

PRODUCT DETAILS:

Part Number:	QTLD005L	Maximum Towing Braked:	3000	kg
ECU Number:	04837	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200mm	Maximum Static Ball Load:	300	kg
TBM/Lug Part Number:	21231			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other:	YES
Total Installation Time:	105 Mins.		
Bumper Cut Required:	No		

Note:

- Electric Brake = Blue wire near blue connector
- Suits vehicles with OEM plastic rear step fitted
- RPA Disable use tail 04943

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

BEFORE YOU START:

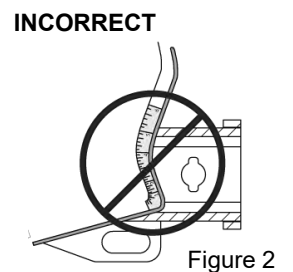
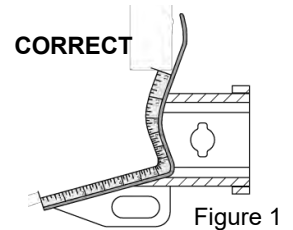
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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.
 - 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

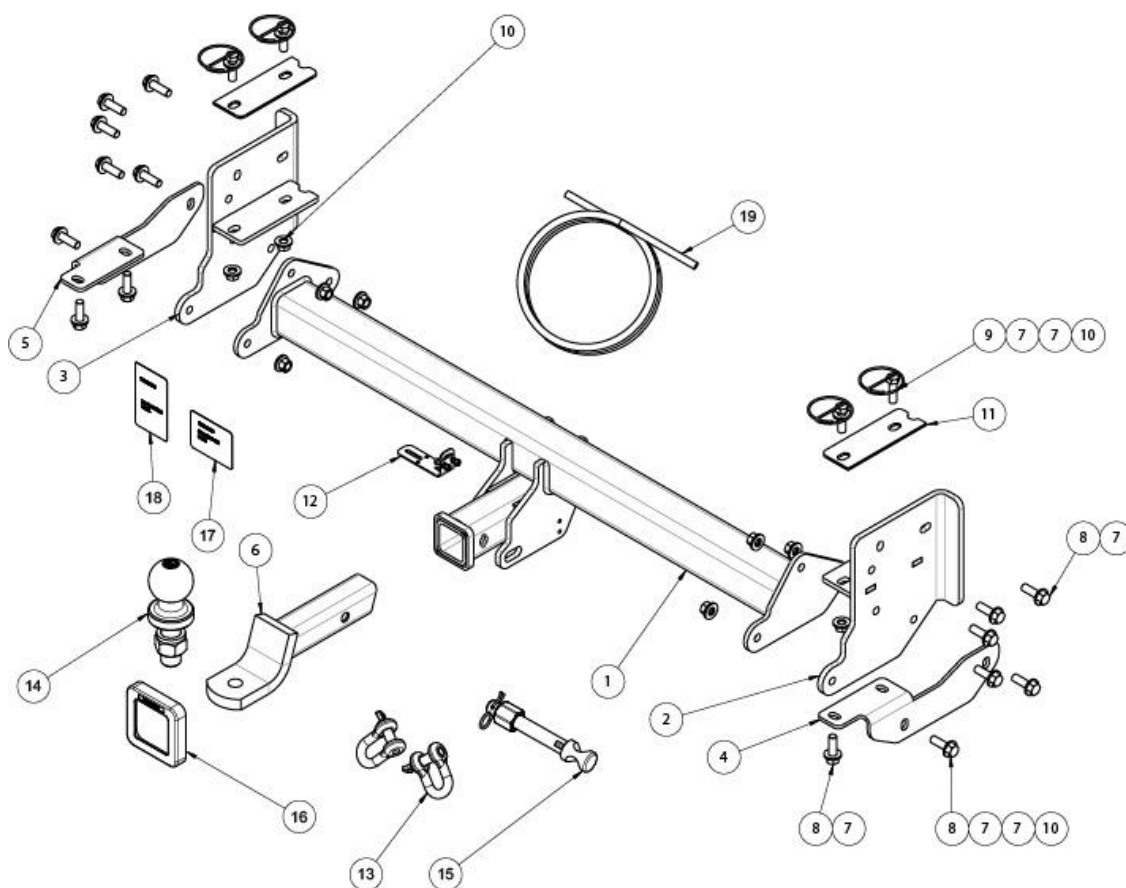
- Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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.

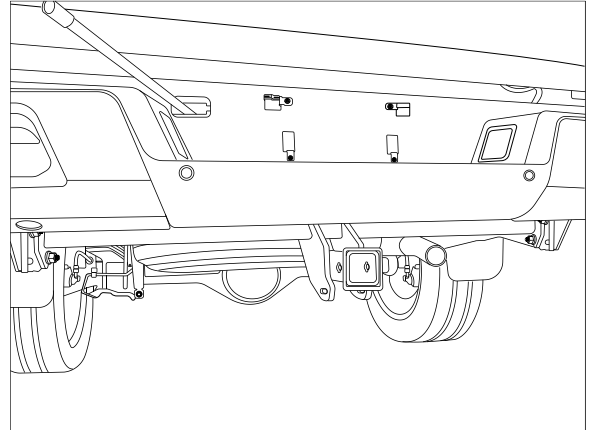
TOWBAR ASSEMBLY DIAGRAM



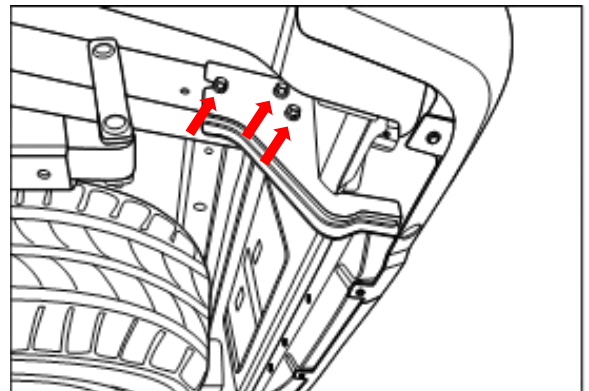
ITEM	DESCRIPTION	QTY
1	LDV T60 WELDED ASSY	1
2	SIDE ARM ASSY – RHS	1
3	SIDE ARM ASSY – LHS	1
4	BRACKET BUMPER SUPPORT RHS	1
5	BRACKET BUMPER SUPPORT LHS	1
6	TRAILER BALL MOUNT	1
7	WASHER PLAIN 1/2"	30
8	SET SCREW HEX HD M12x40x1.75P	16
9	BOLT WIRE M12x40x1.75P & 300mm	4
10	NUT HEX HD M12x1.75P	10

ITEM	DESCRIPTION	QTY
11	SIDE ARM SPACER	4
12	UNIVERSAL PLUG BRACKET KIT	1
13	"D" SHACKLE 10mm	2
14	TOWBALL 50mm	1
15	SMART PIN SILVER	1
16	HITCH BOX COLLAR COVER	1
17	ACRYLIC COMPLIANCE LABEL	1
18	ACRYLIC LOAD RATING LABEL	1
19	WIRE LOOM	1

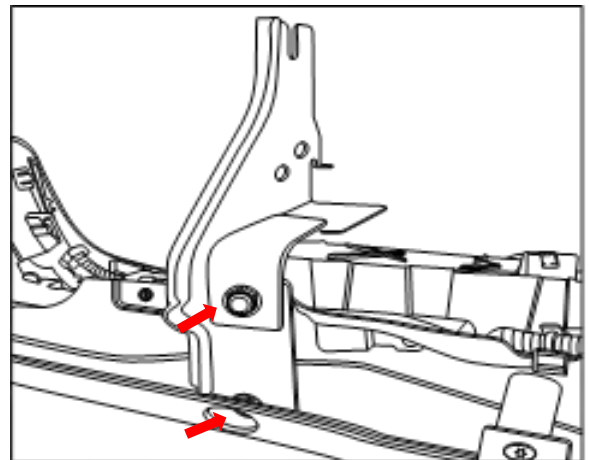
1. Using the wheel tool kit and lower the spare wheel.
Unclip any wiring attached to the rear bumper.



2. Unscrew the 3x bolts.
Repeat to the other side.
Remove whole bumper assembly.

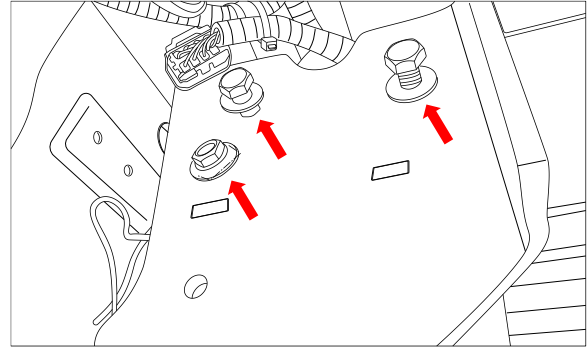


3. Unscrew the 2x bolts and discard the bumper bracket.
Repeat for the other side.



4. Loosely secure the side arm with 3x bolts and 3x washers.

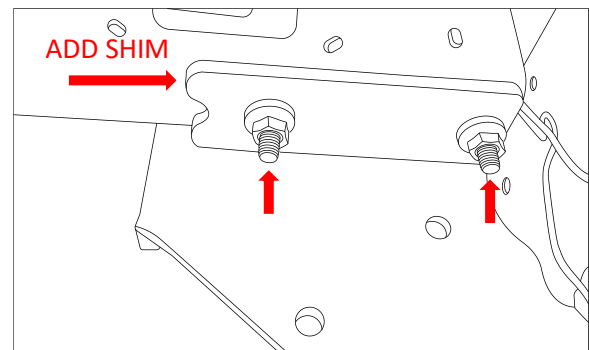
Repeat for the other side.



5. Insert the 2x wirer bolts into the chassis and loosely secure with 2x washers and 2x nuts.

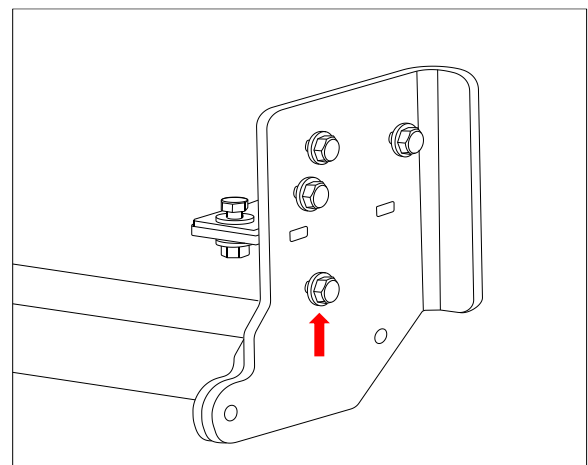
If needed, use shim to fill small gaps between the side arm and the chassis.

Repeat for the other side.



6. Fit the cross tube between the side arms and loosely secure with 1x bolt, 2x washers and 1x nut.

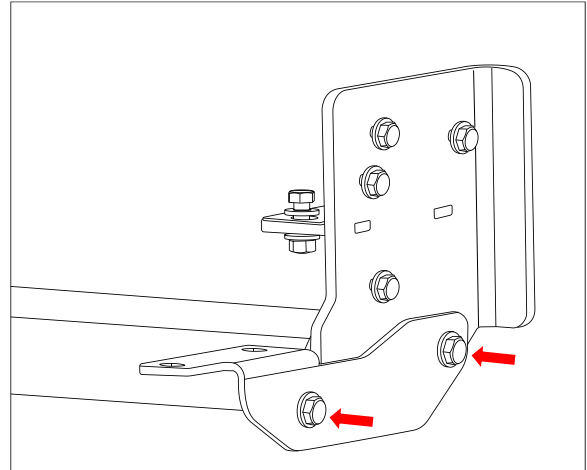
Repeat for the other side.



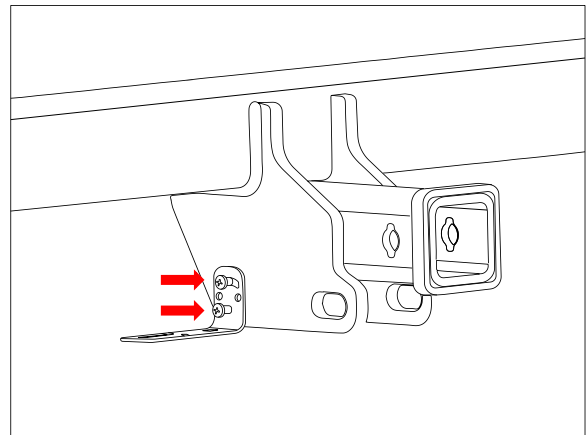
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7. Fit the bumper bracket to the side arm and loosely secure with 2x bolts, 4x washers and 2x nuts.

Repeat for the other side.

Torque all M12 bolts = 77 Nm



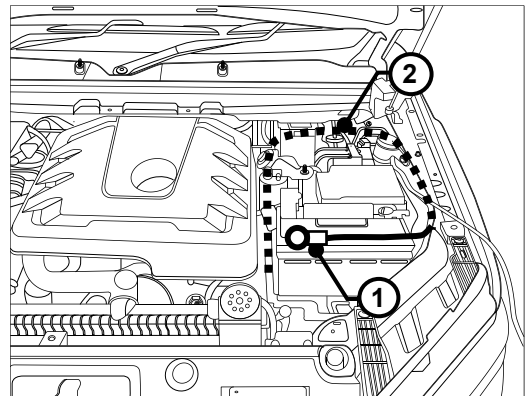
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8. Fit the plug bracket to the dropper and secure 2x screws, 2x washers and 2x nuts.



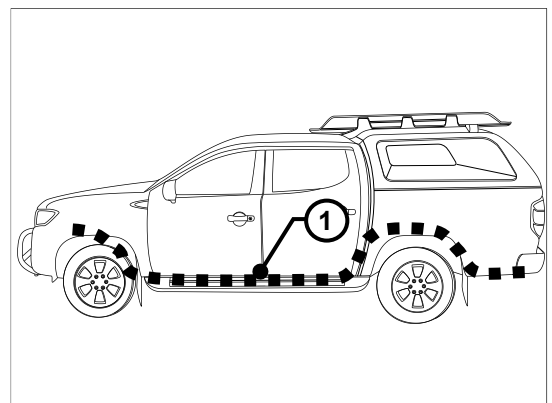
IMPORTANT

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.

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9. Attach the Power Harness (04825) ring terminal (1) to the battery positive post.
 10. Route the Power Harness (2) along the edge of the engine bay and down the LHS Chassis.

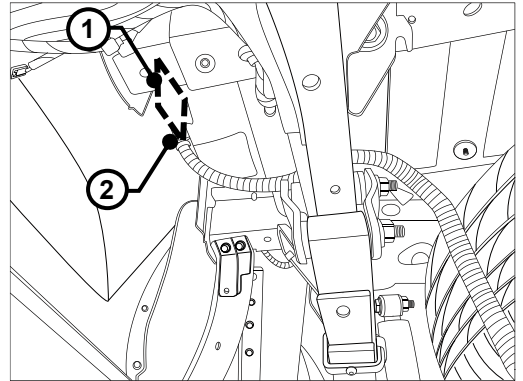


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11. Route the Power Harness (1) along the LHS Chassis rail towards the rear of the vehicle on the LHS, following the existing harness where possible. Cable tie every 600mm (not supplied).
 12. At the rear of the vehicle connect the power harness to the trailer wiring harness (101973-WL).

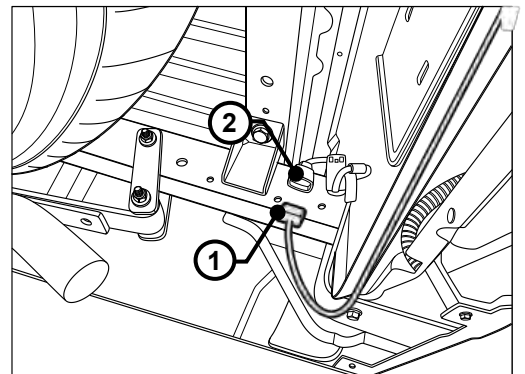


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13. Connect the waterproof ECU (1) (04837) to the ECU connector (2) on the harness and mount in a suitable location in the rear left quarter panel using cable ties and cable tie mounts (not supplied)

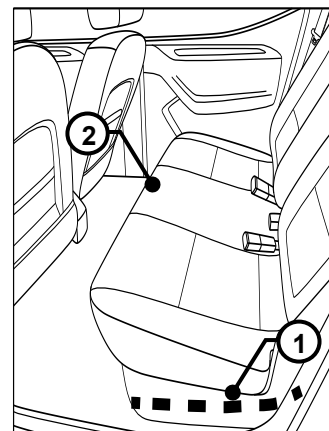
Note: Ensure excess wire length on the power harness is tied to the chassis rail.



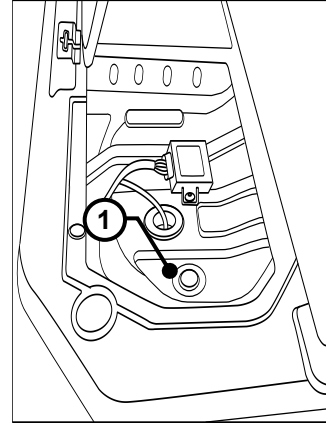
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14. Route the trailer wiring harness connector (1) to the RHS chassis rail of the vehicle.
15. Locate the factory sealed 8-way connector (2) and remove the sealing plug.
16. Connect up the trailer wiring connector (1) to the vehicle connector.



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17. Under the vehicle LHS, route the ground wire with the grommet (1) back down the LHS chassis rail towards the LHS passenger seat.
18. Fold the seat up by pulling the tab in the centre of the seat (2).



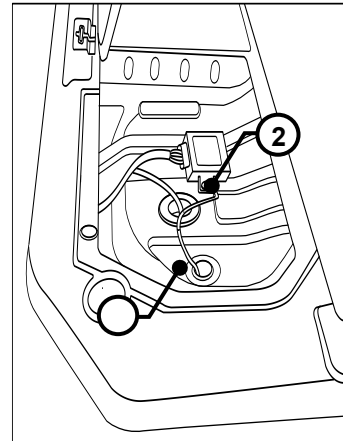
19. Remove the LHS cover and remove the vehicle blanking grommet (1).



20. Route the ground wire (1) through the grommet hole and seat the grommet into the hole ensuring the grommet is seated correctly and provides a seal.

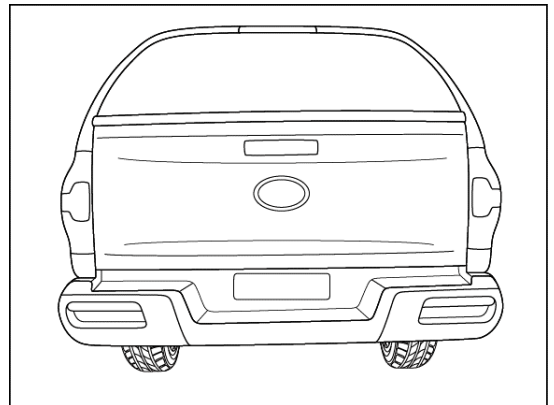
21. Attach the ground wire (1) to the chassis ground bolt (2).

Tech Tip: To make the routing easier, use a guide wire to probe down through the grommet hole, tape the ground wire to the guide wire under the vehicle and pull back up through the grommet hole.

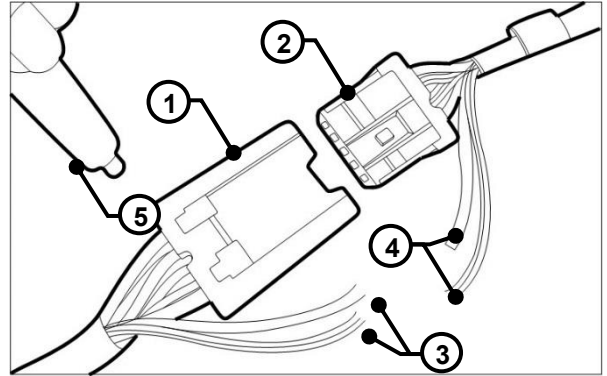


22. Secure tail (WLT024) harness to towbar.
23. Route tail harness up to trailer harness blue connector on the LHS.

Note: RPA disable harness must be used & connected otherwise entire system will not operate.



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24. Connect the tail harness 8-way connector (1) to the trailer patch 8-way mating connector (2)
 25. To enable RPA cut-off, crimp the tail harness GREY and GREY/BLACK wires (3) to the trailer patch matching GREY and GREY/BLACK wires (4).
 26. Apply silicone grease (not supplied) (5) to waterproof connector.
 27. Mount the trailer plug to plug bracket.
 28. Replace all remove parts from steps 1 to 4.
 29. Test the trailer function using a light board or multi-meter.
 30. Place fitting 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)

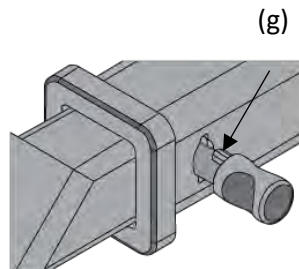
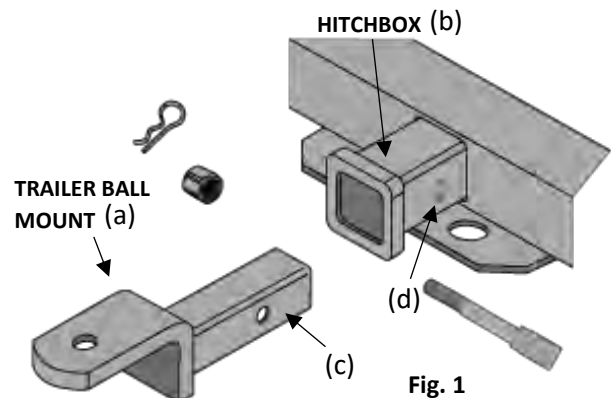


Fig. 2

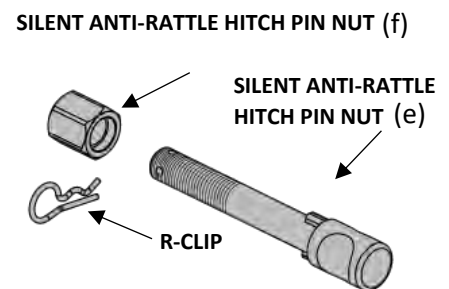


Fig. 3

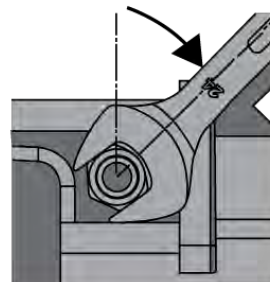


Fig. 4

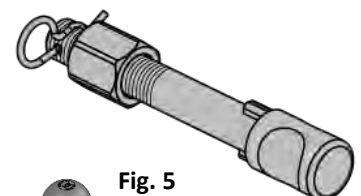


Fig. 5

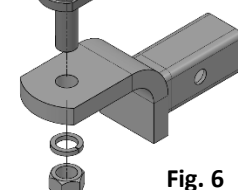


Fig. 6