

PRODUCT DETAILS:

Part Number:	QTHY281L	Maximum Towing Braked:	2000	kg
ECU Number:	WLE70034	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	200	kg
TBM/Lug Part Number:	21126			

FITTING DETAILS:

Towbar Installation Time:	180 Mins.	RPA Disable/Other:	YES
Total Installation Time:	210 Mins.		
Bumper Cut Required:	Yes		

Note:

- Please refer vehicles owner's manual for proper operation and understanding of towing features.

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).

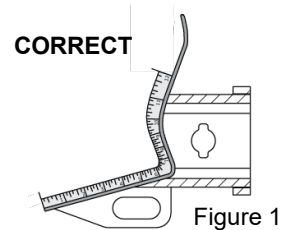


Figure 1

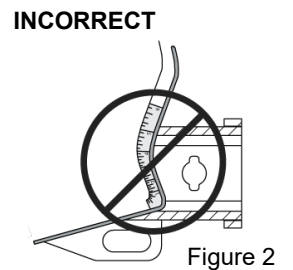


Figure 2

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

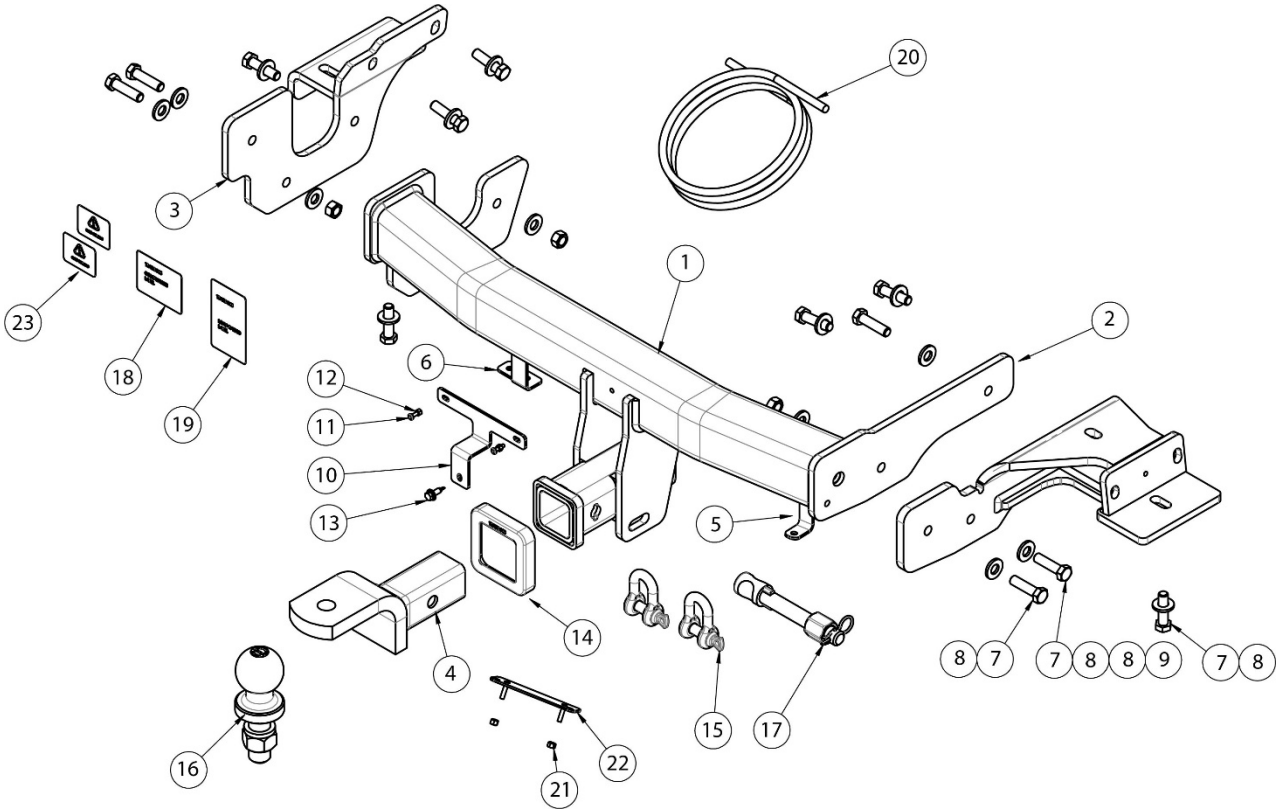
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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.

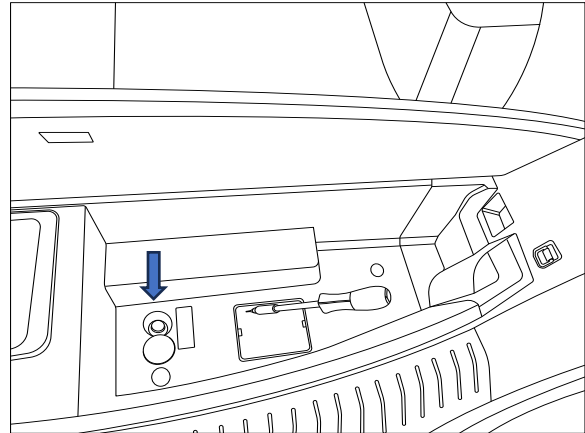
i TOWBAR ASSEMBLY DIAGRAM



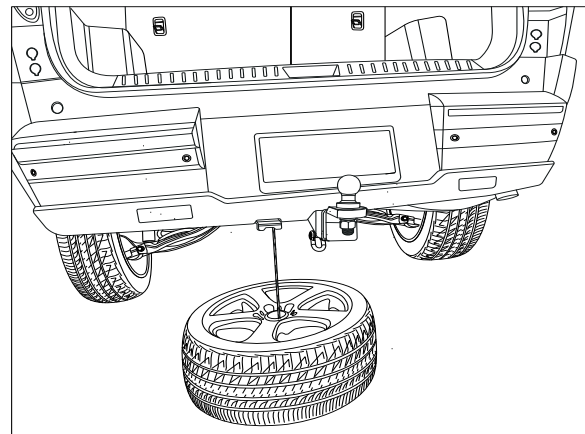
ITEM	DESCRIPTION	QTY
1	HYUNDAI SANTA FE WELDED ASSY	1
2	SIDE ARM - RHS	1
3	SIDE ARM - LHS	1
4	TRAILER BALL MOUNT	1
5	BUMPER TAB - LHS	1
6	BUMPER TAB RHS	1
7	BOLT HEX HD M12x45x1.25P G8.8	12
8	WASHER PLAIN M12x27x3.0mm	15
9	NUT HEX HD M12x1.25P G10	3
10	SENSOR BRACKET	1
11	SCREW PAN HD M4x16x0.7P G4.6	2
12	NUT NYLOC HEX HD M4x0.7P G8	2

ITEM	DESCRIPTION	QTY
13	TEK SCREW 14-20 HEX HD 22mm	1
14	HITCH BOX COLLAR COVER	1
15	D-SHACKLE 10mm	2
16	TOWBALL 50mm	1
17	SMART PIN SILVER	1
18	COMPLIANCE LABEL	1
19	LOAD RATING LABEL	1
20	WIRE LOOM	1
21	NUT NYLOC HEX HD M4x0.7P G8	2
22	PLUG BRACKET	1
23	CAN MODULE WARNING LABEL	1

1. Open the tailgate.
2. Lift up the boot floor panel.
3. Unscrew the plastic cap

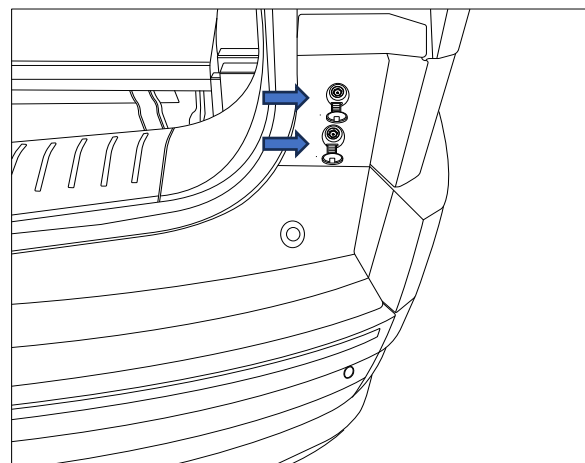


4. Lower and remove the spare wheel.



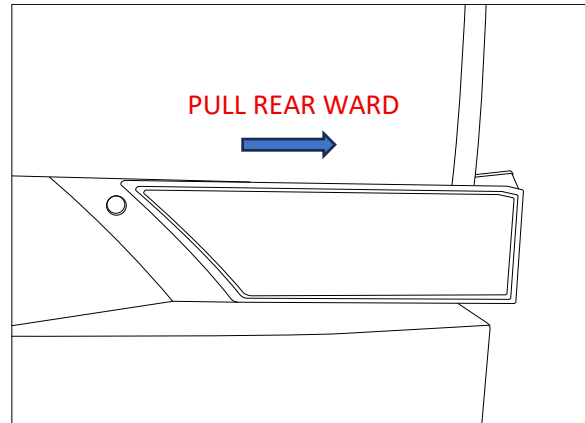
5. Open the 2x screw caps.
6. Remove the 2x screws.

Repeat for the other side



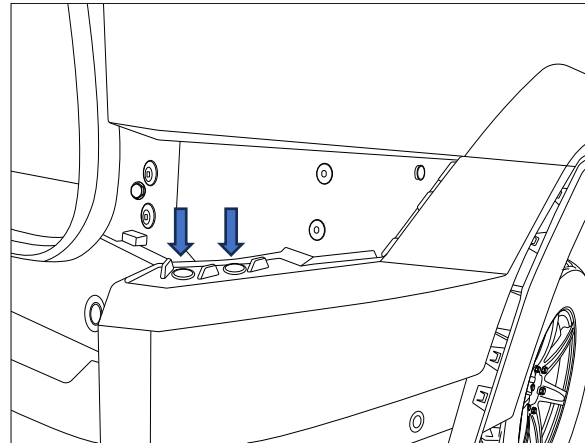
7. Pull the reflector rear ward of the vehicle and remove it.
8. Keep it in a safe place.

Repeat for the other side



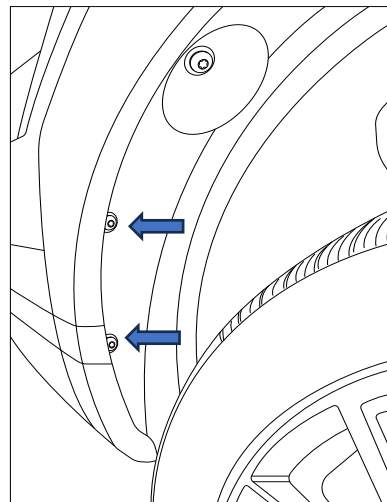
9. Remove 2x scrivenets.

Repeat for the other side.



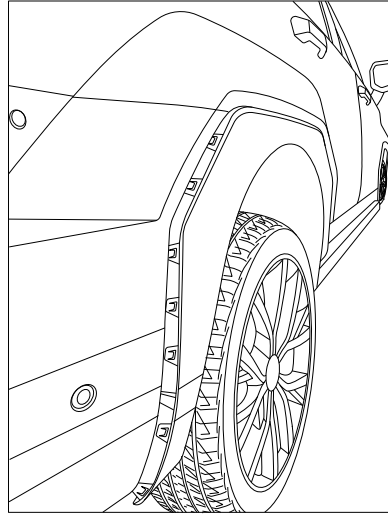
10. Remove 2x scrivenets from the wheel arch liner.

Repeat for the other side.

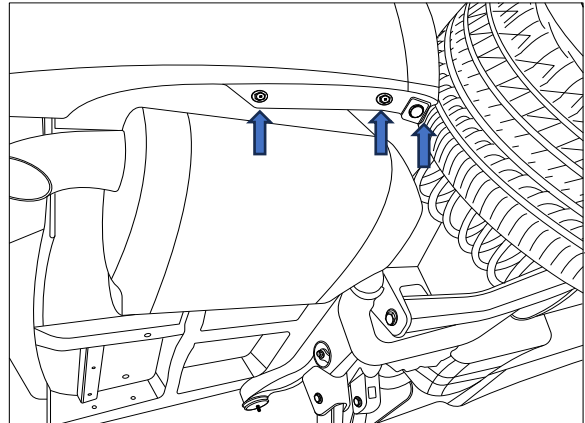


11. Unclip the wheel arch.

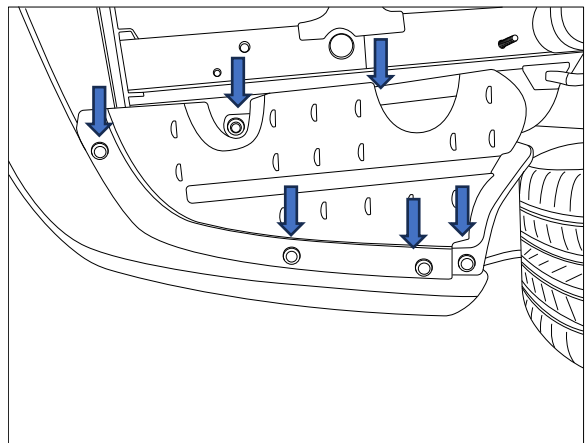
Repeat for the other side.



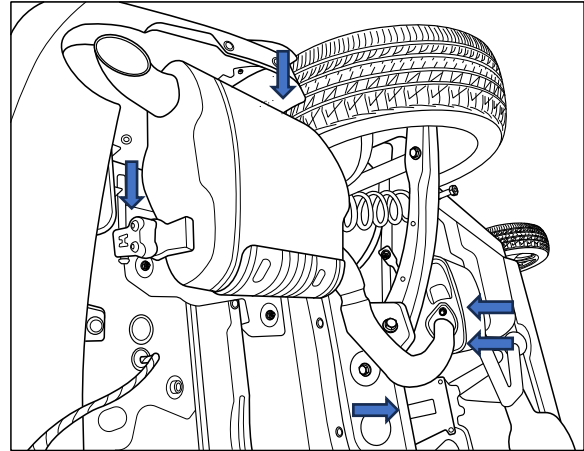
12. Remove 3x scrivenets behind the driver rear wheel.



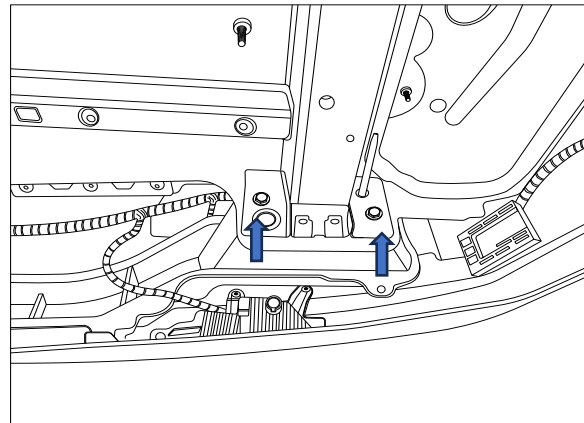
13. Remove 4x scrivenets behind the passenger rear wheel.
Unscrew 2x plastic nuts and remove the plastic under cover.



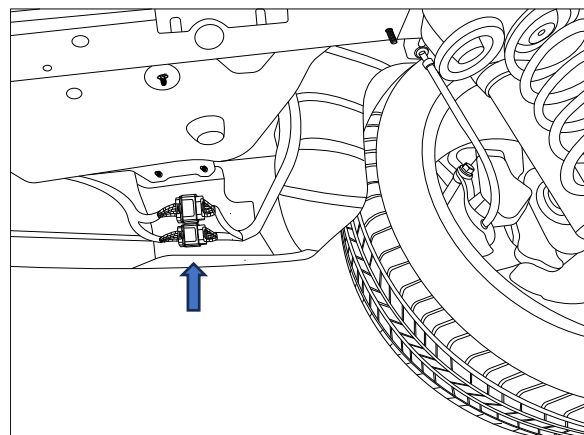
14. Unscrew 2x screws.
Slide the 3x muffler rubber hangers and remove the muffler.



15. Remove 2x screws behind the bumper.
Repeat for the other side



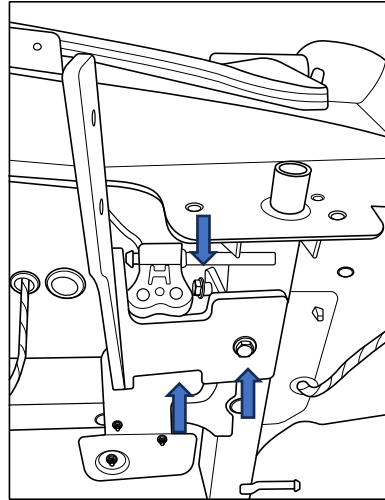
16. Dislodge the bumper harness.
Unclip and remove the bumper.



17. Fit the rubber muffler hanger back to the vehicle.

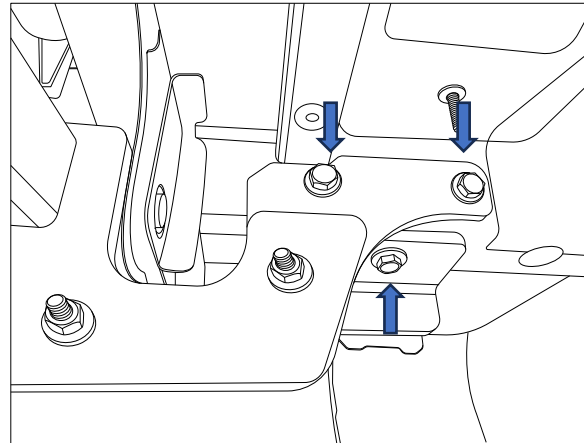
Place the side arm to the driver side chassis.

Secure it with 3x M12x1.25 and 3x washers.



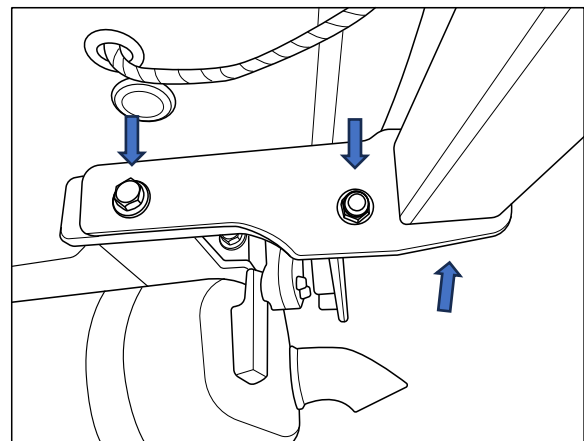
18. Place the side arm to the passenger side chassis.

Secure it with 3x M12x1.25 and 3x washers.



19. Place the cross tube between the side arm.

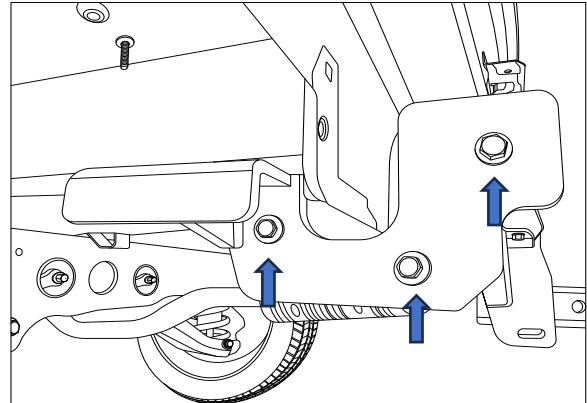
On the driver side, secure it with 3x M12x1.25, 4x washers and 1x nut.



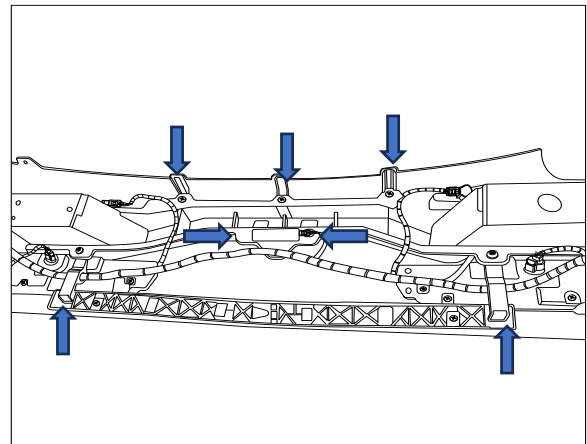
20. On the passenger side, secure it with 3x M12x1.25, 5x washers and 2x nuts.

Torque the fasteners as follows:

M12 x 1.25 CL8.8 = 89 Nm



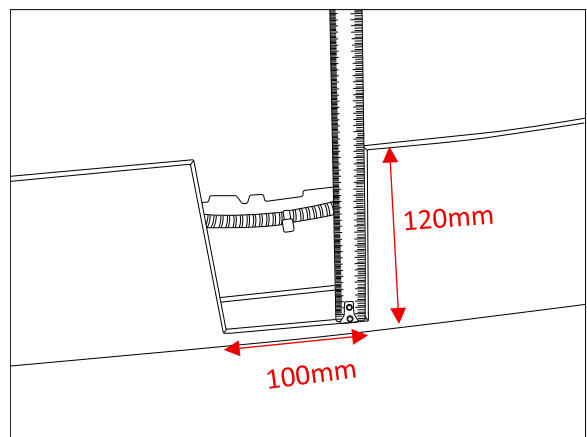
21. Remove 5x scrivenets from the impact beam.
22. Unscrew 2x screws from the sensor.
23. Dislodge the 2x connectors and remove the harness from the impact beam.
24. Remove and discard the impact beam.



25. Place masking tape on the bumper outer skin
Mark and cut out an area 120mm x 100mm as shown to clear the hitch box.
Be mindful to remove any wiring in the cut out area.

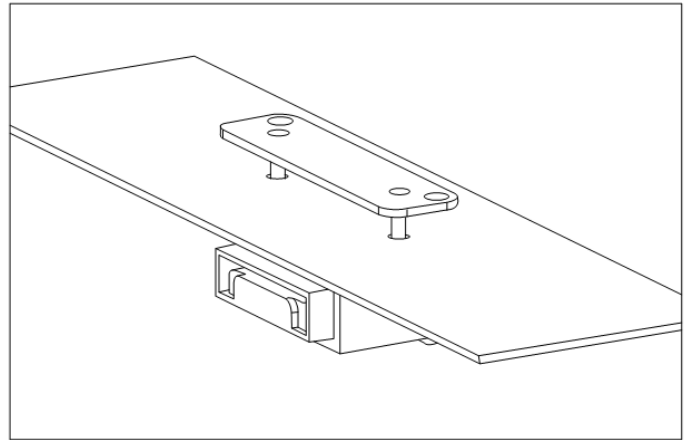
NOTE:

Remove any wiring in the cut-out area before cutting.

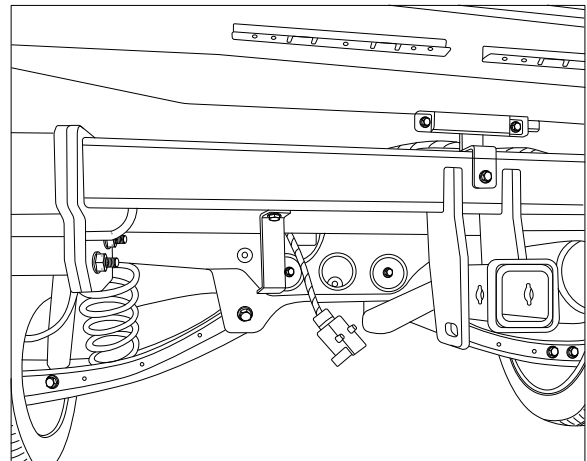


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26. Locate the plug bracket and ensure the harness cable length is long enough.
Drill 2x \varnothing 5mm holes 69mm apart.

Remove all swarf and rough edges



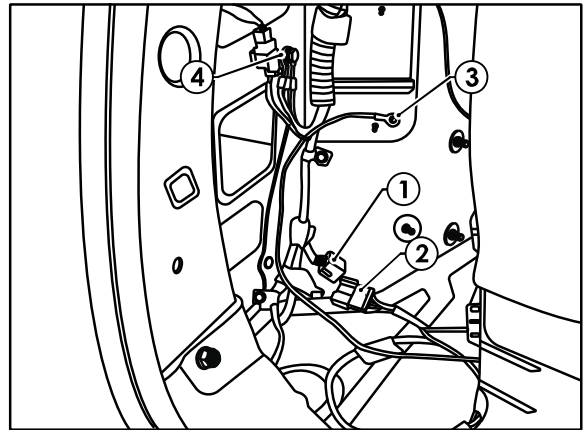
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27. Fit the 2x bumper tabs and the sensor brackets to the bar.
28. Secure them with 3x tek screws.
28. Secure the sensor to bracket with 2x screws and 2x nuts.



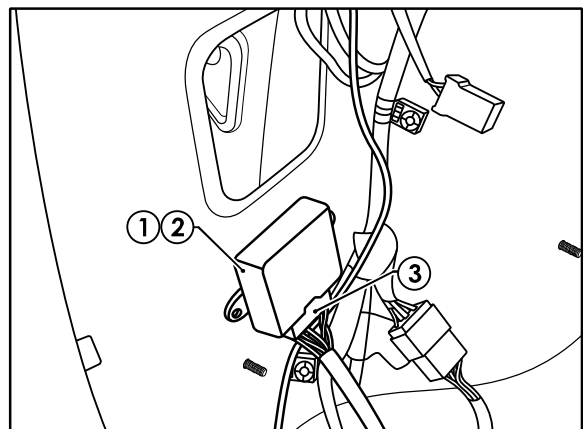
IMPORTANT

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.

30. Connect the vehicle prewire connector (1) to the mating connector on the patch harness (WLL90033) (2).
31. Connect the ring terminal (3) to the vehicle earth point (4).



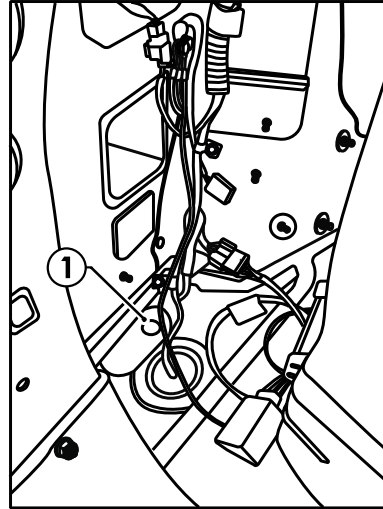
32. Using an alcohol wipe, clean the LHS inner sheet metal area (1) and the underside of the ECU (WLE70034) (2). Connect the trailer patch 18-way connector (3) to the ECU. Apply double sided tape to the ECU and secure it to the vehicle sheet metal.
33. **Note: Mount the ECU, ensuring the connector is orientated downwards.**



34. Remove the blanking grommet (1) on the LHS floor and drill out to 30mm.
With the rear bumper removed, secure tail harness to towbar
Route tail harness up through chassis hole.
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.

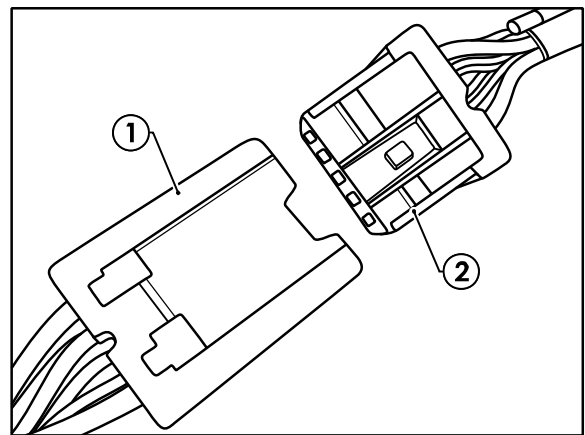
35. **Note: Ensure grommet is seated correctly and makes a good seal.**



36. Connect the tail harness (tail length 1200mm)
8-way connector (1) to the trailer patch mating
8-way connector (2).
Secure all harness using supplied cable ties.
Test the trailer patch function using a light board or multimeter.

37. Re-assemble all the removed parts, **from Step 1 to Step 13, in the reverse order of removal.**

Ensuring there are no squeaks or rattles.



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 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)

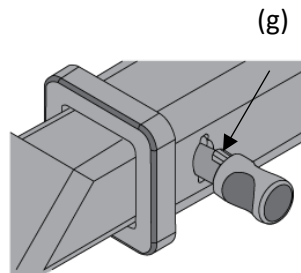
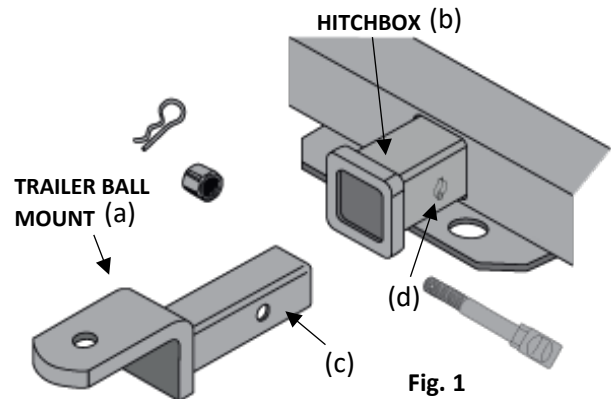


Fig. 2

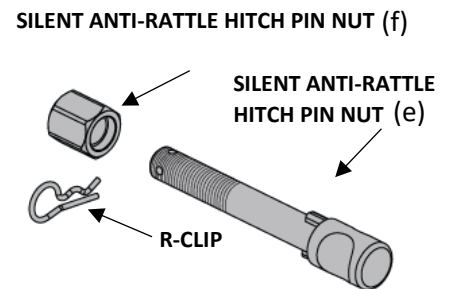


Fig. 3

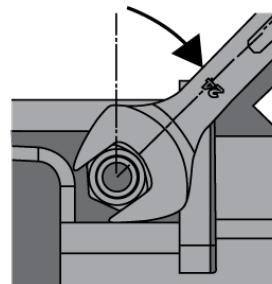


Fig. 4

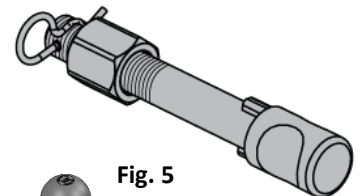


Fig. 5

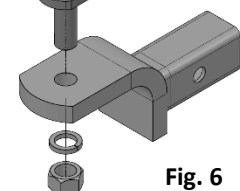


Fig. 6