



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER QTMA664L

MAZDA 6 GL GEN-3 WAGON CL4

PRODUCT DETAILS:

Part Number:	QTMA664L	Maximum Towing Braked:	1600	kg
ECU Number:	04826	Maximum Towing Unbraked:	550	kg
Tail Harness Length Required:	1800 mm.	Maximum Static Ball Load:	120	kg
TBM/Lug Part Number:	21320			

FITTING DETAILS:

Towbar Installation Time:	105 Mins.	RPA Disable/Other:	YES
Total Installation Time:	150 Mins.		
Bumper Cut Required:	Yes		

Note:

- Compatible for vehicles with and without RPA & Smart City Stop functionally.

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

BEFORE YOU START:

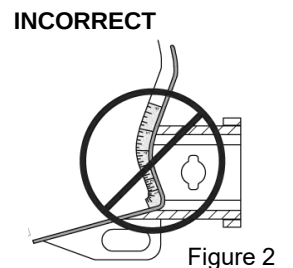
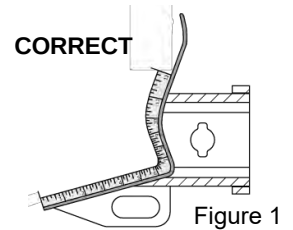
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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

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

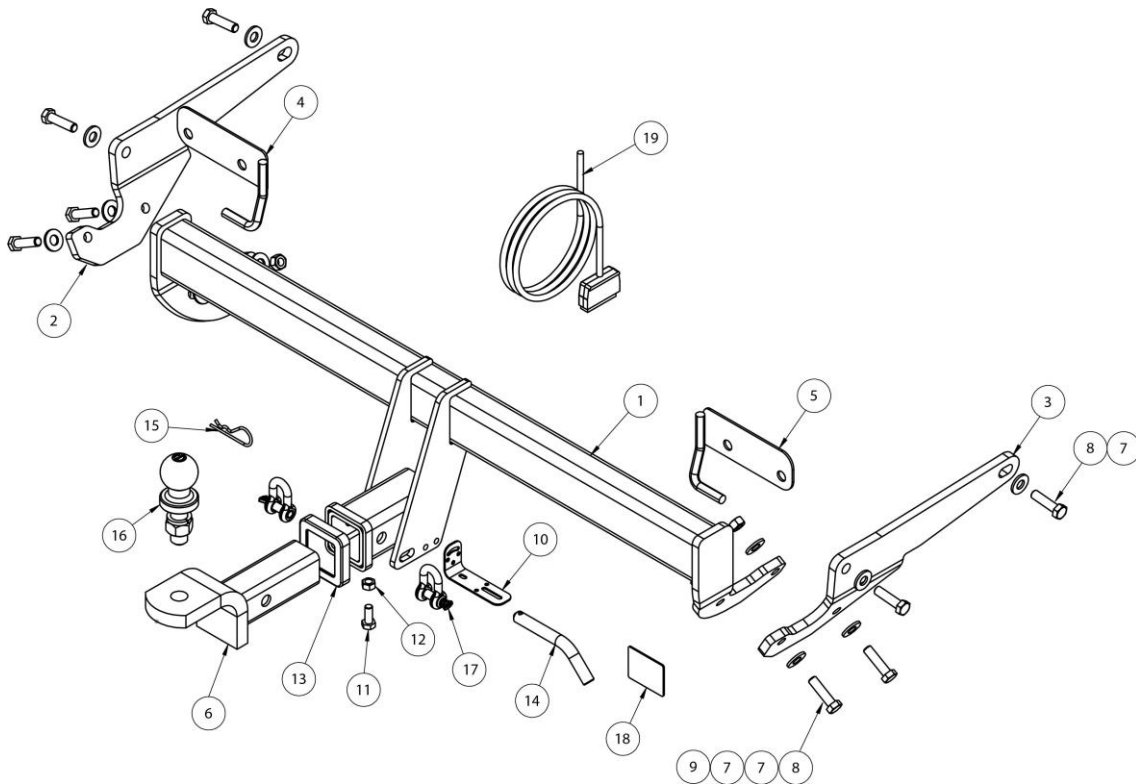
WARNING:

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

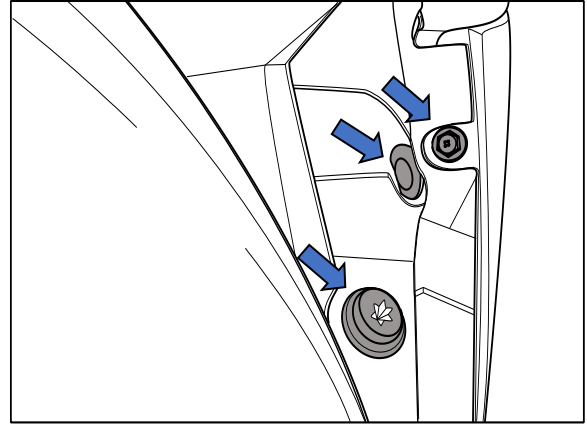


ITEM	DESCRIPTION	QTY
1	CENTRE SECTION WELDED	1
2	SIDE ARM LHS	1
3	SIDE ARM RHS	1
4	LHS EXHAUST HANGER	1
5	RHS EXHAUST HANGER	1
6	TRAILER BALL MOUNT	1
7	WASHER FLAT M12	12
8	SET SCREW HEX HD M12x45x1.25P	8
9	NUT HEX M12x1.25P	4
10	UNIVERSAL PLUG BRACKET KIT	1

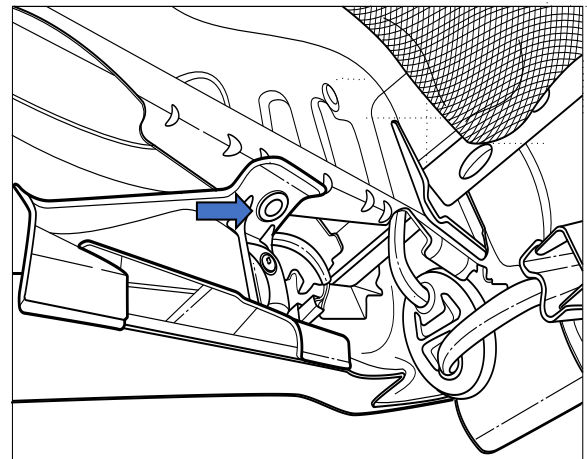
ITEM	DESCRIPTION	QTY
11	BOLT HEX HD M10x25x1.5P	1
12	NUT HEX M10x1.5P	1
13	HITCH BOX COLLAR COVER	1
14	PIN PULL	1
15	R CLIP	1
16	TOWBALL 50mm	1
17	"D" SHACKLE 10mm	2
18	WIRING LOOM	1
19	COMPLIANCE PLATE LABEL	1

1. Remove 2 x screws and 1 x push rivet inside Rear wheel arch.

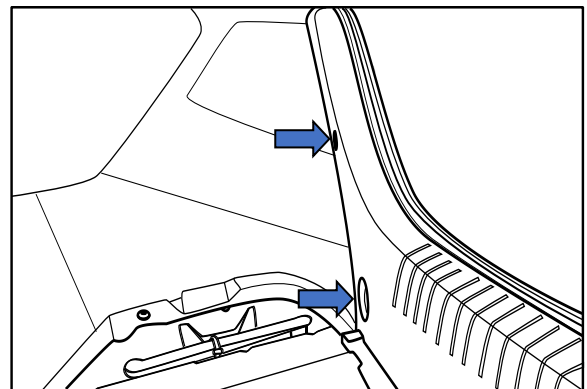
Repeat for other side



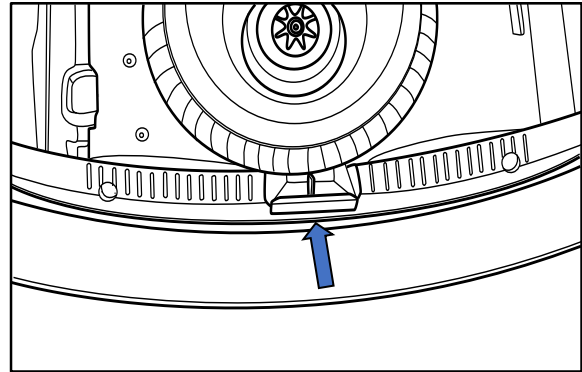
2. On the underside of bumper to back panel remove 2 x push rivets securing the bumper to the back Panel.



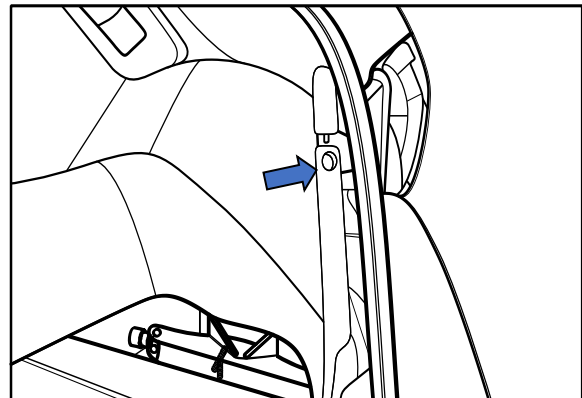
3. Open boot, remove inner carpet and polystyrene Inserts. Remove 4 x push rivets 2 each side attaching inner plastic trim to rearwards face of inside boot cavity.



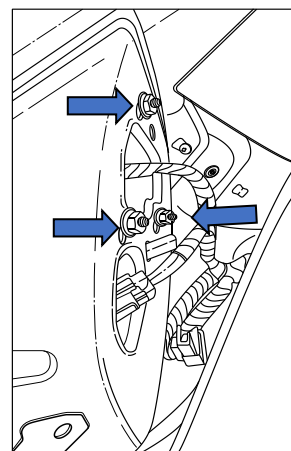
4. Unclip plastic trim around locking latch
5. Remove inner plastic trim by lifting upwards.



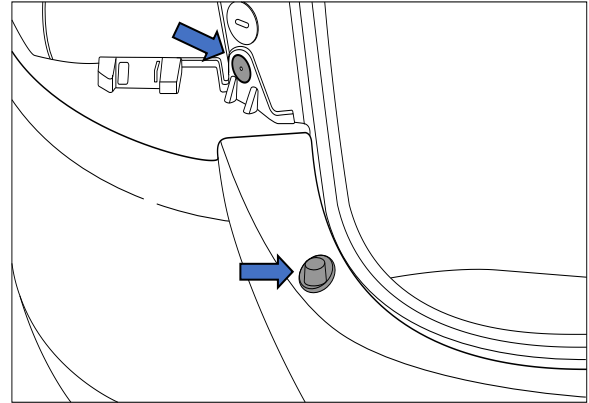
6. Remove 2 x small plastic push rivets in newly exposed area securing inside carpet to chassis rail.



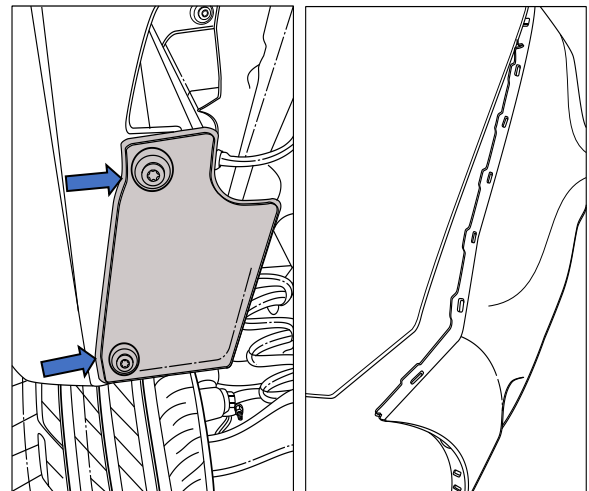
7. From underneath loosened carpet remove 3 x nuts from rear of taillight and remove light assembly.



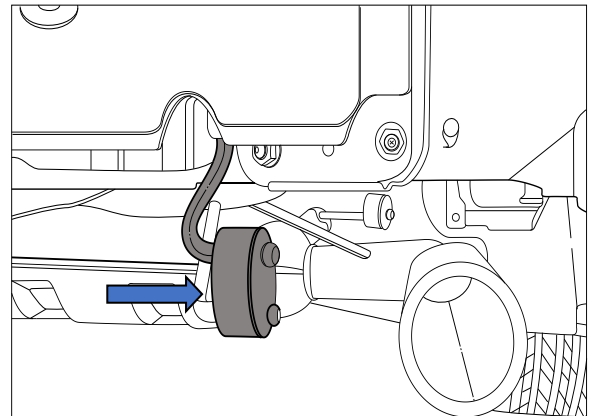
8. In newly exposed cavities from taillights remove 1 x screw each side on rear face of bumper, remove cover cap and remove screw securing bumper underneath.



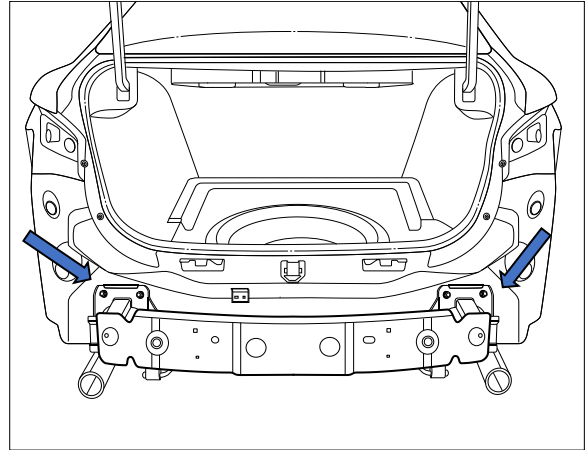
9. Remove 2 x screws from underside of bumper on both sides.
10. Unclip the sides of the bumper by pulling firmly and remove bumper.



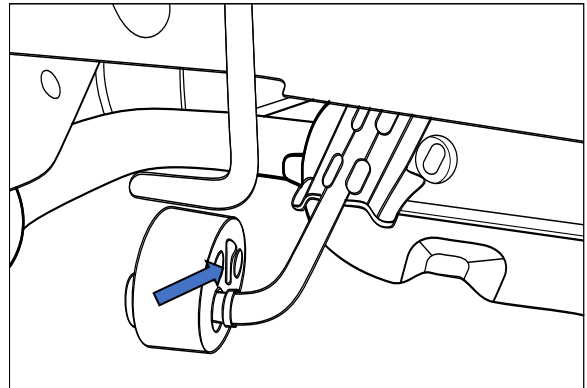
11. Disconnect both exhaust hanger rubbers from rear impact beam.



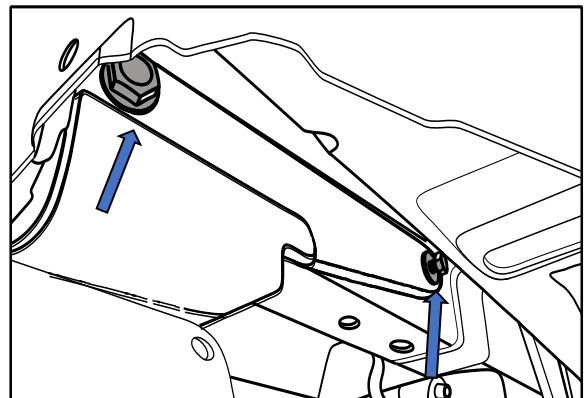
12. Remove rear impact beam from vehicle by removing 8 x nuts securing beam to chassis discard the beam after removal.



13. Secure supplied exhaust hanger plates to chassis using existing bolts mounting to the lower studs.
14. Attach exhaust hanger rubbers to the hooks on each newly mounted plate.



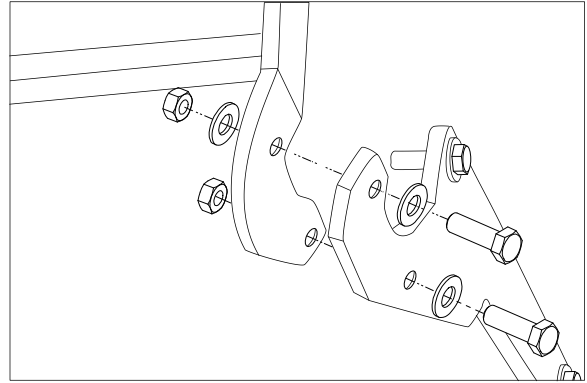
15. Loosely bolt side arms to chassis rail using 2 x M12 bolts & washers on both sides.



16. Mount towbar centre section to chassis arms ensuring that bolts are directed inward as to allow for bumper clearance complete with 2 washers and 1 nut per bolt.

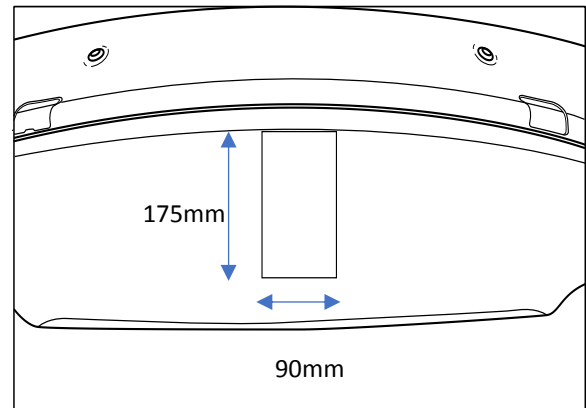
17. Tighten all fasteners to torques listed below.

- M12 x 45 x 1.25P 89 N.m
- M12 x 1.25P Nut 89 N.m



18. Cut out section of bumper under tray approximately 175mm x 90mm as shown.

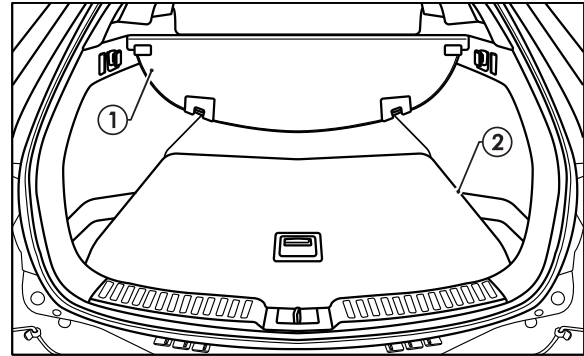
19. Re-fit the bumper and all other components following steps 1 through 9 in reverse order.



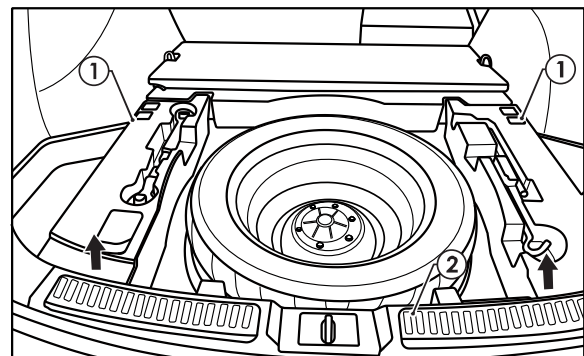
IMPORTANT

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.

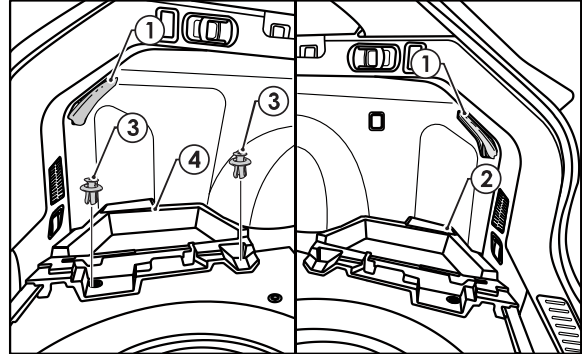
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20. In the luggage compartment, remove the parcel shelf (1), and the floor cover carpet (2).



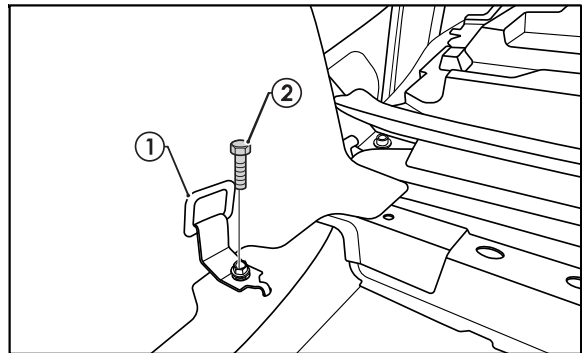
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21. Remove the two foam tool trays (1).
22. Remove the rear luggage compartment trim (2) by pulling in an upwards direction.



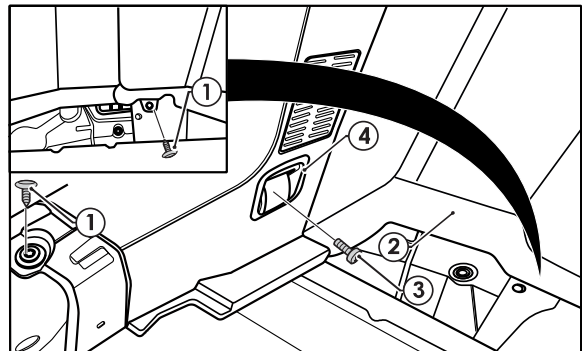
23. Remove both the LHS & RHS luggage compartment access cover (1).
24. On the RHS luggage compartment, remove the tool tray (2).
25. On the LHS luggage compartment, remove the two fasteners (3) and remove the tool tray (4).



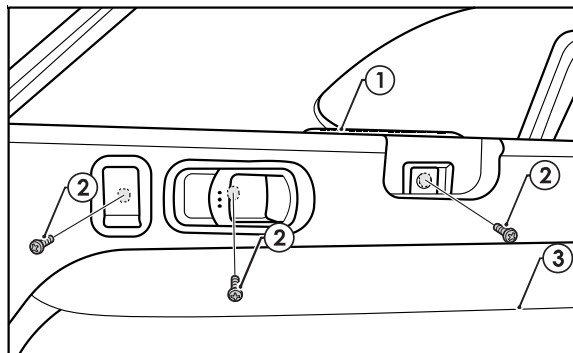
26. On the rear of the LHS luggage compartment, remove the cargo hook (1) by removing the bolt (2).



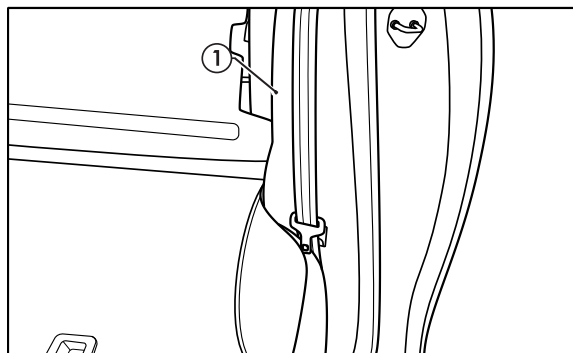
27. Remove the two clips (1) securing the LHS luggage compartment trim (2) and the one screw (3) securing the cargo hook (4).



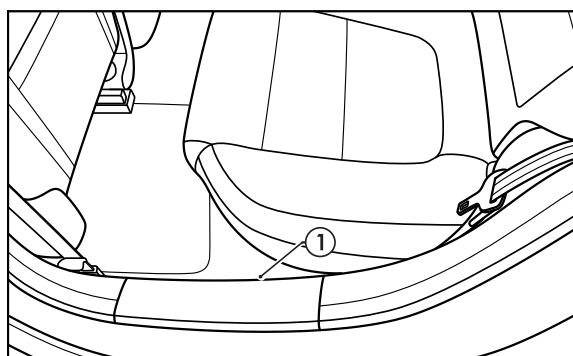
28. On the LHS upper plastic trim (1) of the luggage compartment, remove the three screws (2).
29. Dislodge the LHS luggage compartment trim (3).



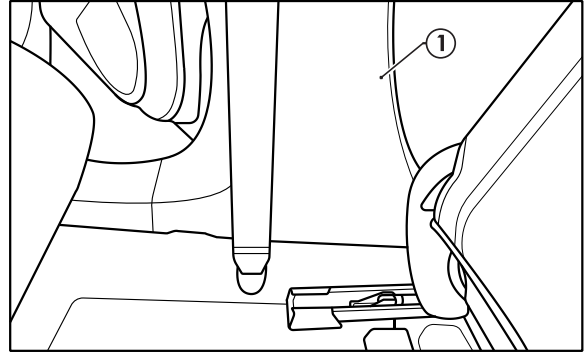
30. On the LHS of the rear passenger, remove the seat trim (1).



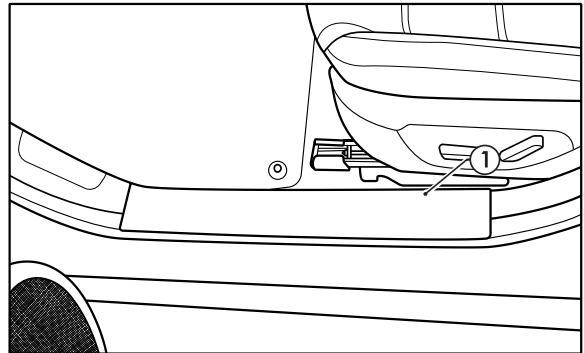
31. Remove the LHS door trim (1).



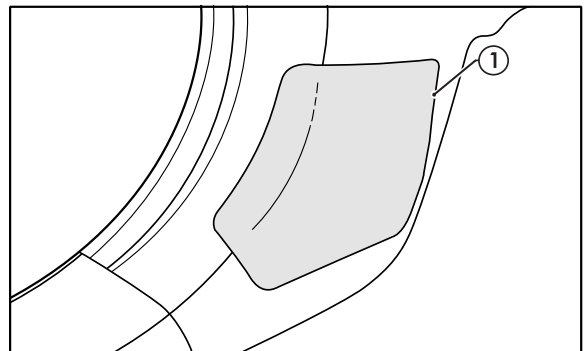
32. Dislodge the LHS 'B' pillar trim (1).



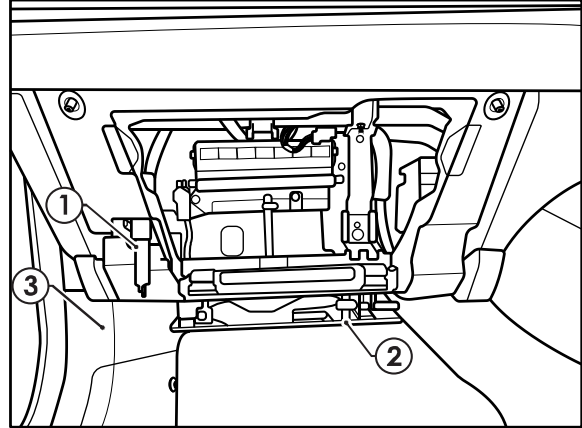
33. On the LHS of the front passenger, remove the door trim (1).



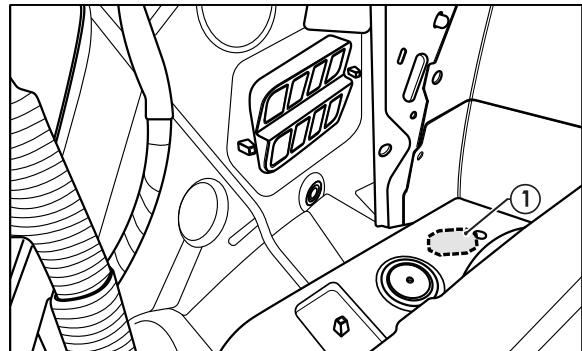
34. Remove the LHS of the kick panel access cover (1).



35. From the front Passenger seat, unclip the dampers (1) on the glove box.
36. Squeeze both sides of the glove box simultaneously to release from the stops.
37. Let the glove box fall below the stops and then pull to release from the vehicle.
38. Dislodge the trim under the glove box (2).
39. Disconnect the footlight connector and remove the trim under the glove box from the vehicle.
40. Remove the LHS passenger kick panel trim (3).

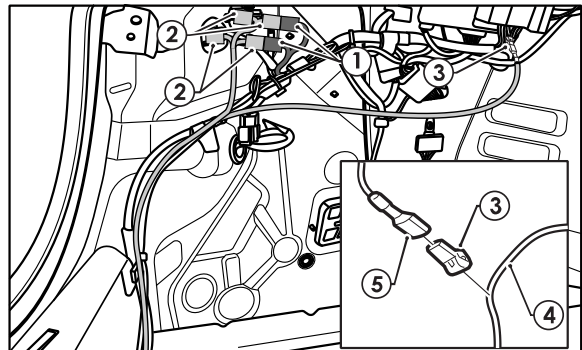


41. On the LHS rear quarter panel of the luggage compartment, drill a Ø30mm hole (1) next to the existing vehicle grommet.
42. File any rough or sharp edges and spray with rust inhibitor.



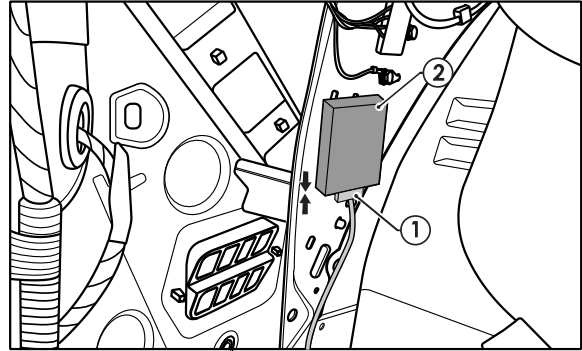
43. On the LHS of the luggage compartment, disconnect both the 2-way and 3-way tail light connectors (1) and connect the trailer patch (2) in between.
44. Following the table below, connect the ezy-tap (3) to the corresponding BLACK/WHITE wire (4), then connect the terminal (5) to the ezy-tap (3).

Function	Trailer Patch	Vehicle Connector
REVERSE	BLACK / WHITE	WHITE / BLACK

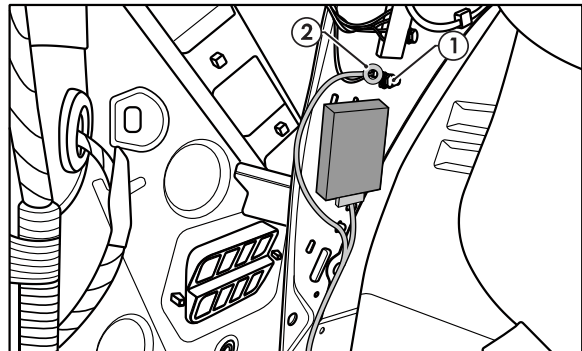


Note: This step is only for reverse wire.

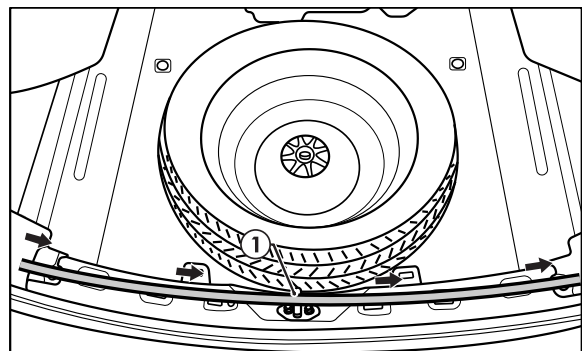
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45. Connect the trailer patch 12-way connector (1) to the ECU (2).
 46. Apply the double sided tape to the ECU (2) and adhere it onto the indicated location on the sheet metal.



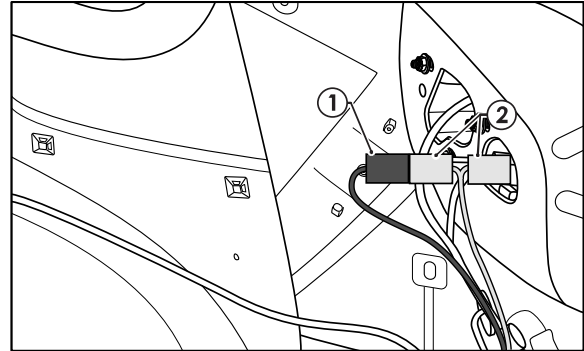
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47. Secure the trailer patch ground ring terminal (1) to the vehicle grounding point (2).



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48. Route the trailer patch (1) towards the RHS of the vehicle.

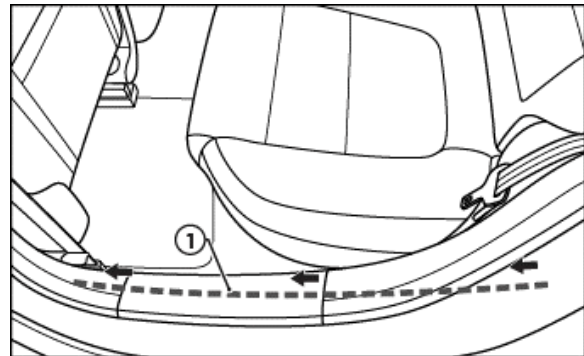


49. Disconnect the tail light connectors (1) and connect the trailer patch (2) in between.

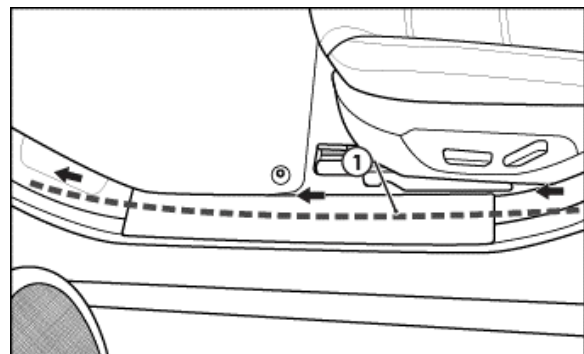


50. Route the 'ORANGE' power wire and RPA disable connector branch (1) towards the front of the vehicle past the 'B' pillar trim.

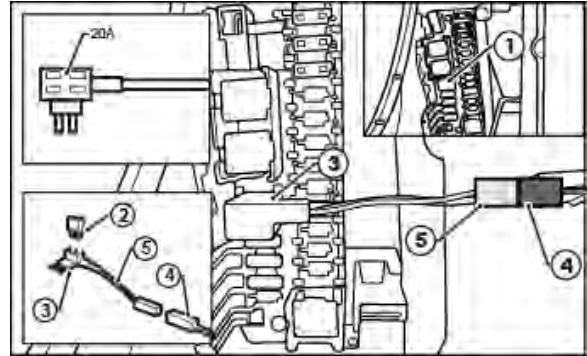
Note: For vehicles not fitted with RPA or "Smart City Stop". RPA disable connector branch does not need to be rated to LHF kick trim. Branch connector and wiring can be secured at rear of vehicle and left disconnected.



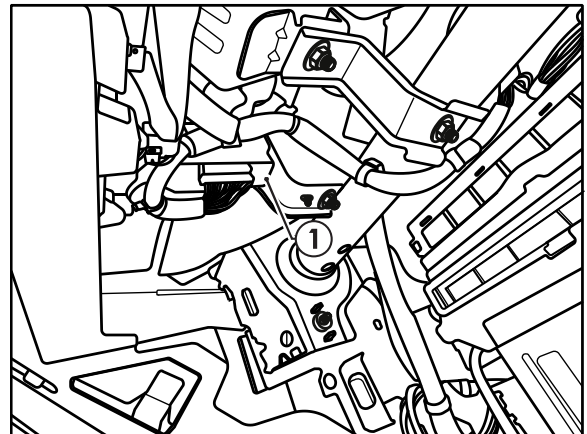
51. Continue routing the 'ORANGE' power wire and RPA disable connector branch (1) towards LHS front passenger kick panel trim.



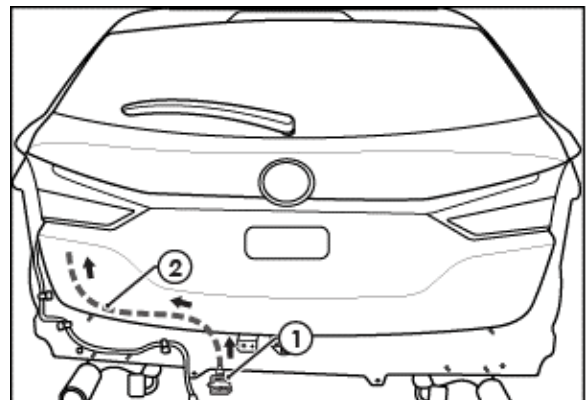
52. Inside the fuse panel, locate the vacant slot as shown (1).
53. Insert the supplied 20-Amp fuse (2) into the upper slots of the add-a-fuse (3).
54. Plug the add-a-fuse (3) into the vacant fuse slot on the fuse panel.
55. Connect the power patch 1-way connector (4) into the add-a-fuse harness mating connector (5).



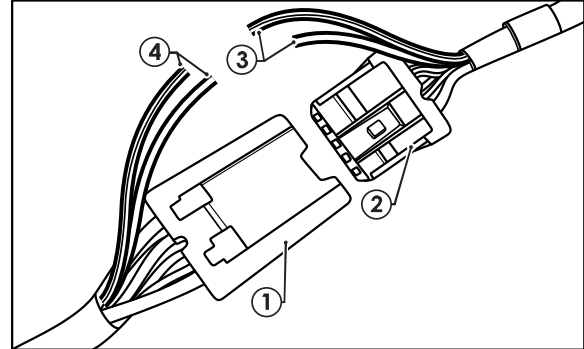
56. Route the Reverse Park Assist disable patch connectors up towards the Parking Assist Module (1) above the glovebox.
57. Disconnect the connector from the ECU and patch in the mating T patch connectors (2) into the vehicle ECU and the Vehicle harness.



58. Mount the trailer socket (1) to the towbar mounting bracket using M4 fasteners (not supplied).
59. Route the tail harness (tail length 1800mm) (2) across the towbar towards the LHS of the vehicle and up through the previously drilled out hole.
60. Ensure the tail harness grommet is seated correctly and secure in place using a cable tie (not supplied).



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61. Connect the tail harness (tail length 1800mm) 8- way connector (1) to the trailer patch mating 8- way connector (2).
 62. Cut off, crimp the tail harness GREY and GREY/BLACK wires (3) to the trailer patch matching GREY and GREY/BLACK wires (4).



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63. Test the trailer harness function using a Light Board or multimeter.
 64. Secure all Harnesses using cables ties (not supplied).
 65. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.
 66. Place the 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)

