

PRODUCT DETAILS:

Part Number:	QTHY268L	Maximum Towing Braked:	2000	kg
ECU Number:		Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1800 mm	Maximum Static Ball Load:	150	kg
TBM/Lug Part Number:	21161			

FITTING DETAILS:

Towbar Installation Time:	80 Mins.	RPA Disable/Other Notes:	NO
Total Installation Time:	80 Mins.		
Bumper Cut Required:	Yes		

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

BEFORE YOU START:

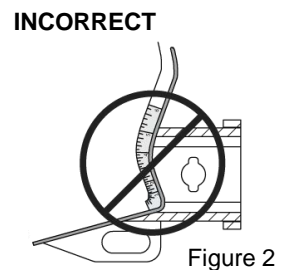
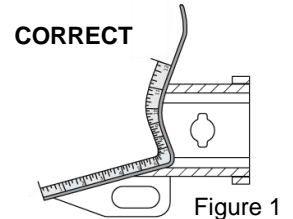
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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

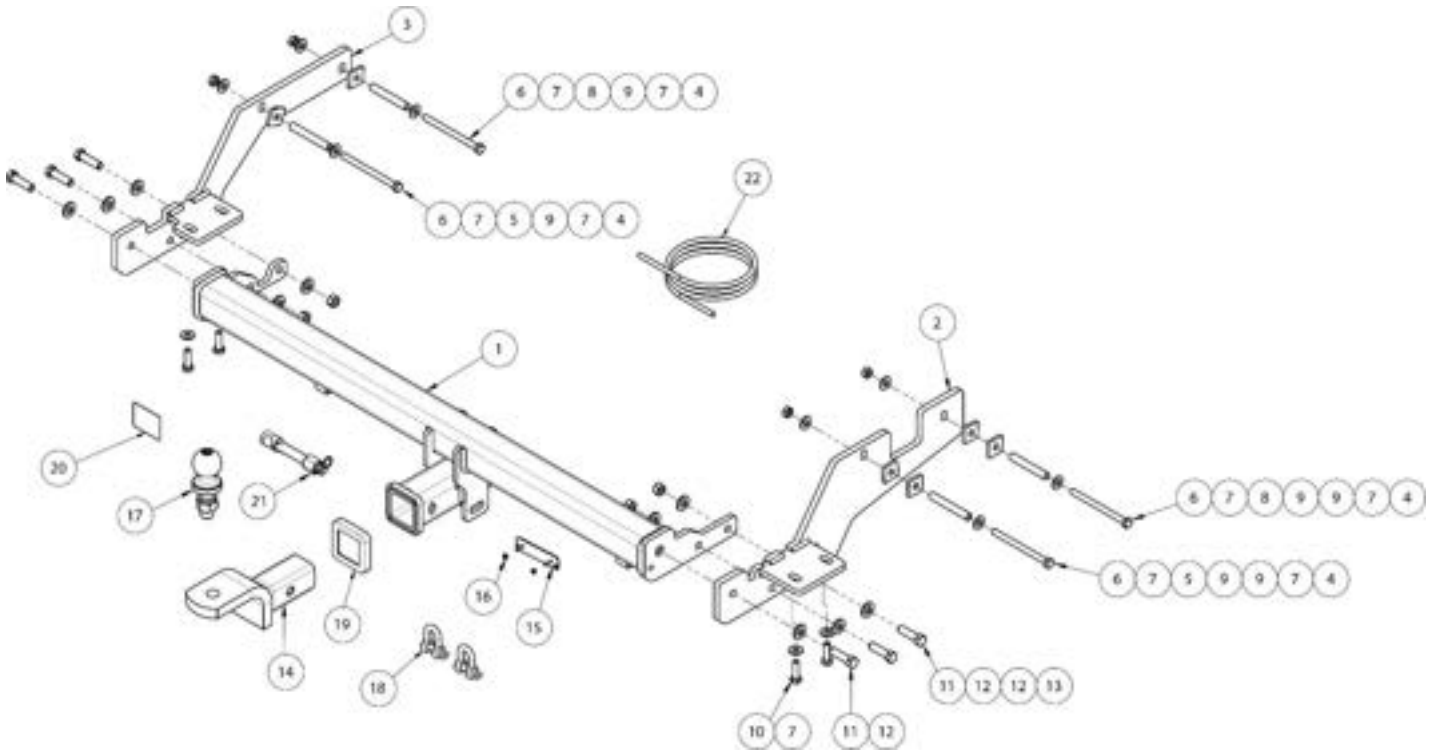
- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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.

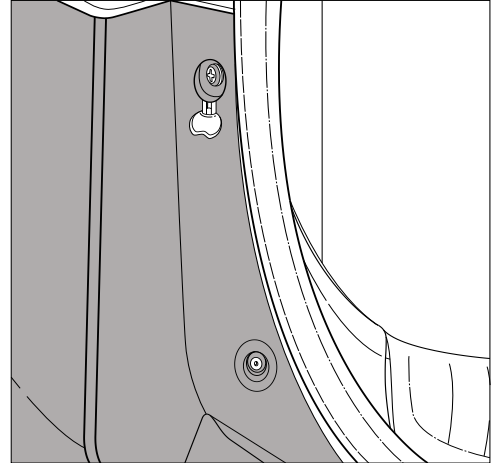
i TOWBAR ASSEMBLY DIAGRAM



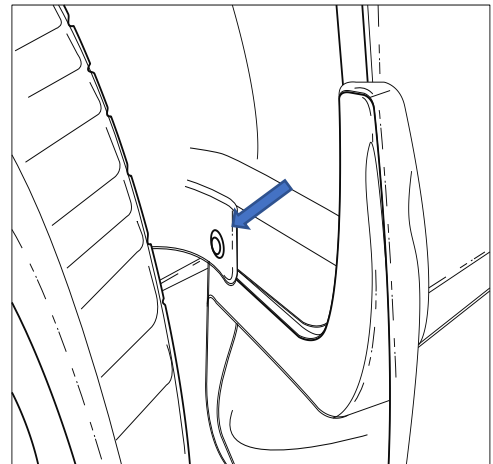
ITEM	DESCRIPTION	QTY
1	HYUNDAI ILOAD WELDED ASSY	1
2	SIDE ARM ASSY RH	1
3	SIDE ARM ASSY LH	1
4	HEX NUT M10x1.5	4
5	SPACER Ø12.7 x 1.2 x 90	2
6	CS M10 x 130 Bolt	4
7	WASHER FLAT M10 X 23 X 2 Z/P	12
8	SPACER Ø12.7 x 1.2 x 84	2
9	LOOSE PLATE 32x32x6 11mm HOLE	6
10	SET SCREW HEX HD M10x35x1.25P	4
11	M12x1.75x45 HEX BOLT PC10.9	6

ITEM	DESCRIPTION	QTY
12	WASHER PLAIN 1/2X1-1/8X16G	10
13	M12x1.75 HEX NUT PC8	4
14	TRAILER BALL MOUNT	1
15	PLUG BRACKET	1
16	NUT NYLON LOCK HEX HD M4X0.7P G8	2
17	50mm TOWBALL	1
18	"D" SHACKLE 10mm	2
19	HITCH BOX COLLAR COVER	1
20	ACRYLIC COMPLIANCE LABEL	1
21	ANTI-RATTLE PULL PIN ASSY SILVER	1
22	WIRING LOOM	1

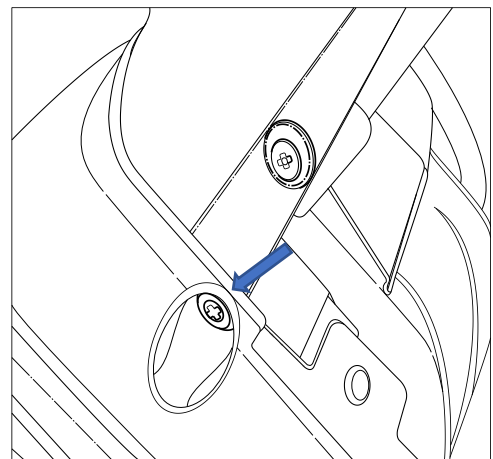
1. Remove 2x Plastic trim buttons from top of Bumper on either side and then remove 4 x Screws from each side.



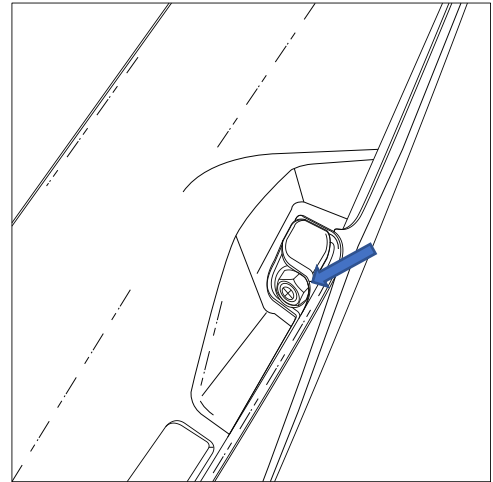
2. Remove 1x Screw from each side of the Mud Flap.



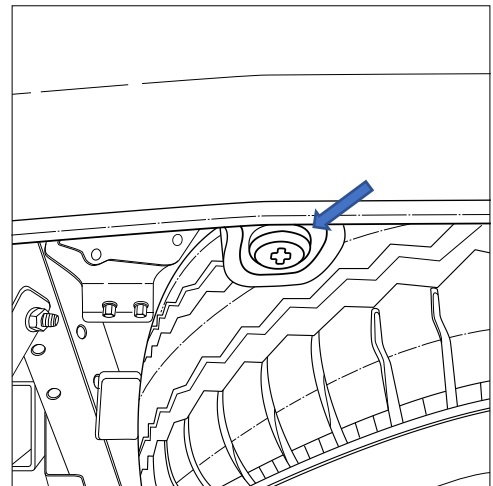
3. Remove 2x Scrivets below the Bumper Bar on both sides near the Mud flaps.



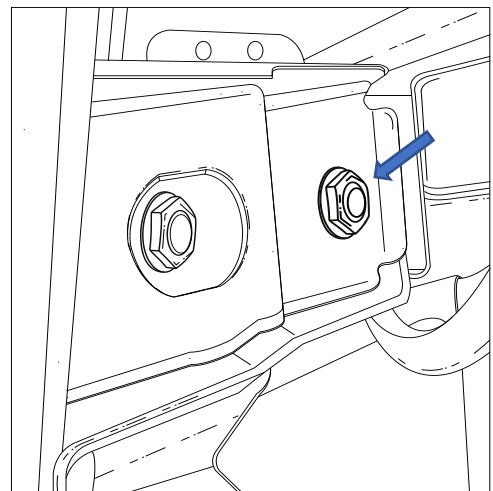
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4. Remove 1x Bolt from inside the Wheel arch from each side.



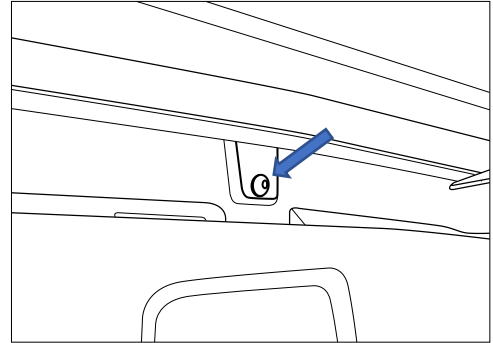
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5. Remove 3x Scrivets from the bottom of the Bumper Bar.



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6. Remove 2x Bolts from each side which holds the Impact Beam.



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7. Remove 3x Screws from the inside of the Bumper Bar.

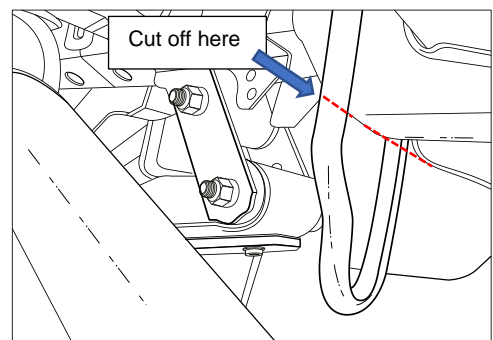


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8. Flex Bumper out at the sides then pull inwards, to remove bumper. Some force may be required.

CAUTION Two person lift required.

9. Remove 2x Scrivets to separate the Impact Beam from the Bumper Bar and then discard the Impact Beam. Store Bumper for later fitment.

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10. Using a grinder or similar tool, remove the driver side towing hook.

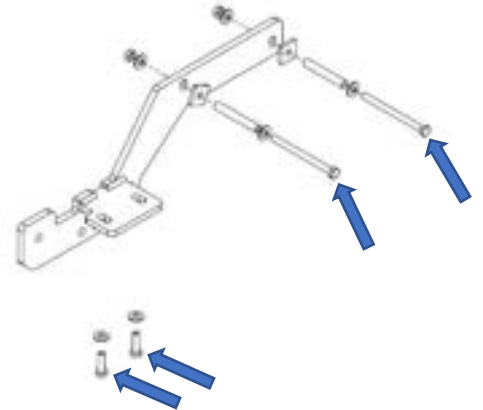


11. To fit the LH Side arm.

Insert crush tubes into the side chassis rail mounting points if they do not have them. The 90mm crush tube to be inserted into the mount point closest to the bumper and the 84mm into the other one.

Position the side arm to the outside of the chassis rail and loosely secure the bottom mounts with 2 x M10 bolts complete with 1 x washer per bolt.

Loosely secure the side mount positions with 2 x M10 bolts complete with 2 x washers and 1 x nut per bolt. Ensure that 1 x spacer plate is positioned between the side arm and outside of chassis rail.

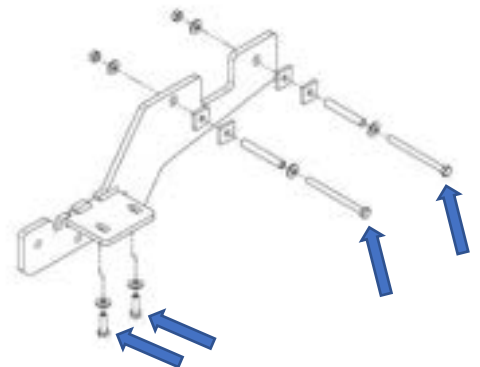


12. To fit the RH Side arm.

Insert crush tubes into the side chassis rail mounting points if they do not have them. The 90mm crush tube to be inserted into the mount point closest to the bumper and the 84mm into the other one.

Position the side arm to the inside of the chassis rail and loosely secure the bottom mounts with 2 x M10 bolts complete with 1 x washer per bolt.

Loosely secure the side mount positions with 2 x M10 bolts complete with 2 x washers and 1 x nut per bolt. Ensure that 2 x spacer plates are positioned between the side arm and inside face of chassis rail.

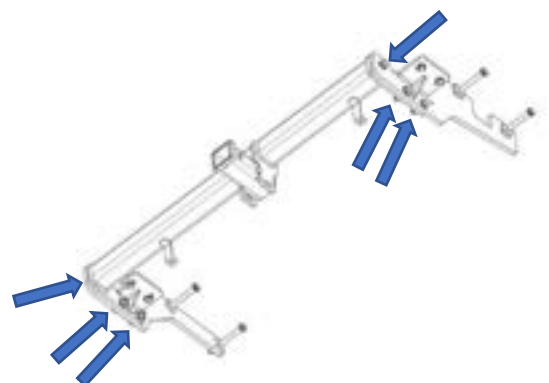


13. Lift crosstube to the side arms and loosely secure each side with 2 x M12 bolts complete with 2 x washers and 1 x nut per bolt and 1 x M12 bolt complete with 1 x washer to the internal weld nut.

Position the bar and torque all the fasteners as specified.

M10 x 1.25 GR 8.8 : 48Nm

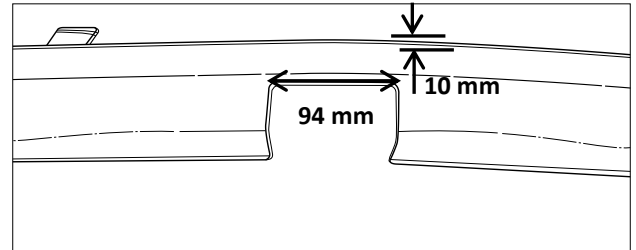
M12 x 1.75 GR 10.9 : 109Nm



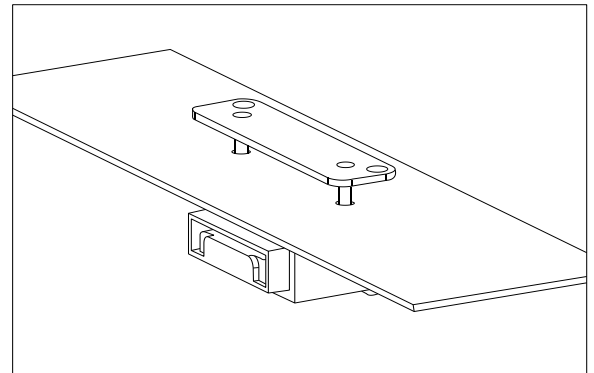
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14. Place masking tape on the outside areas of Bumper bar skin so not to damage the surface while cutting.

Establish Centre line of Bumper Bar Skin then measure, mark, and cut out as shown in diagram using an appropriate tool.

Ensure that cut is clean of swarf and rough edges.



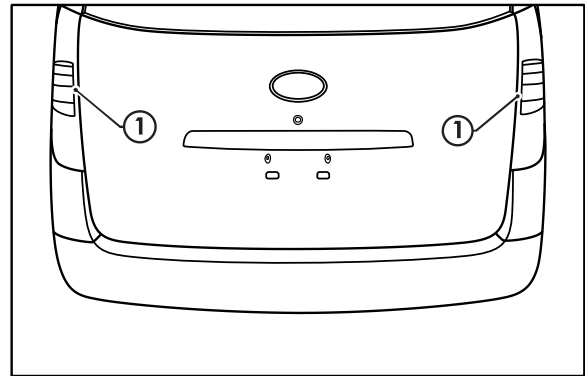
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15. Determine an appropriate position for the plug bracket. Mark out and drill 2x \varnothing 5mm holes 69mm apart on bumper skin to support plug bracket.



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.

16. Remove the LHS and RHS tail light assemblies (1)

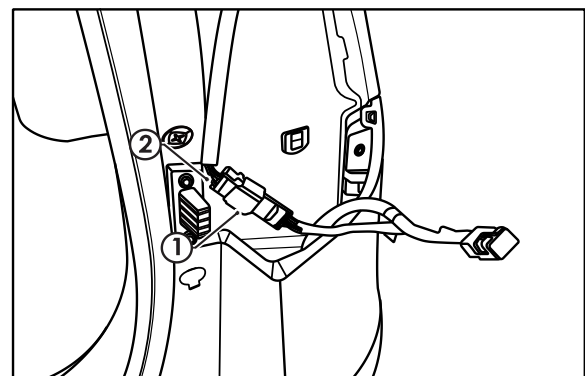


17. On the rear RHS underneath bumper, route the Trailer Patch Harness (P/No: 100182-WL) (1) up the RHS tail light cavity.

Connect the RHS Trailer Patch Harness (1) to the vehicle harness tail light connector (2).

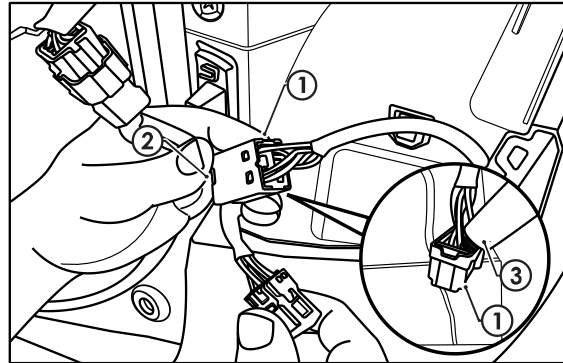
Route the Trailer Patch Harness towards the LHS tail light cavity along the towbar.

Connect the LHS Trailer Patch Harness (1) to the vehicle harness tail light connector (2).



18. On the Tail Harness (Tail length: 1800mm) (1) and mating connector, apply electrical grease or silicon (3) on to the back of the connectors (1)(2) to make them water proof.

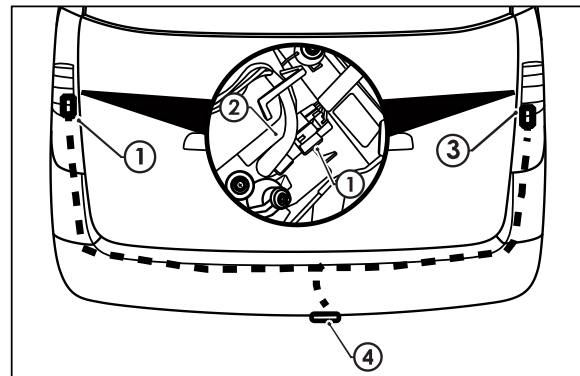
Connect the Tail Harness (1) to the Trailer Patch Harness (2).



19. Connect the Trailer Patch Harness (1) to the tail light assemblies (2) and refit the tail lights (3).

From outside of the vehicle, secure the tail harness socket (4) onto the towbar mounting bracket using M4 fasteners.

Important: Keep harnesses clear of exhaust when routing.



20. Test trailer harness function using trailer light board or multimeter.

Secure all harnesses to the vehicle using cable ties.

Refit the rear bumper in reverse order.

Refit all removed parts and secure all fasteners ensuring there are no squeaks or rattles.

Please place the fitting instructions in the glove box after installation.



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)

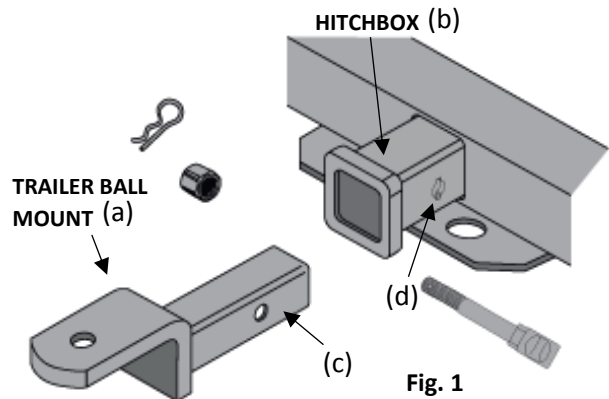


Fig. 1

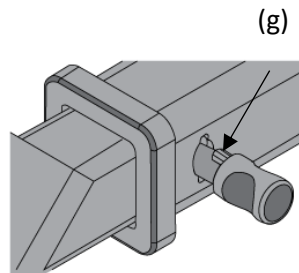


Fig. 2

SILENT ANTI-RATTLE HITCH PIN NUT (f)

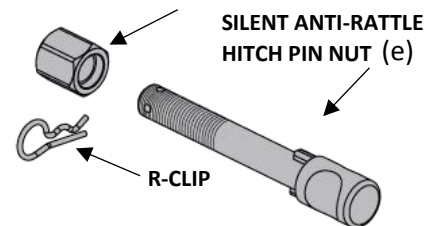


Fig. 3

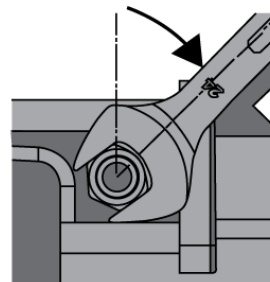


Fig. 4

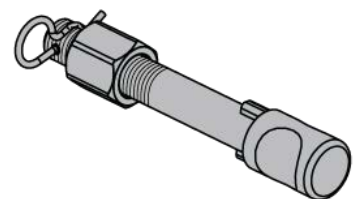


Fig. 5