



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER QTHV07L

HAVAL H6 ICE / PHEV AM

PRODUCT DETAILS:

Part Number:	QTHV07L	Maximum Towing Braked:	2000	1500	kg
ECU Number:	04826	Maximum Towing Unbraked:	750	750	kg
Tail Harness Length Required:	See Note	Maximum Static Ball Load:	200	150	kg
TBM/Lug Part Number:	21325				

FITTING DETAILS:

Towbar Installation Time:	80 Mins.	RPA Disable/Other:	YES
Total Installation Time:	120 Mins.		
Bumper Cut Required:	YES		

Note:

- For RPA disable use tail WLT019.

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

BEFORE YOU START:

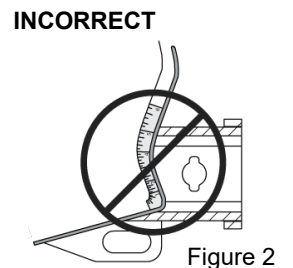
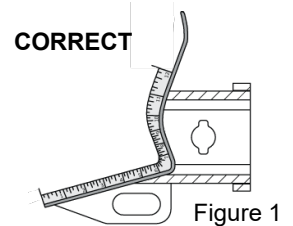
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.

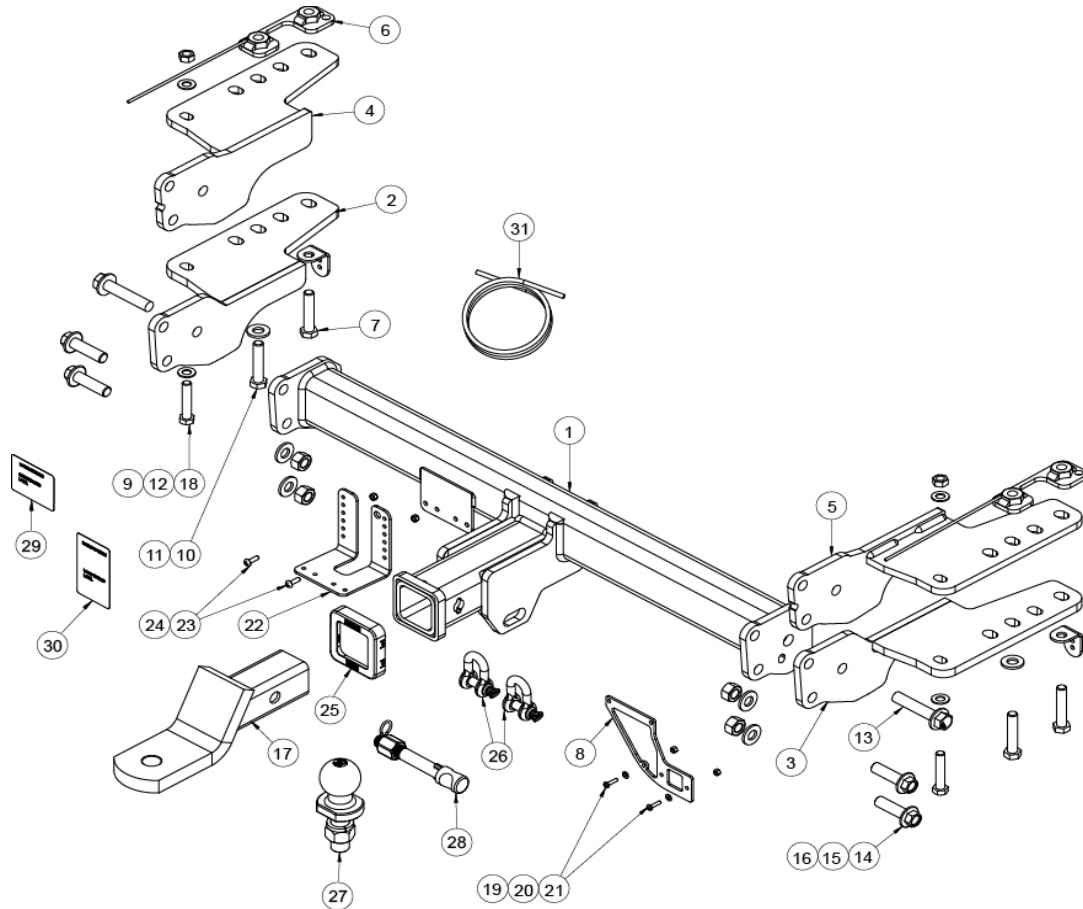
WARNING:

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.



TOWBAR ASSEMBLY DIAGRAM

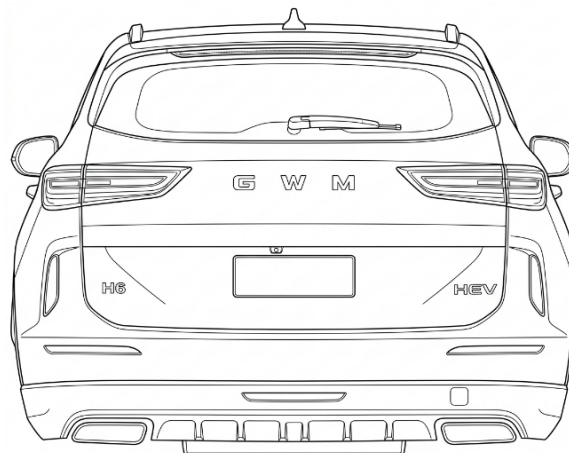


ITEM	DESCRIPTION	QTY
1	HAVAL H6 WELDED ASSY	1
2	OUTER SIDE ARM LHS	1
3	OUTER SIDE ARM RHS	1
4	INNER SIDE ARM LHS	1
5	INNER SIDE ARM RHS	1
6	M12 COARSE PITCH WELD NUT ASSY	2
7	WASHER & ROUTING BRKT	2
8	KICK SENSOR RELOCATION BRKT	1
9	NUT HEX HD M10x1.5P	2
10	BOLT HEX HD M12x60x1.75P G8.8	4
11	WASHER PLAIN M12x27x3.0mm	2
12	WASHER PLAIN M10x21x1.6mm	4
13	BOLT HEX FLANGE M14x70x2.0P G10.9	2
14	BOLT HEX FLANGE HD M14x50x2.0P G10.9	4
15	NUT HEX HD M14x2.0P G10	4
16	WASHER PLAIN M14x28x3.0mm	4

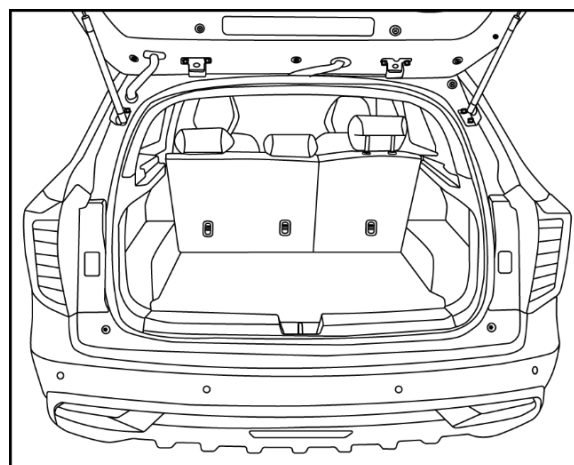
ITEM	DESCRIPTION	QTY
17	TRAILER BALL MOUNT	1
18	BOLT HEX HD M10x55x1.5P G8.8	2
19	NUT NYLOC HEX HD M4x0.7P G8	2
20	WASHER PLAIN M4x9.0x0.7mm	2
21	SCREW PAN HD M4x16x0.7P G4.6	2
22	PLUG BRACKET	1
23	SCREW PAN XR M5x16x0.8P	2
24	NUT NYLOC HEX HD M5x0.8P G8	2
25	HITCH BOX COLLAR COVER	1
26	D-SHACKLE 10mm	2
27	TOWBALL 50mm	1
28	SMART PIN SILVER	1
29	COMPLIANCE LABEL	1
30	LOAD RATING LABEL	1
31	WIRING LOOM	1

1. Position vehicle on a hoist or flat ground.

Turn ignition off and remove keys from vehicle.



2. Release tail gate to expose boot cabin space.



3. Gain access to the LHS tail area to remove the plastic cover (1) on the LHS taillight assembly concealing two mounting screws.

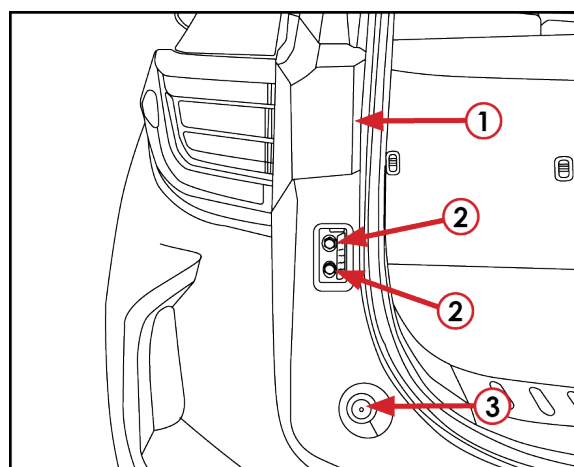
Remove the rubber boot stop by removing the 2 x M10 Screws (2).

Remove 1x hex socket screw (3) on the LHS securing bumper to vehicle.

Repeat for the RHS.

Tools Used:

- Hex Bit 5mm
- Socket 10mm

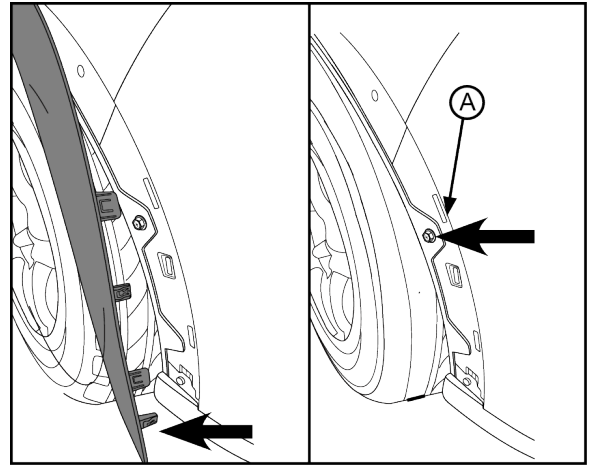


4. Gain access to the LHS wheel arch to remove the rear fender flare.

Remove the Phillips head screw (A).

Tools Used:

- Trim remover
- Phillip's head screwdriver

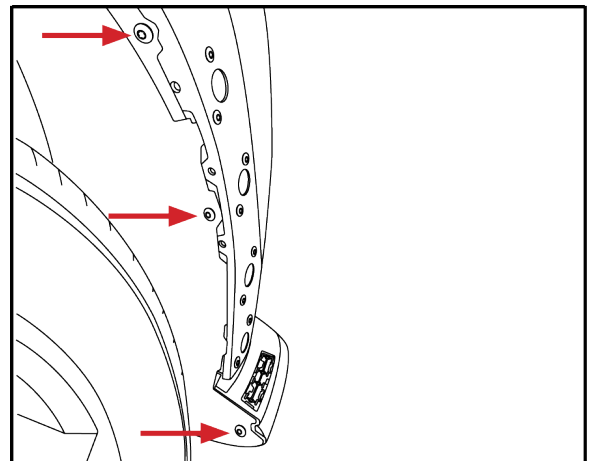


5. Remove 3x Phillip's head screws securing inner guard to bumper on the LHS.

Repeat steps 4 & 5 for the RHS.

Tools Used:

- Phillip's head screwdriver

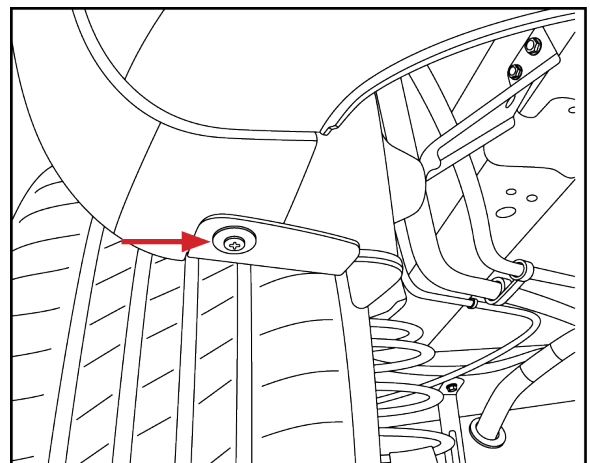


6. Remove the underside push pin securing the inner guard to the bumper on the LHS.

Repeat for the RHS.

Tools Used:

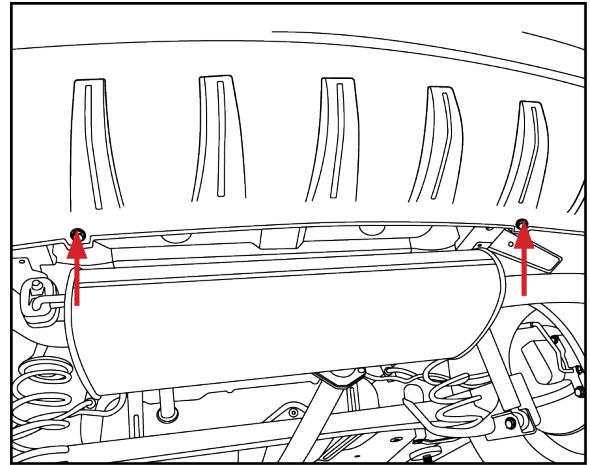
- Phillip's head screwdriver



7. Remove 2x M10 screws underside securing bumper to rear reinforcement bracket.

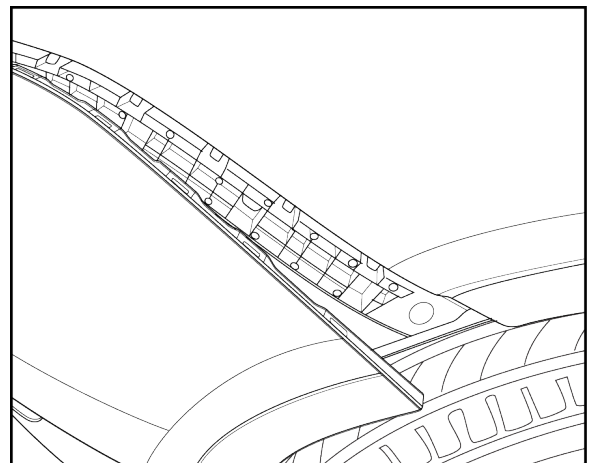
Tools Used:

- Socket 10mm
- Ratchet



8. Carefully disengage the bumper fascia from the retaining clips either side by pulling the fascia away from the vehicle, starting at the forward upper corner shown.

Carefully remove the bumper to access the rear bumper connector.

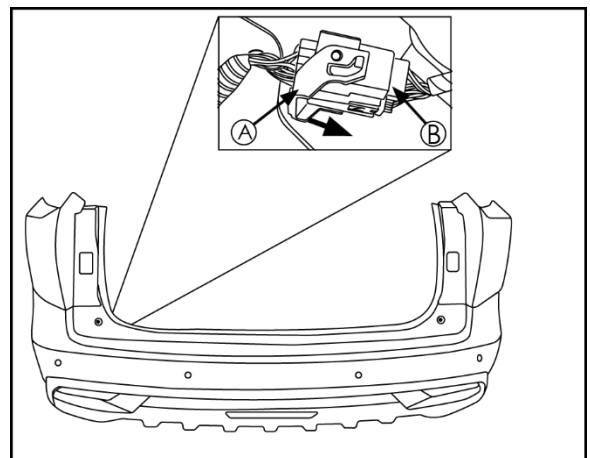


9. Gain access to the rear bumper connector on the rear reinforcement bar of the vehicle to unclip the connector.

Pull back the connector lever (2) on the connector (2) to unlock the connector which will disconnect the connector and allow removal of the rear bumper fascia.

Carefully continue to remove the rear bumper fascia and carefully set aside.

Unclip the connector to detach it from the rear intrusion beam.

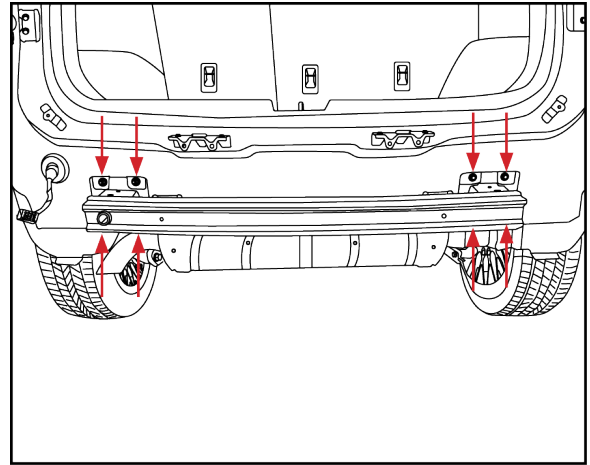


10. Remove 8x M10 nuts securing reinforcement bar to vehicle body.

Detach reinforcement bar from vehicle body.

Tools Used:

- Socket 13mm
- Ratchet



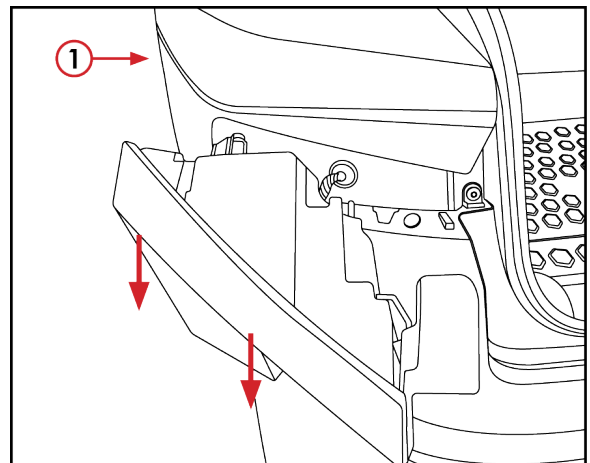
11. Gain access to the LHS taillight to remove the M8 Bolt (1) securing taillight to the vehicle.

Remove the taillight by unclipping the connector.

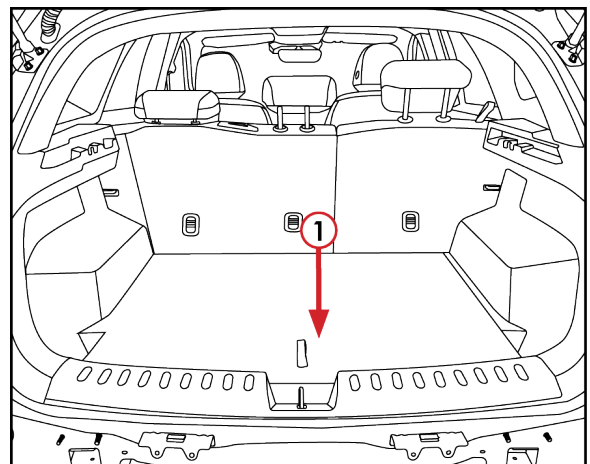
Repeat for RHS.

Tools Used:

- Socket 10mm
- Ratchet



12. Gain access to the cargo area and remove the rear cargo floor panel (1).



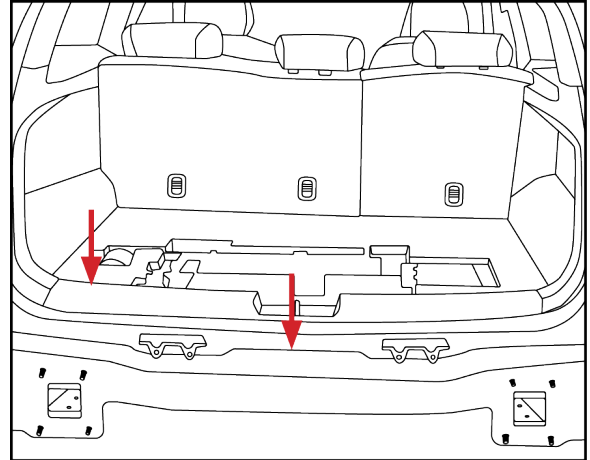
13. Remove the foam floor base.

Remove the LHS foam tray by unloading the 2 x plastic fasteners.

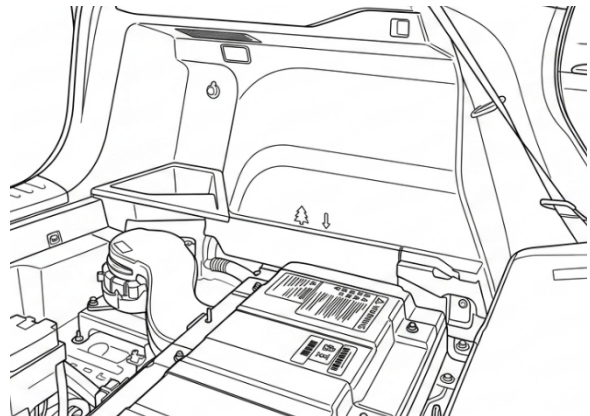
Dislodge and pull the rear scuff panel upwards.

Fold down the rear left passenger seat.

Note: Petrol vehicle will have a tyre under the cargo floor panel, visual shows PHEV variant.



14. Remove the 3 x M6 bolts to remove the rear cargo LHS lower trim plate.

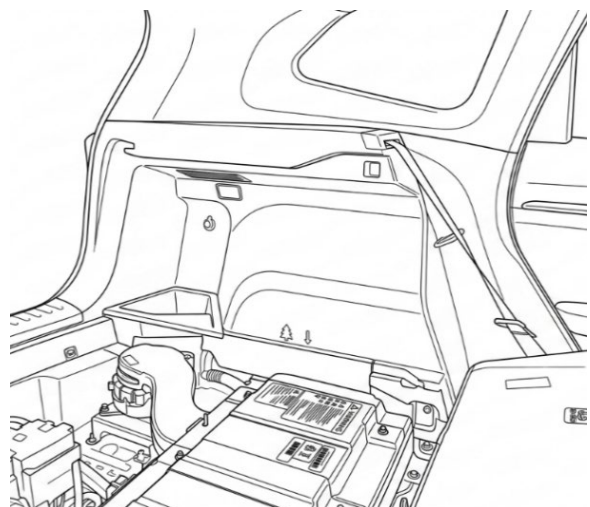


15. Remove the plastic tub.

Unclip the rear cargo light and disconnect the 2-way light connector.

Dislodge the rear LHS lower cargo trim enough to gain access and disconnect the auxiliary socket connector.

Note: For PHEV vehicles, unscrew, unclip and put aside the Subwoofer Speaker (1)

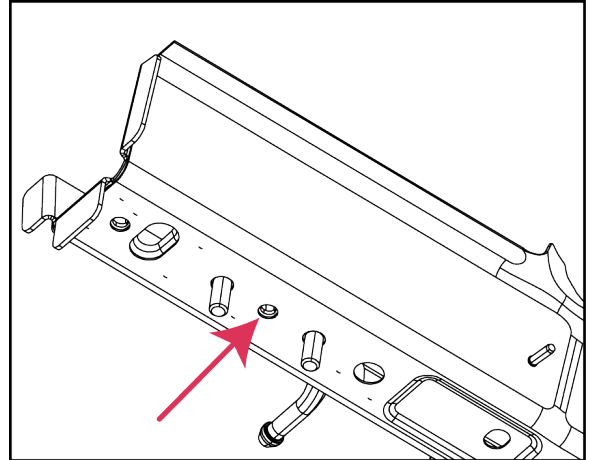


16. Gain access to underneath the vehicle on the LHS Chassis to drill out hole shown to 13mm on both sides. Use 10mm chassis hole as guide.

Repeat for the RHS.

Tools Used:

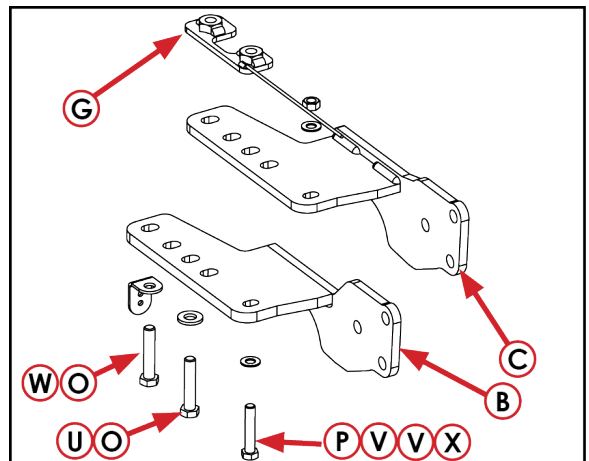
- Drill
- Drill bit 13mm



17. Gain access to the chassis LHS and loosely attach the Towbar Sidearm Outer LHS (B) and the Towbar Sidearm Inner LHS (C) using 2 x M12 x 60 Hex Bolts (O), M12 Washer (U), M12 Washer Brkt (W), M12 Nut Plate (G), M10 x 55 Hex Bolt (P), 2 x M10 washer (V), M10 Nut (X).

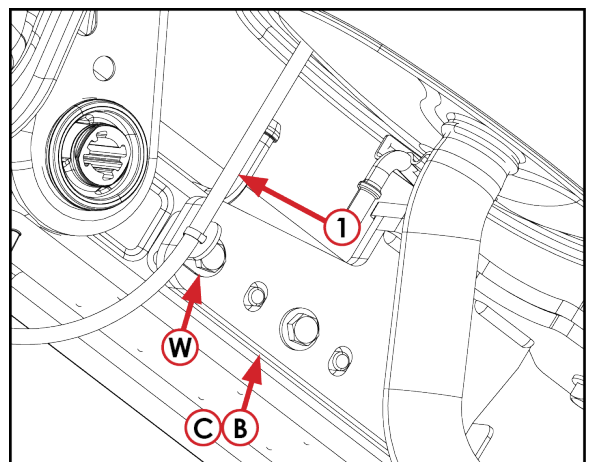
Repeat for opposite side using Towbar Sidearm Outer RHS (D) and Towbar Sidearm Inner RHS (E) and matching fasteners.

NOTE: Pull out the vehicle harness from the vehicle chassis for PHEV 4WD vehicles before attaching side arms



18. If fitting to a PHEV 4WD proceed with step 17. If not then continue to step 18.

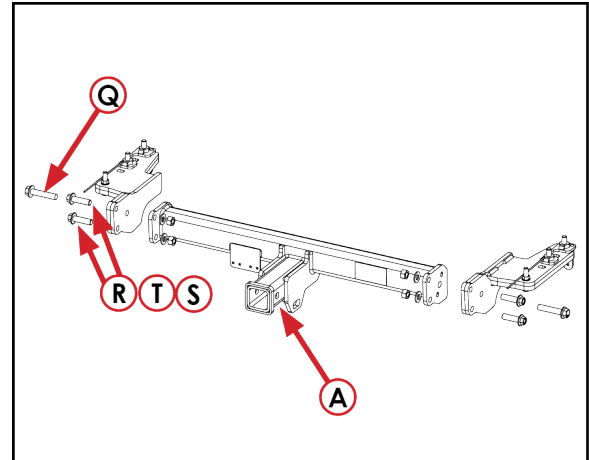
For PHEV 4WD Vehicles, adjust vehicle harness (1) so that it does not interfere with side plates (B) & (C), and secure vehicle harness with supplied cable ties to notch in Washer Bracket (W)



19. Loosely attach Towbar (A) to Side Arms using 2 x M14 x 50 Hex Flanged Bolt (R), 2 x M14 Washer (T), 2 x M14 Hex Nut (S) and 1 x M14 x 70 Hex Flanged Bolt (Q) per side as shown.



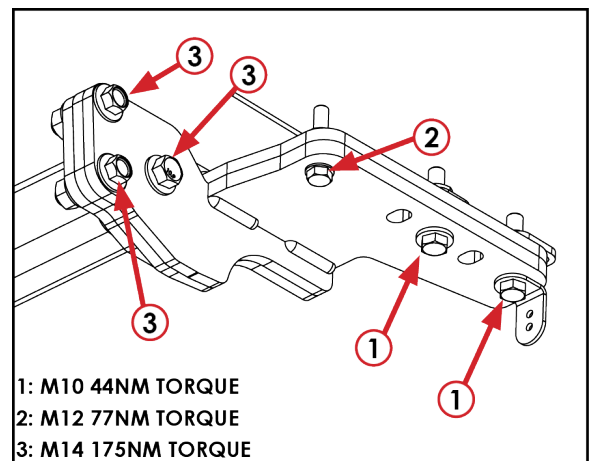
Important
Tighten but do not torque fasteners.



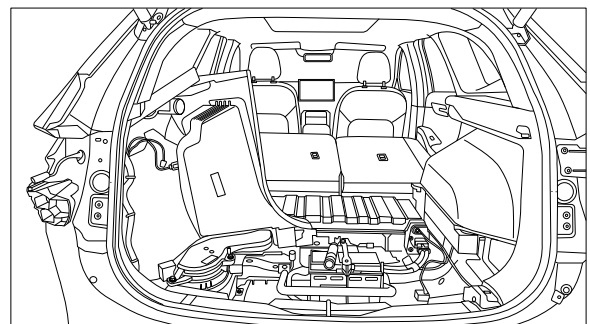
20. Torque all fasteners as per the specified torque shown.

Tools Used:

- Spanner 10mm, 18mm, 21mm
- Socket 10mm, 18mm, 21mm
- Torque Wrench



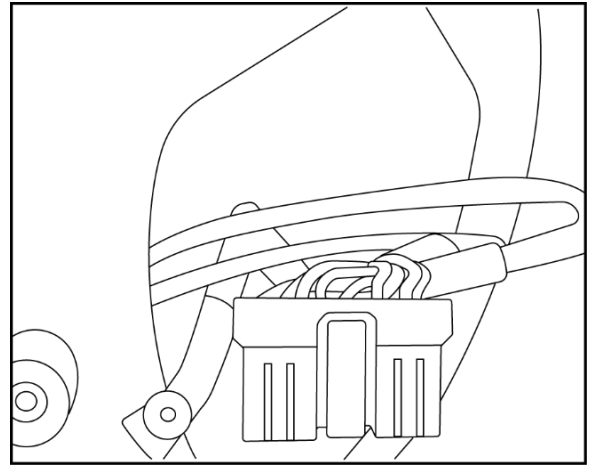
21. Locate the LHS taillight harness grommet and push the grommet and the connector inside the vehicle.



22. Bend the trailer harness 12-pin connector wires sideways as shown.

Feed the connector through LHS taillight hole followed by the power, ground, 8-pin male connector and grommet. Seat the grommet properly in the hole and secure to the loom using a cable tie (not supplied).

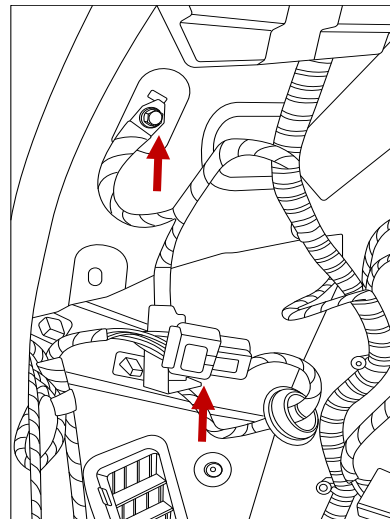
Note: Be careful not to damage the harness on the sheet metal when pushing through the hole.



23. Gain access to the LHS cargo area and retrieve the trailer harness.

Locate the trailer patch ground ring terminal. Secure this to the vehicle ground point as shown.

Connect the trailer patch 8-pin female connector to mating vehicle LHS taillight connector.

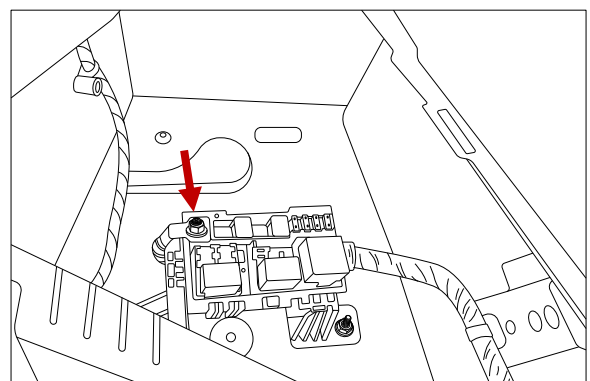


24. Route the trailer patch harness power wire towards the RHS of the vehicle and to the rear Power Distribution Module (PDM).

NOTE: For petrol vehicles, the PDM is located towards the vehicle front, LHS of the boot.

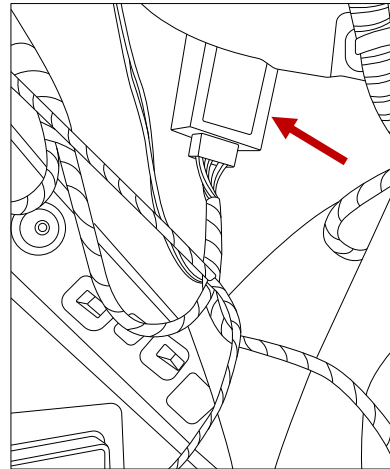
Remove the terminal cover to expose the positive terminal post.

Connect the ring terminal.



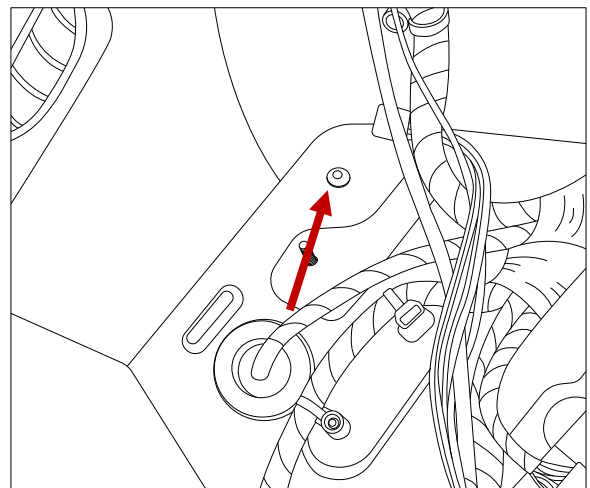
25. Locate the ECU connector on the trailer patch and plug this into the ECU.

Use the tape provided to mount the ECU in the location shown. Apply pressure to allow for good adhesion.

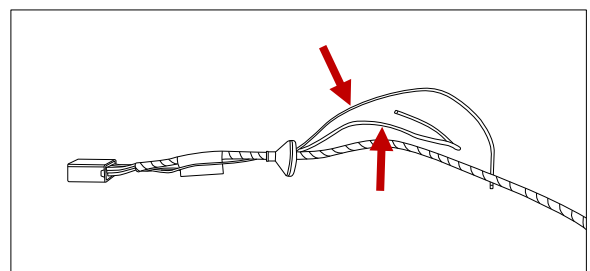


26. Locate the blanking grommet in the LHS floor sheet metal as shown and discard. Using a step drill, drill this hole to exactly Ø30mm.

Note: Spray rust inhibitor on the edges of the hole and clean up any sharp edges.

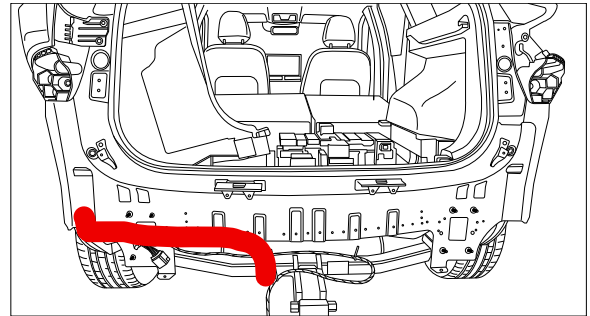


27. Locate the grey and grey/black wires on the tail harness. Push them through the grommet as shown.



28. Feed the tail harness blue connector through the hole, ensuring enough slack for the trailer socket to be mounted to the towbar.

Slide the grommet to the desired location and secure to the loom with a cable tie (not supplied).

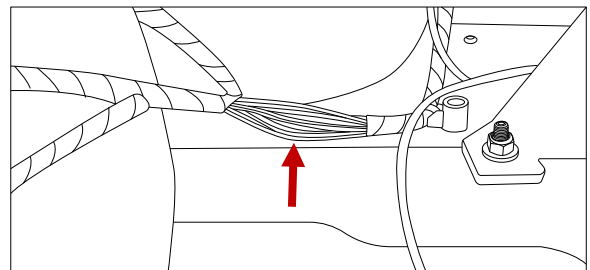
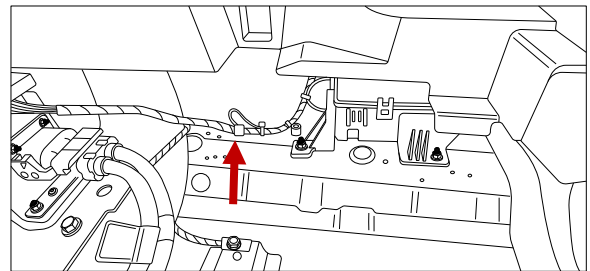


29. Locate the vehicle harness located below the RHS lower cargo trim

Strip back 100mm of insulation to locate the vehicle Red/Black wire.

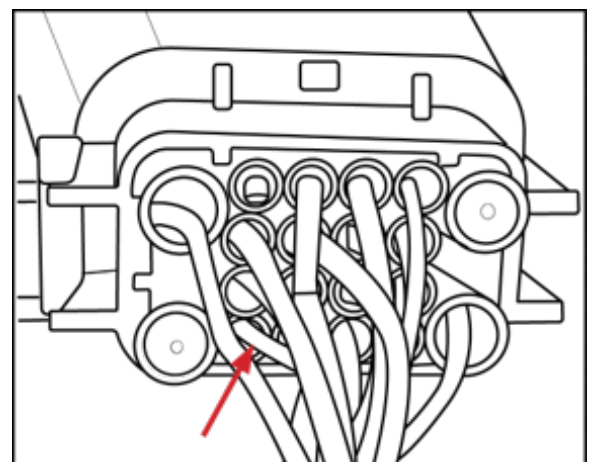
Locate the trailer patch black wire labelled "Reverse Input".

Using the supplied wire-tap cover, join these wires. Clamp the terminal shut over the wire and secure wire-tap with cable ties (not supplied).



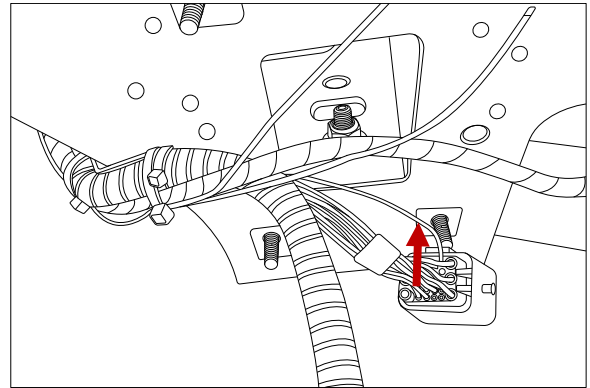
30. Locate the rear bumper connector on the rear LHS of the vehicle. Peel back the tape on the vehicle harness and conduit approx. 100mm to access the Red/Black wire (pin 2).

Cut wire 100mm from the back of the connector.



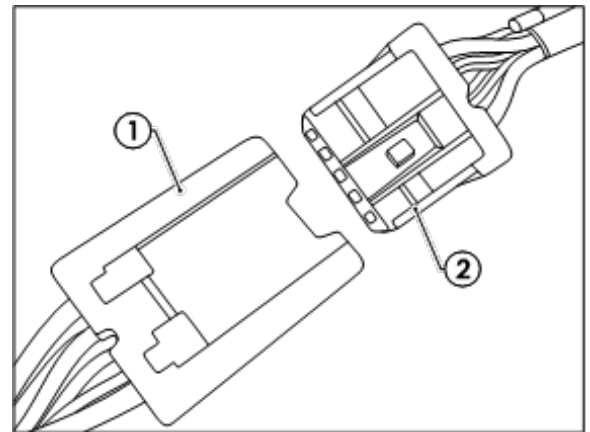
31. Locate the trailer harness Grey wire, remove the wire installation. Join the grey wire to the Red/Black wire on the vehicle side (solder or crimp).

Locate the trailer harness Grey/Black wire and repeat this process with the Red/Black wire on the bumper side.



32. Connect the trailer patch blue connector (1) to the tail harness blue connector (2).

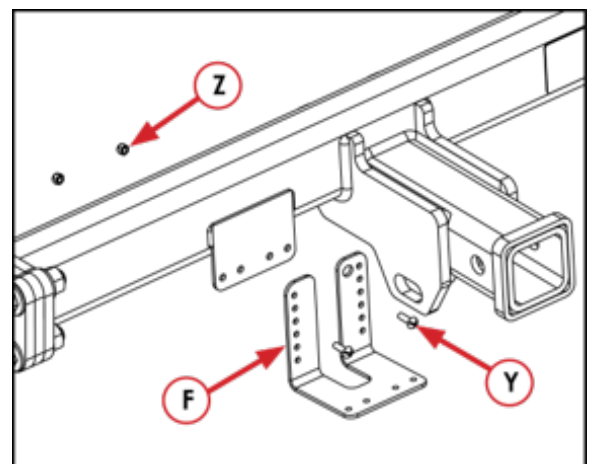
Route the rest of the harness along the vehicle loom and secure with cable ties where necessary (not supplied).



33. Re-attach the reinforcement beam and re-fix the rear bumper connector to the reinforcement bar.

Feed the trailer socket through the Plug Bracket (F) and secure it using fasteners supplied with harness.

34. Attach Plug Bracket (F) to the Towbar with 2 x M5 Set Screw (Y) and 2 x M5 Nyloc Nut (Z).



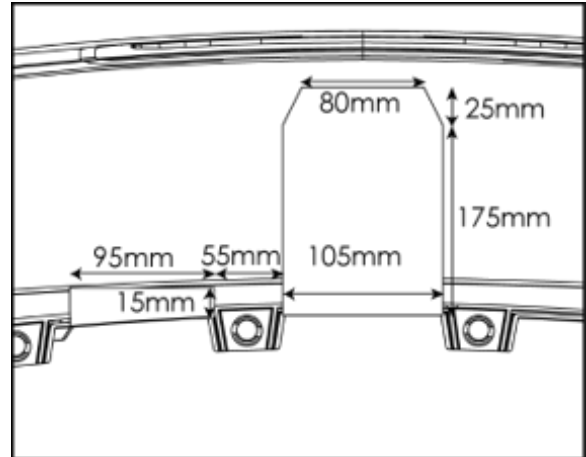
35. Mark the centre line of the rear bumper.

Using this centre line, make a rectangular cut 175mm up from the bottom edge and 105mm wide. Make a further cut 25mm high and 80mm wide centred at the top of the first cut. Angle cut the top corners of each rectangle to meet.

Measure 55mm from the LHS edge of the marked cut out and mark 15mm up from the edge of the bumper as shown to mark the second cutout shape for the Plug Bracket.

Tools Used:

- Taper measure
- Marker pen
- Air saw



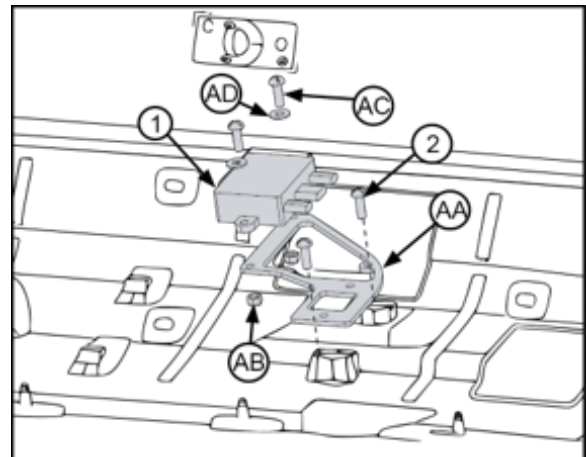
36. Locate the kick sensor on the inside of the bumper (1) and detach by removing 2 x Screws (2).

Align two of the holes on the provided Kick Sensor Relocation Bracket (AA) and attach the Kick Sensor Relocation Bracket (AA) to the bumper with the original screws (2).

Attach the kick sensor (1) to the Kick Sensor Relocation Bracket (AA) using the M4 Screw (AC), M4 washer (AD) and M4 Nut (AB).

Tools Used:

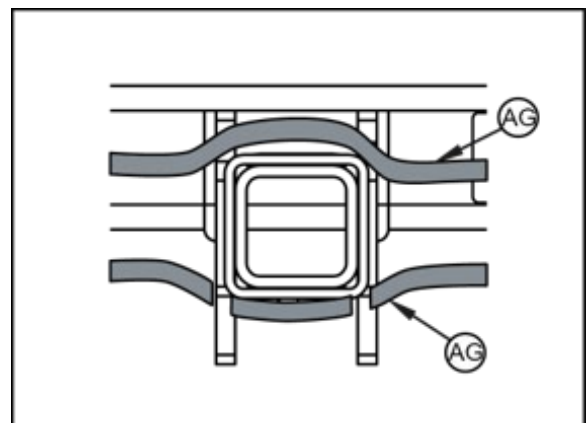
- Philips Head Screwdriver.



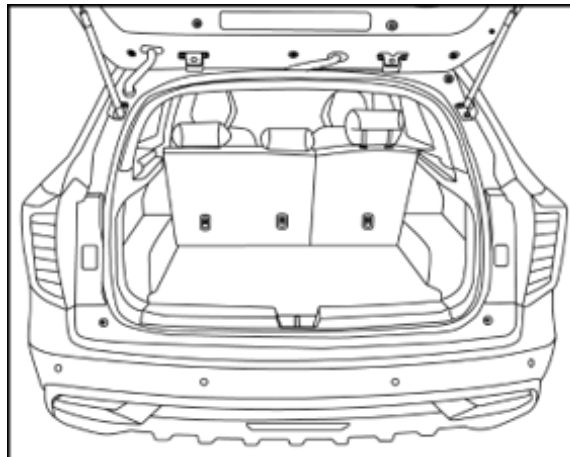
37. Attach 200mm Corrugated Tube (AG) onto centre section of top and bottom foot swipe sensor wires.

Install bumper over towbar by following steps 1 to 7 in reverse, then route sensor wires above and below hitch box as shown.

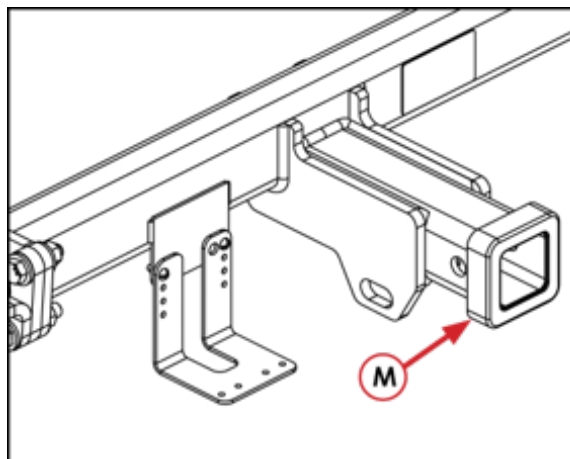
38. The RPA system is disabled when the lid of the trailer socket is opened and the vehicle is reverse gear.



39. Reinstall the bumper over towbar by following steps in reverse.
Test trailer harness function using a trailer test board.
Place fitting instructions in the glove box.



40. Fit supplier collar cover (M) onto the hitch receiver.





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)

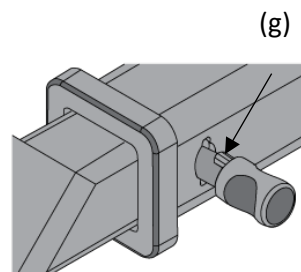
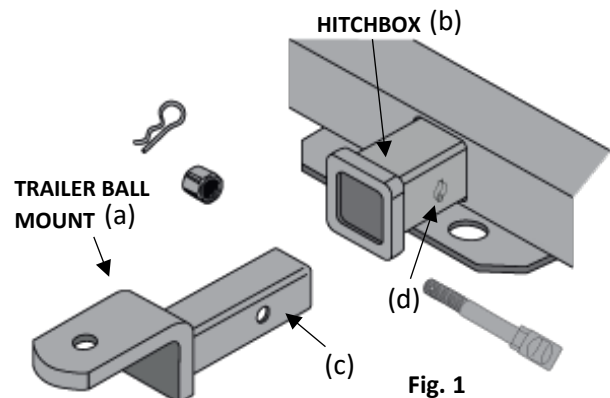


Fig. 2

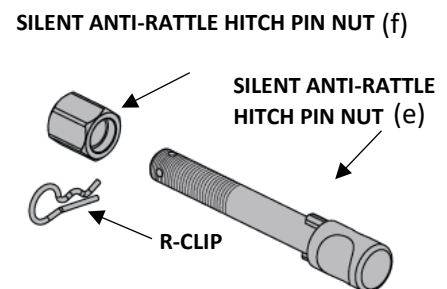


Fig. 3

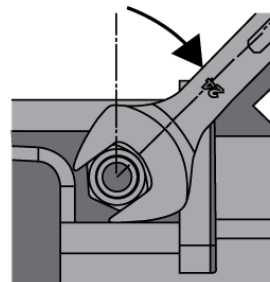


Fig. 4

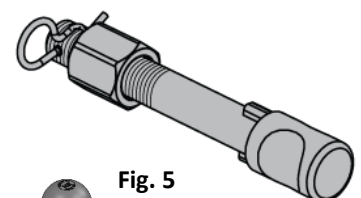


Fig. 5

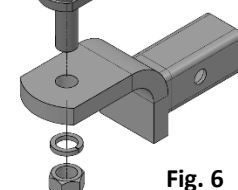


Fig. 6