

PRODUCT DETAILS:

Part Number:	QTHY272L	Maximum Towing Braked:	1200	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm.	Maximum Static Ball Load:	120	kg
TBM/Lug Part Number:	21236			

FITTING DETAILS:

Towbar Installation Time:	80 Mins.	RPA Disable/Other:	YES
Total Installation Time:	140 Mins.		
Bumper Cut Required:	Yes		

Note

- RPA Disable - Near transmission lever

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

BEFORE YOU START:

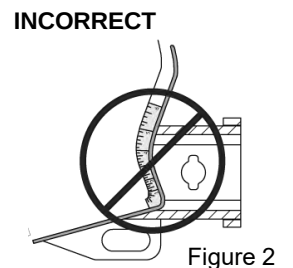
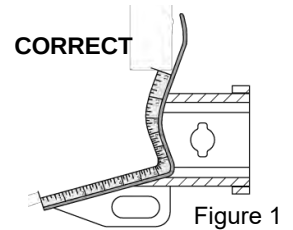
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.
 - o Measure from bottom edge along bumper and around corner to the 70 mm point (Figure 1).
 - o 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.

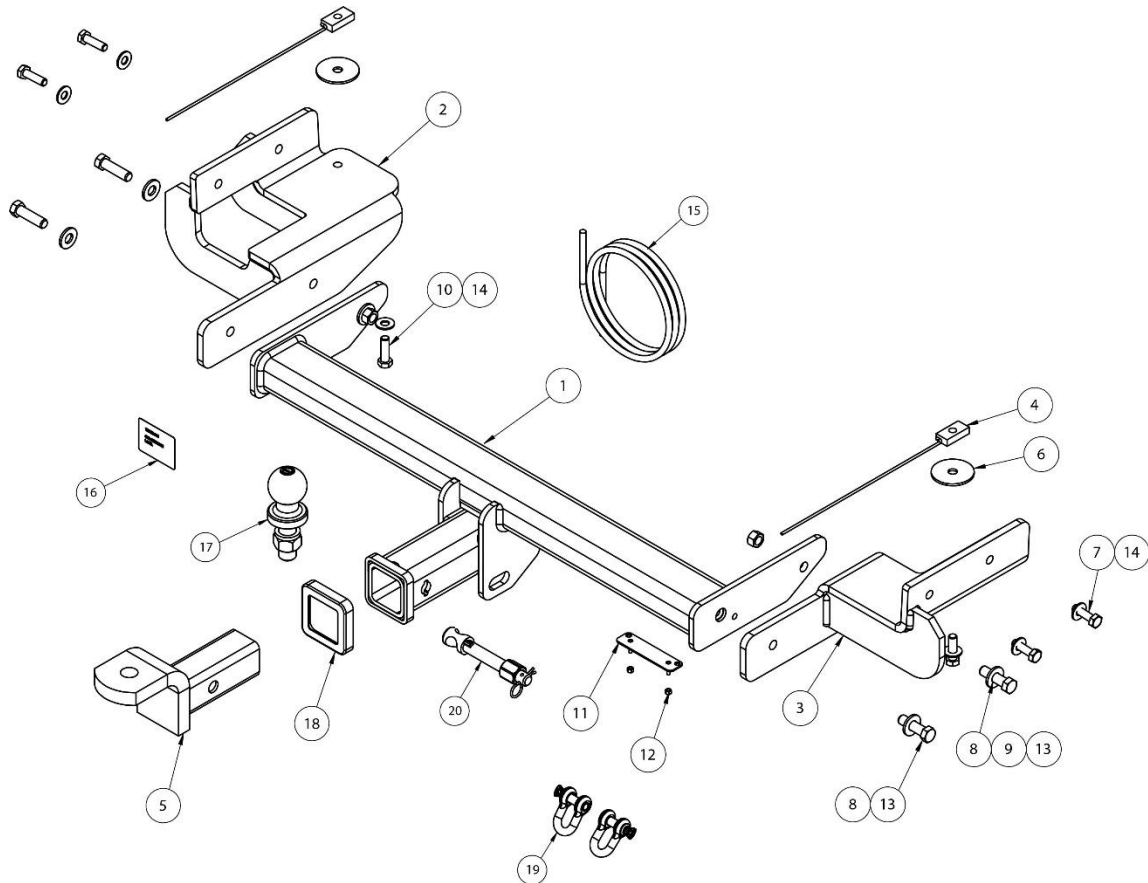
WARNING:

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.



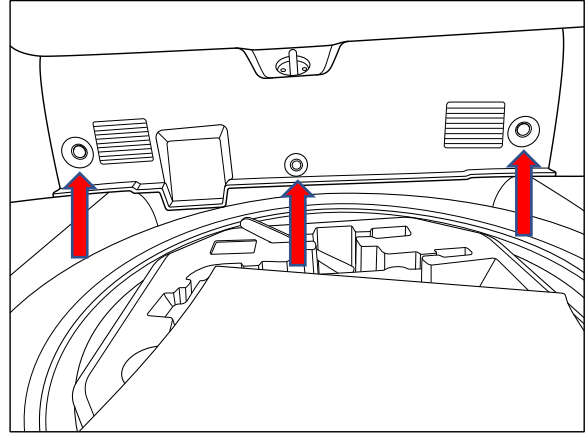
TOWBAR ASSEMBLY DIAGRAM



ITEM	DESCRIPTION	QTY
1	HYUNDAI ELANTRA WELDED ASSY	1
2	SIDE ARM ASSY – LHS	1
3	SIDE ARM ASSY – RHS	1
4	T PLATE M10x1.5P & WIRE 300mm	2
5	TRAILER BALL MOUNT	1
6	SPACER	2
7	SET SCREW HEX HD M10x35x1.25P	4
8	BOLT HEX HD M12x45x1.75P	4
9	NUT HEX M12x1.75P	2
10	SET SCREW HEX HD M10x35x1.5P	2

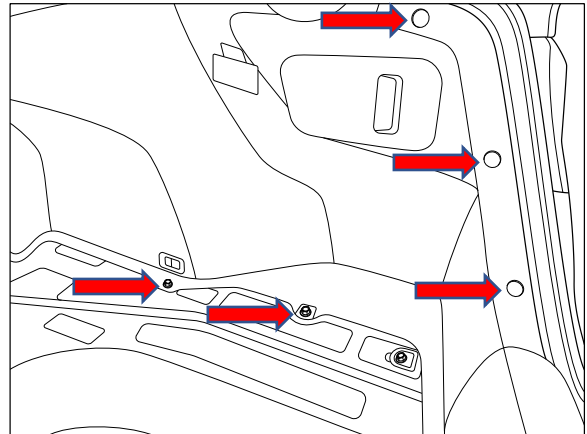
ITEM	DESCRIPTION	QTY
11	PLUG BRACKET	1
12	NUT NYLON LOCK HEX M4x0.7P	2
13	WASHER FLAT M12	6
14	WASHER PLAIN M10x23x2	6
15	WIRING LOOM	1
16	COMPLIANCE LABEL	1
17	TOWBALL 50mm	1
18	HITCH BOX COLLAR COVER	1
19	"D" SHACKLE 10mm	2
20	SMART PIN	1

1. Open the boot and remove the boot carpet.
Remove 3x scrivenets from the rear plastic trim and pull upward.



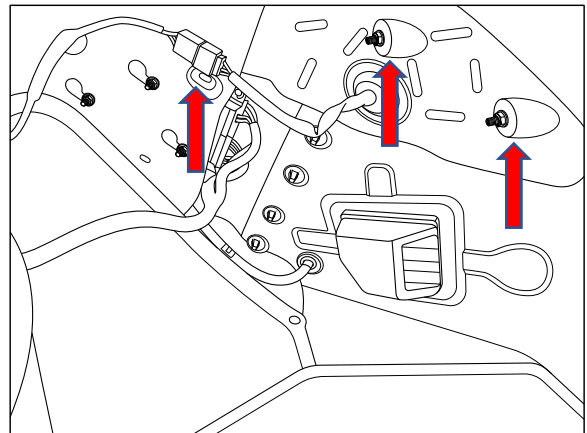
2. On the RHS of the boot.
Remove 3x scrivenets and 2x screws from trim and pull toward the center of the vehicle.

Repeat the step for the LHS.



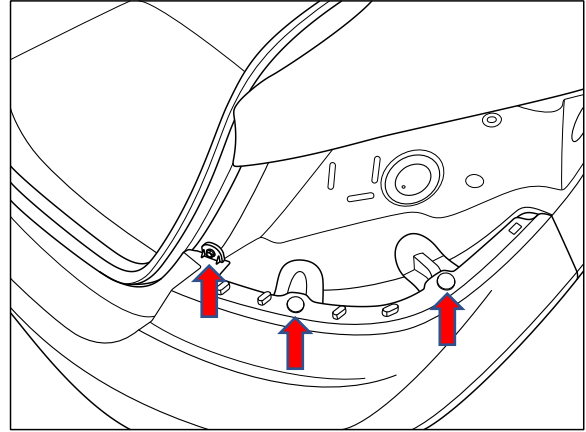
3. On the RHS
Disconnect the tail light connector.
Remove 2x nuts and pull tail light rearward.

Repeat the step for the LHS.



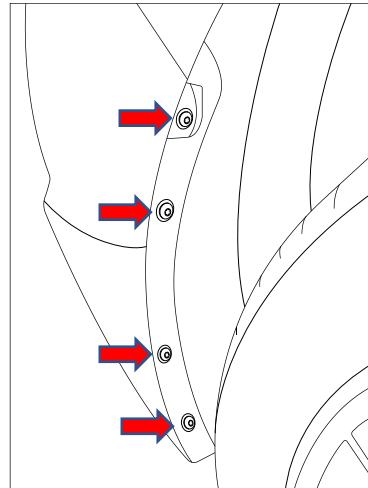
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4. On the RHS
Remove 1x screw and 2 scrivets.

Repeat the step for the LHS.

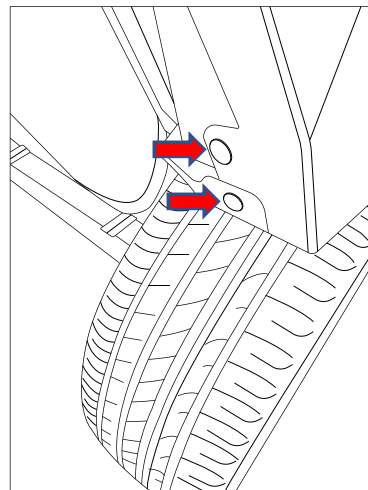


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5. On the RHS
Remove 4x screws.

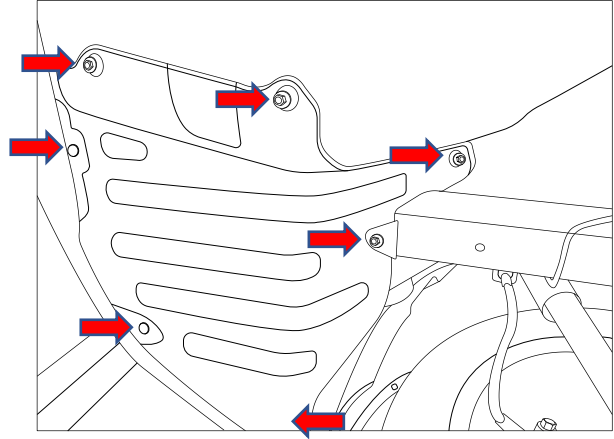
Repeat the step for the LHS.



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6. On the RHS
Remove 2x scrivets.

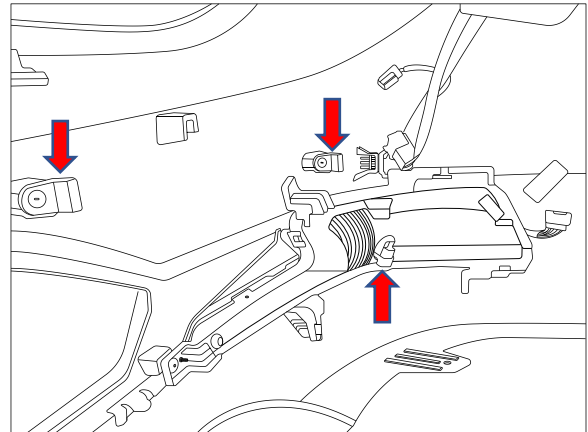


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7. On the LHS under vehicle
Remove 4x nuts and 4x scrivets.
Pull the cover down ward.

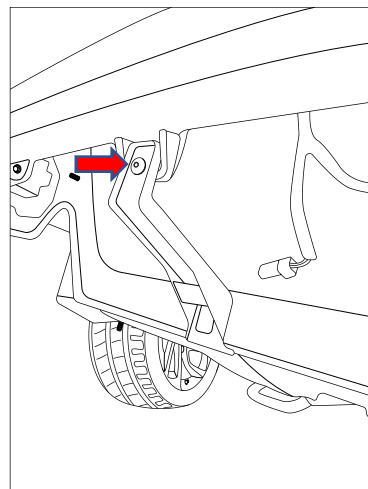


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8. On the LHS inside bumper
Disconnect the 2x sensors and 1x rear light.

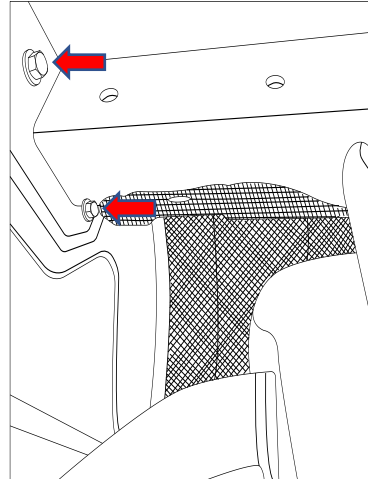
Repeat the step for the RHS.



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9. Remove 1x screw and discard the plastic bracket.

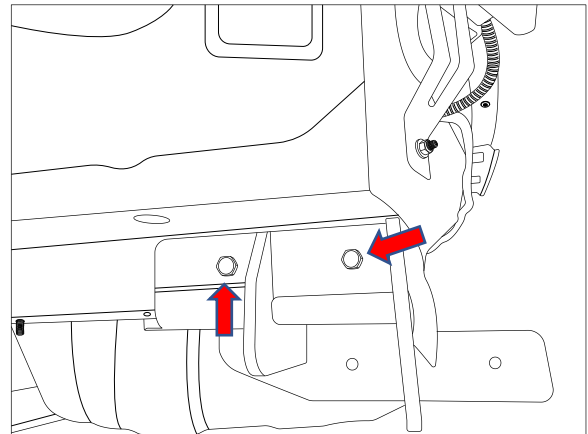


10. Remove 4x bolts and pull the impact beam rearward.



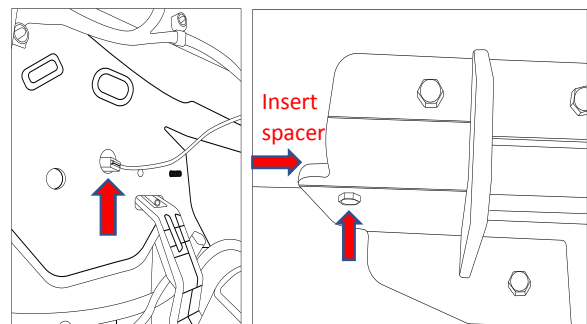
11. On the LHS
Loosely fit the side arm bracket to the vehicle and insert 2x M10.

Repeat the step for the RHS.



12. On the LHS
Insert the wired nut in the back panel hole.
Insert the spacer (Item 6) between the side arm and vehicle chassis.
Fix using 1x M10.

Repeat the step for the RHS.



13. On the LHS

Fit the welded assembly by inserting 2x M12 bolts.

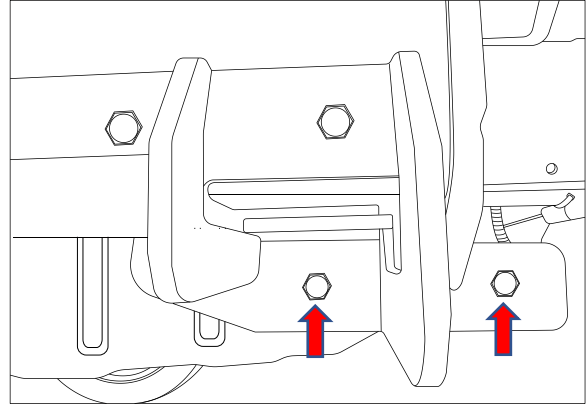
Torque all bolts:

M10 x 1.25P = 48Nm

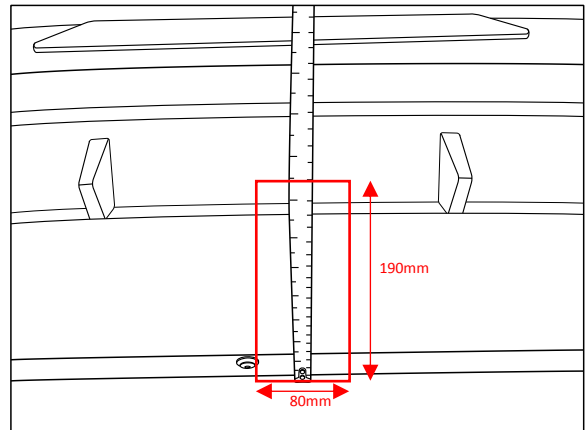
M10 x 1.5P = 44 Nm

M12 x 17.5P = 77Nm

Reinstall the impact beam



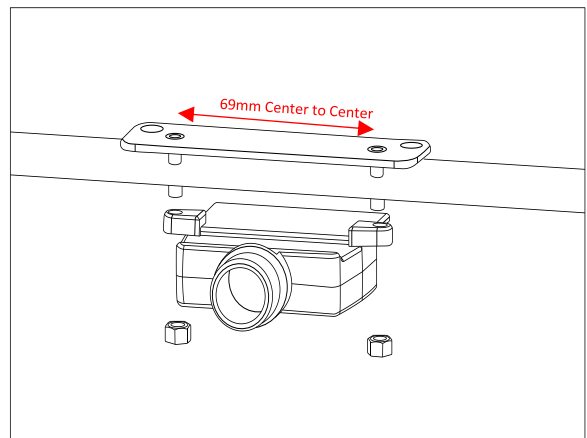
14. Determine centre of bumper, measure and mark off 80mm wide by 190mm long section as measured from the edge of bumper. Cut marked lines and clean edges to remove any sharp burrs.



15. Locate the plug position. (Make sure the harness cable is long enough)

Drill 2x Ø5mm holes, 69mm apart.

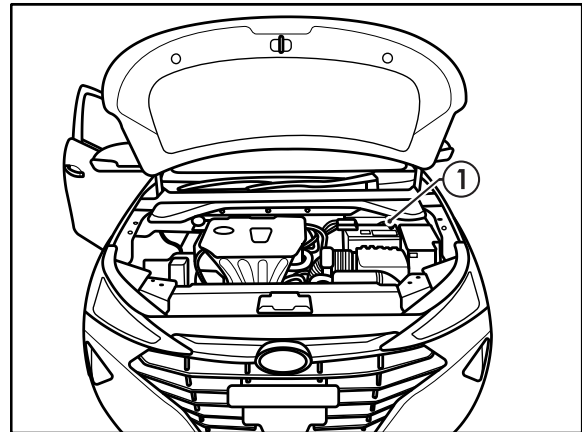
Reinstall bumper by reversing step 1-8.



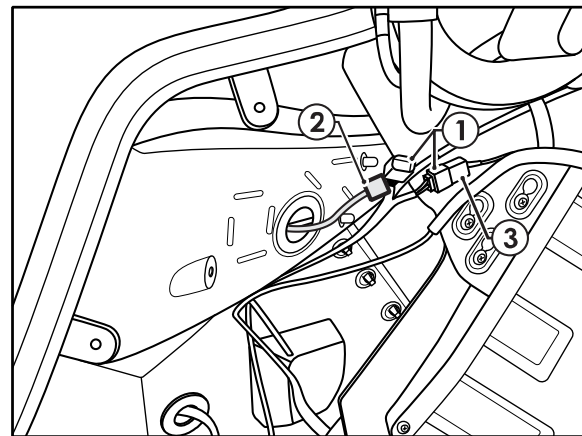
IMPORTANT

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.

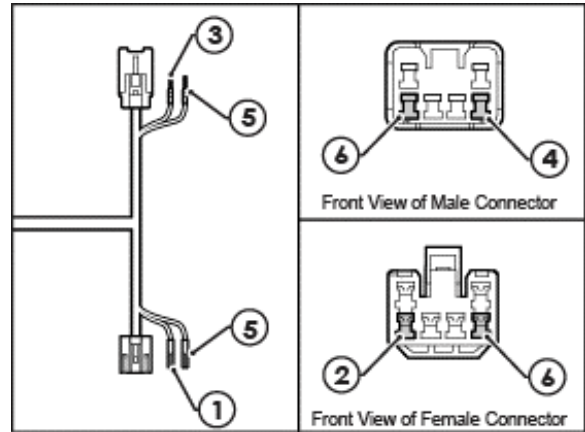
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16. In the Engine Bay, disconnect the vehicle battery negative terminal (1).
 17. In the luggage compartment, remove the floor carpet.
 18. Fold down the rear seats by pulling the levers in the boot.



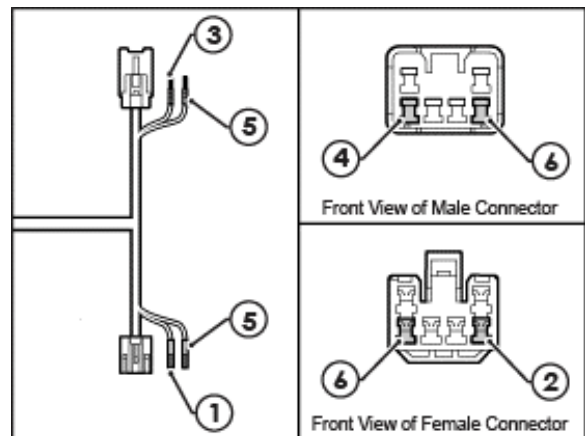
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19. At the LHS tail lamp, patch in the LHS tail lamp connectors (1) in between the vehicle tail light wiring (2) and the vehicle body wiring (3).
 20. Route the rest of the trailer patch wiring across to the RHS of the vehicle.



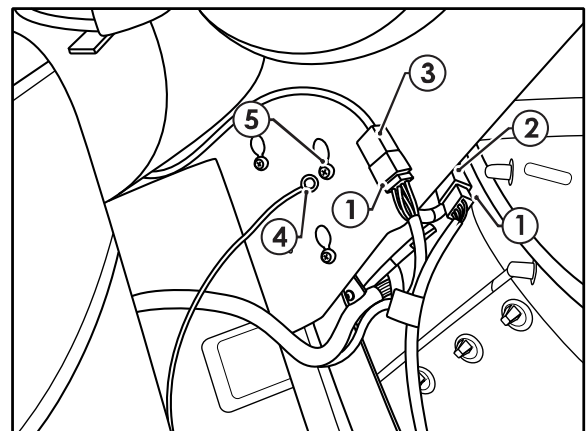
21. For vehicles with incandescent bulb tail lights, Insert the 'BROWN/BLACK' wire (1) with a female terminal into the highlighted cavity (2) on the Trailer Patch Harness RHS 6-way female connector.
22. Insert the 'BROWN/BLACK' wire (3) with male terminal into the highlighted cavity (4) on the Trailer Patch Harness RHS 6-way male connector.
23. Insert the 'BLACK' wires (5) into the highlighted cavities (6) on the Trailer Patch Harness tail light 6-way connectors.



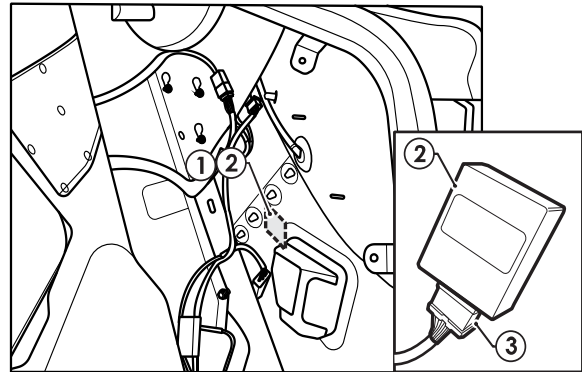
24. For vehicles with LED tail lights, Insert the 'BROWN/BLACK' wire (1) with a female terminal into the highlighted cavity (2) on the Trailer Patch Harness RHS 6-way female connector.
25. Insert the 'BROWN/BLACK' wire (3) with male terminal into the highlighted cavity (4) on the Trailer Patch Harness RHS 6-way male connector.
26. Insert the 'BLACK' wires (5) into the highlighted cavities (6) on the Trailer Patch Harness tail light 6-way connectors.



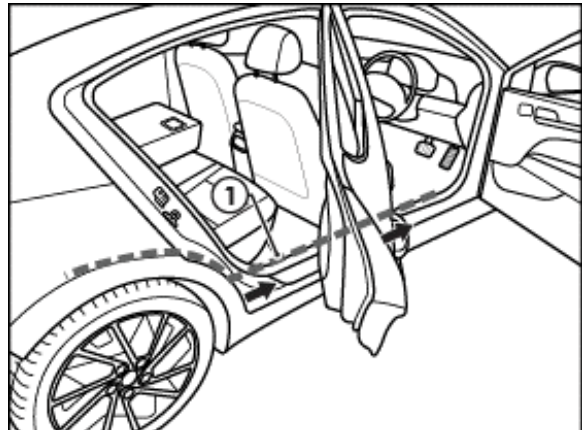
27. On the RHS, patch in the RHS patch connectors (1) in between the vehicle tail light wiring (2) and the vehicle body wiring (3).
28. Connect the star ring terminal (4) to a suitable location on the vehicle chassis (5).



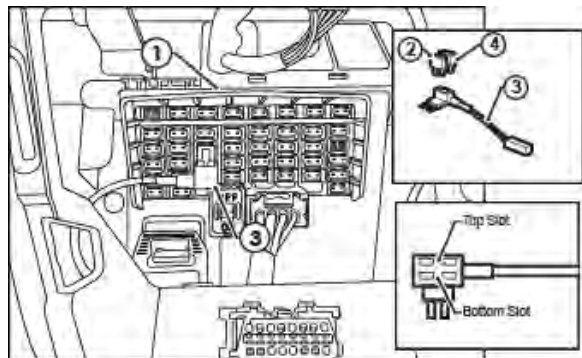
29. Using an alcohol wipe, clean the RHS inner sheet metal area (1) and the underside of the ECU (04826) (2).
 30. Connect the trailer patch 12-way connector (3) to the ECU.
 31. Apply double sided tape to the ECU (2) and secure it to the vehicle sheet metal.
- Note: Mount the ECU (2), ensuring the connector is orientated downwards.**



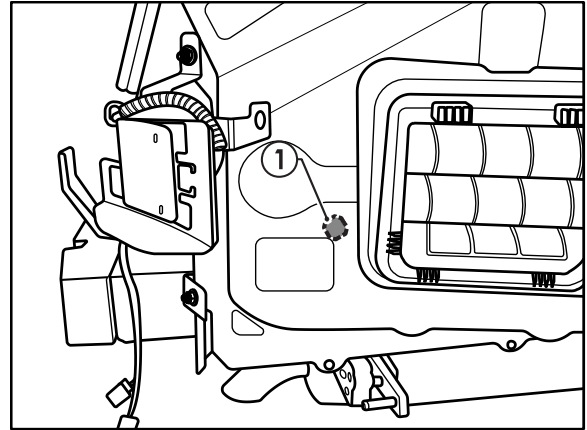
32. Route the orange power wire (1) down the RHS towards the vehicle fuse panel near the driver's right knee.
33. Tuck the power wire (1) under the trim as required.



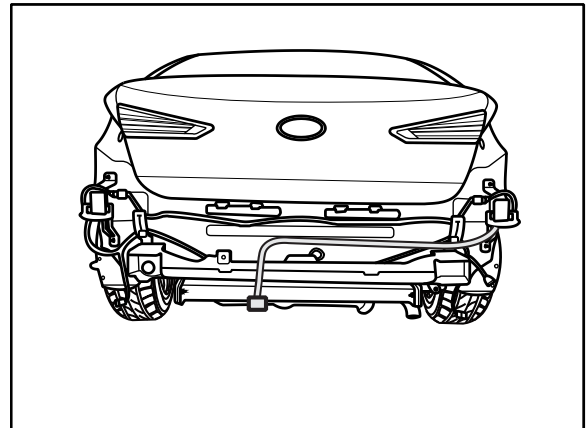
34. On the vehicle fuse box (1), remove the vehicle 30A fuse (2).
 35. On the Add-A-Fuse (3), insert the supplied 20 amp fuse (4) into the Add-A-Fuse (3) top slot and then insert the vehicle 30A fuse (2) into the bottom slot.
 36. In the orientation shown, insert the Add-A-Fuse (3) into the slot where the previously removed fuse was located.
 37. Connect the Add-A-Fuse (3) to the main harness.
- Note: To maintain correct electrical operation, ensure you insert the fuse adaptor into the allocated slot and in the orientation shown.**



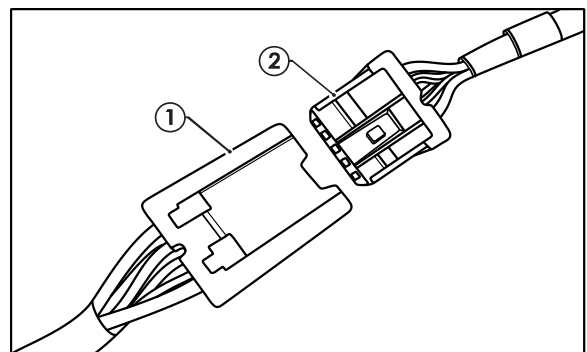
38. Drill a 30mm grommet hole in a suitable location (1) to enable the tail harness to be routed from the towbar to the ECU.



39. With the rear bumper removed, secure tail harness to towbar.
40. Route tail harness up through chassis and previously drilled 30mm hole.
41. 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.



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



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43. Secure all harness using supplied Cable Ties.
 44. Test the trailer patch function using a light board or multi-meter.
 45. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
 46. The RPA function can be disabled via a switch next to the gear shifter.
 47. Place the fitting instructions in the glove box after fitment.
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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)

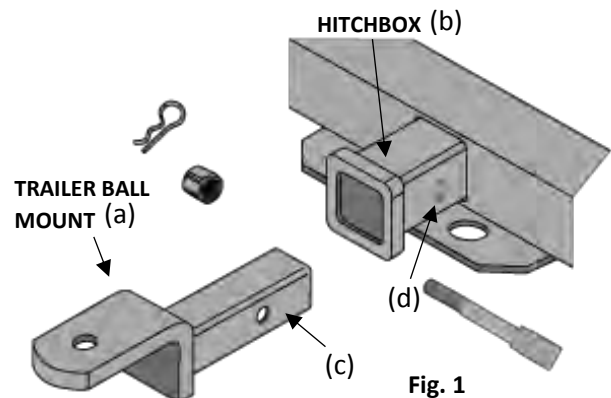


Fig. 1

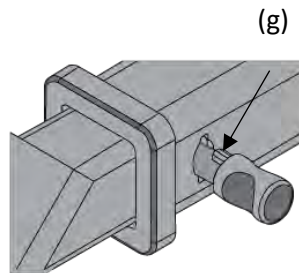


Fig. 2

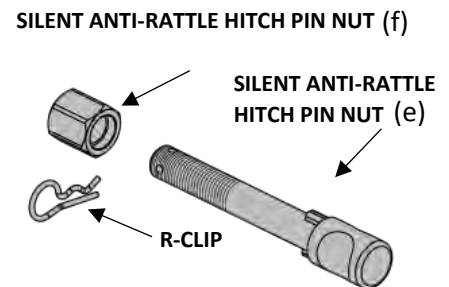


Fig. 3

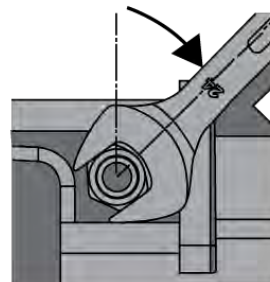


Fig. 4

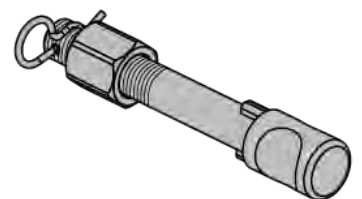


Fig. 5