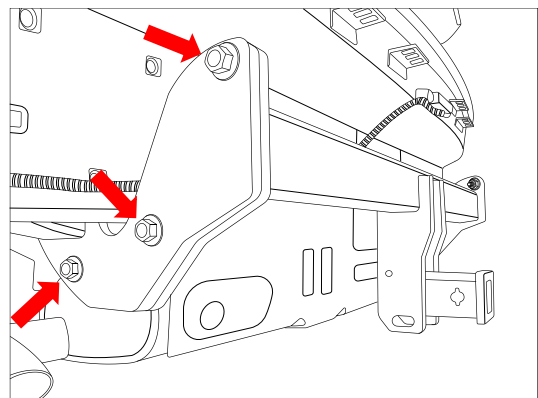
Repeat for other side.



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10. Position the crosstube assembly to the side arms and loosely secure each side with 3 x M12 bolts complete with 2 x washers and 1 x nut per bolt.

11. Tighten all fasteners to the following torque.

M10 x 1.25 Gr10.9 : 125Nm.

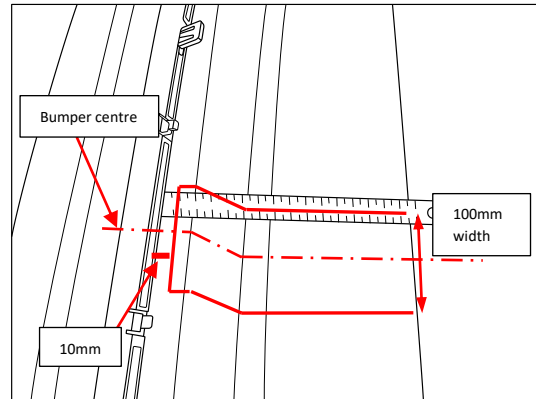


12. For the bumper cut.

On the inside of the bumper, identify the centre of the bumper. Measure, mark out and cut a section, 10mm away from merged panels (clip section) and 100 mm wide on the panel as indicated.

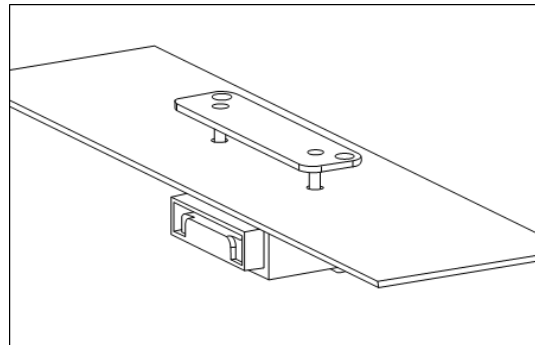
NOTE:

Cut only the bottom section of the bumper. The painted section does not get cut. Ensure that you do not cut through any foot swipe sensors or wires if applicable.



13. At an appropriate position on the bumper, mark out and drill 2x $\varnothing 5\text{mm}$ holes 69mm apart on bumper skin to support plug bracket. Feed bracket threads through drilled holes prior to reinstalling bumper.

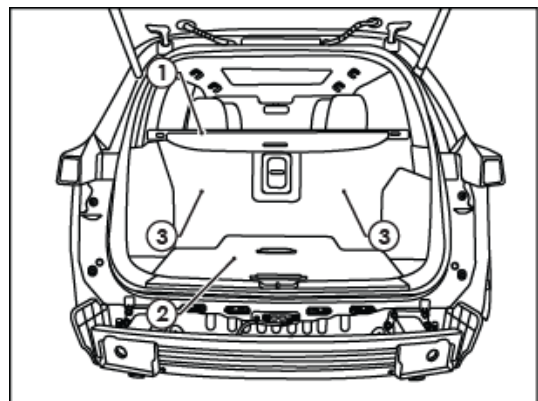
Be careful not to cut through or damage the foot swipe cable if applicable.



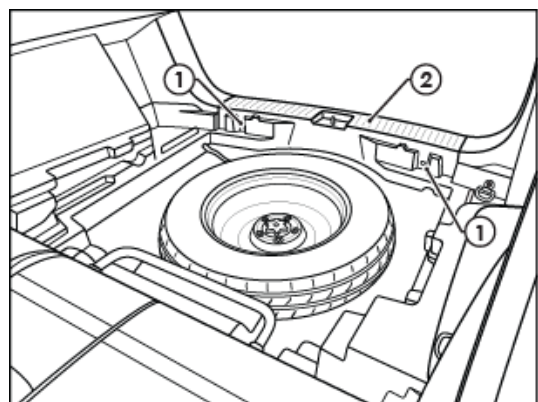
IMPORTANT

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.

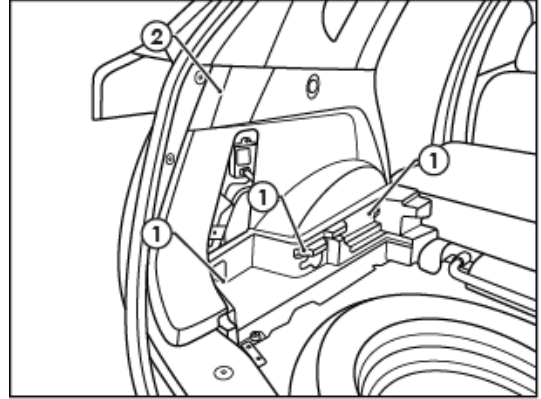
14. Remove rear cargo blind (1) if fitted.
15. In the luggage compartment, remove the floor carpet (2).
16. Fold down the rear seats (3).



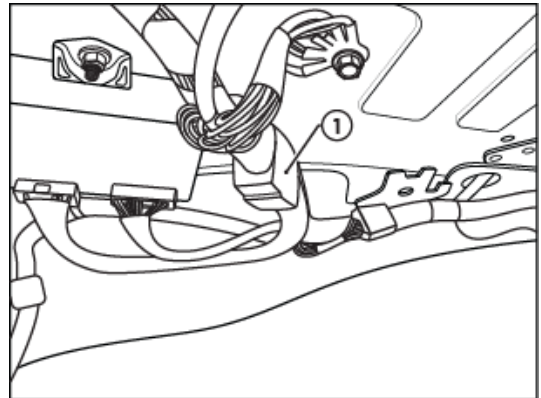
17. Remove the 2x trim clips (1) securing the rear scuff trim (2).
18. Remove the rear scuff trim (2) by lifting up.



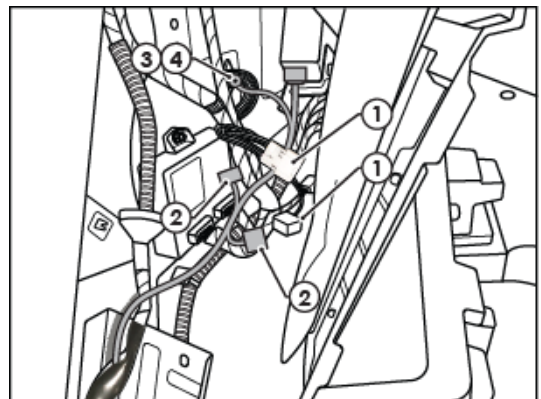
19. On the LHS, remove the 3x trim bolts (1) securing the LHS luggage compartment trim (2).
20. Fold the LHS luggage compartment trim (2) inwards to gain access to the Vehicle Pre-Wire Connector.



21. Locate the Vehicle Pre-Wire Connectors (1) in the LHS Rear Compartment area.
22. Cut Back the Tape to reveal 8-Way Vehicle Pre-Wire Connectors.

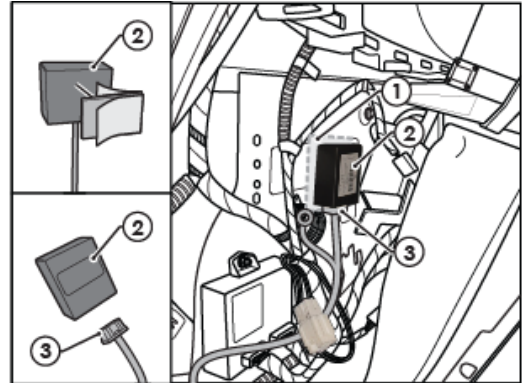


23. Disconnect the Vehicle Pre-Wire Connectors (1), patch in the Trailer Wiring Harness (102848-WL) (2) in between the Vehicle Pre-Wire Connectors (1).
24. Secure Ground Ring Terminal (3) to the Vehicle Earthing Point (4).



25. Using an alcohol wipe, clean the LHS inner sheet metal area (1) and the underside of the ECU (04826) (2).
26. Connect the trailer patch 12-Way connector (3) to the ECU.
27. Apply double sided tape to the ECU (2) and secure it to the vehicle sheet metal.

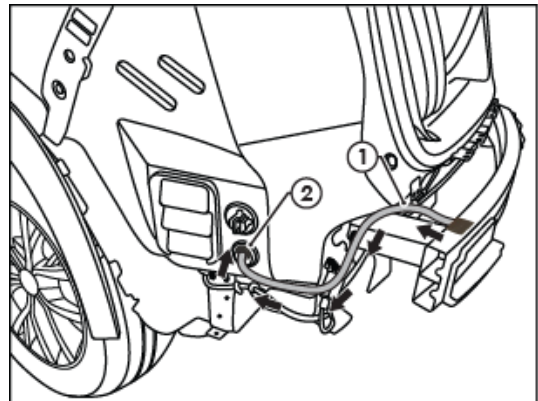
Note: Mount the ECU, ensuring the connector is orientated downwards.



28. With the rear bumper removed, secure tail harness (1) to towbar.
29. On the LHS of the vehicle remove the existing blanking grommet (2).
30. Route tail harness (1) up through the 30mm hole into the vehicle.
31. Seat the grommet on the tail harness in 30mm hole and route to trailer harness blue connector on patch loom.

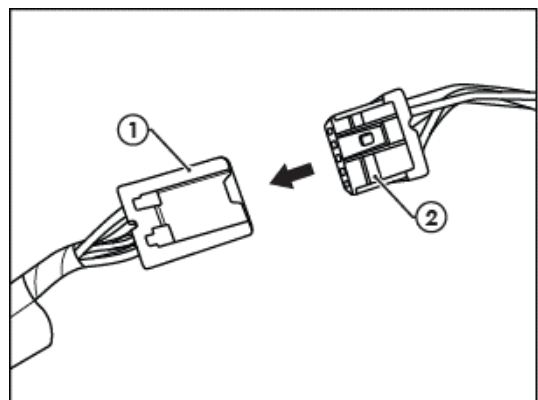
Note: Keep harness routing clear of all sharp edges, moving parts and places of extreme heat.

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

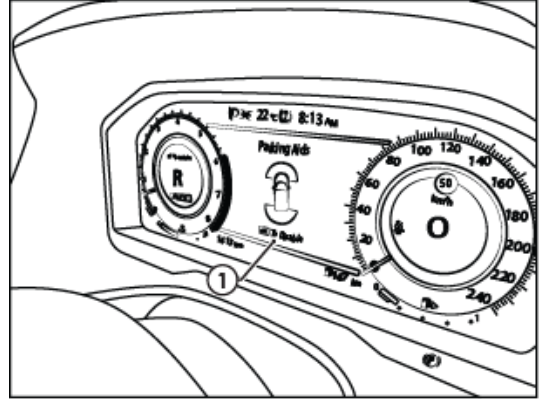


32. Connect the tail harness (tail length 1200mm) 8-Way connector (1) to the trailer patch mating 8-Way connector (2).
33. Secure all harness using supplied cable ties.
34. Test the trailer patch function using a light board or multi-meter.
35. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
36. The RPA function can be disabled by following Step 38.
37. Place the fitting instructions in the glove box after fitment.

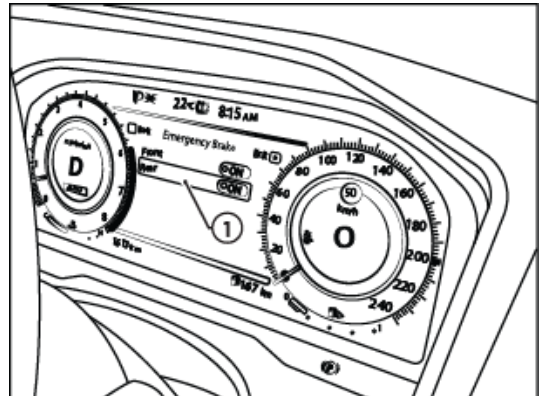
Note: Autonomous Braking must be disabled before Trailer is connected. Follow Step 40 on how to disable Autonomous Braking.



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38. To disable RPA function. Put the vehicle into Reverse Position and the Parking Aids Screen will be displayed in the Vehicle Cluster Information Display (1).
39. Using the Controls on the Steering Wheel press "OK" to disable RPA.



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40. To disable Autonomous Braking function, navigate to the Settings on the Vehicle Cluster Information Display (1). Scroll down to Driver Assistance then to Emergency Brake and turn off the Rear Autonomous Braking Function.
Settings > Driver Assistance > Emergency Brake > Rear (OFF).





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)

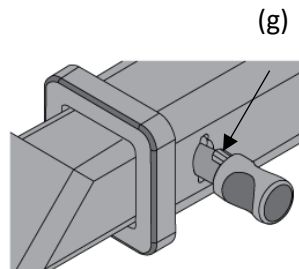
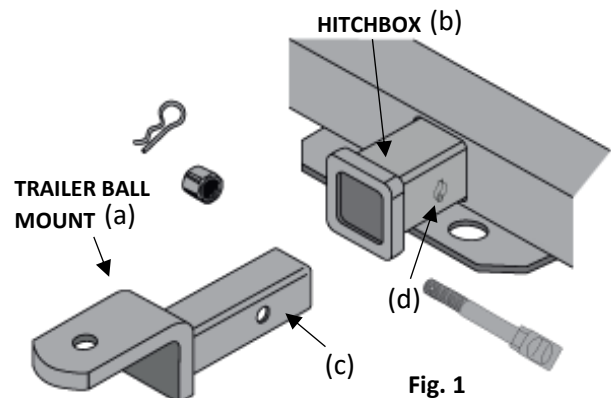


Fig. 2

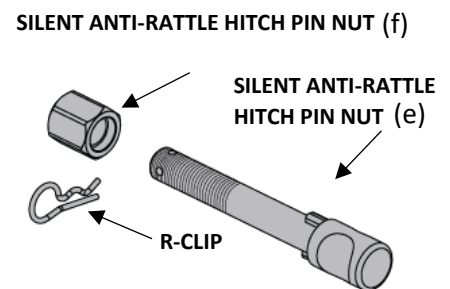


Fig. 3

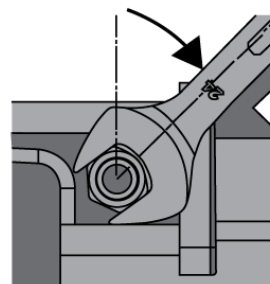


Fig. 4

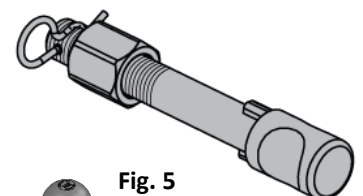


Fig. 5

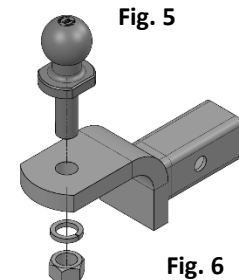


Fig. 6