



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER QT1146L

TOYOTA LANDCRUISER 76 SERIES

PRODUCT DETAILS:

Part Number:	QT1146L	Maximum Towing Braked:	3500	kg
ECU Number:	N/A	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	350	kg
TBM/Lug Part Number:	21342			

FITTING DETAILS:

Towbar Installation Time:	60 Mins.	RPA Disable/Other:	NO
Total Installation Time:	85 Mins.		
Bumper Cut Required:	Yes		

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

BEFORE YOU START:

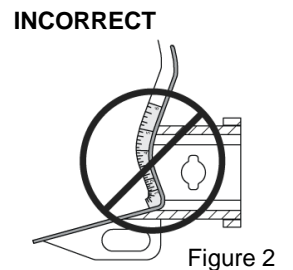
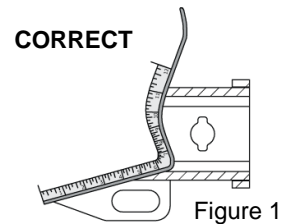
Check all hardware items have been included refer to assembly diagram.
Please ensure this towbar is only fitted to vehicle models as per Trailboss application guide.

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

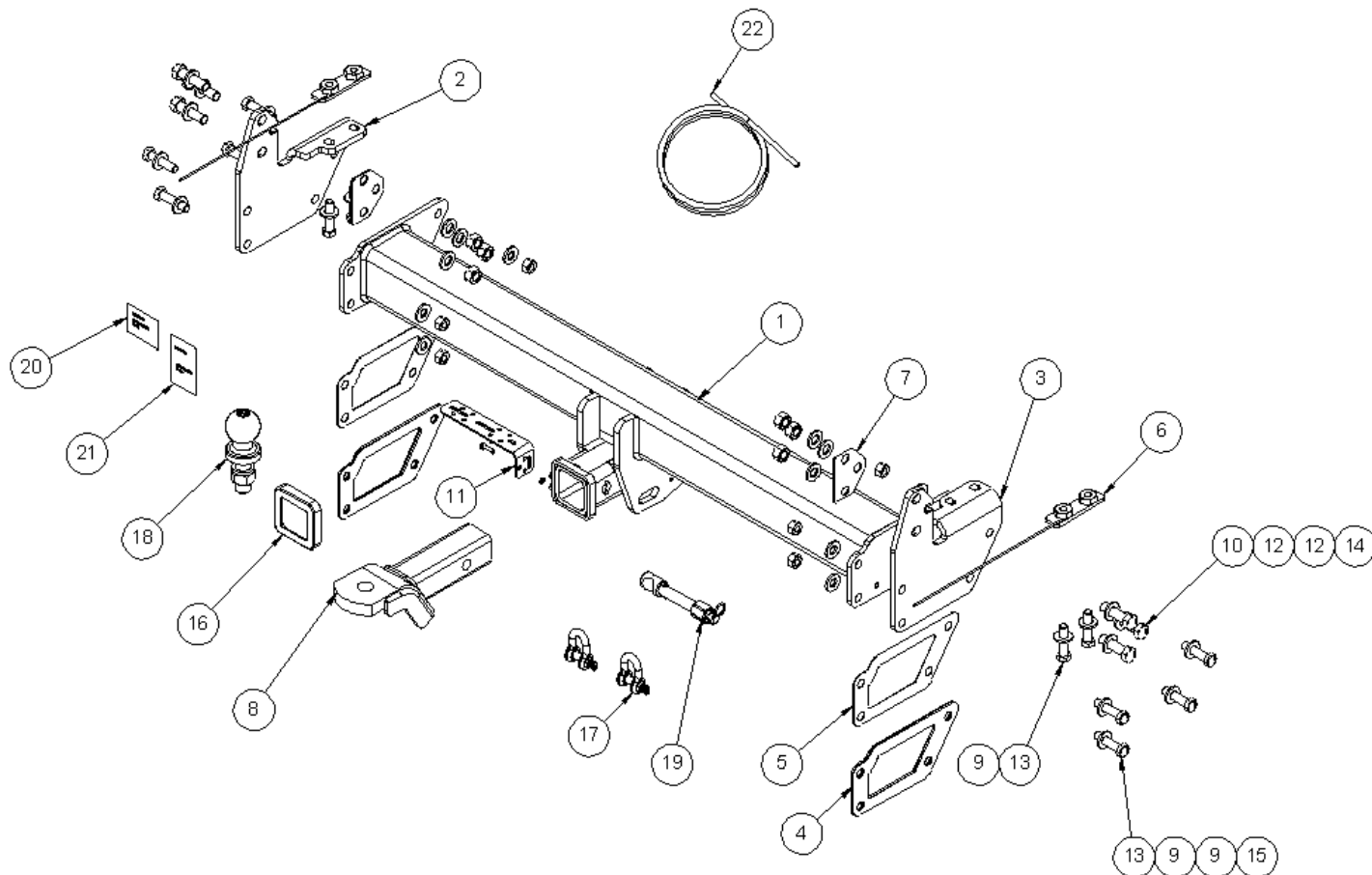
- Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.

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

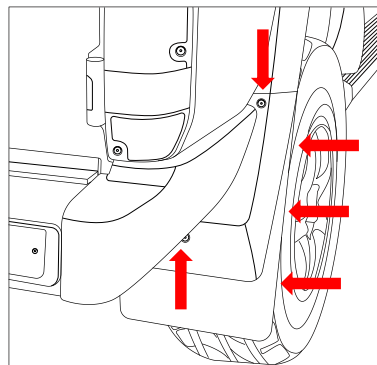


ITEM	DESCRIPTION	QTY
1	TOYOTA LC76 WELDED ASSY	1
2	SIDE ARM LHS	1
3	SIDE ARM RHS	1
4	SPACER PLATE 2mm	4
5	SPACER PLATE 1mm	2
6	NUT PLATE	2
7	SPACER 2.0mm	2
8	TRAILER BALL MOUNT	1
9	WASHER PLAIN 1/2"	20
10	SET SCREW HEX HD M14x50x1.5P	6
11	LARGE UNIVERSAL PLUG BRKT KIT	1

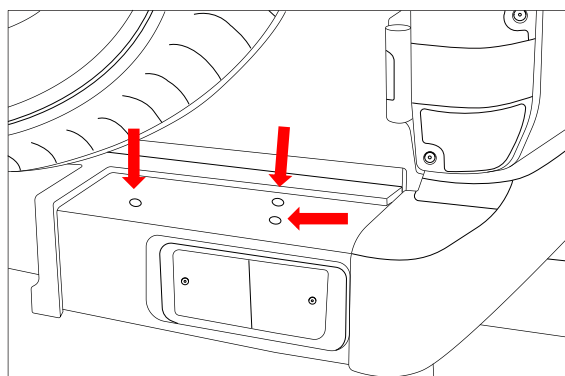
ITEM	DESCRIPTION	QTY
12	WASHER PLAIN M14x28x3	12
13	BOLT HEX HD M12x50x1.75P	12
14	NUT HEX HD M14x1.5P	6
15	NUT HEX HD M12x1.75P	8
16	HITCH BOX COLLAR COVER	1
17	"D" SHACKLE 10mm	2
18	TOWBALL 50mm	1
19	SMART PIN SILVER	1
20	COMPLIANCE LABEL	1
21	LOAD RATING LABEL	1
22	WIRING LOOM	1

1. Remove 2x outer screws.
Remove 3x inner screws between the mudflap
and the wheel.

Repeat for the other side.

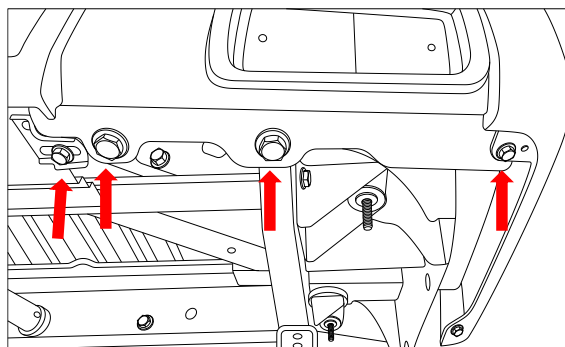


2. Remove and retain 3x bolts and 2x nuts from
the bumper.



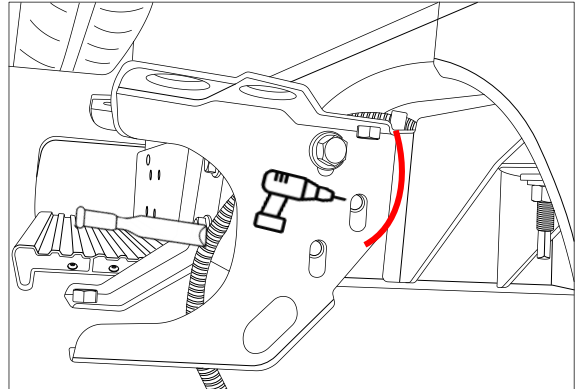
3. Remove and retain 4x bolts.
Disconnect the taillight harness.
Remove the side bumper.

Repeat for the other side.



4. To ensure the bumper bracket is in the same location relative to the chassis, Use the marker to trace the bracket profile. Remove and discard 2x lower bolts secure the bracket to the chassis. Chisel out the 2x weld nuts behind the hole and then drill out the 2x holes to Ø15mm.

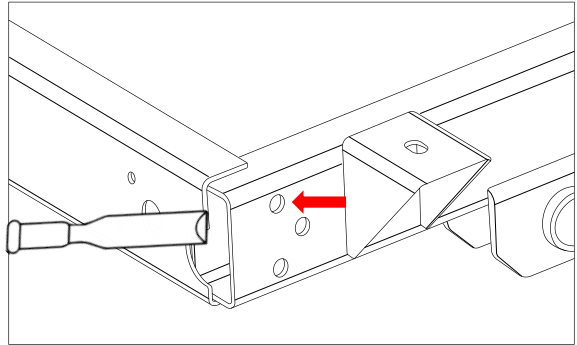
Repeat for the other side.



5. Remove and discard 1x top bolt. Remove the bumper bracket. Chisel out the 1x weld nuts inside the chassis.

Repeat for the side.

Coat the bare metal surface with anti-rust solution.

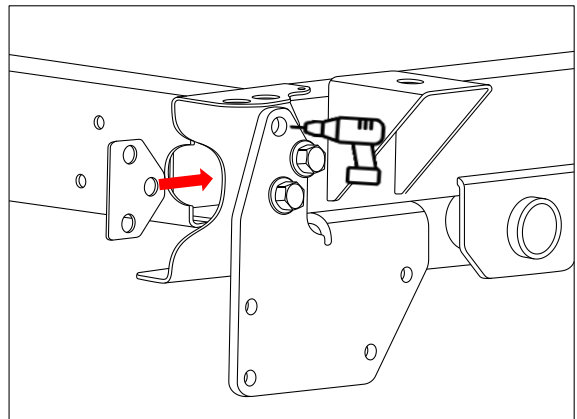


6. Place the bumper bracket and the side arm on the chassis. Slide the spacer plate in chassis. Loosely secure the brackets with 2x M14 bolts, 4x washers and 2x nuts.

Drill out the top hole to Ø15mm.

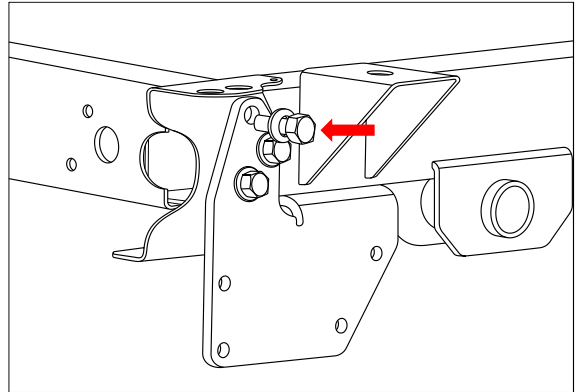
Coat the bare metal surface with anti-rust solution.

Repeat for the other side.



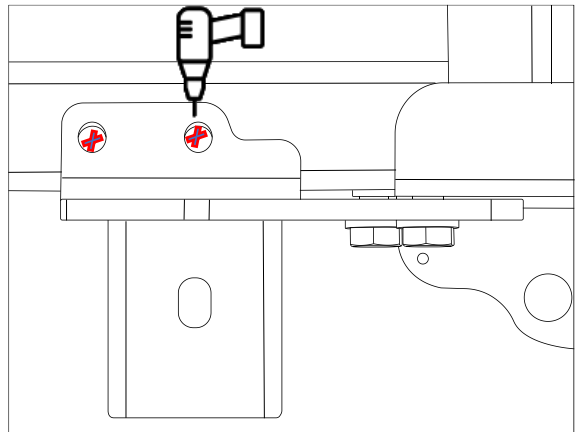
-
7. Loosely secure the top hole with 1x M14 bolts, 2x washers and 1x nut.

Repeat for the other side.



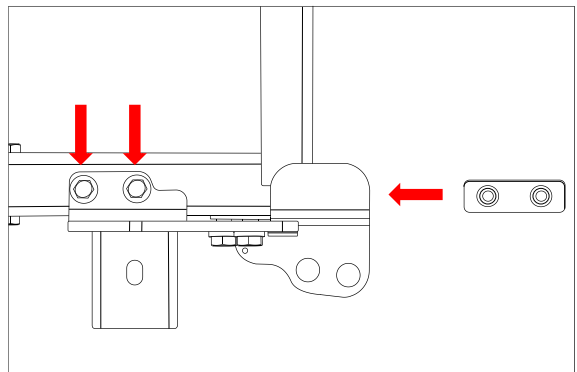
-
8. Mark 2x centre inside the side arm slots. Drill 2x Ø12.5mm under the chassis.

Repeat for the other side.



-
9. Slide the nut plate into the chassis. Loosely secure the bracket with 2x M12 bolts and 2x washer.

Repeat for the other side.



10. Place the cross tube and spacers as required between the side arms.
Loosely secure it with 4x M12, 8x washer and 4x nut.

Repeat for the other side.

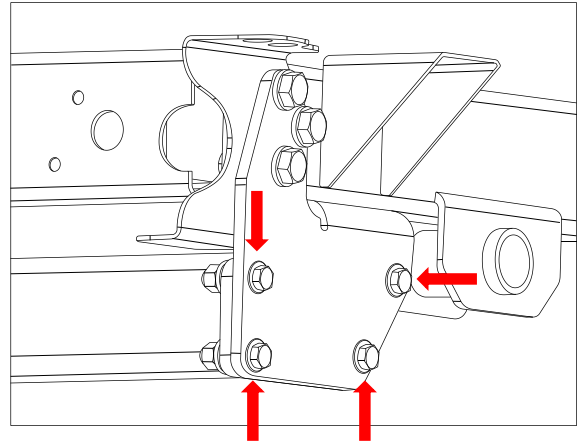
Torque the fasteners as follows:

M12 x 1.75P = 109 Nm

M14 x 1.50P = 196 Nm

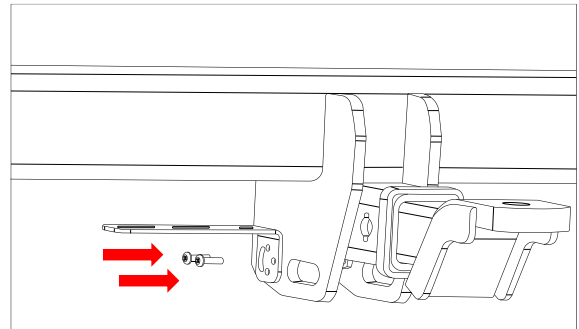
NOTE:

To ensure the bumper brackets align to the marked line in step 4 before torque any fasteners.

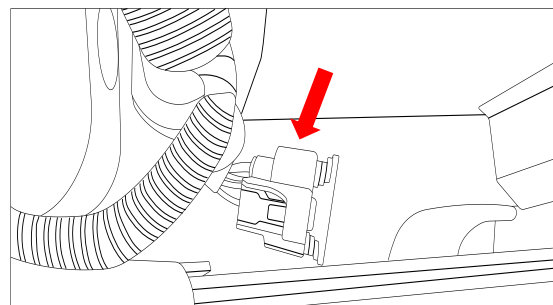


11. Place the plug bracket to the dropper and secure it with 2x screws, 2x washer and 2x nuts.

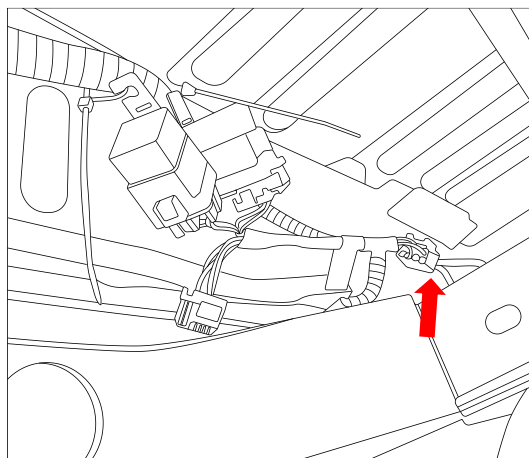
Reassemble all the removed parts in the reverse order of removal. Secure all clips and fastener.



12. Locate 8-way pre-wire connector on the LHS chassis rail.
13. Remove the blanking plug and discard.



14. Connect the trailer harness 101350-WL to the trailer pre-wire connector.
15. Mount the trailer plug to plug bracket, route tail harness towards the trailer patch mating blue connector; connect **and waterproof using electric grease**.
16. Secure the harness and relays to vehicle main loom.
17. Test trailer function using trailer test board.
18. Refit all removed parts.
19. Place instructions in glovebox.





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)

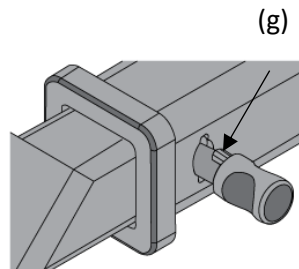
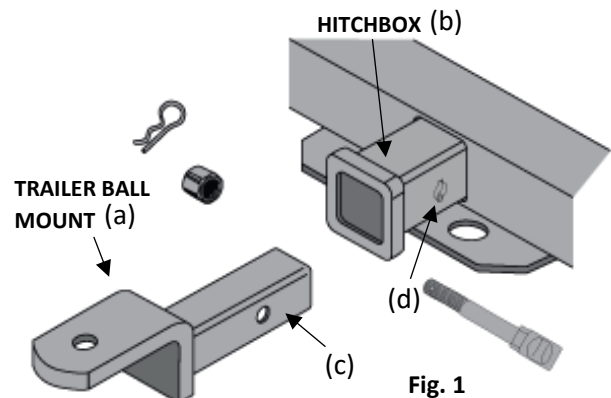


Fig. 2

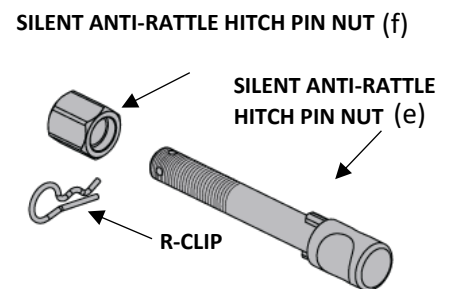


Fig. 3

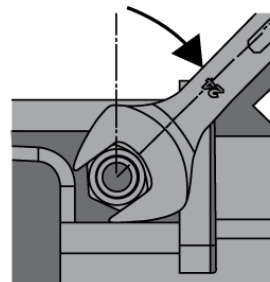


Fig. 4

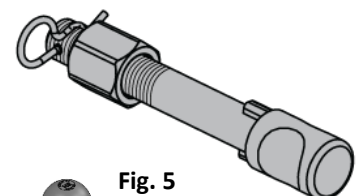


Fig. 5

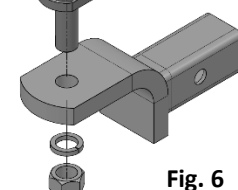


Fig. 6