

**PRODUCT DETAILS:**

Part Number:	QTDS866L	Maximum Towing Braked:	2700	kg
ECU Number:	N/A	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1800 mm.	Maximum Static Ball Load:	200	kg
TBM/Lug Part Number:	21201			

**FITTING DETAILS:**

Towbar Installation Time:	120 Mins.	RPA Disable/Other:	YES
Total Installation Time:	160 Mins.		
Bumper Cut Required:	Yes		

**Note:**

- Please refer vehicles owner's manual for proper operation and understanding of towing features enabled when coded.
- Requires special tool to Dehouse/rehouse wiring terminals - Use Part # 05426 2mm JPT tool.
- To disable ADAS Systems follow step 42-45.

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

#### BEFORE YOU START:

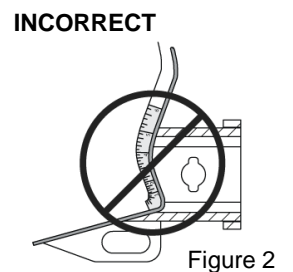
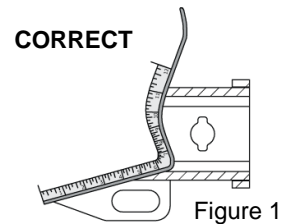
Check all hardware items have been included refer to assembly diagram.  
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

#### 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

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

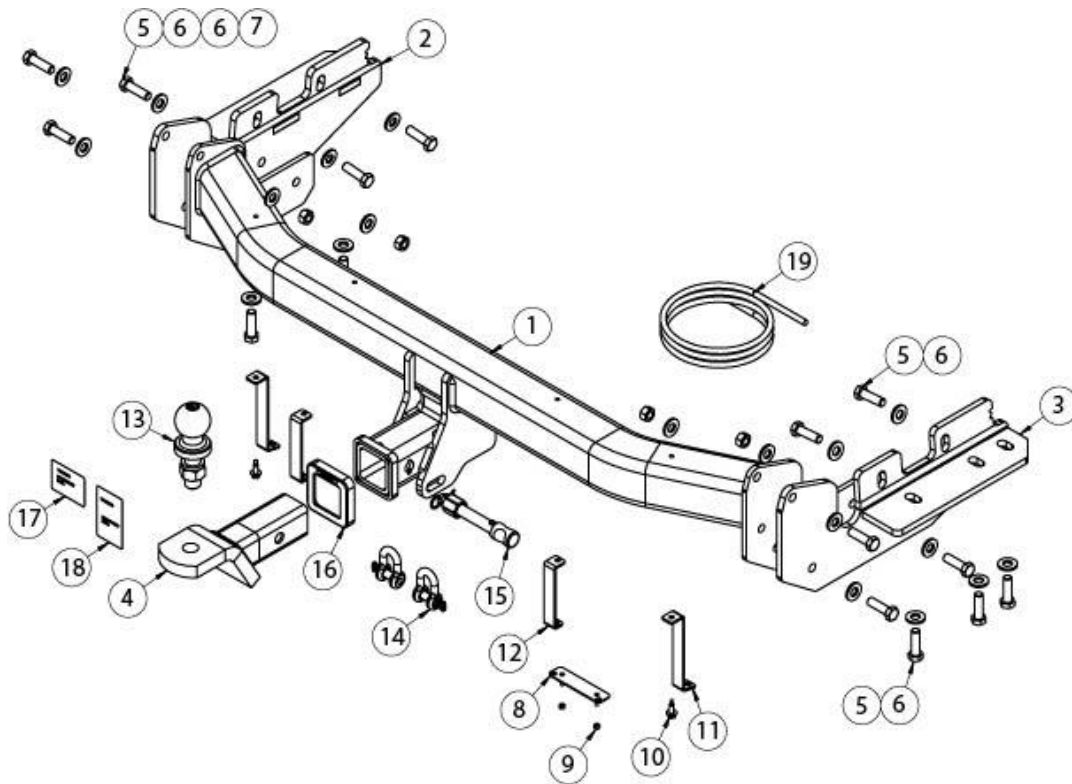
#### WARNING:

**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

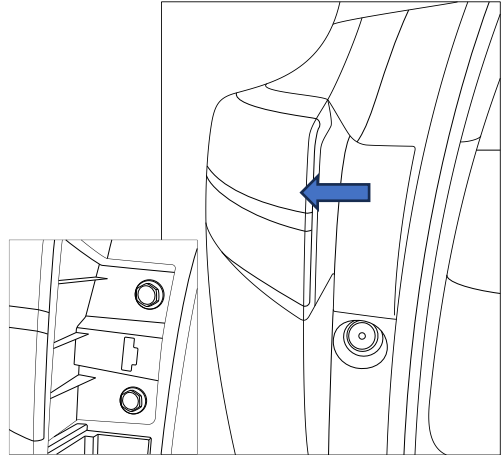


ITEM	DESCRIPTION	QTY
1	PATHFINDER R53 WELDED ASSEMBLY	1
2	SIDE ARM ASSY LHS	1
3	SIDE ARM ASSY RHS	1
4	TRAILER BALL MOUNT	1
5	BOLT HEX HD M12x40x1.25P	16
6	WASHER PLAIN 1/2"	22
7	NUT HEX HD M12x1.25P	6
8	PLUG BRACKET	1
9	NUT NYLOC HEX HD M4x0.7P	2
10	TEK SCREW 14-20 HEX HD 22mm	2

ITEM	DESCRIPTION	QTY
11	BUMPER TAB S SHAPE	2
12	BUMPER TAB U SHAPE	2
13	TOWBALL 50mm	1
14	"D" SHACKLE 10mm	2
15	SMART PIN SILVER	1
16	HITCH BOX COLLAR COVER	1
17	COMPLIANCE LABEL	1
18	LOAD RATING LABEL	1
19	WIRING LOOM	1

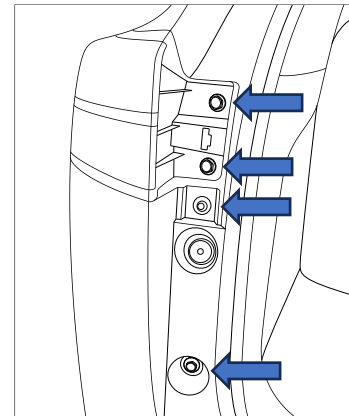
- 
1. Release the tailgate to expose the rear cabin. Using a Trim tool carefully remove the Plastic trim to expose the taillight. Note the clip is located in the centre of the trim and needs to be released by pushing the clip with trim tool and peeling trim back towards the taillight.

Repeat for the other side.



- 
2. Remove the 2 x Hex Head Set Screws securing the taillight and the 2 x Domed Hex Head Screws securing the Rear Fascia to the vehicle.

Repeat for the other side.

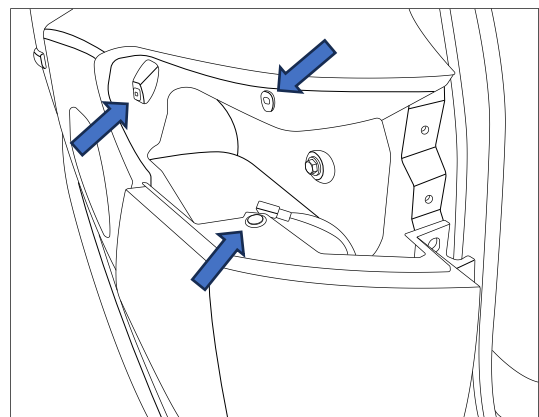


- 
3. Remove the Taillights and disconnect plugs that connect to the rear loom. Pull the Taillight gently outwards to pop the 2 x clips along the side securing the light to the vehicle.

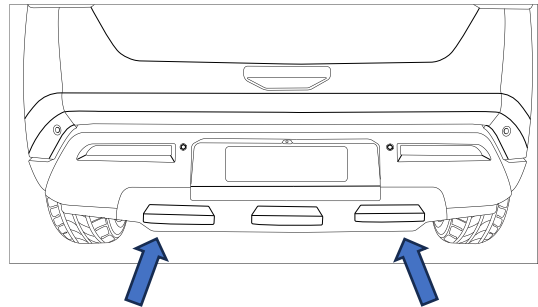
Repeat for the other side.

4. Remove the 1 x Scrivet securing the Rear Fascia.

Repeat for the other side.

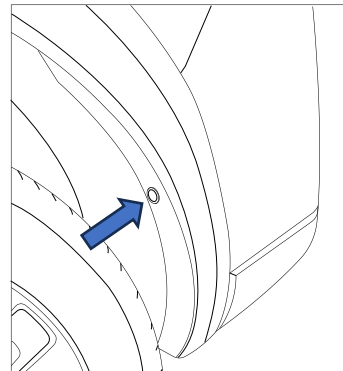


- 
5. Remove the 2 x Scrivets on the underside of the Rear Fascia.



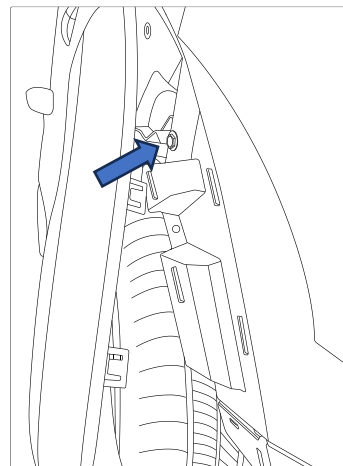
- 
6. Remove the 1 x Scrivet on the inside of the wheel arch trim.

Repeat for the other side.

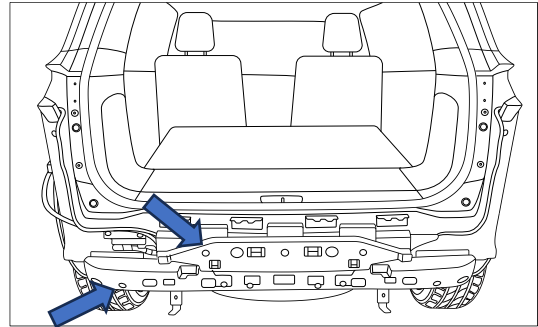


- 
7. Peel back the wheel arch trim to expose and remove the 1 x Hex Head Set Screw retaining the Rear Fascia to the vehicle.

Repeat for the other side.

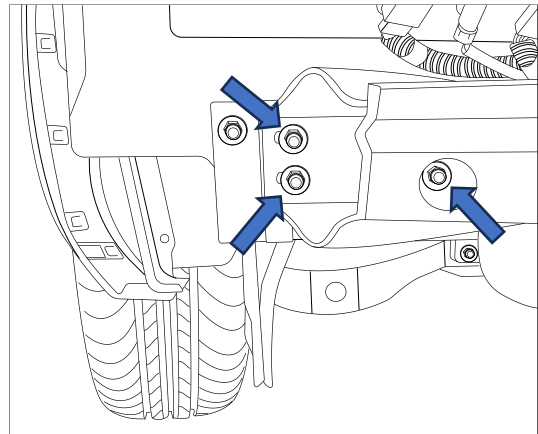


8. Carefully unclip the bumper assembly from vehicle and set aside.  
Ensure to disconnect wiring harness connectors and sensor connectors located on the passenger and driver's side.
9. Remove and disregard the polystyrene trim.



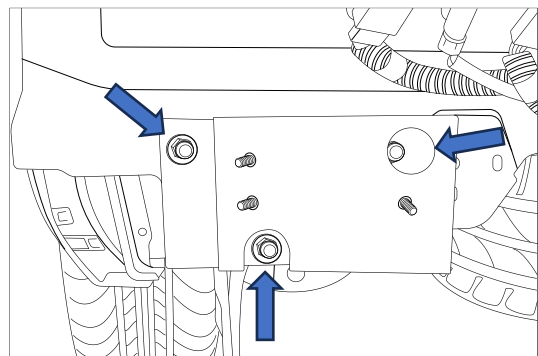
10. Using a socket with an appropriate extension remove the 3 x Flange Nuts that secure the Impact to the Impact Beam mounts.

Repeat for the other side.

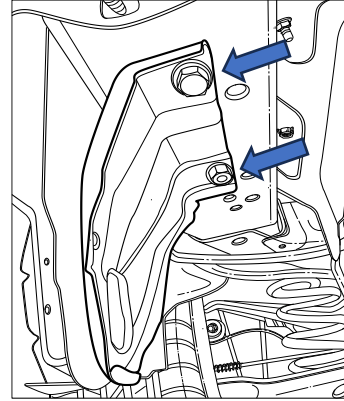


11. Using a socket with an appropriate extension remove the 1 x Hex Head Set Screws and 3 x Flange Nuts that secure the Impact Beam mounts to the back panel of the vehicle.

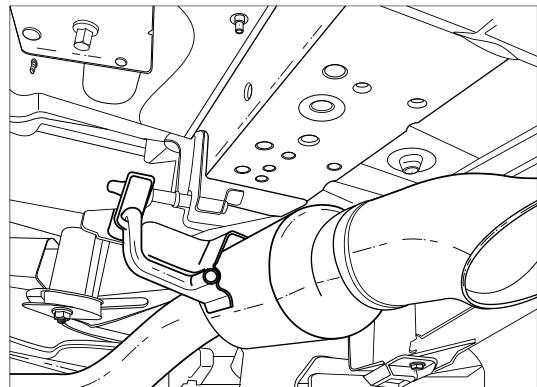
Repeat for the other side.



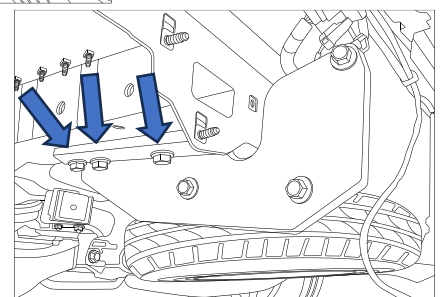
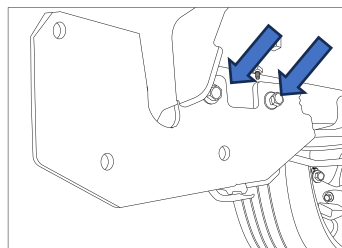
- 
12. Remove and disregard factory tow hook by unscrewing 4 x Hex Head Flange Set Screws.



- 
13. Disconnect the exhaust from the Hanger to allow clearance for the Towbar.

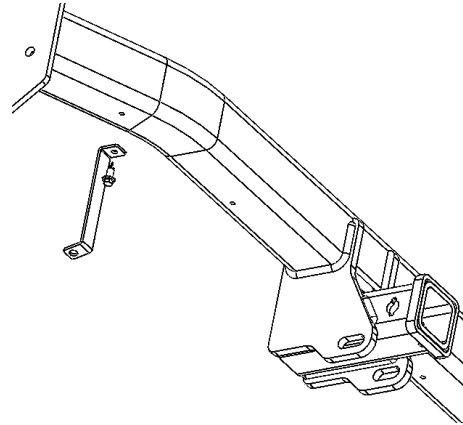


- 
14. Loosely secure side arms to chassis rail with 5 x M12 bolts complete with 1 x washer per bolt.



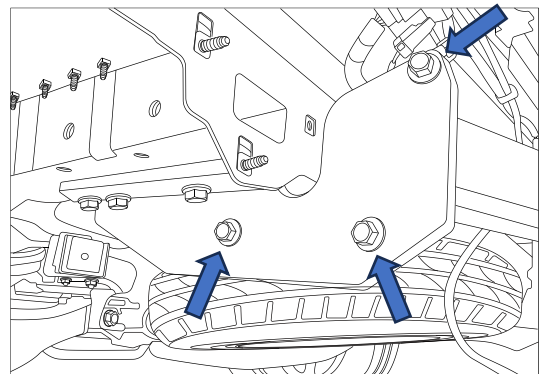
15. Secure the appropriate bumper tab brackets to the bottom of the crosstube with the provided tek screw.

Repeat for the other side.



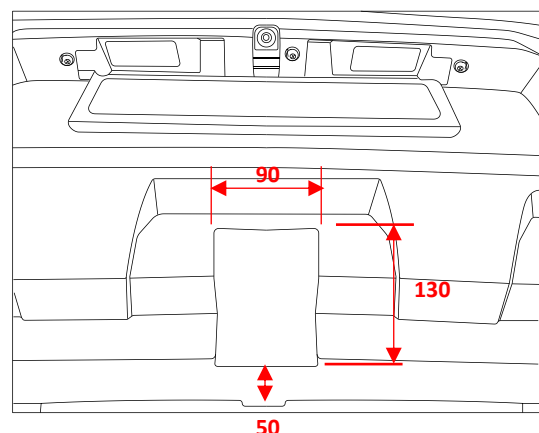
16. Loosely secure the Towbar to the Side arms with 3 x M12 x 40 x 1.25P bolt per side, complete with 2 x M12 washer and 1 x M12 Nut per bolt per side.

Tighten all fasteners to torques listed below:  
**M12 x 1.25: 89 N.m**



17. Determine the centre of the bumper, leaving a space of 50mm from the lower edge mark off 90mm (45mm each side) then measure 130mm up along the surface on both sides and mark the upper edge.

**Cut out the bumper material, ensure to not cut through or damage the foot swipe cable located on the inside of the bumper.**



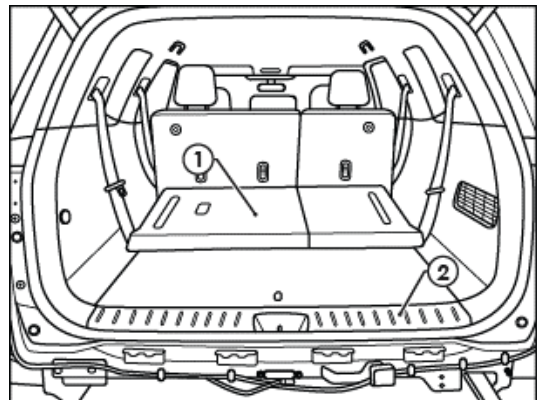


---

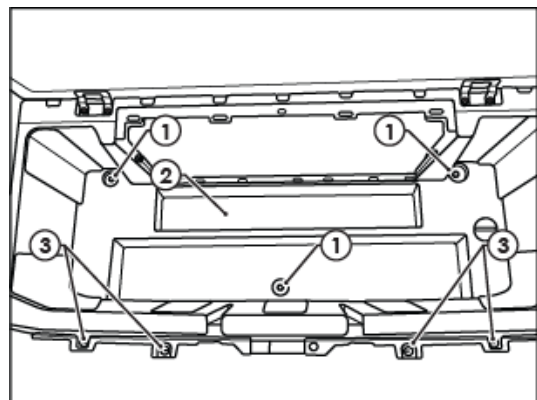
## IMPORTANT

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.

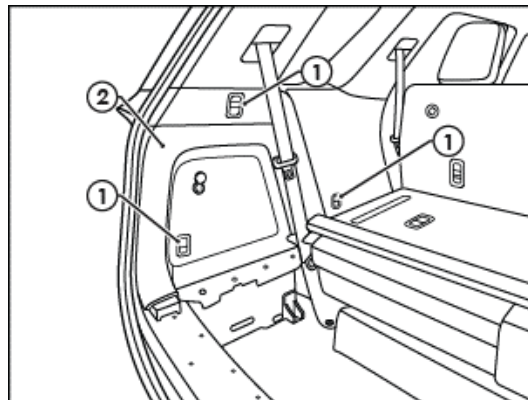
- 
18. In the luggage compartment, fold down the rear seats (1).
  19. Remove the Rear Scuff Trim (2) by lifting up.



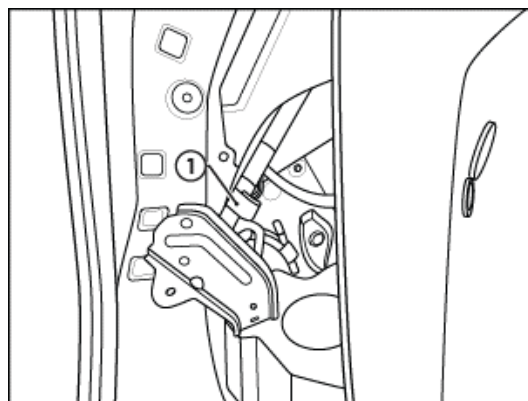
- 
20. Remove the 3x bolt (1) securing the Rear Storage Compartment (2).
  21. Remove the Rear Storage Compartment (2) by dislodging the 4x Trim Clips (3).



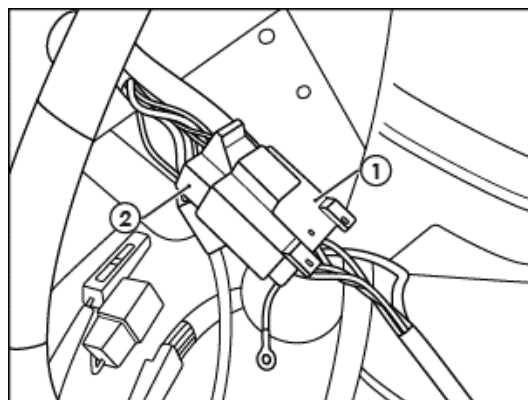
22. On the LHS Rear Compartment, remove the 3x Trim Bolts (1) securing the LHS luggage compartment trim (2).
23. Fold the LHS luggage compartment trim inwards to gain access to the Vehicle Pre-Wire Connector.



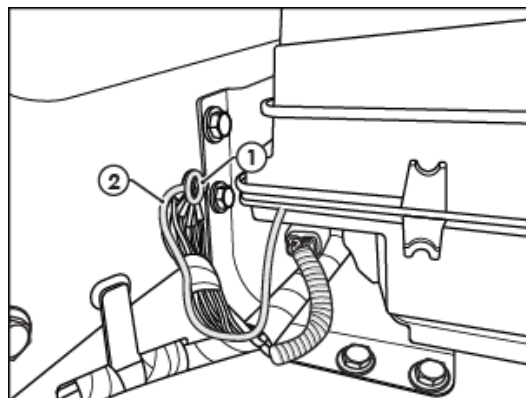
24. Locate the Vehicle Pre-Wire Connectors (1) in the LHS Rear Compartment area.
25. Cut Back the Tape to reveal 6-Way Vehicle Pre-Wire Connector (1).



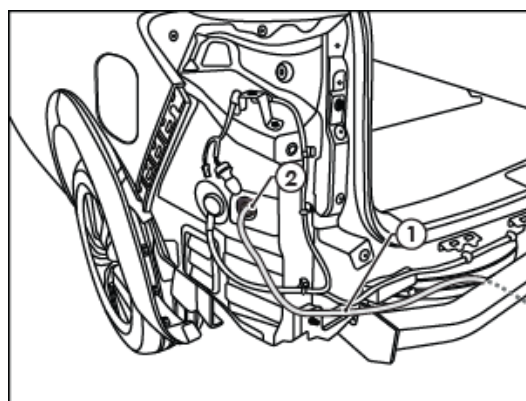
26. Connect the 6-Way Connector (1) on the Trailer Patch (102850-WL) onto the Vehicle Pre-Wire Connector (2).



27. Locate the Vehicle Earthing Point (1) at the Rear LHS Compartment Area.
28. Secure Ground Ring Terminal (2) to the Vehicle Earthing Point (1).



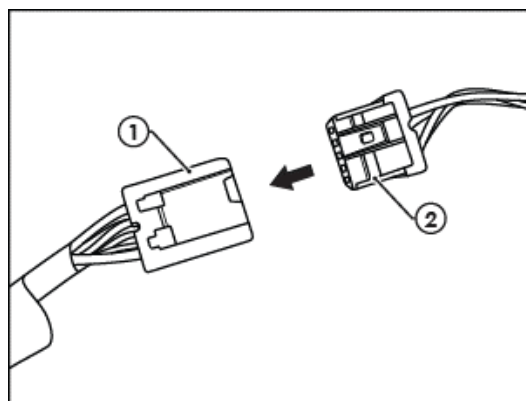
29. With the rear bumper removed, secure tail harness (1) to towbar.
30. On the LHS of the Vehicle remove the existing Blanking Grommet (2).
31. Route Tail Harness (1) up through the 30mm hole.
32. Seat grommet in 30mm hole and route the Tail Harness (1) towards Trailer Patch (102850-WL) blue connector.



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

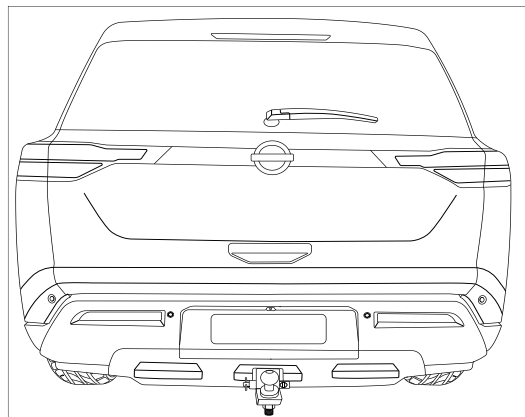
**Note: Ensure grommet is seated correctly and makes a good seal.**

33. Connect the tail harness (tail length 1800mm) 8-Way connector (1) to the trailer patch mating 8-Way connector (2).
34. Secure all harness using supplied cable ties.
35. Test the trailer patch function using a light board or multi-meter.

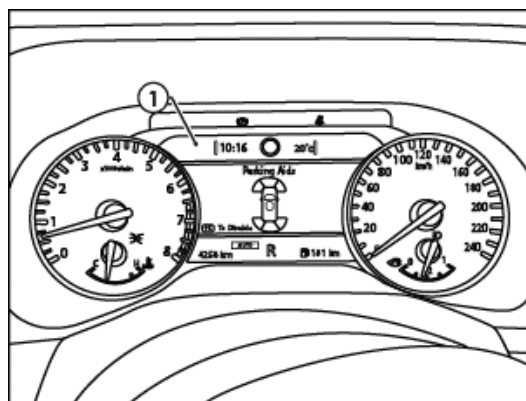


36. Re-fit all removed parts (reverse step 1-8, 20-24) and secure all fasteners, ensuring there are no squeaks or rattles.
37. The RPA function can be disabled by following Step 42 and Step 43.
38. Autonomous Braking can be disabled by following Step 45.
39. Place the fitting instructions in the glove box after fitment.

**Note: Autonomous Braking must be disabled before Trailer is connected. Follow Step 45 on how to disable Autonomous Braking.**

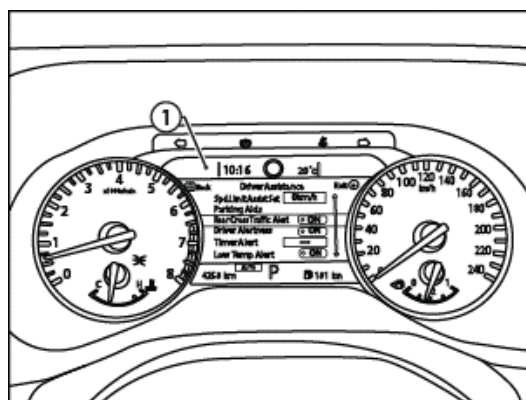


40. To disable RPA function. Put the vehicle into Reverse Position and the Parking Aids Screen will be displayed in the Vehicle Cluster Information Display (1).
41. Using the Controls on the Steering Wheel press "OK" to disable RPA.



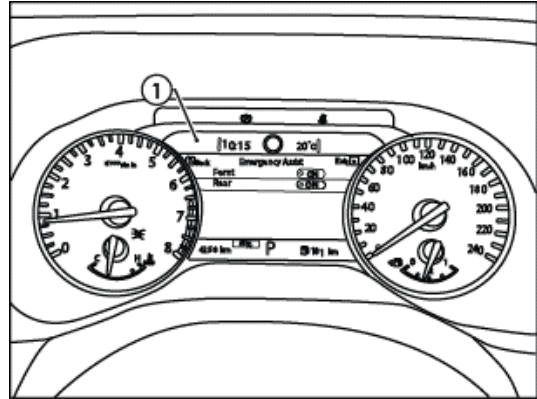
42. To disable Rear Cross Traffic Alert function, navigate to the Settings on the Vehicle Cluster Information Display (1). Scroll down to Driver Assistance then to Rear Cross Traffic Alert then proceed to turn it off.

**Settings > Driver Assistance > Rear Cross Traffic Alert > (OFF).**



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

**Settings > Driver Assistance > Emergency Assist > 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 (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)

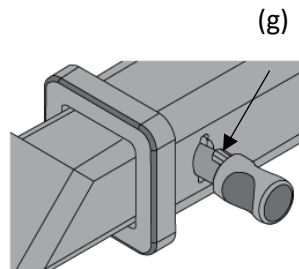
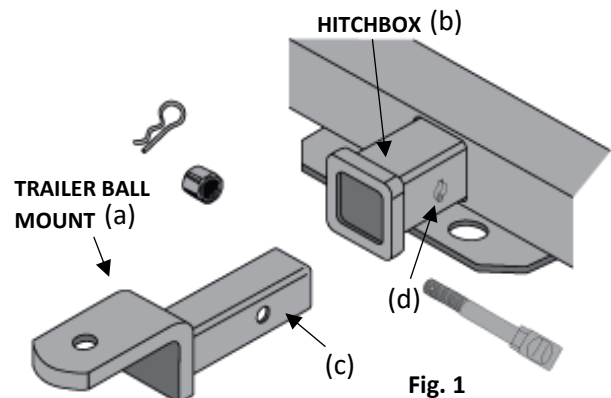


Fig. 2

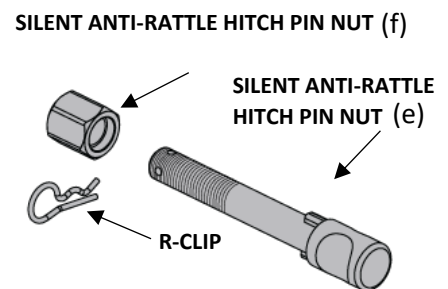


Fig. 3

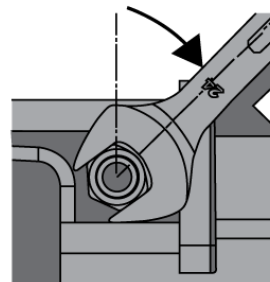


Fig. 4

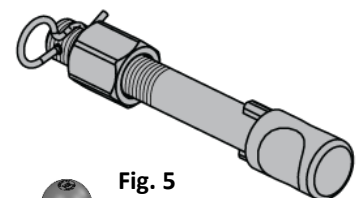


Fig. 5

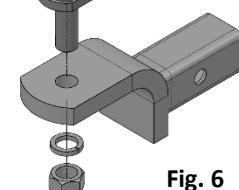


Fig. 6