



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER QTMA665L

MAZDA CX30 FWD/AWD NOV 2019 ON

PRODUCT DETAILS:

Part Number:	QTMA665L	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:	102242-WL			

FITTING DETAILS:

Towbar Installation Time:	40 Mins.	RPA Disable/Other:	YES
Total Installation Time:	70 Mins.		
Bumper Cut Required:	Yes		

Note:

- Electric Brake = Blue Connector
- Tail Length 1200mm
- RPA disable use tail 04943

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

BEFORE YOU START:

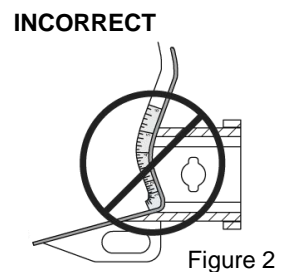
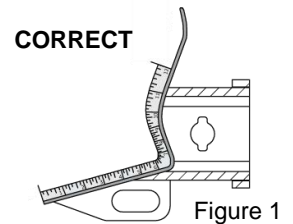
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.

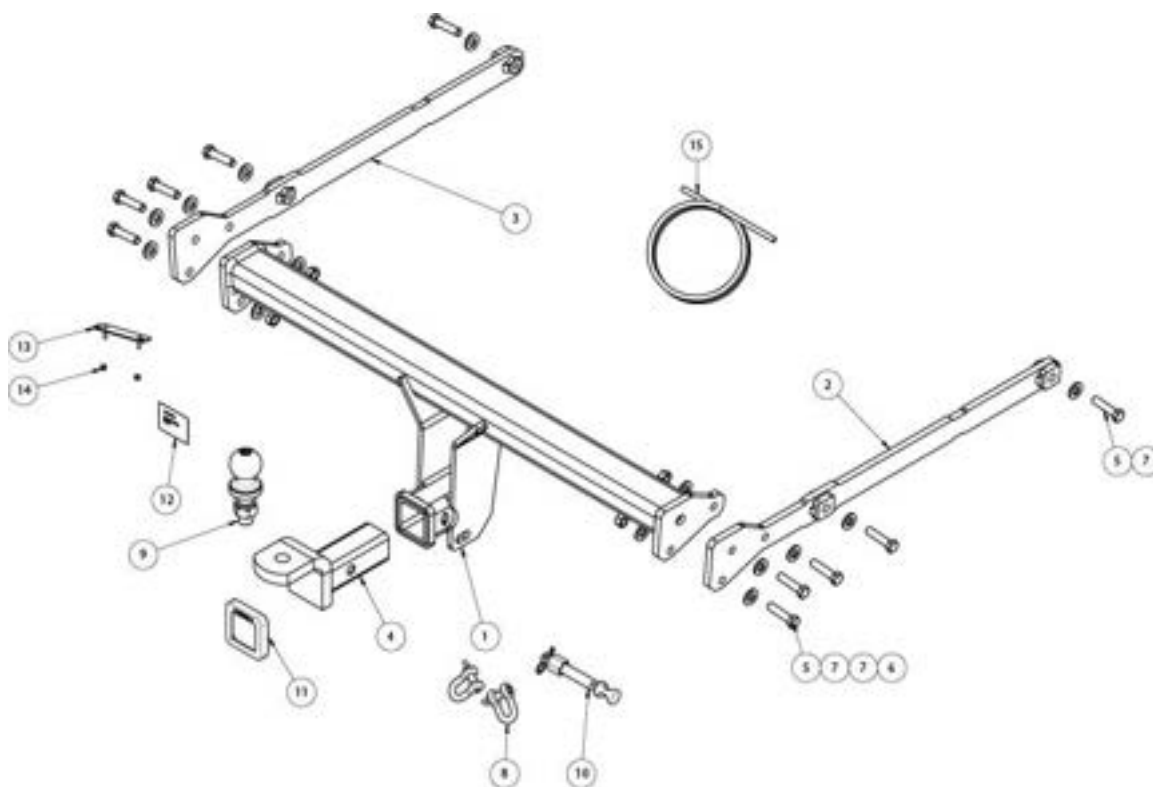
WARNING:

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.

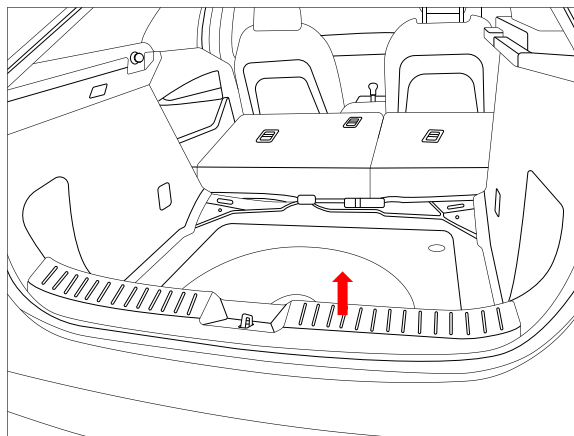


TOWBAR ASSEMBLY DIAGRAM



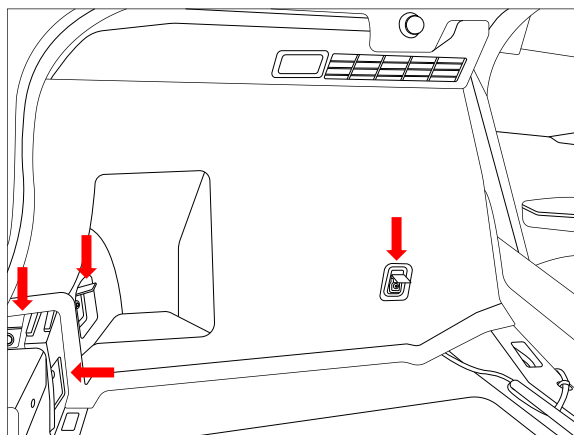
ITEM	DESCRIPTION	QTY
1	MAZDA CX30 DM CLASS 4	1
2	SIDE ARM ASSY RHS	1
3	SIDE ARM ASSY LHS	1
4	TRAILER BALL MOUNT	1
5	BOLT HEX HD M12x50x1.75P	10
6	NUT HEX HD M12x1.75P	4
7	WASHER PLAIN 1/2"	14
8	"D" SHACKLE 10mm	2
9	TOWBALL 50mm	
10	SMART PIN SILVER	1
11	HITCH BOX COLLAR COVER	1
12	COMPLIANCE LABEL	1
13	PLUG BRACKET	1
14	NUT NYLOC HEX HD M4x0.7P	2
15	WIRE LOOM	1

1. Remove cargo cover, cargo floor liner, spare wheel and accessories
Lift up to remove the rear latch trim



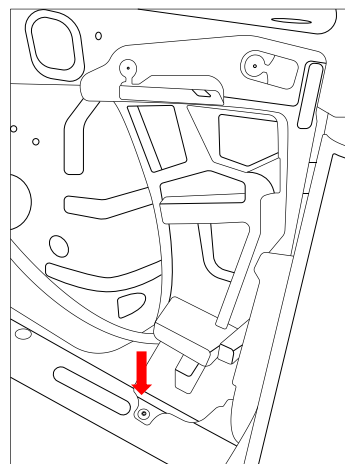
2. Pull the upper trim to the center of the vehicle to unclip.
Unscrew 2x in the lower liner
Remove 2x scrivet clips

Repeat for other side



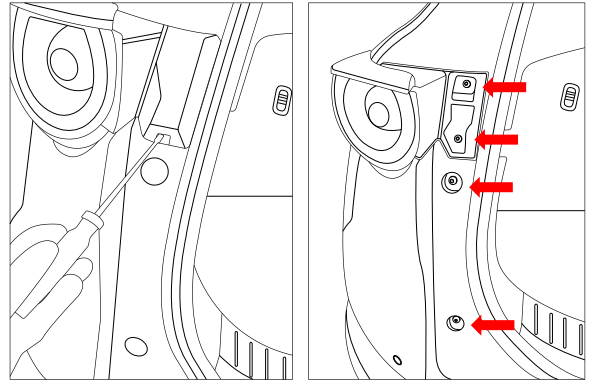
3. Remove 1x scrivet clip
Unclip and remove the liner
Disconnect the taillight harness

Repeat for other side



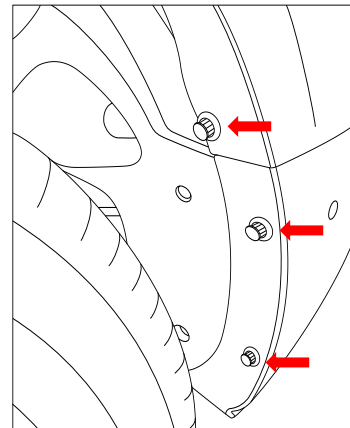
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4. Open the tail gate
Remove 3x plastic cover
Remove 4x screws
Pull rear ward to remove the tail light assembly

Repeat for other side



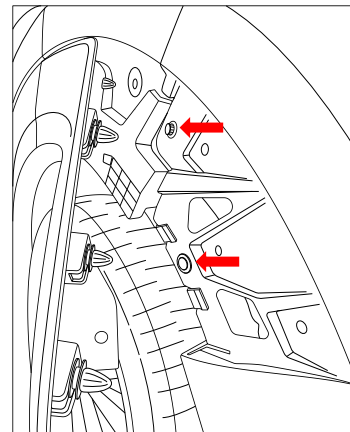
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5. Remove 3x scrivet clips inside the wheel guard

Repeat for other side

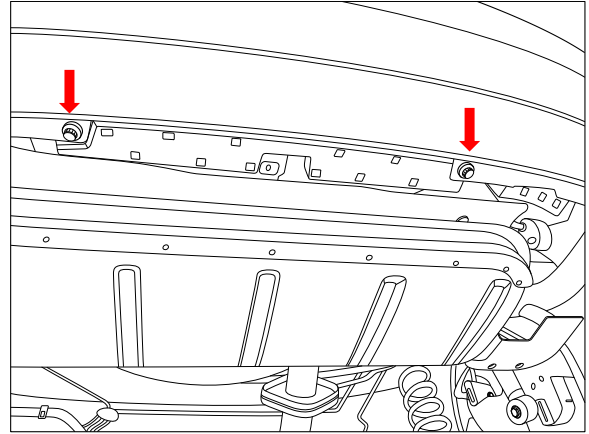


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6. Peel back the side guard
Unscrew 1x screw
Remove 1x scrivet clips

Repeat for other side

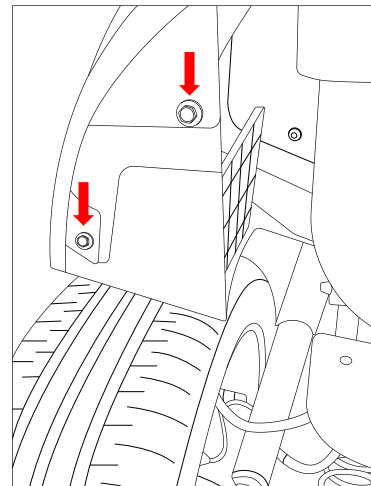


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7. Remove 2x scrivet clips under the bumper



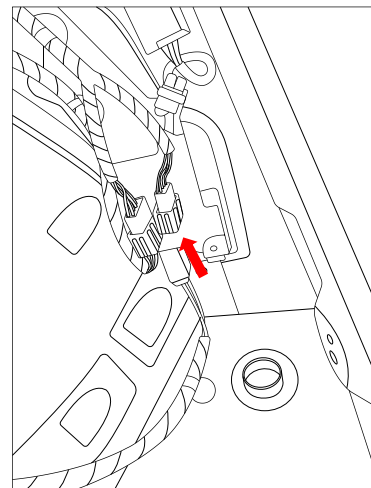
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8. Unscrew 2x screws

Repeat for other side

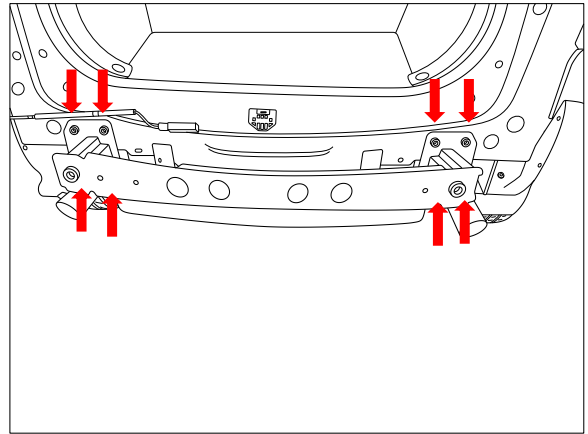


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9. Proceed to the RHS inner boot section and locate the sensor harness connector.

10. Disconnect the bumper sensor harness.
Unclip the bumper and pull rear ward



11. Unscrew 8x nuts and discard the impact beam and nuts.

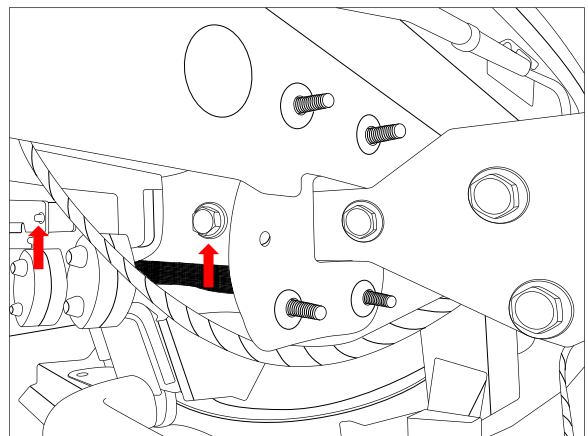


12. Insert the side arm into the chassis.
Loosely insert 2x bolts and 2x washer through the chassis hole and into the side arm.

Repeat for other side.



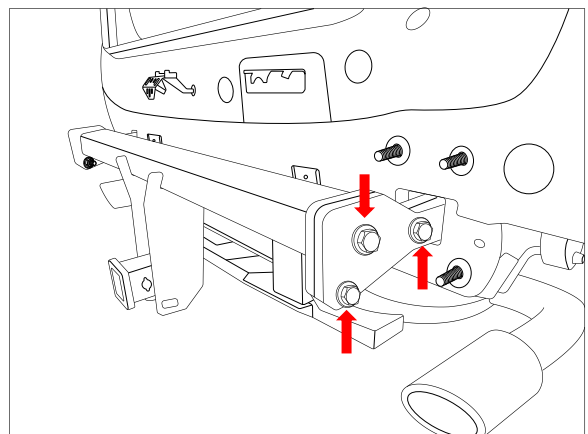
Carefully selecting the side arm for the corresponding side. The weld nuts on the side arm must face toward the center line of the vehicle



13. Place the cross bar between the side arms.
Insert 3x bolts, 3x washers, 2x nuts.

Repeat for other side.

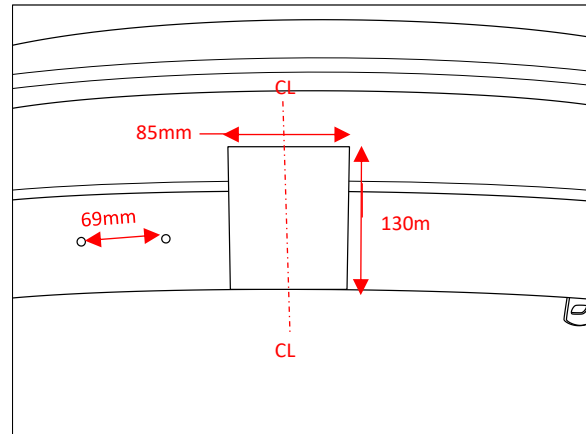
Torque all M12 bolts = 109Nm



14. Place masking tape on the bumper outer skin
Mark and cut out an area as shown to clear
the hitch box. Cut measurement to start from
the edge of bumper.

Locate the plug bracket and ensure the
harness cable length is long enough
Drill 2x ø5mm holes 69mm apart

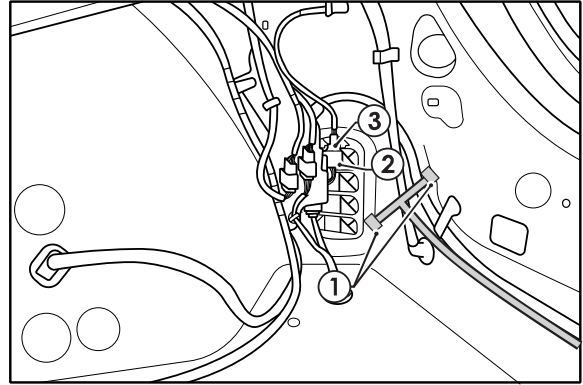
Remove all swarf and rough edges



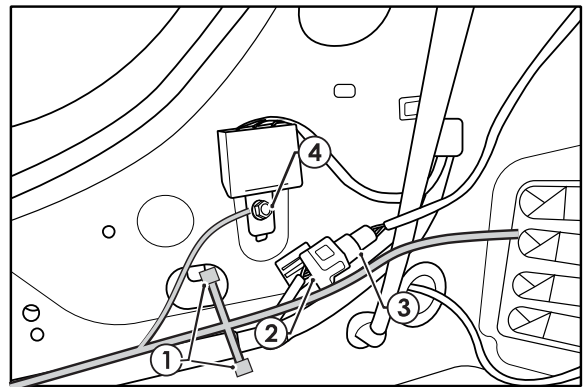
! IMPORTANT

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.

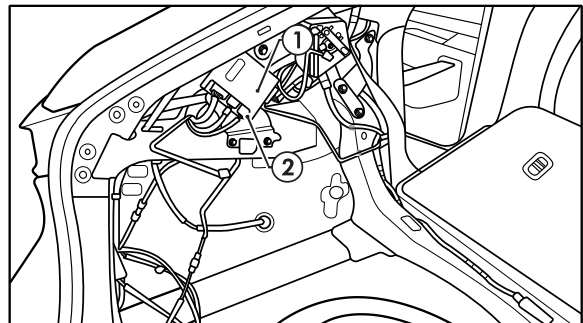
15. On the RHS, patch in the RHS branch patch connectors (1) in between the vehicle wiring (2) and the tail light wiring (3).



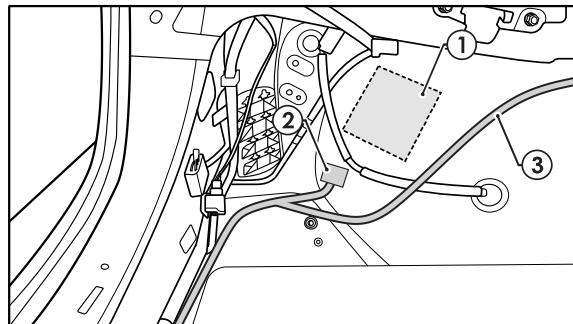
16. Route the LHS patch across to the LHS tail light connectors.
17. Patch in the LHS branch patch connectors (1) in between the vehicle wiring (2) and the tail light wiring (3).
18. Connect the ground wire to the vehicle earthing point (4).
19. Secure to the existing vehicle wiring using the supplied cable ties.



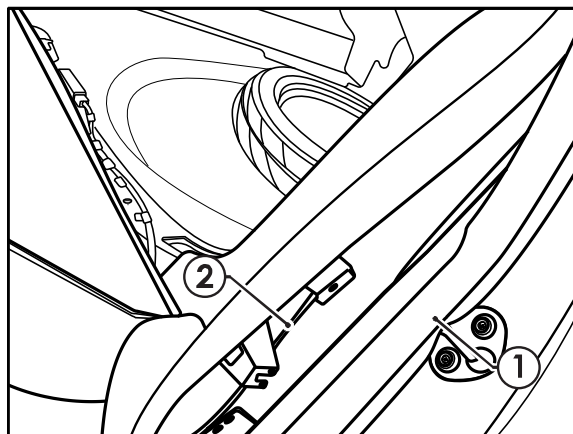
20. On the LHS, locate the vehicle reverse parking module (1).
21. Disconnect the 16 way connector (2) from the module and patch in the mating RPA disable/trailer activation connection in between the vehicle wiring and the RPA module.



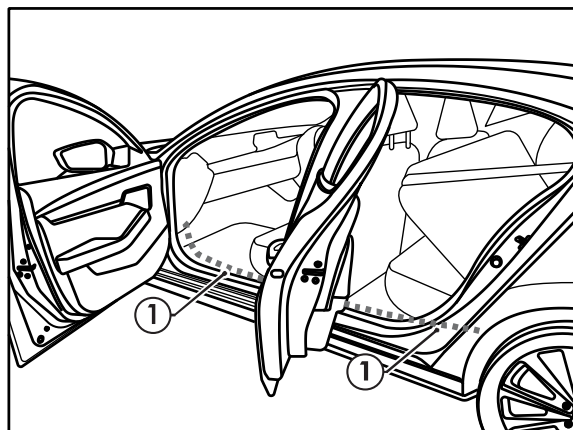
22. Using an alcohol wipe, clean a suitable area on the LHS inner sheet metal (1) and the underside of the ECU (04826).
23. Connect the trailer patch 12-way connector (2) to the ECU.
24. Apply double sided tape to the ECU and secure it to the vehicle sheet metal.
25. Route the orange wire (3) towards the front of the vehicle.
26. **Note: Mount the ECU, ensuring the connector is orientated downwards.**



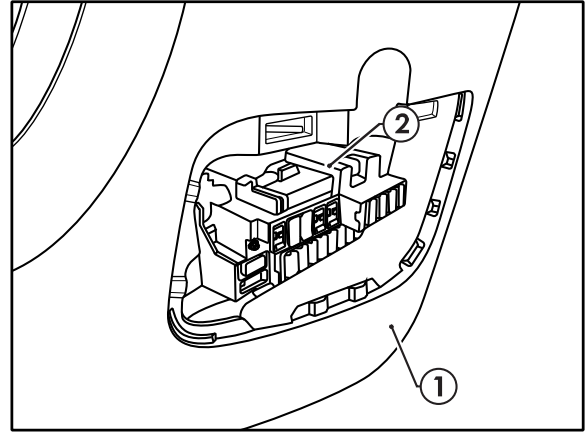
27. With the weather seal (1) removed, feed the power wire (2) through to the cabin from the boot.



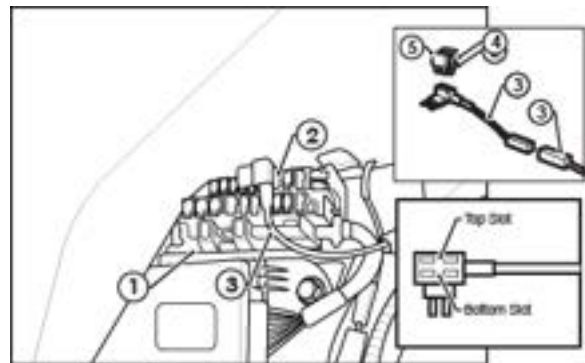
28. With the front and rear scuff trims removed (1), continue routing the power wire (2) towards the front of the vehicle, tucking the power wire under the B pillar trim.



29. Remove the cover on the LHS kick panel (1).
30. Route the orange wire towards the fuse box (2).

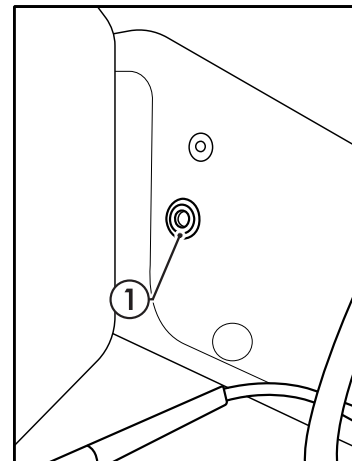


31. On the vehicle fuse box (1), remove the vehicle fuse 15 Amp Fuse (F16) (2) and discard.
32. On the Add-A-Fuse (3), insert the supplied 20 amp fuse (4) into the Add-A-Fuse top slot and then insert the supplied 15 amp fuse (5) into the bottom slot.
33. In the orientation shown, insert the Add-A-Fuse (3) into the slot occupied by the vehicle fuse (2).
34. Connect the Add-A-Fuse (3) to the main harness.
35. **Note: To maintain correct electrical operation, ensure you insert the fuse adaptor into the allocated slot and in the orientation shown.**



36. On the LHS floor in the luggage compartment, remove the 15mm grommet blank (1).
37. Drill out to 30mm in diameter to enable the tail harness to be routed from the towbar to the ECU.

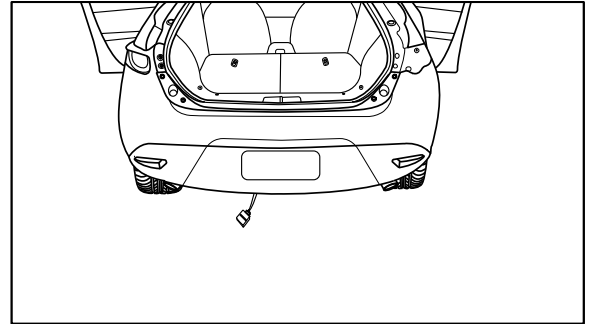
Note: Remove sharp edges and spray rust inhibitor.



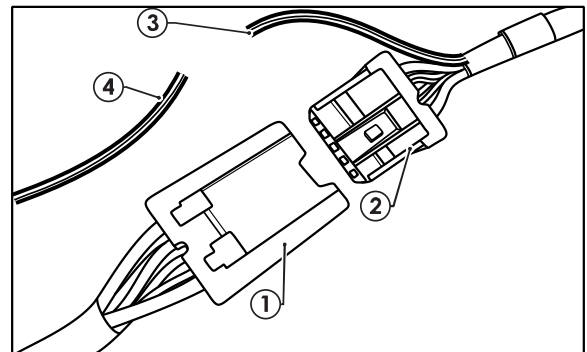
38. Secure tail harness to towbar.
39. Route tail harness up through chassis and previously drilled 30mm hole.
40. Seat grommet in 30mm hole and route to trailer harness blue connector on patch loom

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

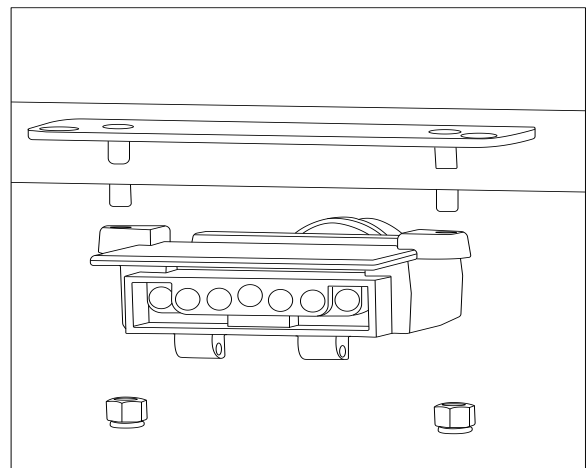
Note: Ensure grommet is seated correctly and makes a good seal.



41. Connect the tail harness (tail length 1200mm) 8-way connector (1) to the trailer patch mating 8-way connector (2).
42. Cut-off, crimp the tail harness GREY and GREY/BLACK wires (3) to the trailer patch matching GREY and GREY/BLACK wires (4).



43. Secure all harness using supplied Cable Ties.
44. Place the plug bracket on the previously drilled out hole on the bumper.
45. Re-fit bumper and all interior trims in reverse order from steps 10 to 1, secure all fasteners, ensuring there are no squeaks or rattles.
46. Mount the trailer plug to the plug bracket.
47. Test the trailer patch function using a test board or multimeter.
48. 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)

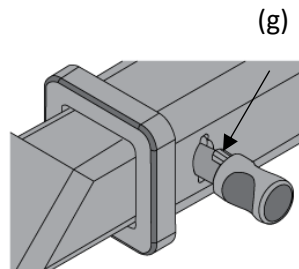
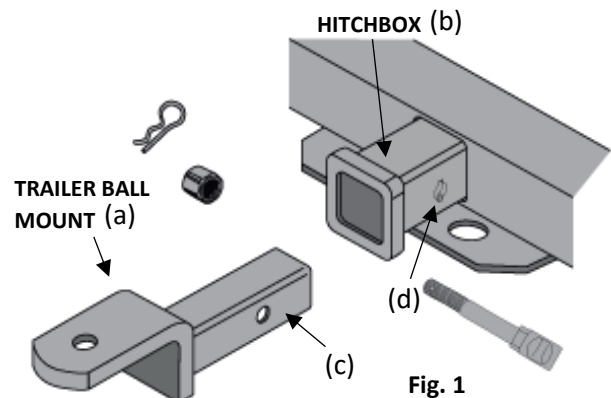


Fig. 2

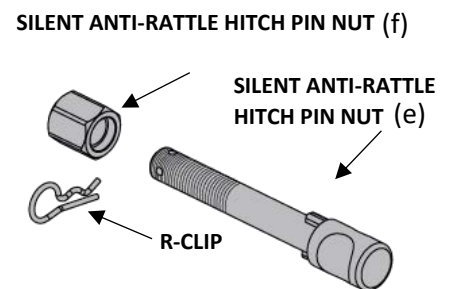


Fig. 3

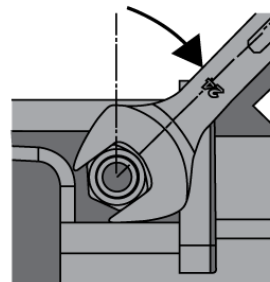


Fig. 4

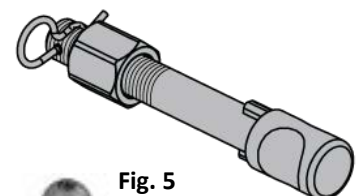


Fig. 5

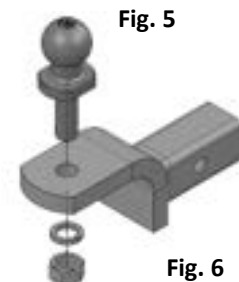


Fig. 6