

PRODUCT DETAILS:

Part Number:	QTHD776L	Maximum Towing Braked:	2100	kg
ECU Number:	04839	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm.	Maximum Static Ball Load:	95	kg
TBM/Lug Part Number:	21126			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other Notes:	YES
Total Installation Time:	75 Mins.		
Bumper Cut Required:	Yes		

Note:

- RPA Disable: Automatic – When 04936 used
- Electric brake input location: Near blue connector

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

BEFORE YOU START:

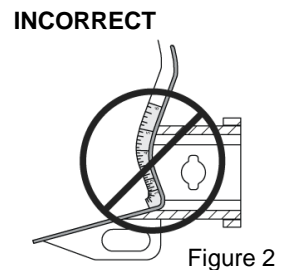
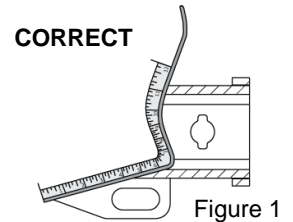
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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

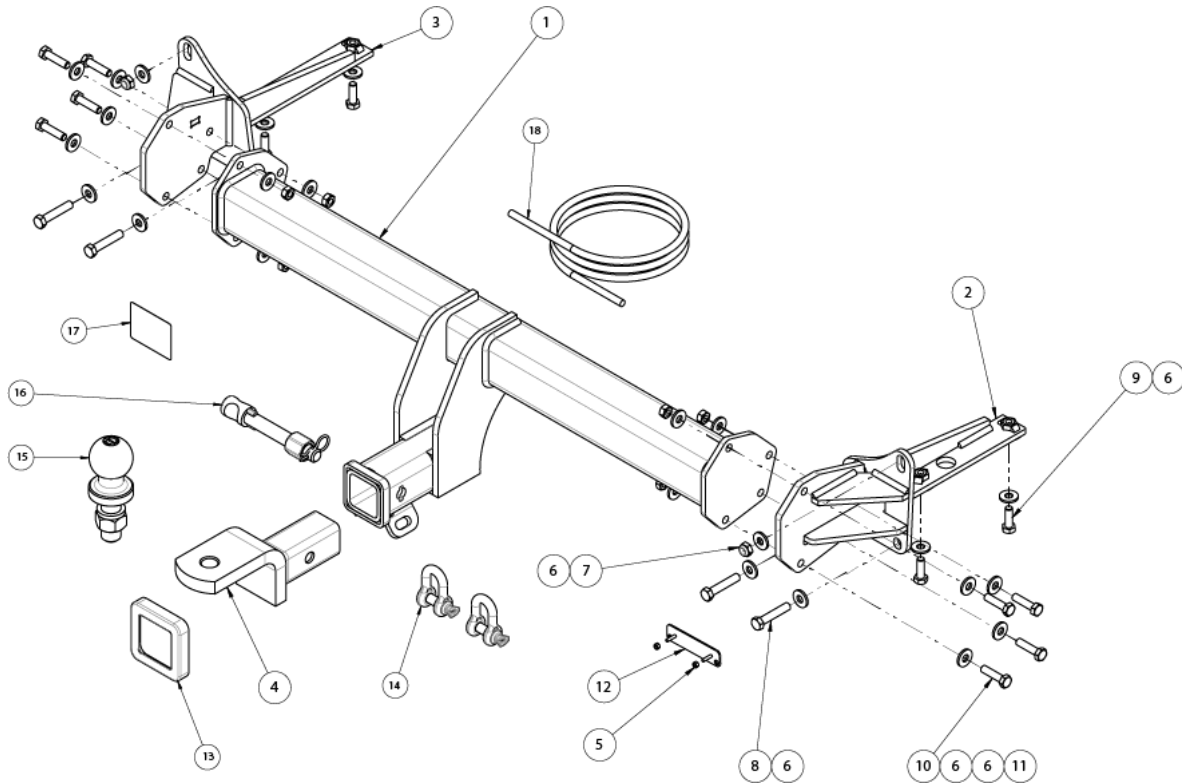
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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.

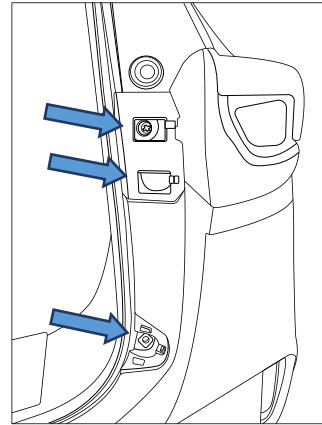
i TOWBAR ASSEMBLY DIAGRAM



ITEM	DESCRIPTION	QTY
1	COMMODORE WAGON WELDED ASSY	1
2	SIDE ARM ASSY RH	1
3	SIDE ARM ASSY LH	1
4	TRAIL BALL MOUNT	1
5	NUT NYLON LOCK HEX HD M4x0.7P	2
6	WASHER PLAIN M10 X 25 X 3	26
7	NUT NYLON INS LOCKHEX HD M10x1.5P	2
8	BOLT HEX HD M10x55x1.5P	4
9	SETSCREW HEX HD M10x30x1.5P	4

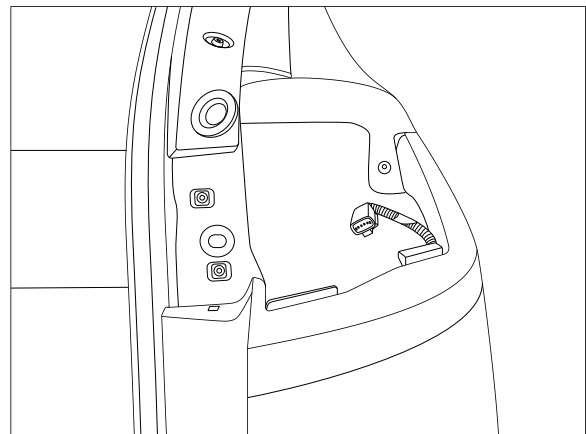
ITEM	DESCRIPTION	QTY
10	BOLT HEX HD M10x40x1.25P	8
11	NUT HEX HD M10x1.25P	8
12	PLUG BRACKET	1
13	HITCH BOX COLLAR COVER	1
14	"D" SHACKLE 10mm	2
15	TOWBALL 50mm	1
16	SILENT HITCH PIN – SILVER	1
17	ACRYLIC COMPLIANCE LABEL	1
18	WIRING LOOM	1

1. Open tailgate.
2. Lift 2 x taillight mounting covers and remove the exposed screws.
3. Remove 1 x bumper mount caps (slide inwards) and remove the exposed torx screw.
Repeat for other side.



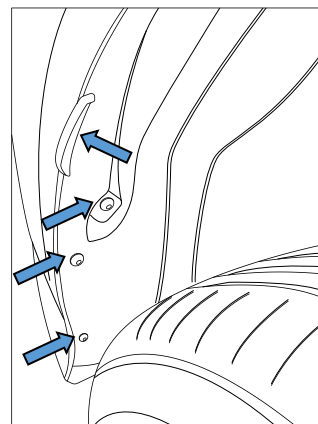
4. Remove taillight from vehicle (pull rearwards) and disconnect wiring harness from the taillight.

Repeat for other side.



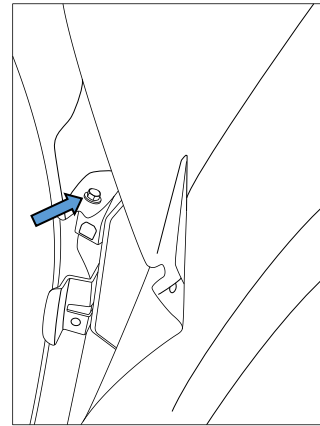
5. In wheel arch, remove 4 x Torx screws.

Repeat for other side.

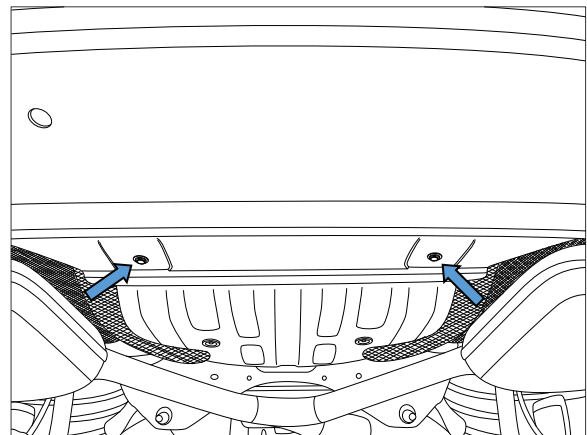


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6. Peel back wheel arch liner and remove exposed bolt (bumper to chassis).

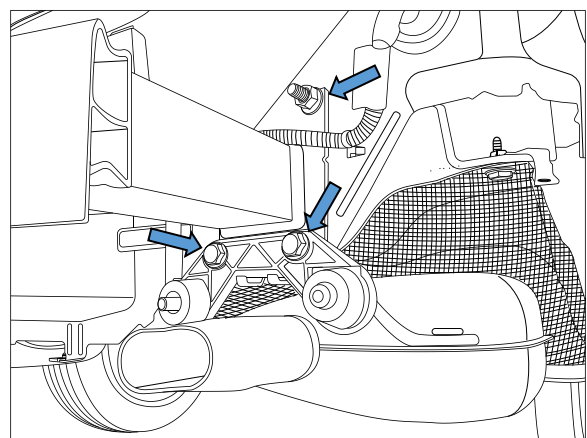
Repeat for other side.



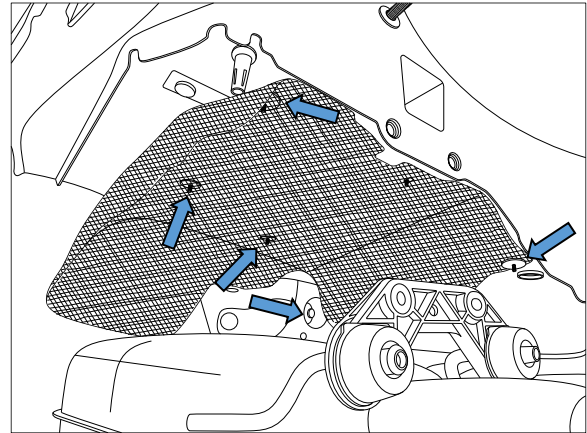
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7. Under bumper towards the centre, remove 2 x bolts securing bumper.
8. Carefully peel away bumper from sides and remove from vehicle. Ensure to disconnect any electrical connectors as required.



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9. Remove and discard impact beam, secured with 1 x nut and 2 x bolts per side.

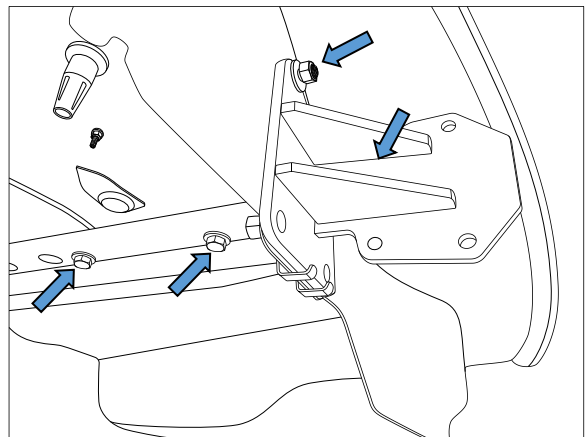


10. Drop the LH and RH exhausts and remove the LH and RH heat shields.
RH heat shield secured with 2 x bolts and 3 x retainer screws.
LH heat shield secured with 5 x retainer screws.



11. Insert LH side arm into the chassis rail and loosely secure to the underside with 2 x M10 x 30 bolts complete with 1 x washer per bolt and to the rear with 1 x M10 nyloc nut complete with 1 x washer.

Repeat for other side.



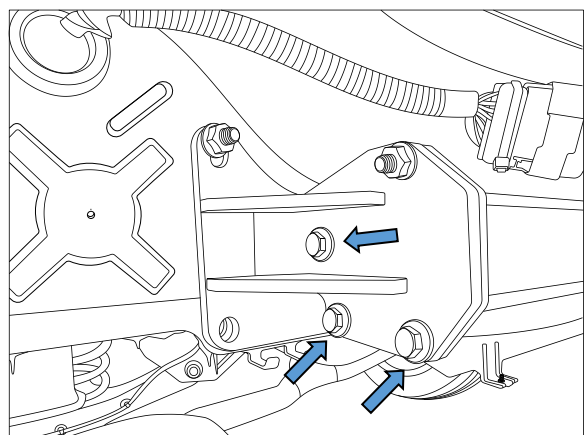
12. Lift crosstube to side arms and secure with 8 x M10 x 40 bolts complete with 2 x washers and 1 x nut per bolt (4 per side).

For ease of fitment, ensure all the bolts are outward facing on the side arms.

Torque all fasteners (crosstube and sidearms) as follows:

M10 GR 8.8 (side arms) :48Nm

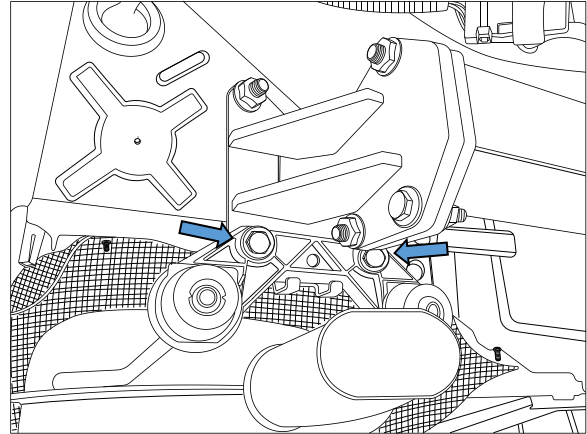
M10 GR 10.9 (crosstube) :62Nm



13. Refit the LH and RH heatshields, removed in step 10.
14. Refit the LH exhaust hanger bracket (with exhaust) and secure in combination with the LH side arm with 2 x M10 x 55 bolts complete with 1 x washer per bolt.

Repeat for other side.

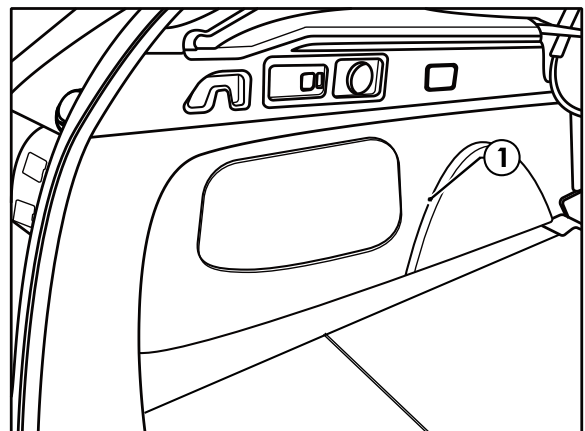
Torque the fasteners to 44Nm.



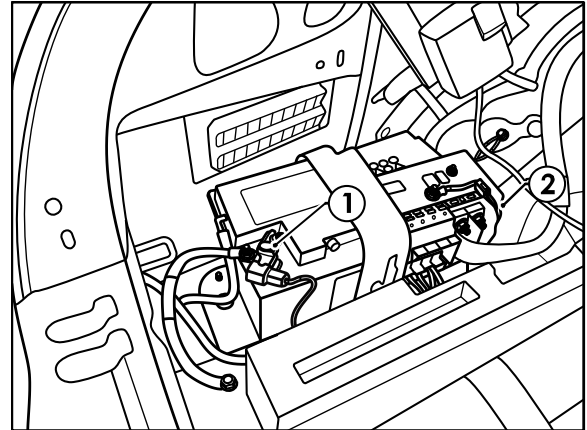
IMPORTANT

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.

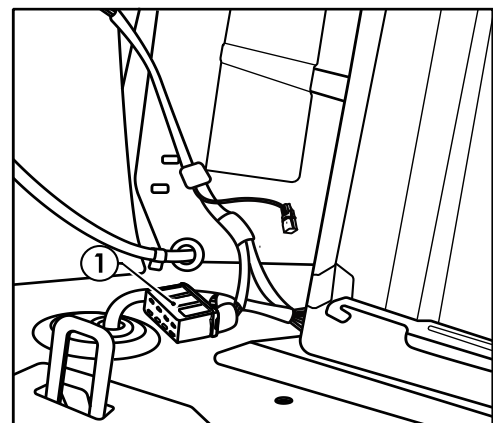
15. In the boot, remove the LHS cover (1).



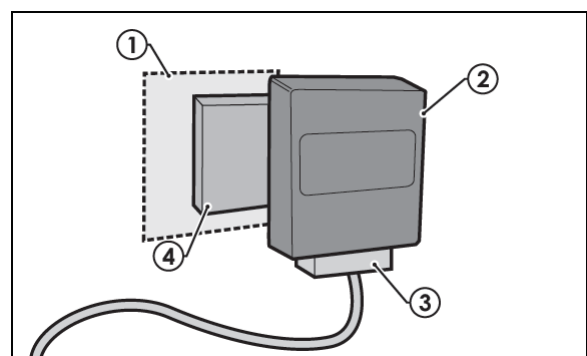
16. **For V6 AWD variants:** In the boot, disconnect the negative battery terminal **(1)**.
17. In the LHS rear quarter panel in front of the battery towards the tail light, locate the vehicle grey prewire connector **(2)**.
18. Connect the trailer patch (101996-WL) 13-way grey connector to the vehicle pre-wire connector **(2)**.



19. **For I4 FWD variant:** In the engine bay, disconnect the negative battery terminal.
20. In the LHS rear quarter panel towards the tail light, locate the vehicle grey pre-wire connector **(1)**.
21. Connect the trailer patch (101996-WL) 13-way grey connector to the vehicle pre-wire connector **(1)**.

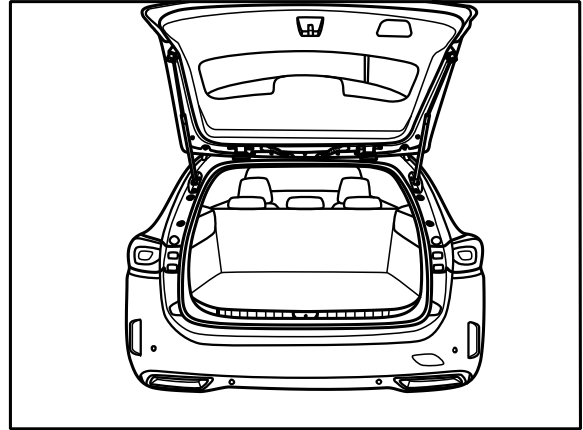


22. Using an alcohol wipe, clean a suitable area of the LHS inner sheet metal **(1)** and the underside of the ECU (04839) **(2)**.
23. Connect the trailer patch 22-way connector **(3)** to the ECU.
24. Apply double sided tape **(4)** to the ECU **(2)** and secure it to the vehicle sheet metal.

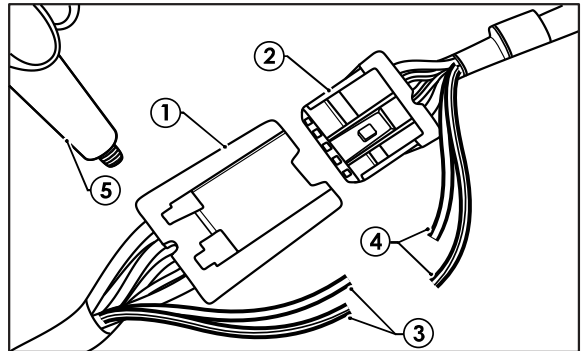


Note: Mount the ECU, ensuring the connector is orientated downwards.

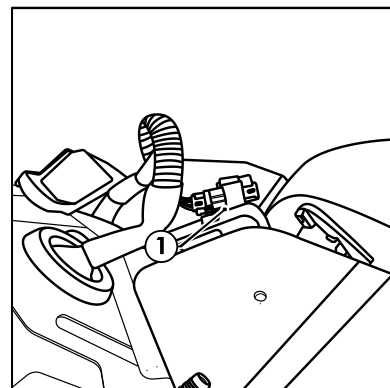
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25. With the rear bumper removed, secure tail harness (Part No: 04936) to towbar.
Add enough length to mount the socket with Plug Bracket on last step.



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26. Connect the tail harness 8-way connector (1) to the trailer patch mating 8-way connector (2).
27. Cut-off, crimp and tail harness GREY and GREY/BLACK wires (3) to the trailer patch matching WHITE and GREY/BLACK wires (4).
28. Apply silicone grease (not supplied) (5) to waterproof connector.



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29. Under the vehicle LHS, locate the vehicle trailer harness pre-wire connector (1).
30. Remove the blanking plug sealing the connector and connect the black and purple connector on the patch harness to the vehicle pre-wire connector.



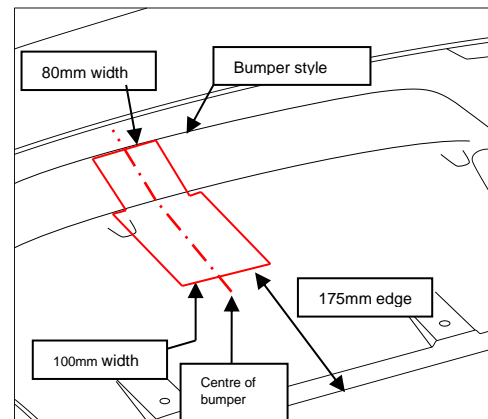
31. Test the trailer patch function using a light board or multi-meter.
32. Secure all harness using supplied Cable Ties.

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

For Standard model.

33. On bumper locate the centre, measure off, mark and cut a hole as depicted.

Ensure that you do not cut through the tailgate foot swipe sensors or harness located inside the bumper

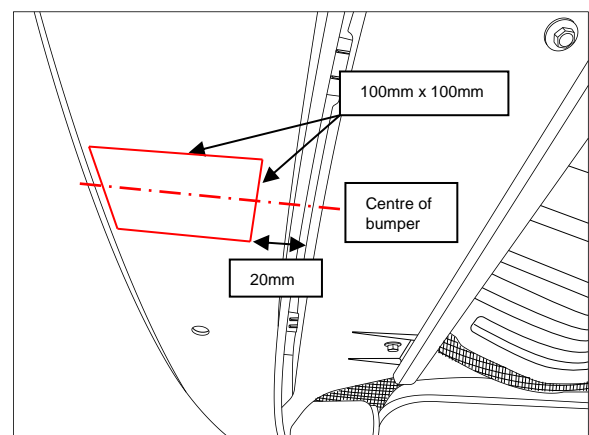


For RSV model.

34. On bumper locate the centre, measure off, mark and cut a hole as depicted (100mm x 100mm).

The 20mm is measured from the outer edge of the panel.

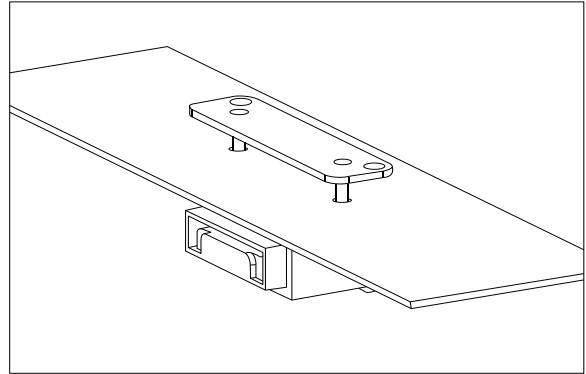
Ensure that you do not cut through the tailgate foot swipe sensors or harness located inside the bumper



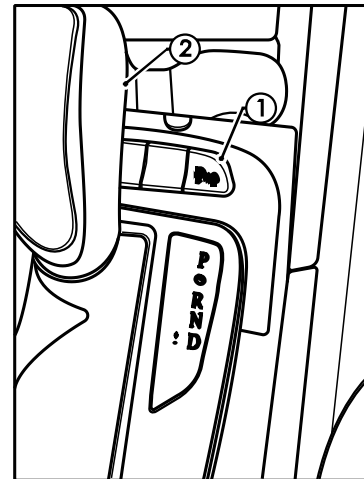
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35. Determine an appropriate position for the plug bracket. Mark out and drill 2x \varnothing 5mm holes 69mm apart on bumper skin to support plug bracket.

Fit the plug bracket to the bumper prior to final bumper installation.

36. Refit the bumper and removed components.



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37. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
38. The RPA function can be disabled via a switch **(1)** next to the transmission lever **(2)**.
39. Place the fitting instructions in the glove box after fitment.





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)

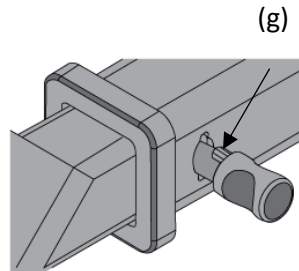
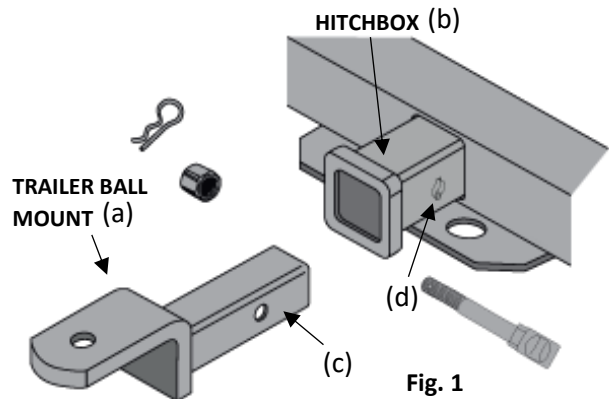


Fig. 2

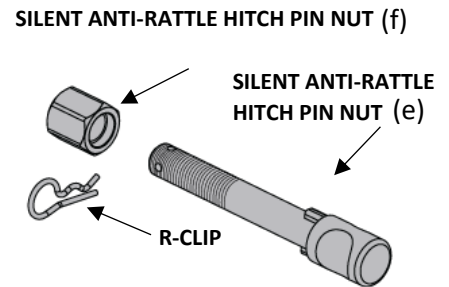


Fig. 3

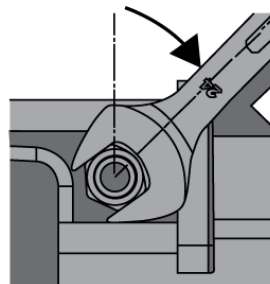


Fig. 4

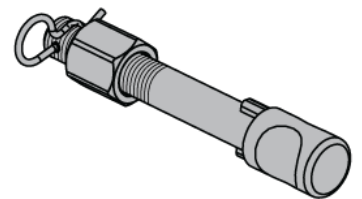


Fig. 5