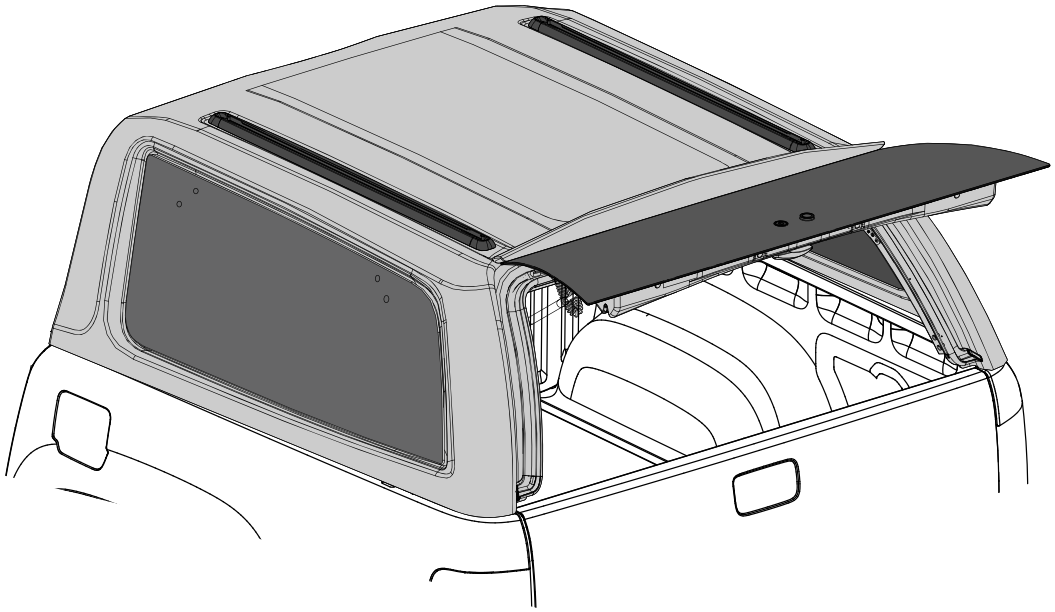
INSTALLATION INSTRUCTIONS

IMPORTANT: PLACE IN THE CUSTOMER'S VEHICLE SERVICE BOOK



MAZDA BT-50 MY21 - A/M GEN III CANOPY INSTALLATION INSTRUCTIONS

ISUZU D-MAX MY21 - A/M GEN III CANOPY INSTALLATION INSTRUCTIONS

Installation time: 90 minutes

IMPORTANT:

- **Do not tighten any bolts, screws and nuts that are used in the window frames, locks and glass assemblies. This may cause water leaks along window frames and glass windows to shatter.**
- **Read instructions carefully before installation.**
- **It is strongly recommended that installation is conducted by an authorized dealer.**
- **This product must be installed exactly as specified in these instructions. Failure to do so may result in improper fit and/or retention/failure of components.**
- **Recommend installation by two people (four people will be required to lift Canopy).**

CARE INSTRUCTIONS:

Clean Canopy with a mild detergent and water solution.

Do not use abrasive cleaners or solvents.

PERSONAL PROTECTIVE EQUIPMENT:

Mask

Rubber Gloves

Goggles

Hearing Protection

Tools (Not supplied in kit. Please prepare before installation.)

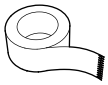
Drill

Drill Bit
Ø3mm
Ø5.5mm
Ø9mm

Socket torque wrench

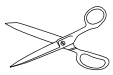
Socket 13mm

Wrench
No: 10,12 & 13mm



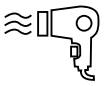
Marking Tape

Clean cloth



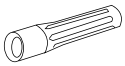
Scissors

Marking pen

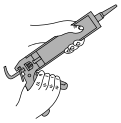


Dryer

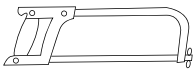
Wire cutters
/ side cutters



Flash light



Silicone & Gun



Hacksaw

Phillips Screwdriver

Rivet gun

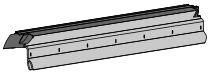
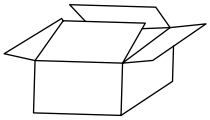
Head Bit

Non permanent marker

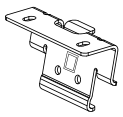
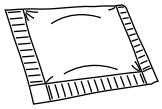
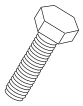
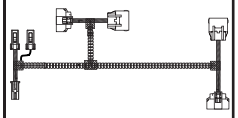
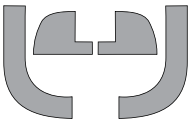
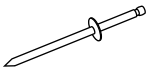
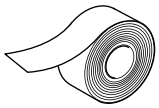
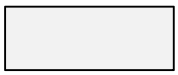
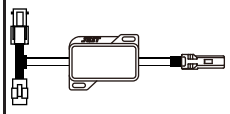
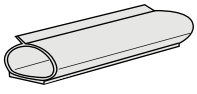
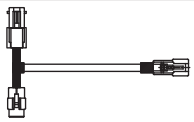
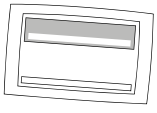
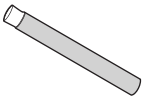
Tape Measure

Isopropyl Alcohol or Equivalent

Components (Please ensure installation kit is complete and not damaged prior to installation.)

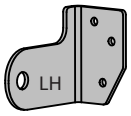
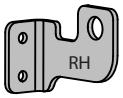
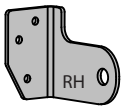
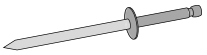
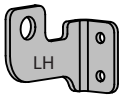
No.	Part Name	Q'ty	Drawing	No.	Part Name	Q'ty	Drawing
Ⓐ	Canopy	1		Ⓒ	Keys (attached to door strut)	2	
Ⓑ	Tailgate Rail (CNPY0093)	1		Ⓓ	Fitting Kit	1	

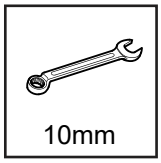
Components (Please ensure installation kit is complete and not damaged prior to installation.)

No.	Part Name	Q'ty	Drawing	No.	Part Name	Q'ty	Drawing
①	Rail Clamp (outer) (CLIP3780PC)	6		⑭	Rust inhibitor satchel (MISC2776)	1	
②	Rail Clamp (inner) (CLIP3533PC)	6		⑮	Clamp Template (MISC5186)	1	
③	Stop Bracket (CLIP3751PCTX-1)	2		⑯	Cabin patch harness (LOOM0209)	1	
④	M8x30 Bolt (SCRW0846)	28		⑰	Vehicle patch harness (LOOM0203)	1	
⑤	M8 Washer (WASH0171-1)	44		⑱	Cable base (FAST0647)	10	
⑥	M8 Clutch Nut (NUTS0250-1)	16		⑲	Anti abrasion corners (TAPE0796)	1	
⑦	Top Plate (CLIP3767PCTX-1)	8		⑳	Anti abrasion tape (TAPE0258-5)	2	
⑧	Rivet (FAST0609)	7		㉑	Anti abrasion tape (TAPE0811)	1	
⑨	Anti abrasion tape (55mm x 100mm) (TAPE0649)	6		㉒	Vehicle Patch Harness (LOOM0204)	1	
⑩	Cable tie (FAST0254)	35		㉓	Canopy T-Patch (LOOM0235)	1	
⑪	Bulb Seal (1.8m) (EXTR0052)	1		㉔	Cabin T-Patch (LOOM0208)	1	
⑫	Alcohol Wipe (MISC0052)	7		㉕	Cable tie (CONS1590)	40	
⑬	Primer (MISC1365)	2		㉖	Extension Harness (LOOM0273)	1	

Components (Please ensure installation kit is complete and not damaged prior to installation.)

KIT038965 - TUB REINFORCEMENT KIT

No.	Part Name	Q'ty	Drawing	No.	Part Name	Q'ty	Drawing
㉗	Lower LH Bracket	1		㉚	Upper RH Bracket	1	
㉘	Lower RH Bracket	1		㉛	Rivet	10	
㉙	Upper LH Bracket	1					



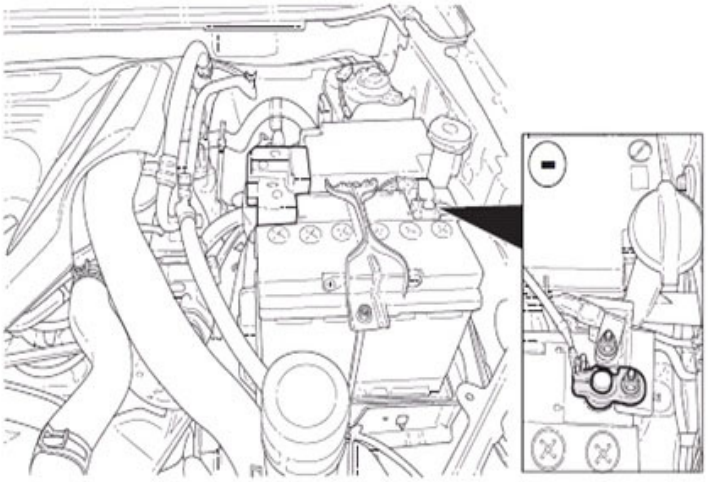
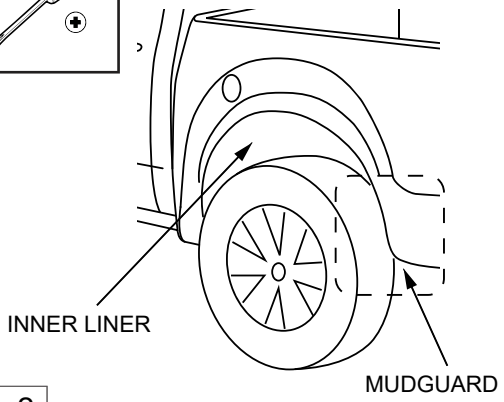
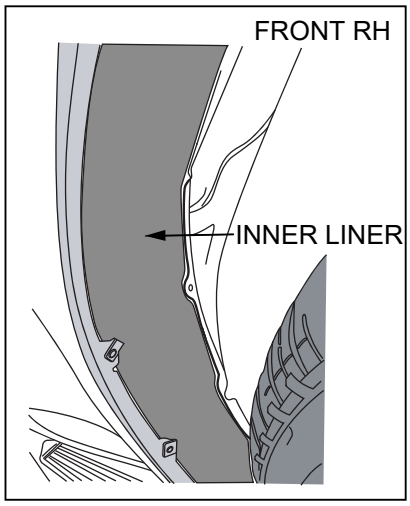


Fig. 1

1. Note down the clock and radio settings. In the engine bay,disconnect and isolate the negative battery terminal.





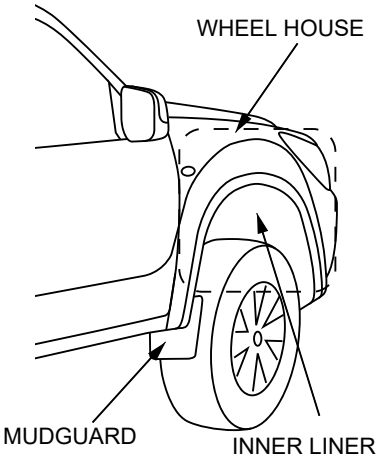


Fig. 2

2. Remove inner liner and mudguard at front RHS wheel house and rear LHS wheel house.
   Note: Refer to the vehicle workshop manual for removing and installing inner liner and mudguard.

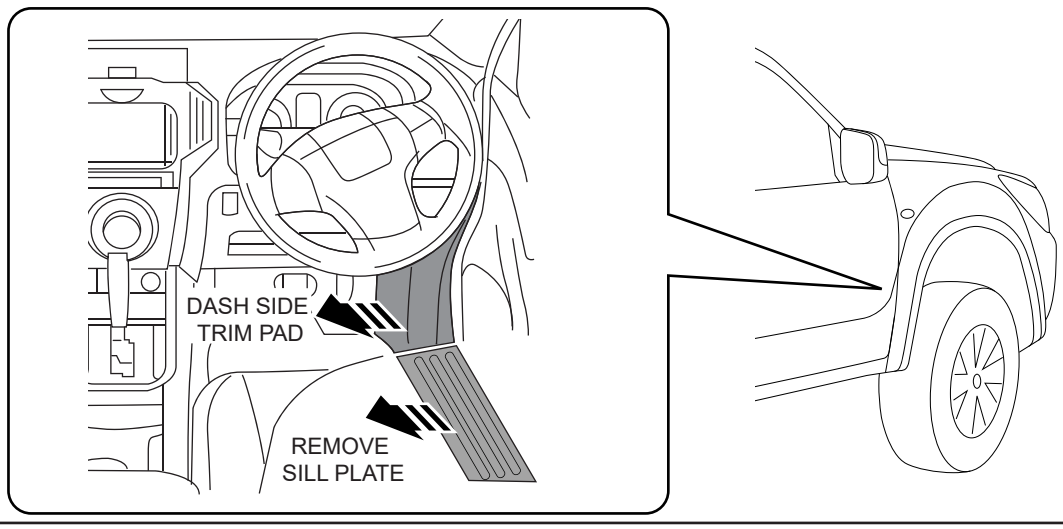


Fig. 3

3. Locate the front driver's side sill plate and dash side trim pad. Remove and retain both.

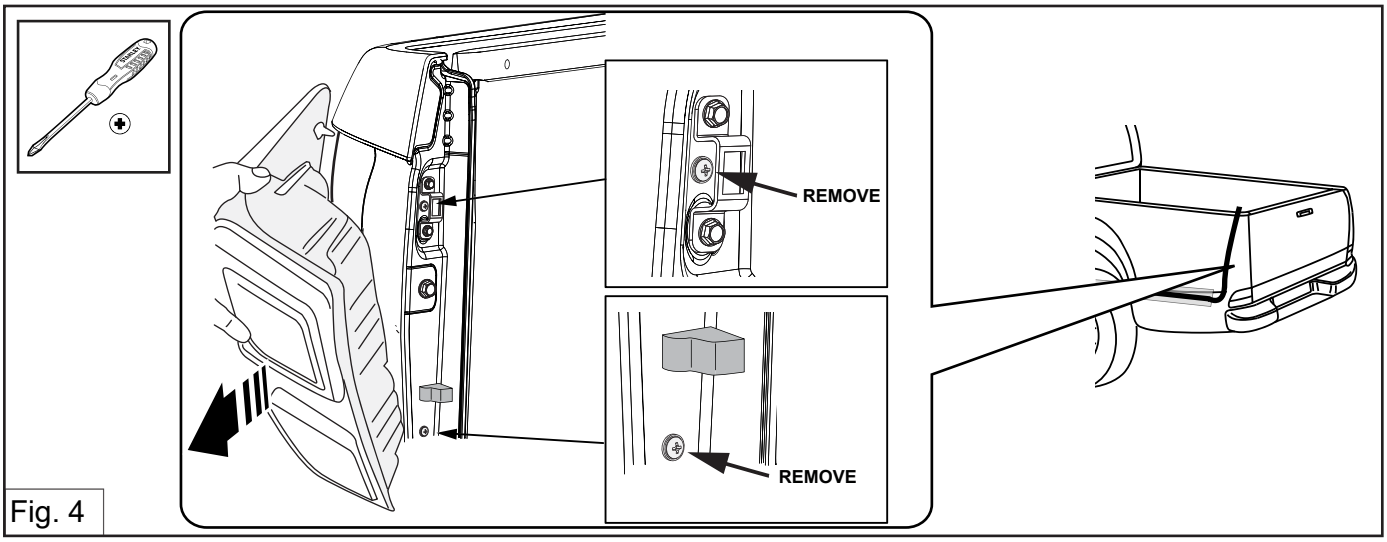


Fig. 4

4. Open the tailgate and remove the 2 screws shown and slide the LHS tail light out.

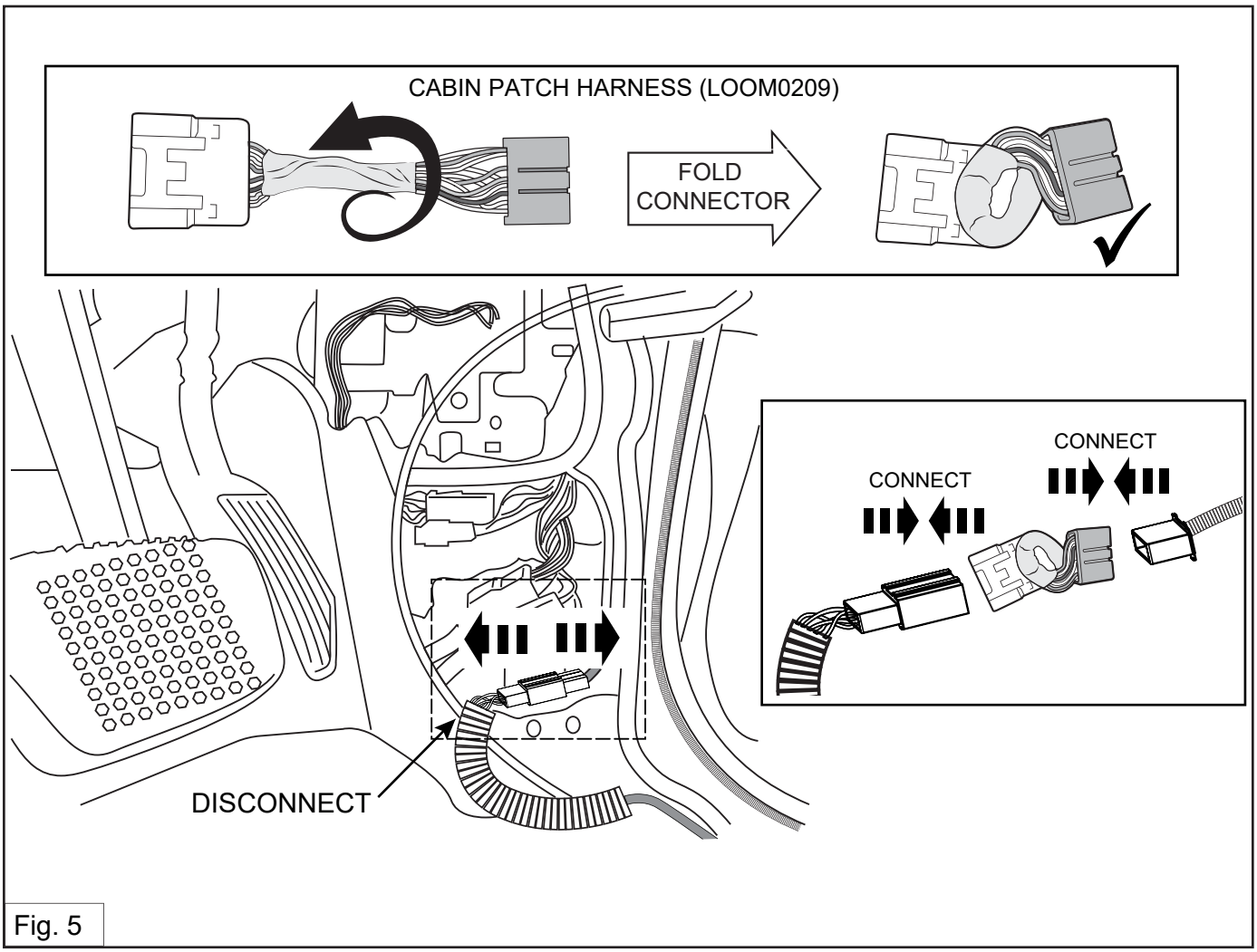


Fig. 5

5. Locate the Centre High Mounted Stop Lamp connector behind the driver side kick panel and disconnect. Fold Cabin Patch Harness LOOM0209 (16) as shown and add in between the two disconnected connectors.

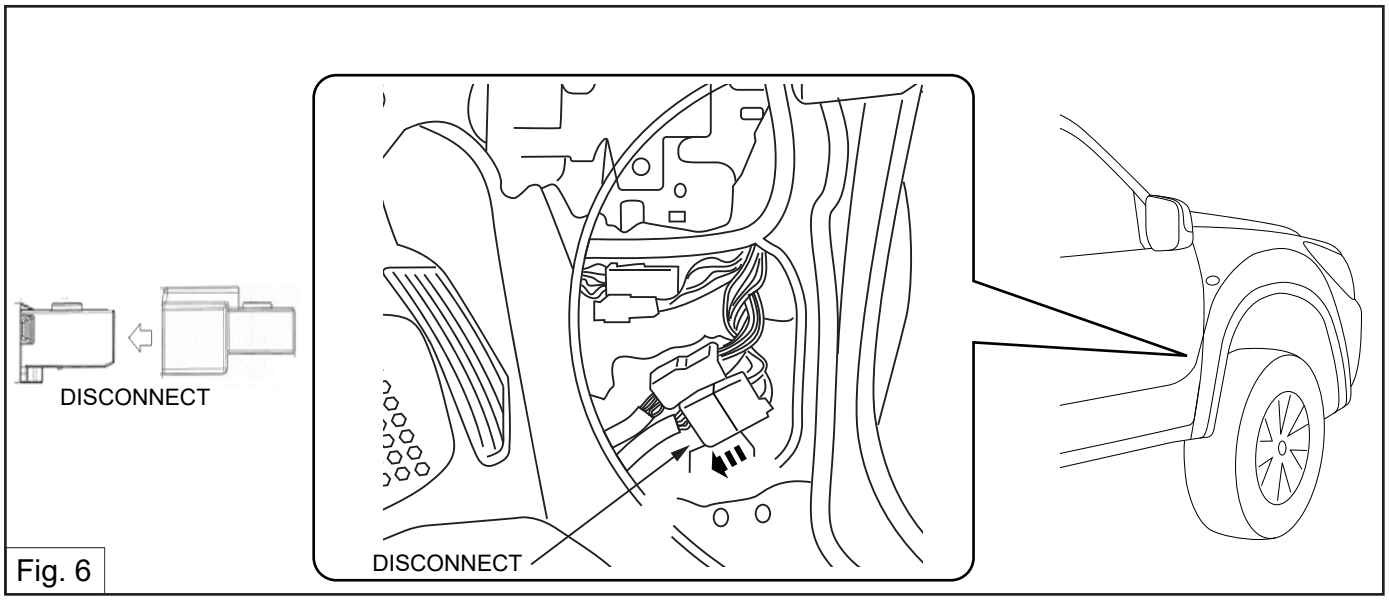


Fig. 6

6. Disconnect the 14-way connector as shown.

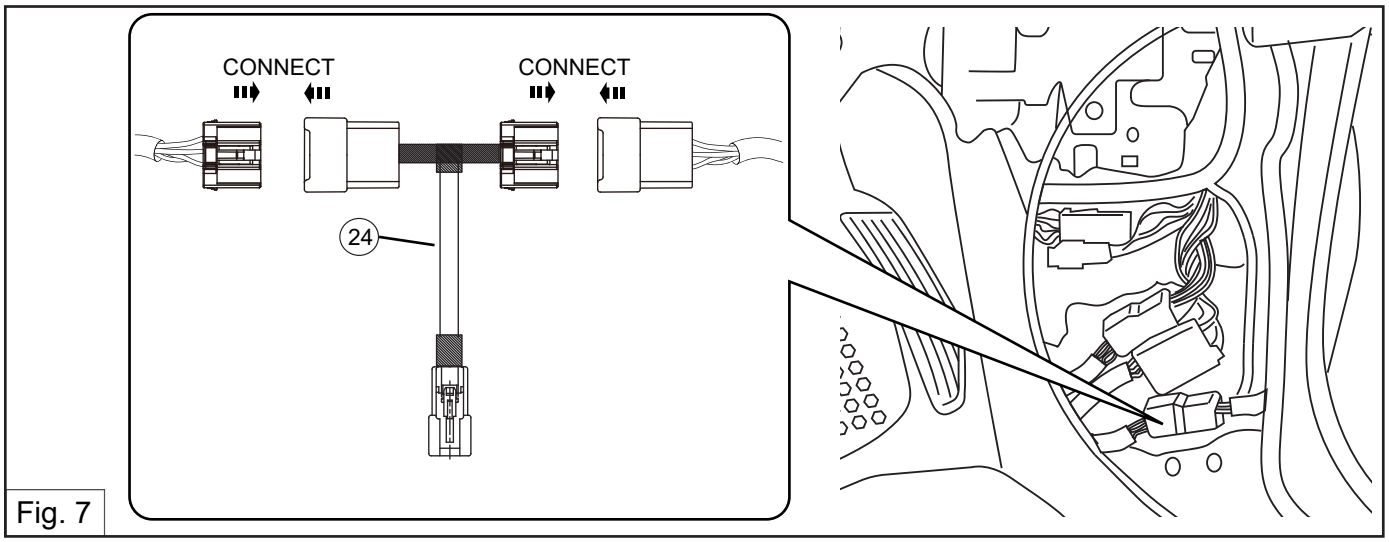


Fig. 7

7. Bridge the disconnected connectors using Cabin T-patch LOOM0208 (24) as shown.

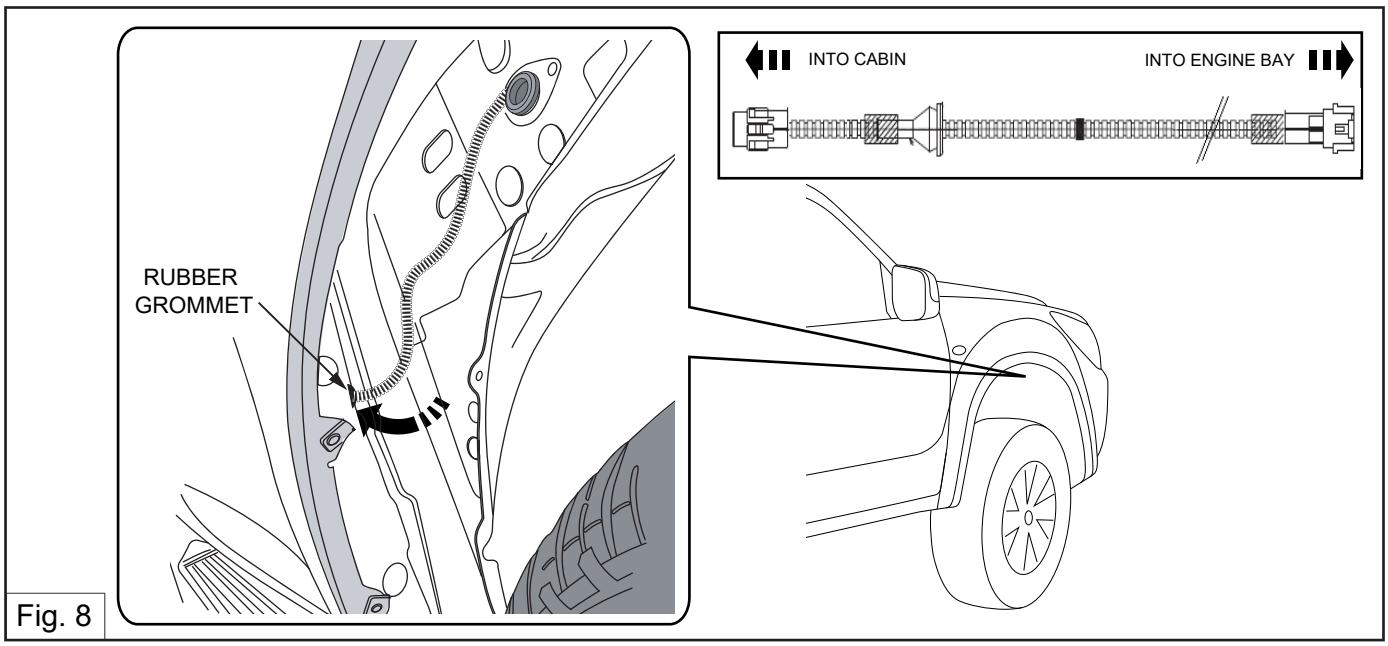


Fig. 8

8. Remove the rubber grommet from the rear of the front RH wheel house and feed the Vehicle patch harness LOOM0204 (22) into the cabin through the hole in the rear of the wheel house until the rubber grommet is seated correctly.

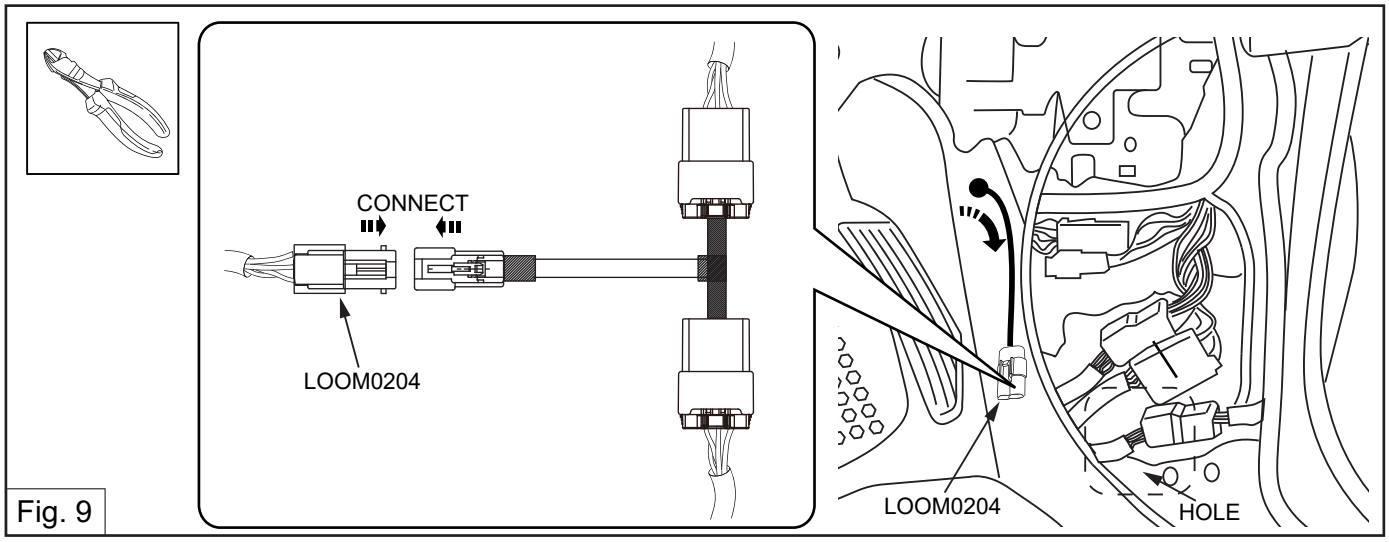


Fig. 9

9. Pull out the harness end (A) from square hole. Connect the harness end (A) (LOOM0204) to the T-patch (LOOM0208) as shown and bind the extra length of T-patch using cable tie (10). Refit the dash side trim pad and sill plate.

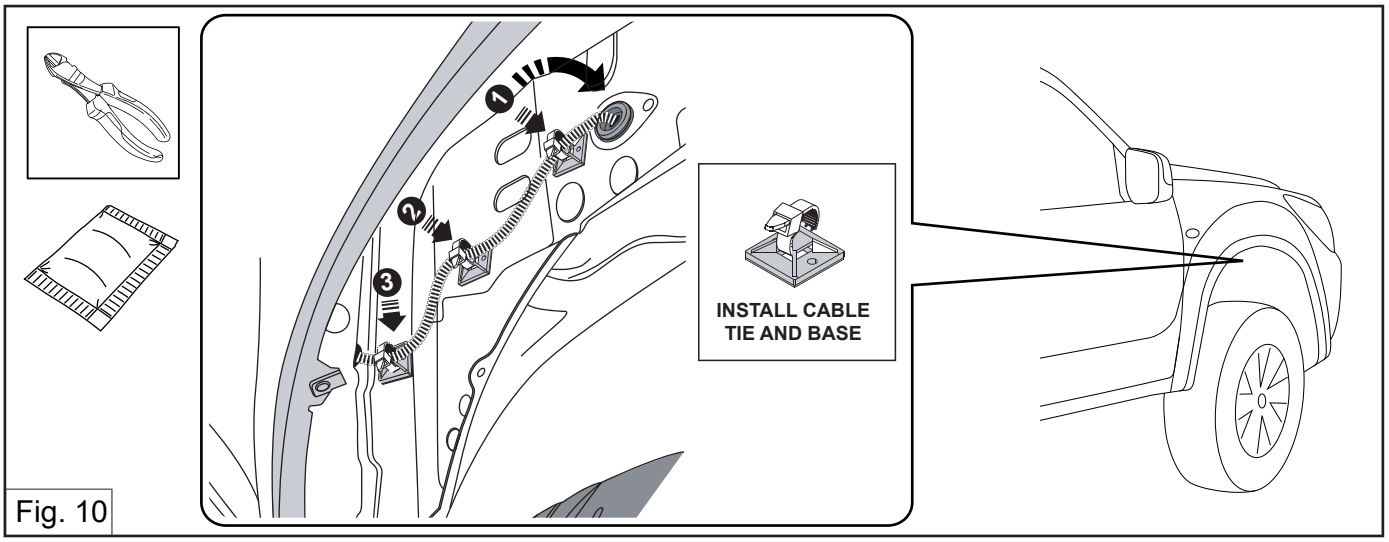


Fig. 10

10. Feed the Vehicle patch harness LOOM0204 (19) into the engine bay through a hole in the wheel house. Secure the Vehicle patch harness LOOM0204 (19) using cable ties M (10) and cable tie base (18) as shown in 3 places.
Note: Clean installation points using alcohol wipe (12) before sticking cable tie base (18).

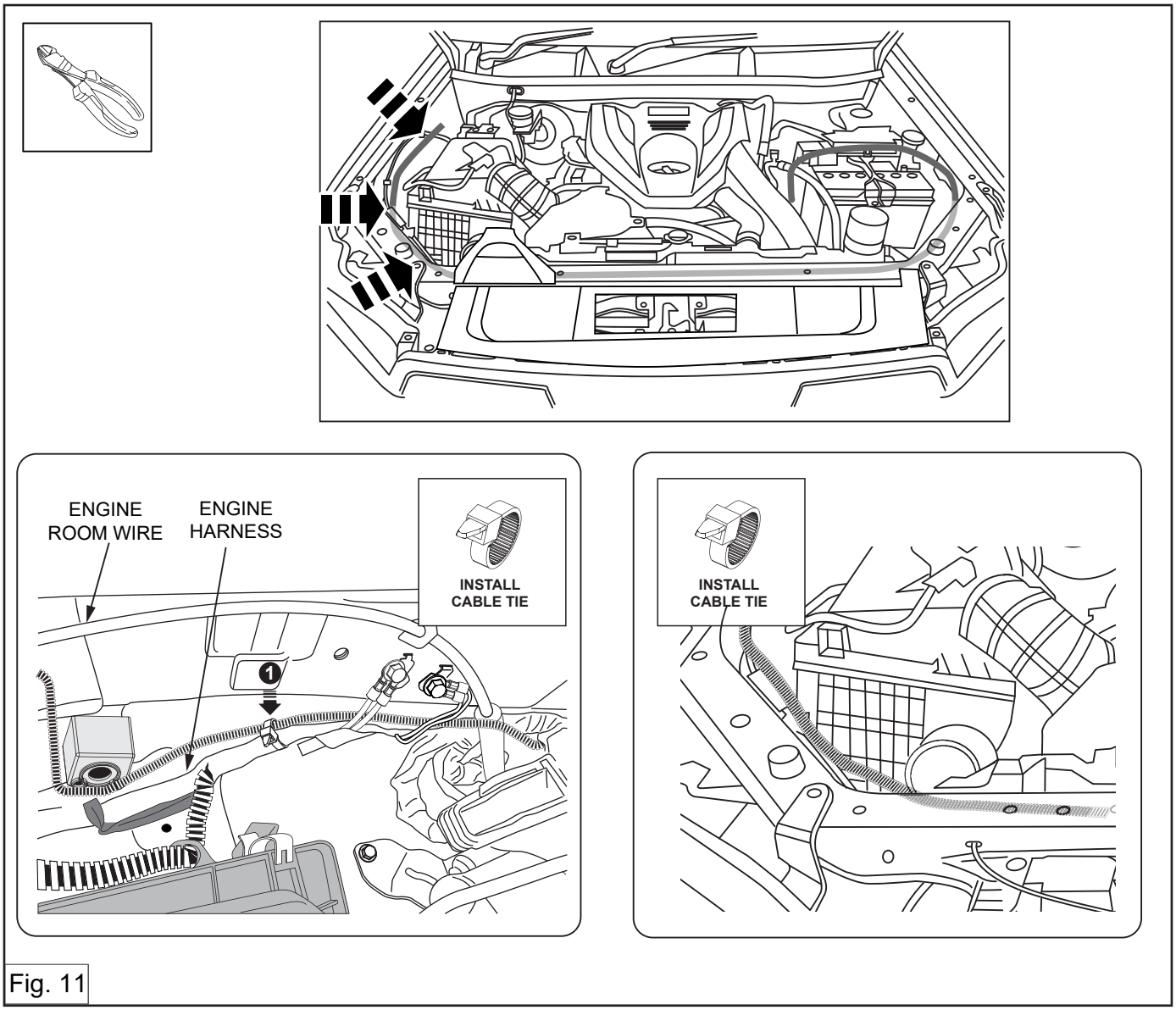


Fig. 11

11. Run the vehicle patch harness LOOM0204 (22) along the RHS panel and secure to the existing harness and engine room wire using cable ties (10) at the existing clipping points towards the headlight.

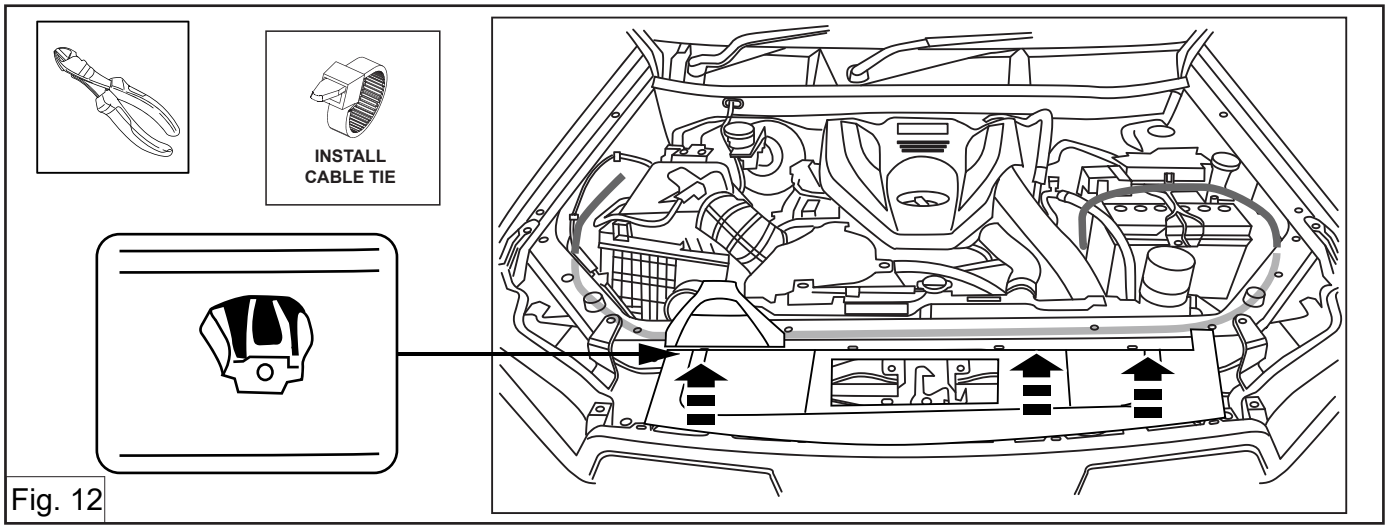


Fig. 12

12. Continue feeding the vehicle patch harness LOOM0204 (22) under the front top chassis just above the radiator and secure vehicle patch harness LOOM0204 (22) to the existing harness using cable ties (10) at the three existing clipping points.

NOTE: Removing the plastic radiator cover will help with access & can be re-installed after Loom is fed across.

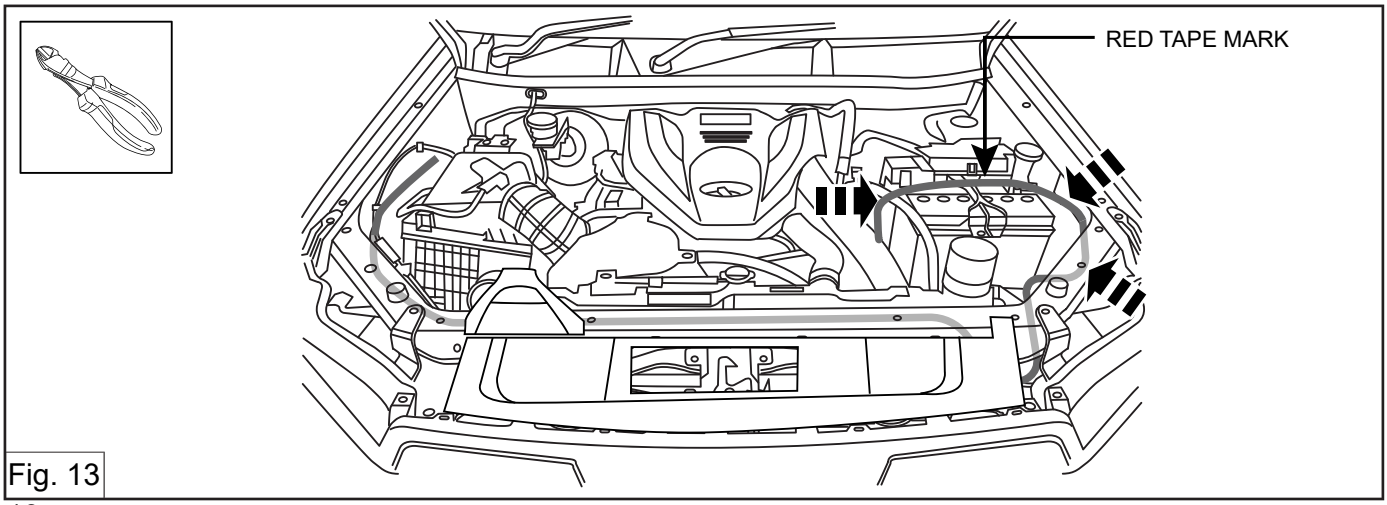


Fig. 13

13. Continue feeding the vehicle patch harness LOOM0204 (22) along the LHS headlight and towards the battery securing it to the existing harness using cable tie at the existing clipping points. Feed the vehicle patch harness LOOM0204 (22) between the battery and fuse box and drop down along the chassis to the floor.
    Note: There is a red stripe on the vehicle patch harness LOOM0204 (22) that must line up as shown. Use cable tie (10) in this location securing the vehicle patch harness LOOM0204 (22) to the existing harness at existing clipping point.

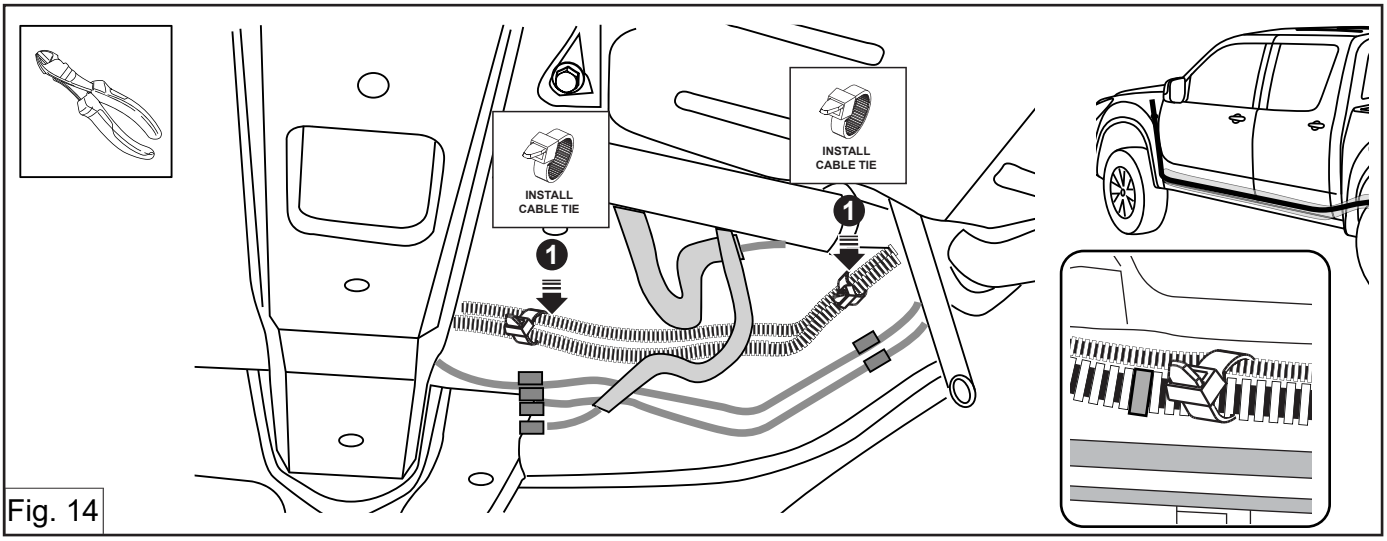


Fig. 14

14. Under the vehicle continue securing the harness to the existing harness and feed towards the rear of the vehicle along the chassis rail. Secure with cable ties at the existing clipping points.
    Note: Refer to the vehicle workshop manual if removing and installing oil pan guard to install harness.

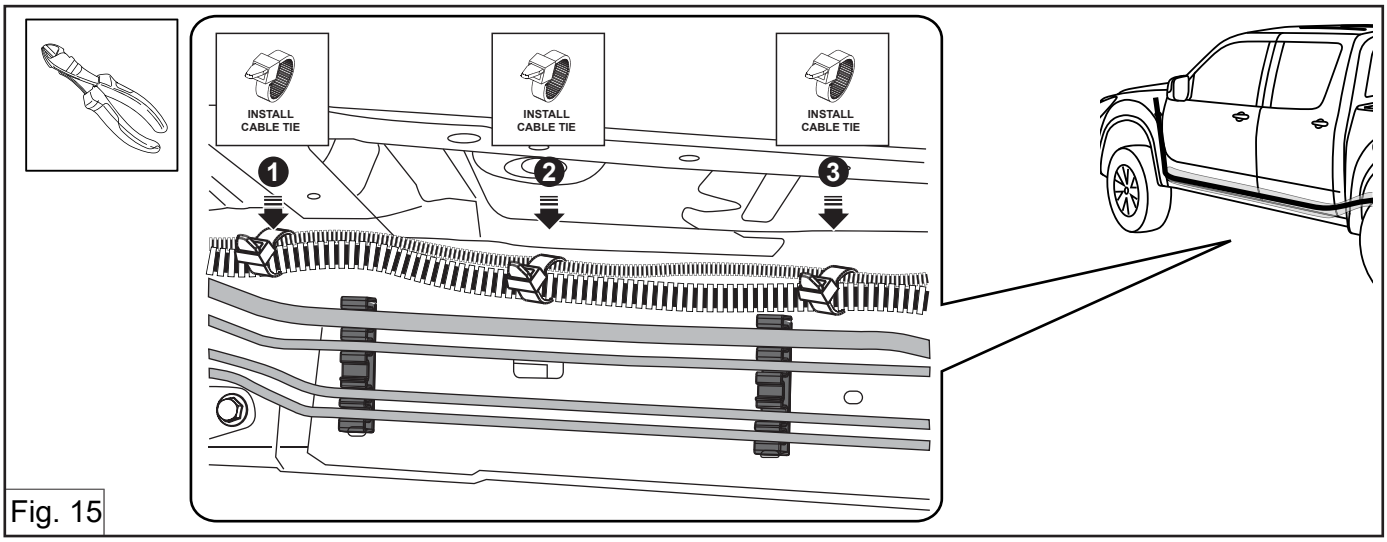


Fig. 15

15. Under the vehicle continue securing the vehicle patch harness LOOM0204 (22) to the existing harness and feed towards the rear of the vehicle along the chassis rail. Secure with cable ties (10) at the existing clipping points.

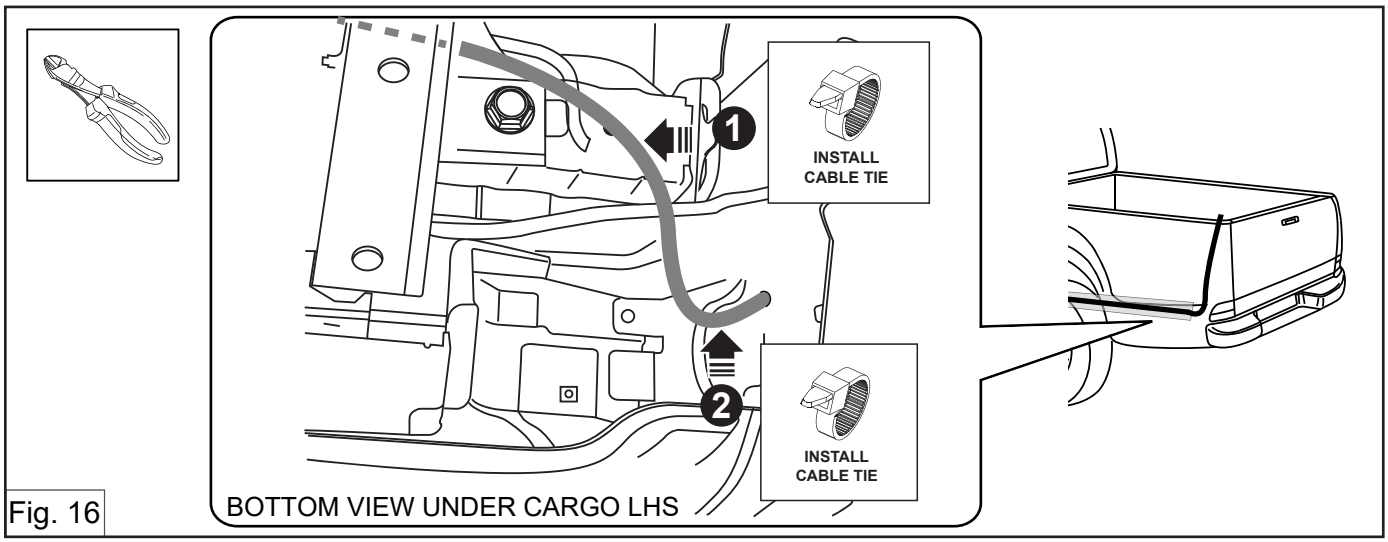


Fig. 16

16. Under the vehicle continue securing the vehicle patch harness LOOM0204 (22) to the existing harness as shown. Secure with cable ties (10) at the existing clipping points.

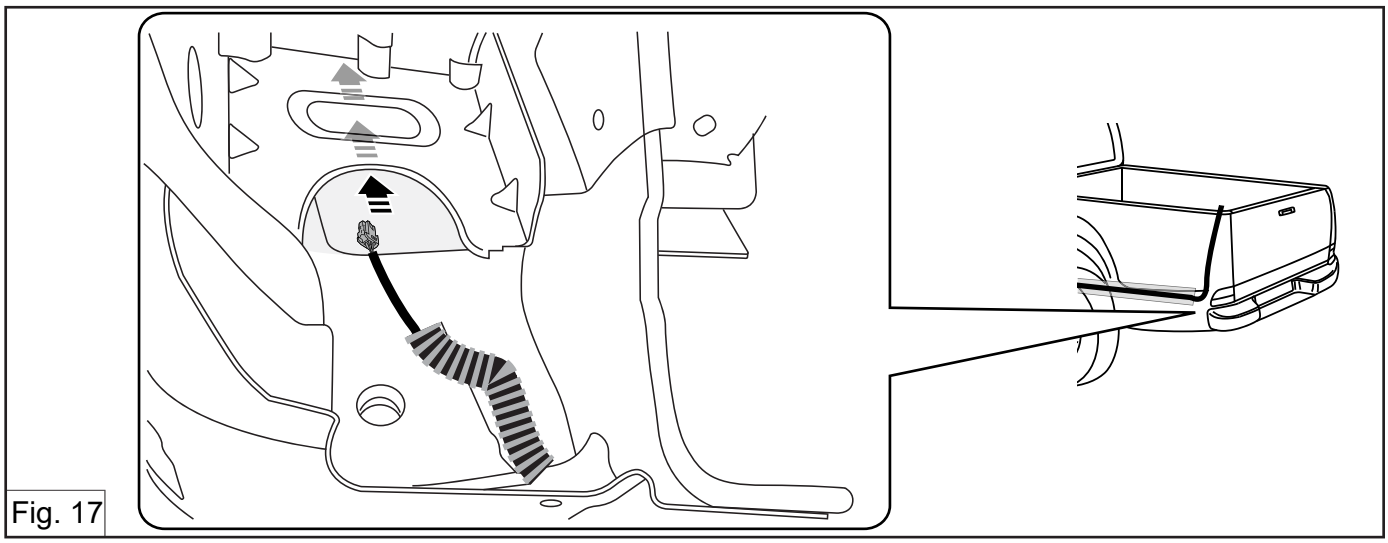


Fig. 17

17. Feed the connector of the vehicle patch harness LOOM0204 (22) up through the hole to the cavity as shown.

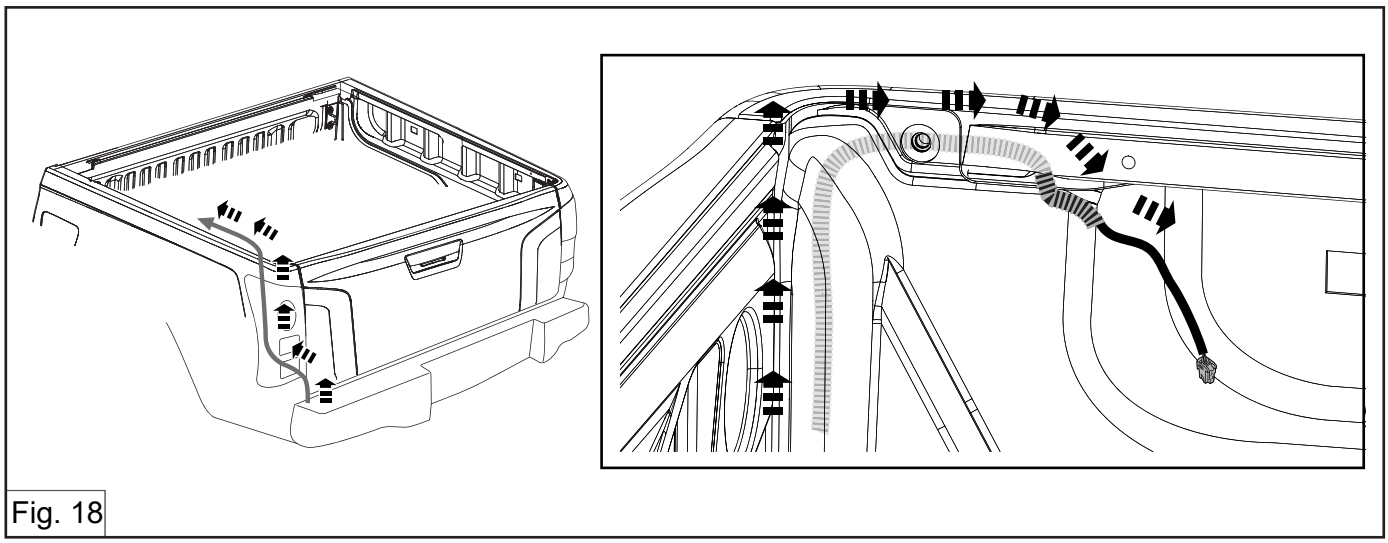


Fig. 18

18. Feed the vehicle patch harness LOOM0204 (22) up through the RR COMB LAMP cavity, through the small opening between panels and into the tub of the vehicle as shown.

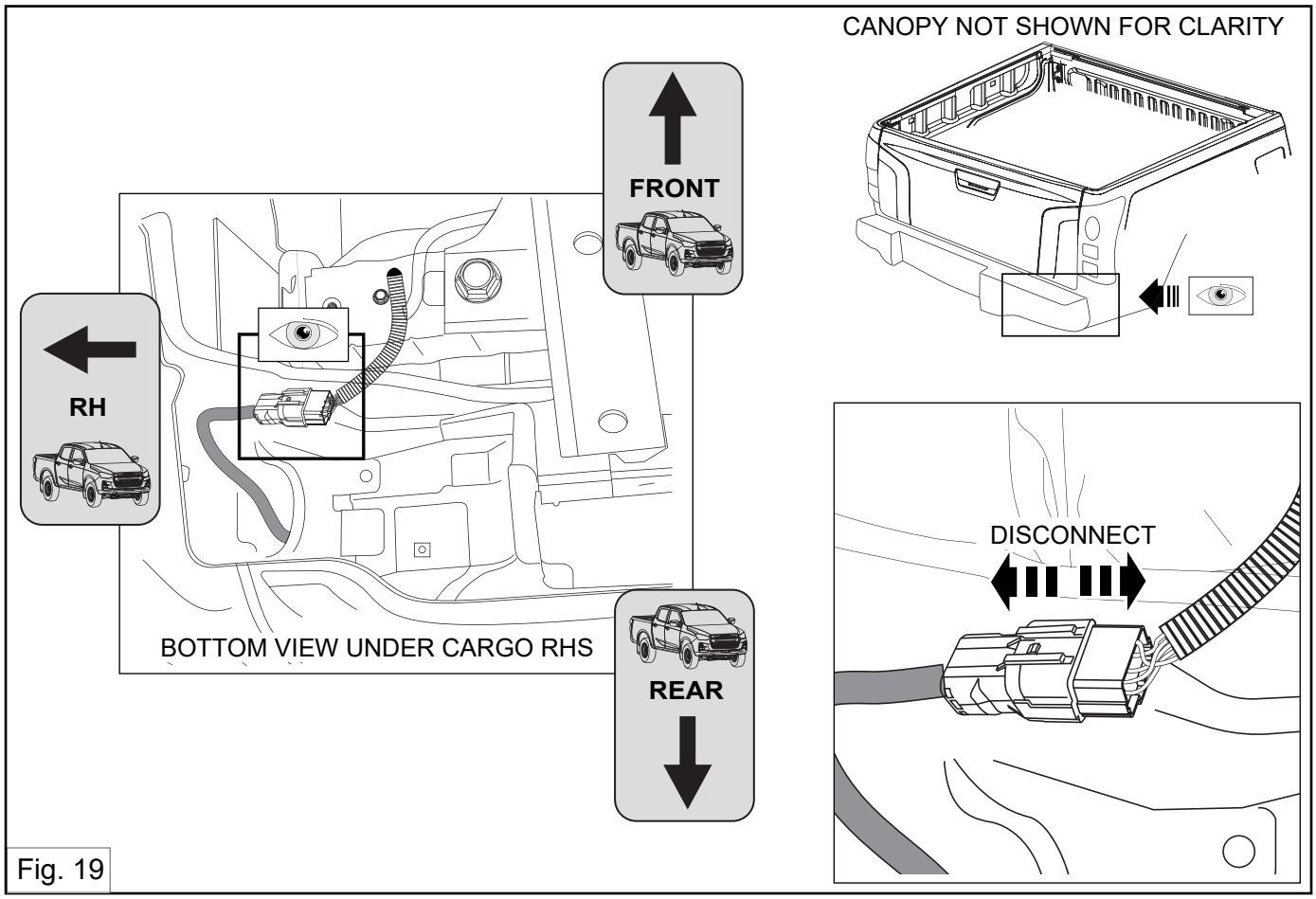


Fig. 19

19. Locate and disconnect the RR Comb Lamp connector underneath the vehicle as shown.

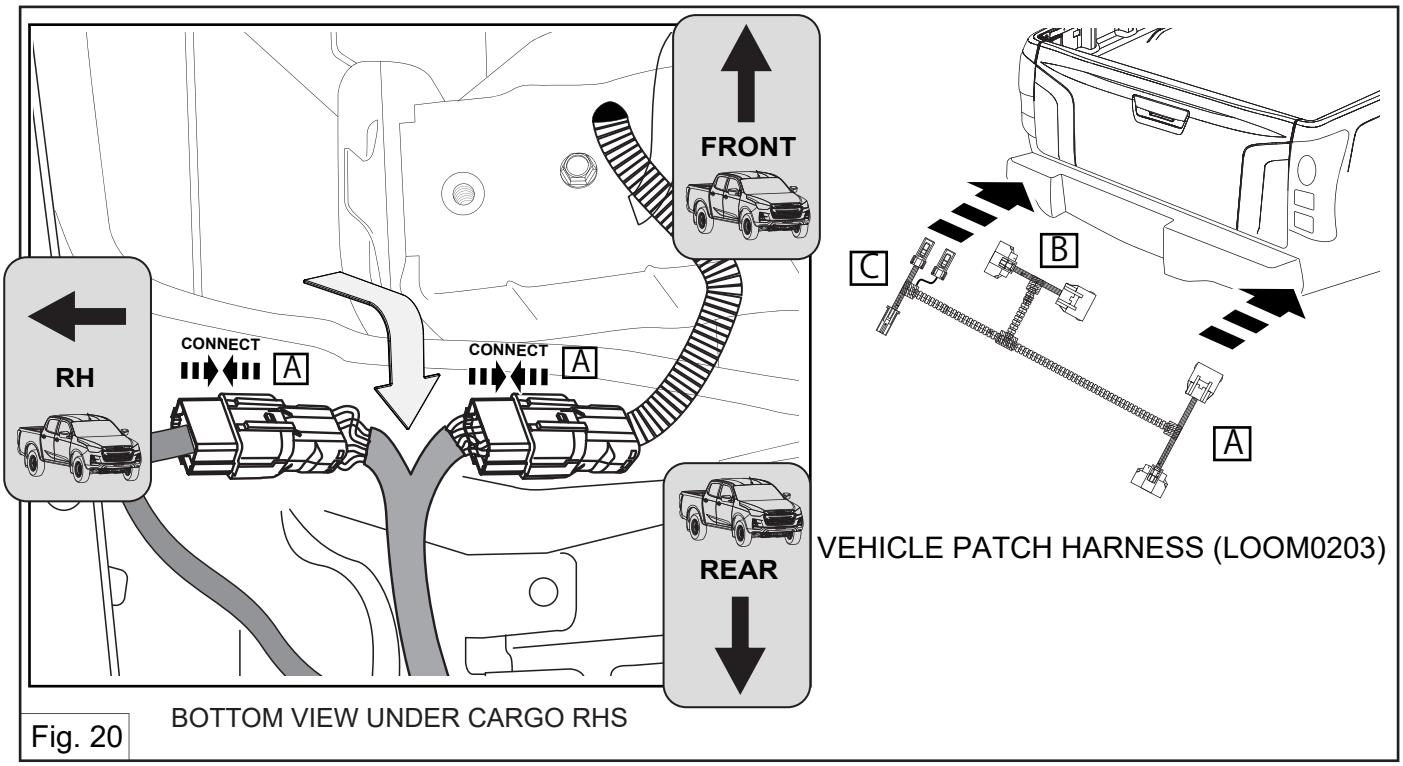


Fig. 20

20. Bridge the male and female connectors from the RR Comb Lamp with the vehicle harness A connectors as shown vehicle patch harness (LOOM0203).

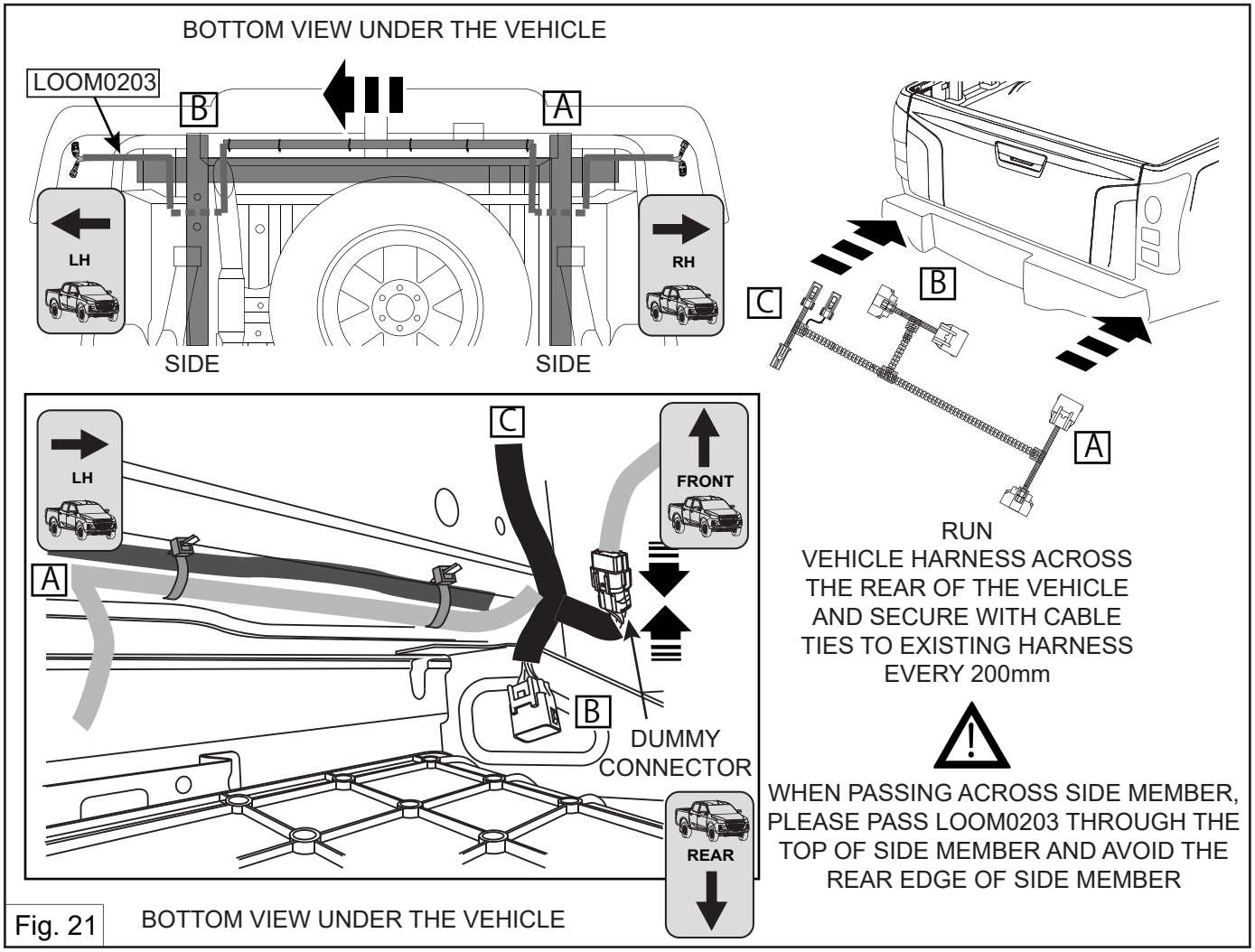


Fig. 21 BOTTOM VIEW UNDER THE VEHICLE

21. Run the vehicle patch harness (LOOM0203) underneath rear of the tub as shown and secure to the chassis or existing vehicle harness using cable ties. Remove dummy connector from existing harness then connect one of the vehicle patch harness (LOOM0203) connectors B to the existing tow bar harness connector. Connect dummy connector to other of the vehicle patch harness (LOOM0203) connector B .

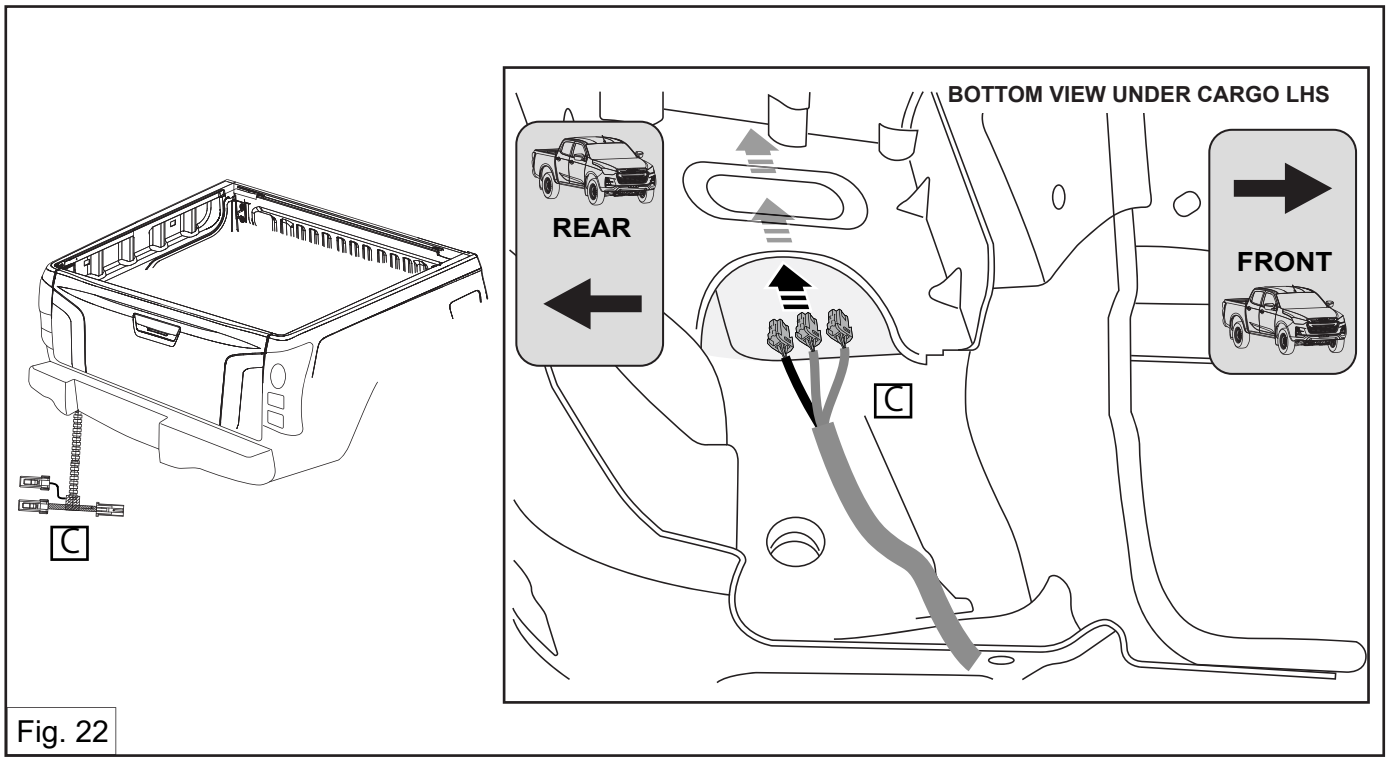


Fig. 22

22. Feed the connector of the vehicle patch harness (LOOM0203) up through the hole to the RR comb lamp cavity.

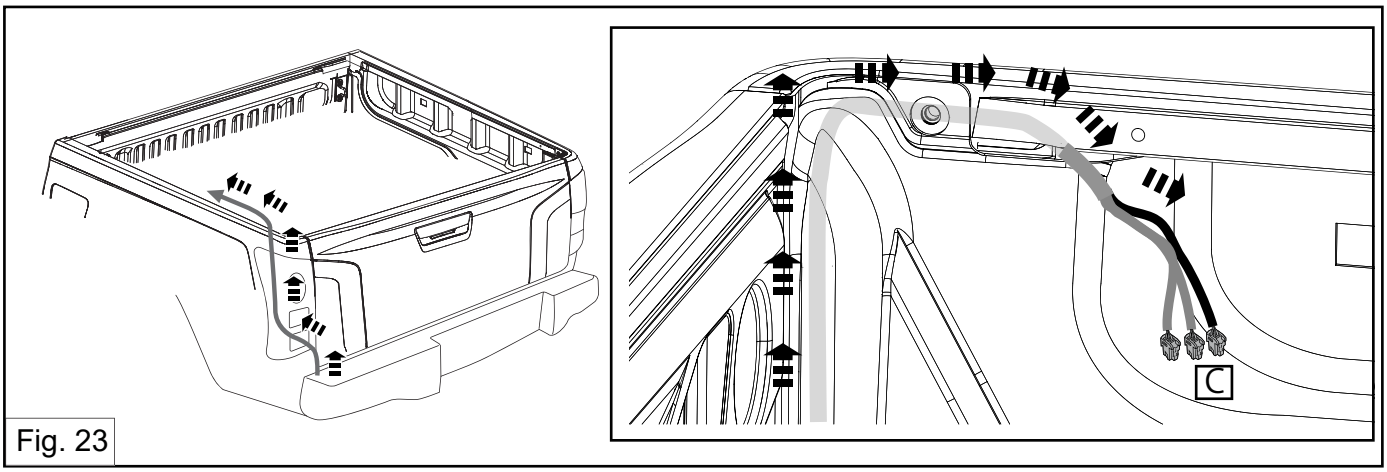


Fig. 23

23. Feed the vehicle patch harness (LOOM0203) up through the RR comb lamp cavity, through the small opening between panels and into the tub of the vehicle as shown.

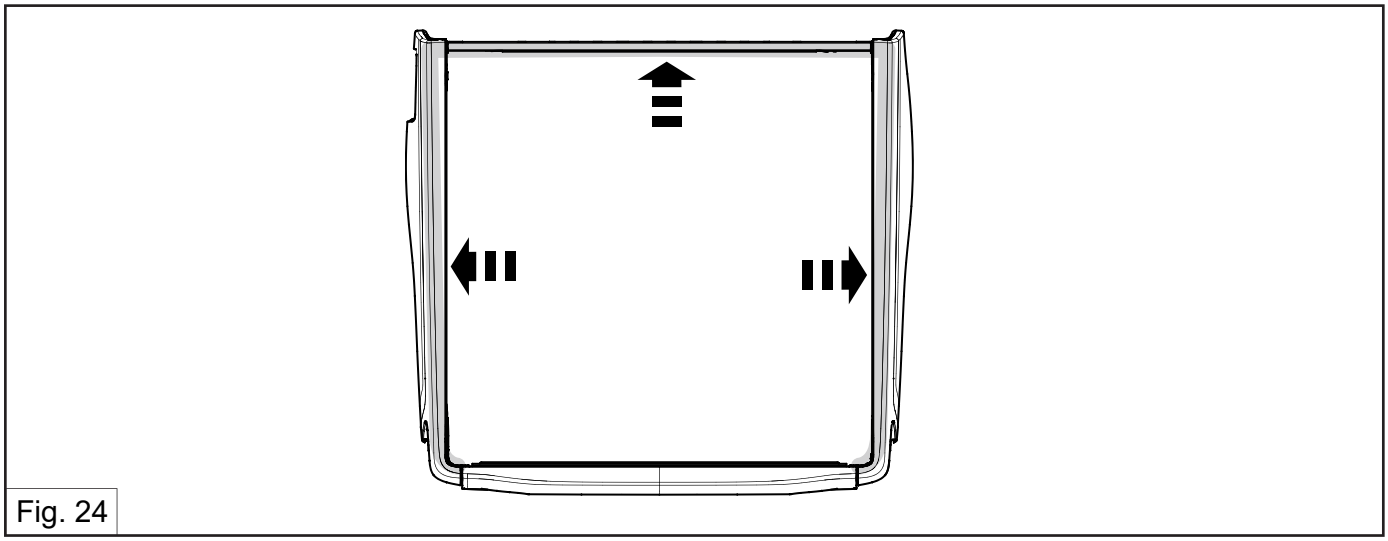


Fig. 24

24. Required tools: IPA spray, Clean dry cloth.

Using an alcohol wipe clean the top surface of the front and side rail and wipe away residue with a clean dry cloth. If heavy cleaning is required use IPA spray and wipe away residue with a clean dry cloth.

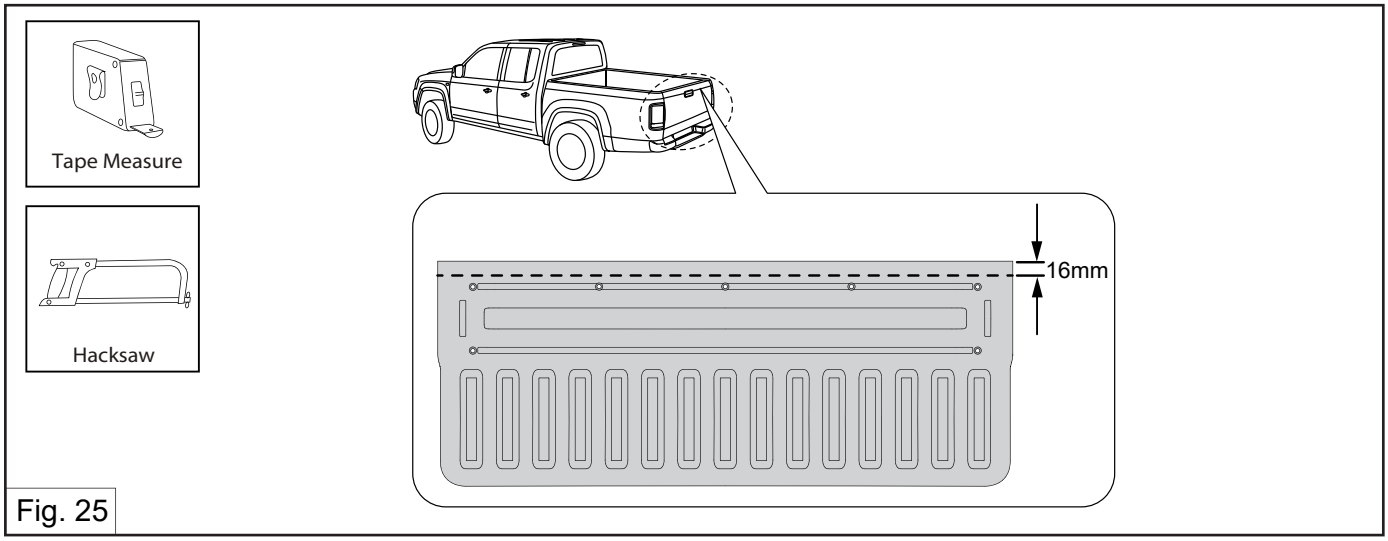


Fig. 25

25. Required tools: Hacksaw, Tape Measure.

Remove the tailgate liner.

Using a hacksaw, remove 16mm of material from the top of the tailgate liner.

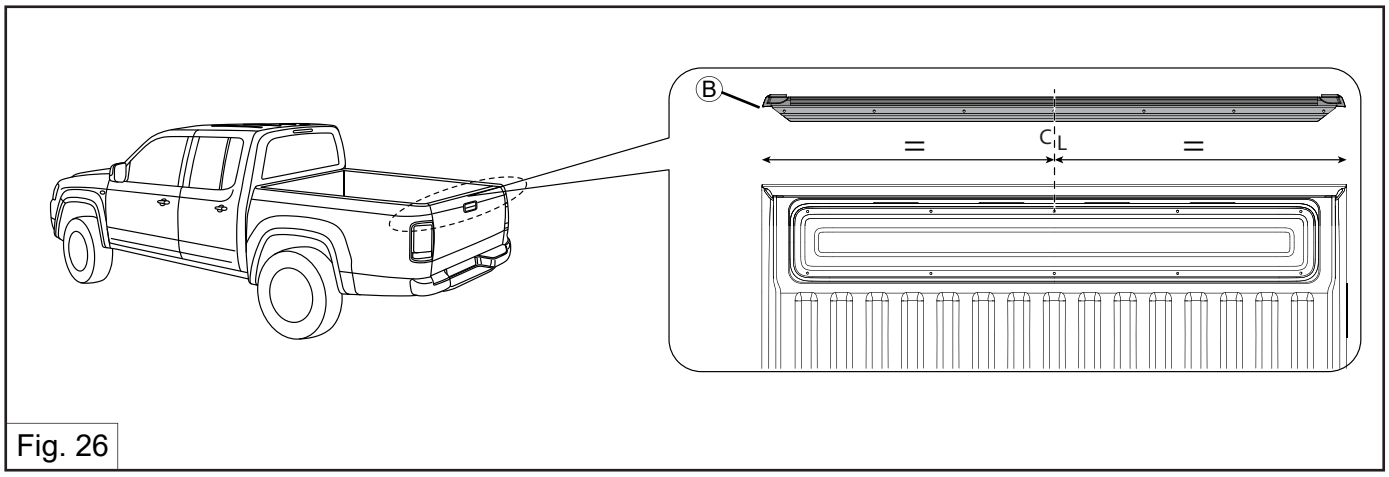


Fig. 26

26. Required tools: Non permanent marker, Measuring tape.

Using a non permanent marker, measure and mark a line across the centre of the (B) Tailgate Rail and the centre of the tailgate (as shown).

Place the (B) Tailgate Rail on the tailgate and check that the tailgate rail is an equal distance from each end of the tailgate. Placing the (B) Tailgate Rail on the tailgate, mark the holes on the front of the tailgate using a non permanent marker. Remove the Tailgate Rail.

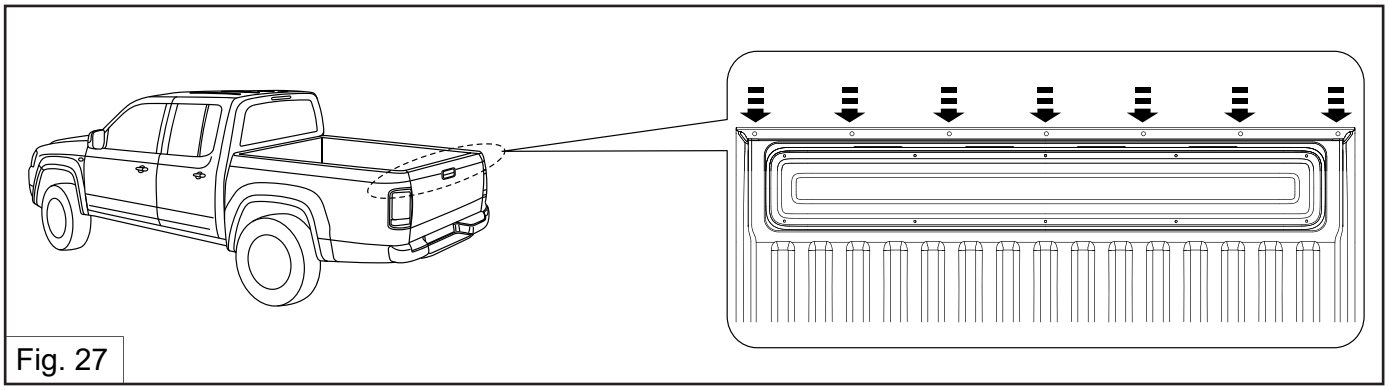


Fig. 27

27. Required tools: Drill & Ø5mm drill bit, Rust inhibitor.

Using the holes marked in the previous step, drill out the seven (7) Ø5mm holes into the tailgate rail. Apply rust inhibitor to all drilled holes in the tub sheet metal.

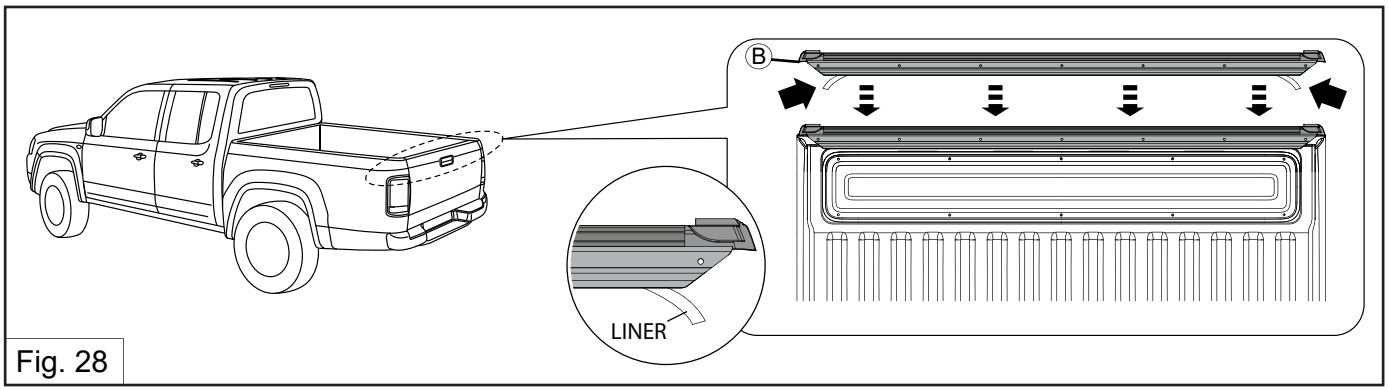


Fig. 28

28. Remove 50mm of liner from each end of the double sided tape applied to the (B) Tailgate Rail.

Important: Ensure the liner is pinned outside of the perimeter of the tailgate rail when the tailgate rail is applied.

Fit the tailgate rail to the tailgate, aligning with the previously marked centre lines.

Loosely insert the rivets through the holes in the tailgate rail and into the tailgate, then remove liner from the double sided tape by pulling on the liner hanging from the ends of the rail.

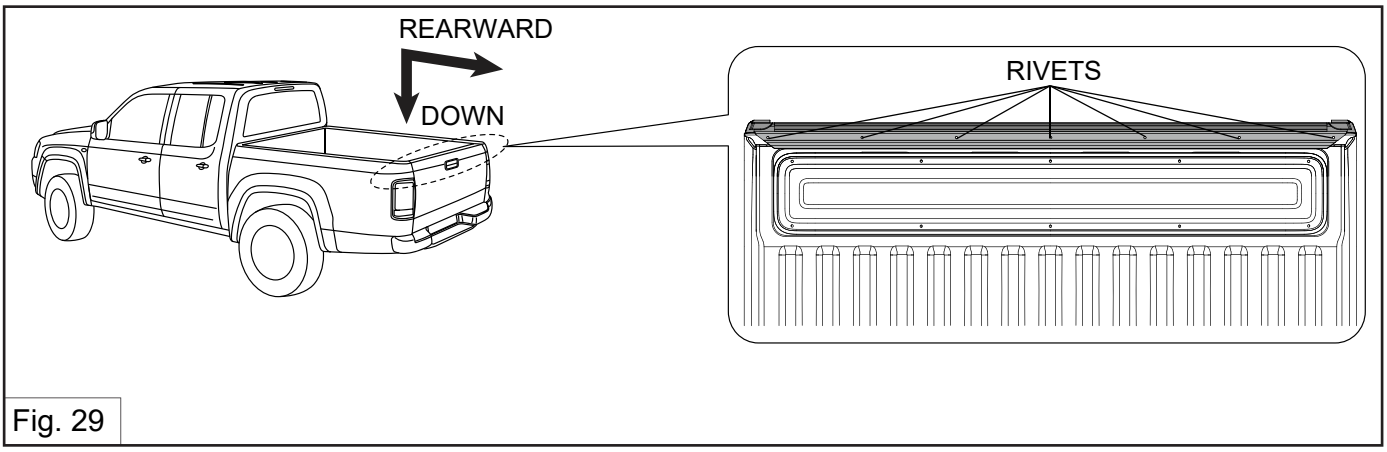


Fig. 29

29. Required tools: Rivet gun for stainless steel rivets.
Secure the tailgate rail with seven (8) Rivets.
Apply firm pressure rearwards and down on the tailgate rail to ensure maximum adhesion of the tape.
Refit the tailgate liner (if required).

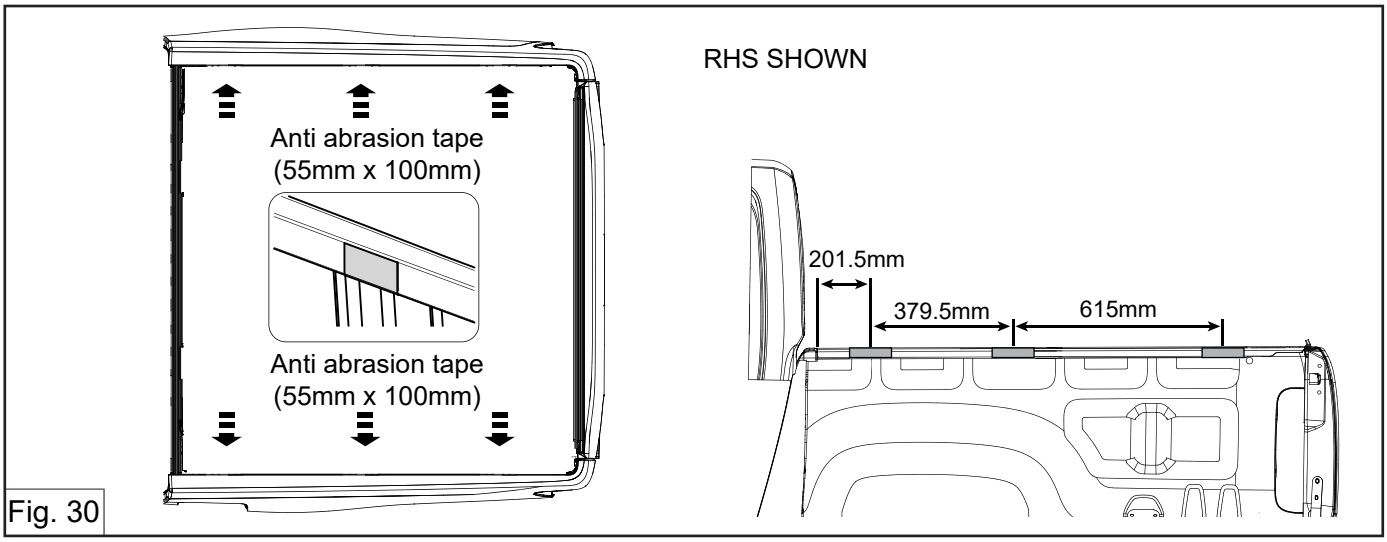


Fig. 30

30. Required tools: Measuring tape
Measure positions on the tub from the front rail as shown. Place 3 Anti abrasion tapes (9) centrally on the measured positions on the inside side rails.
Repeat for LHS.

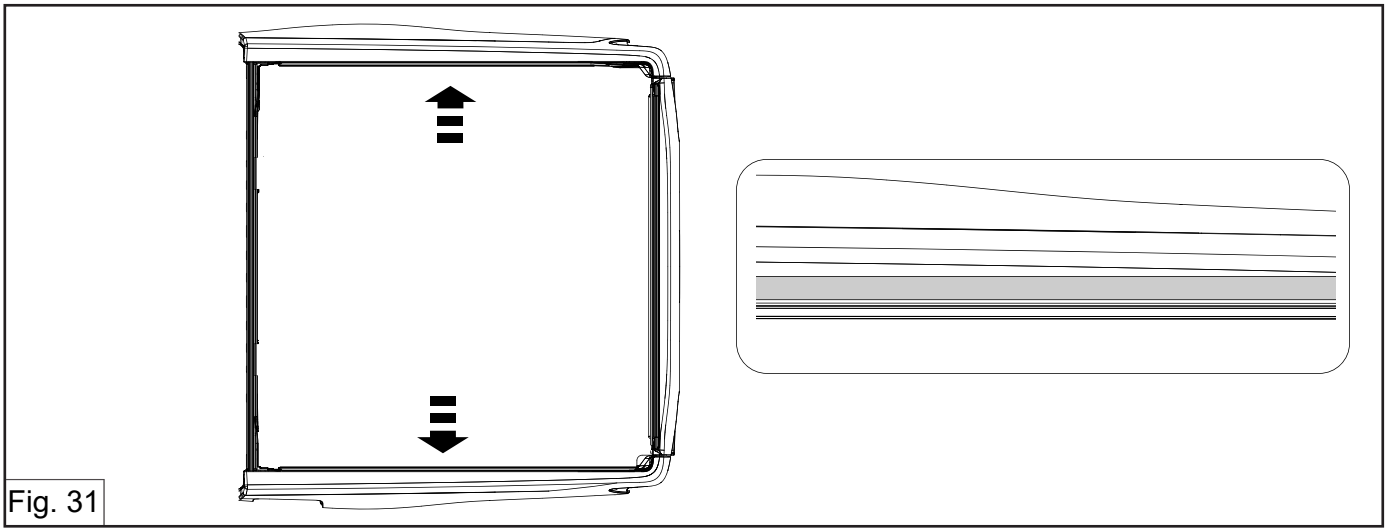


Fig. 31

31. Required tools: IPA spray, Clean dry cloth
Using an alcohol wipe clean the top surface of the side rails and wipe away residue with a clean dry cloth. If heavy cleaning is required use IPA spray and wipe away residue with a clean dry cloth.

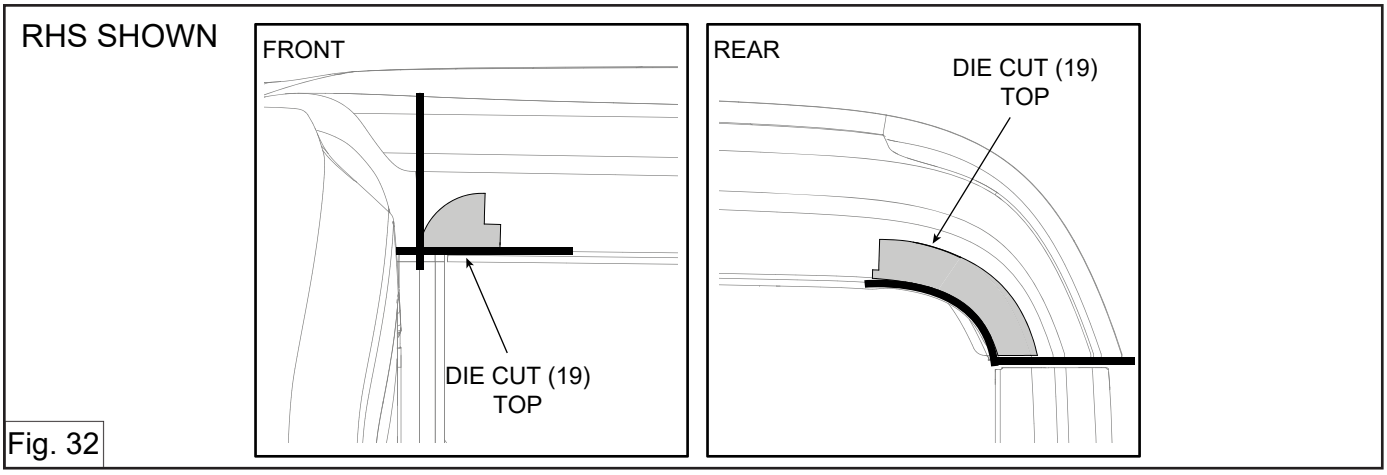


Fig. 32

32. Apply clear die cut anti-abrasive tape to the tub corners (19) as shown.

Important: 70% IPA can be used between the tape and the tub to help position tape.

Important: Align neatly to the edges of the radii as shown.

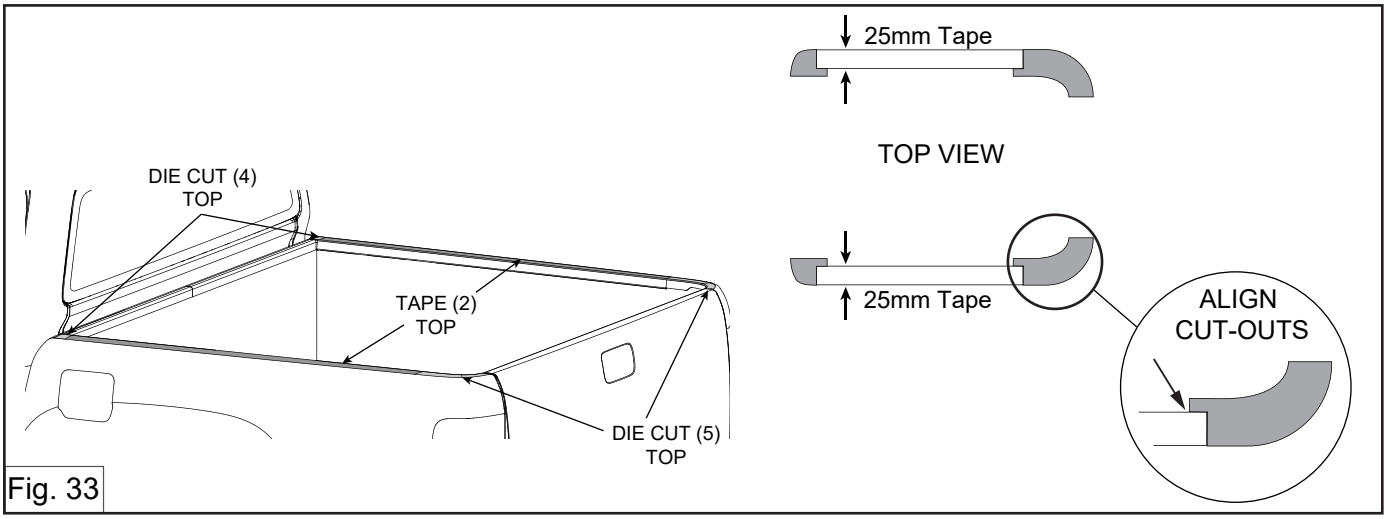


Fig. 33

33. Apply clear die cut anti-abrasive tape to the tub corners (20) as shown.

Important: Align 25mm tape carefully with cut-out alignment features in die cut corners as shown.
NOTE: Ensure there are no ripples on the tape.

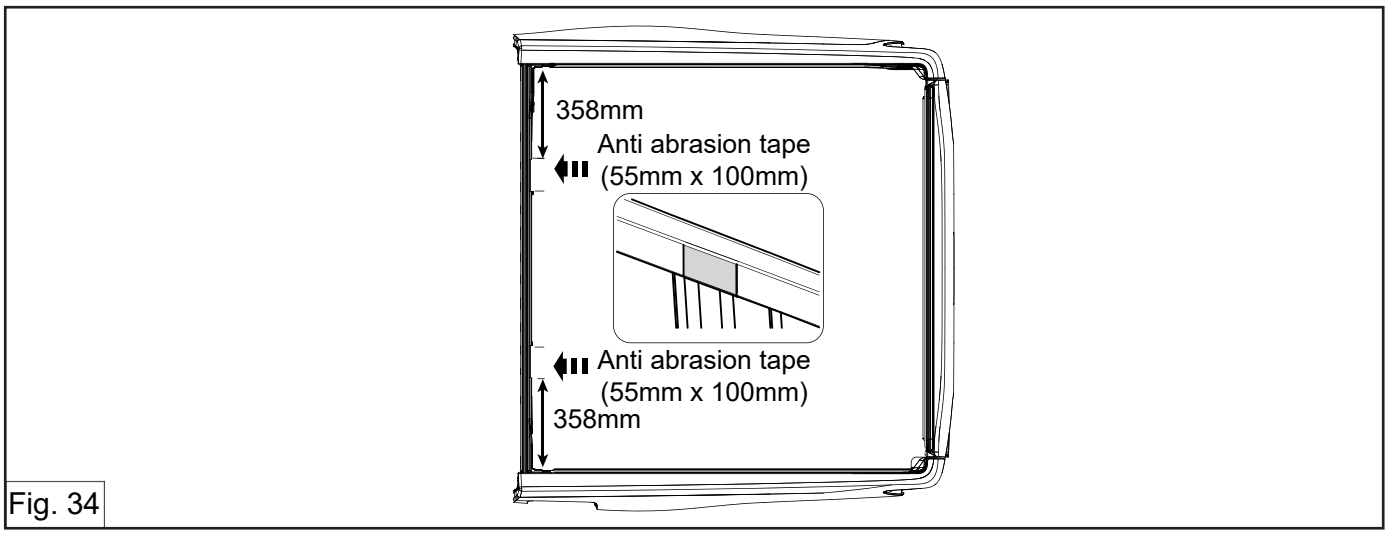


Fig. 34

34. Apply two pieces of (9) Anti abrasion tape 55x100mm to the front of the tub where the stop bracket will contact the tub. Measure 358mm from the inside tub rail.

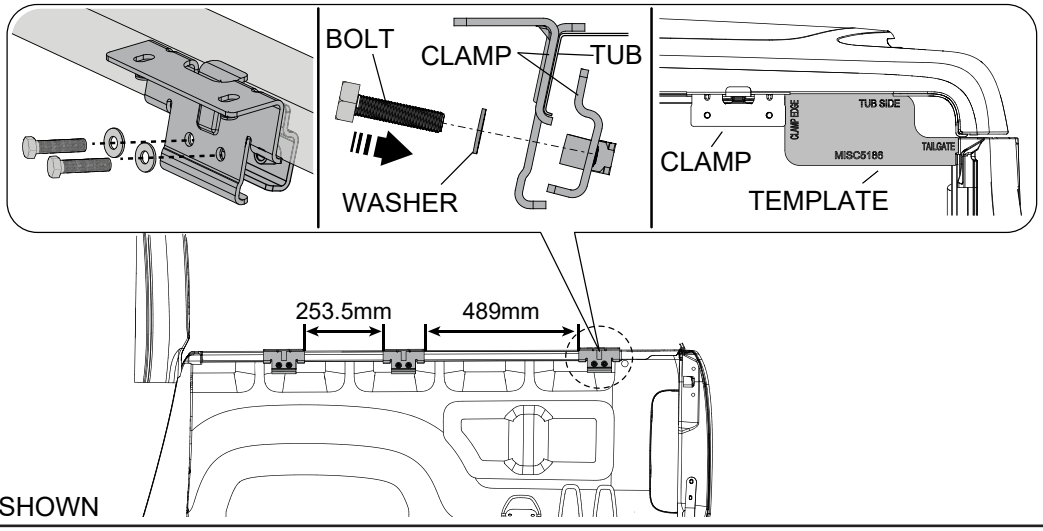


Fig. 35 RHS SHOWN

35. Required tools: 13mm Socket

Loosely secure the first Rail Clamp (1, 2) to the side rail near the rear of the tub on the RHS using two M8x30 Bolts (4), M8 Washers (5) and the inner and outer Rail Clamp (2, 1) pieces as shown. Using the provided Clamp Template (15), align by the tailgate and the side rail, sliding the clamp to butt against it. Tighten the clamp to Torque 20Nm so it won't move.

From the front facing edge of the clamp, measure 489mm and secure the second clamp then 253.5mm and secure the third clamp as shown. Repeat for LHS.

Important: Remove the keys secured to the rear door of the canopy before proceeding.

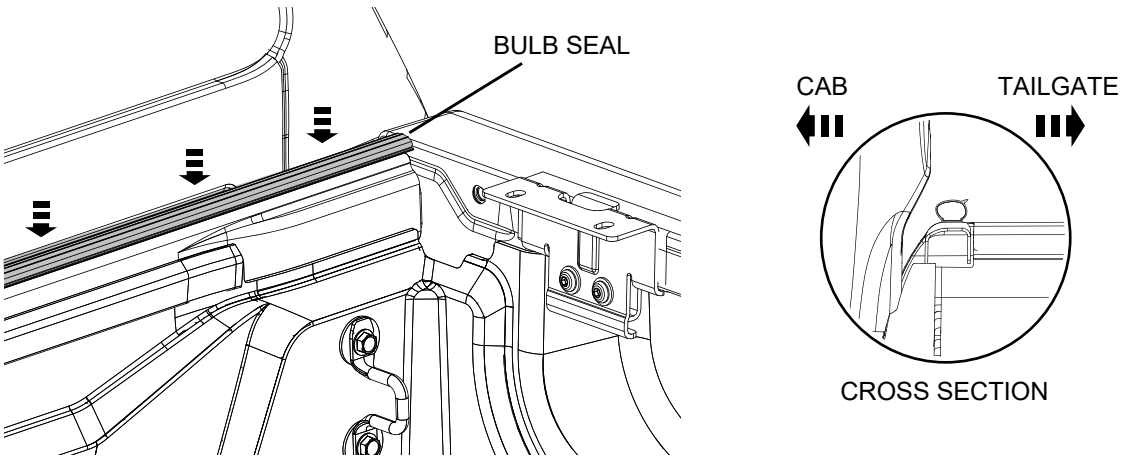


Fig. 36

36. Clean the top of the front tub rail with Alcohol Wipe (12) and apply Primer (13). Allow to dry.

Fit the Bulb Seal (11) along the center of the rail with the lip of the bulb seal facing towards the tailgate. Press firmly to adhear the double sided tape.

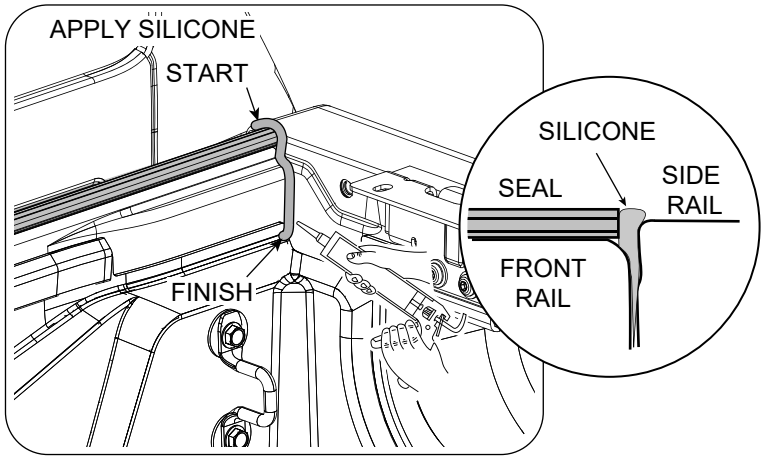


Fig. 37

37. Required tools: Silicone & Gun.

Apply a bead of silicone in the corner gap between the front and side rail as shown.

Important: Apply at an angle to ensure that the silicone enters the space between the top of the front rail and side rail for the optimal seal.

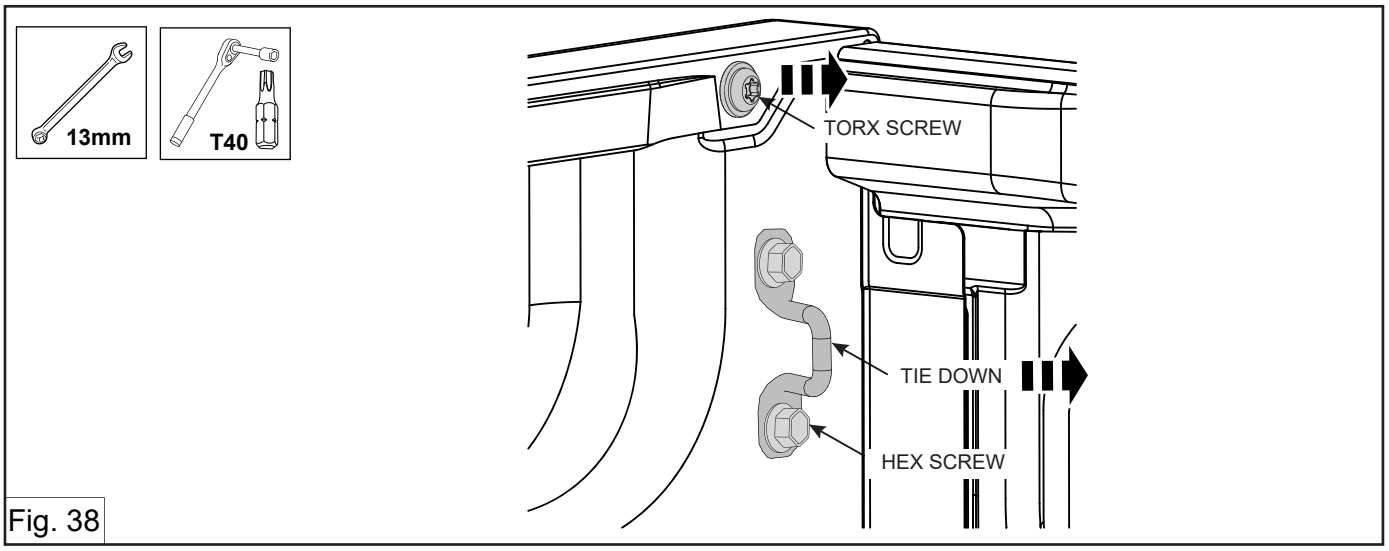


Fig. 38

38. Required tools: 13mm Spanner & T40 Torx Bit.

Remove the Torx screw from the tub front side rail (LHS shown). Remove the two hex screws holding the tie down hook and retain the Torx screw and both hex screw. Repeat for the RHS.

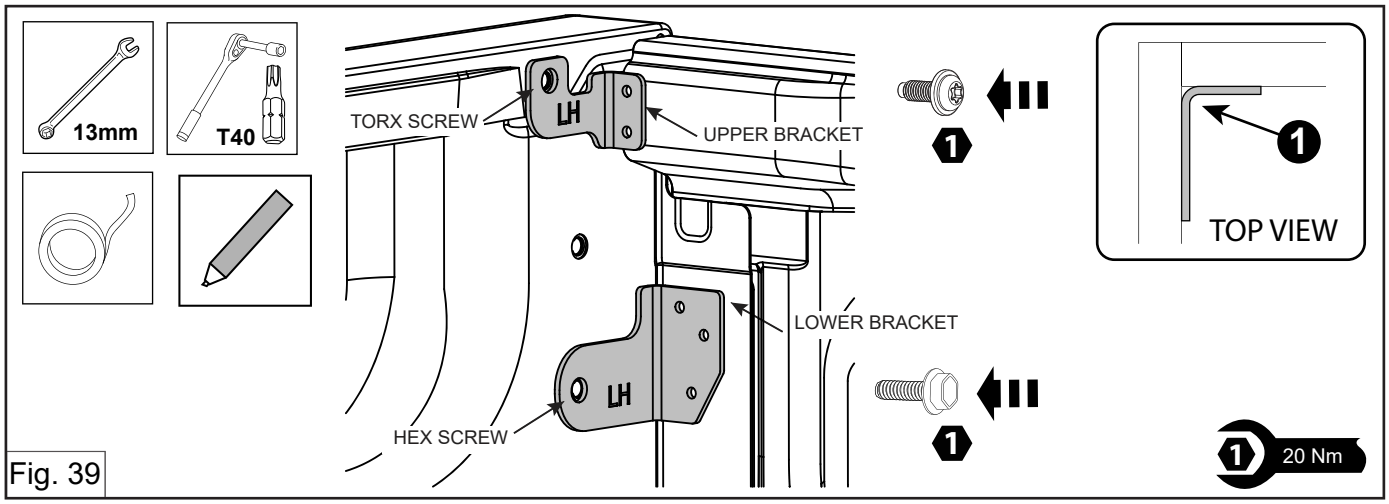


Fig. 39

39. Required tools: Drill, 13mm Spanner, T40 Torx Bit, Torque Wrench & Rivet Gun.

Cover the tub area under the brackets for marking purpose with masking tape and place the reinforcement plates (27, 29) in the LHS tub front corner as shown. Temporarily fix the brackets to the tub using the previously removed screws as shown. Ensure bracket is flush with tub (1).

Mark the 5 holes centers using the brackets as a guide. Remove brackets. Repeat for the RHS.

Note: Brackets must be mounted directly to the tub if a tubliner is fitted.

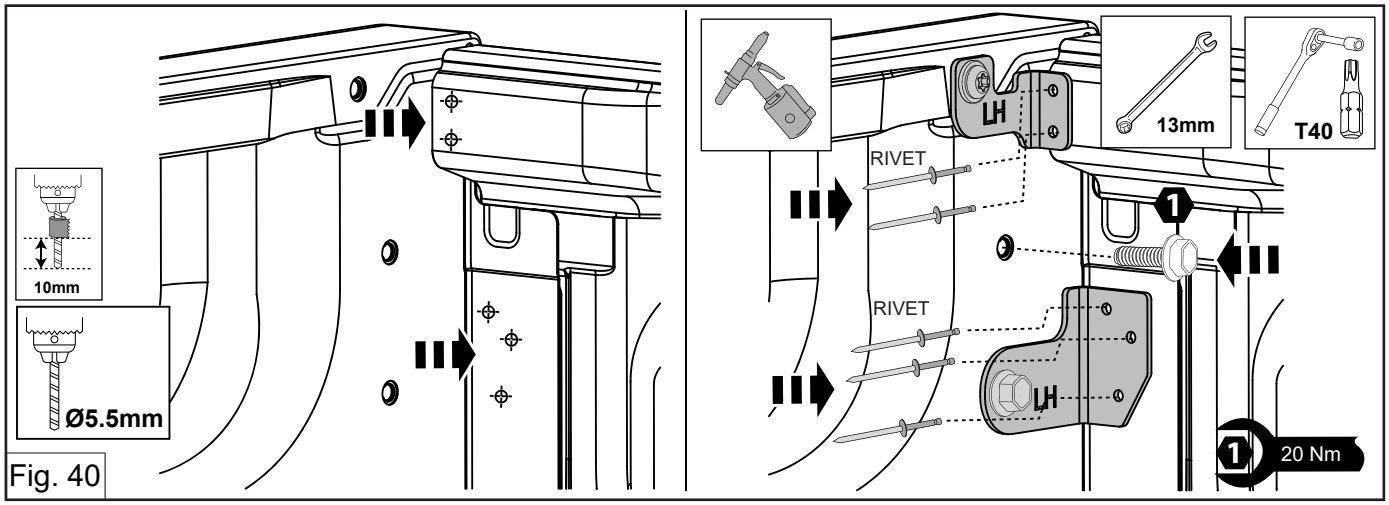


Fig. 40

40. Required tools: Drill, 13mm Spanner, T40 Torx Bit, Torque Wrench & Rivet Gun.

Drill the 5 hole location with 5.5mm drill bit set to 10mm depth. Apply rust inhibitor (14) to the holes. Fit brackets (27, 29) using retained bolts and provided rivets (31) as shown. Repeat for the RHS. Refit third bolt as shown. Torque to 20Nm.

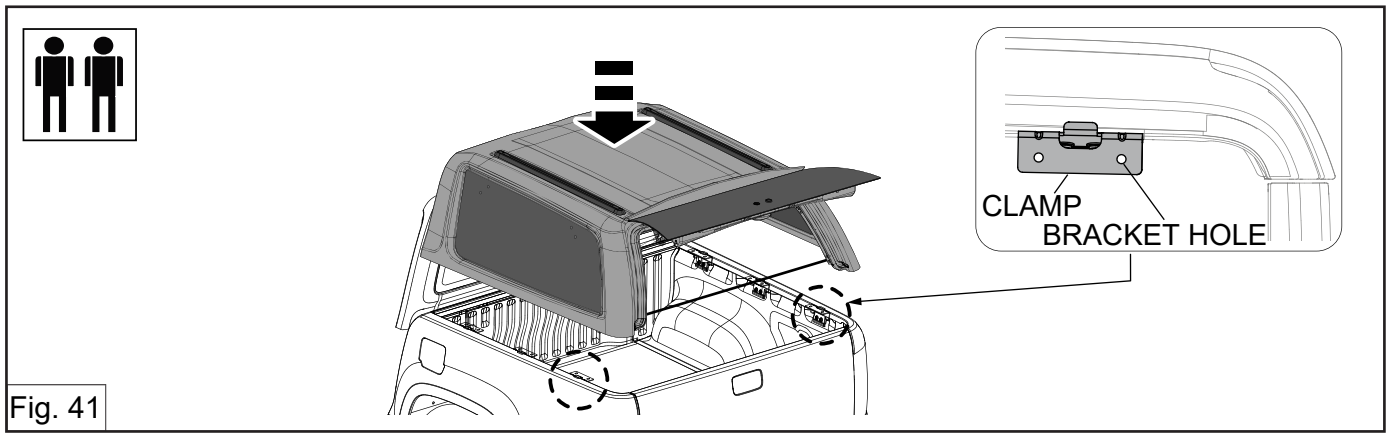


Fig. 41

41. With the rear canopy window open, gently lower the canopy (A) onto the tub, ensuring it is seated evenly on the tub sides, and slightly back. Align the rear datum hole in the canopy base rail with the hole in the rear clamp bracket (1) as shown.
Position the canopy to be central sideways by checking the side alignment and front holes of the side rail placed over the side clamp brackets. Position the canopy to be central sideways by checking the side alignment and front holes of the side rail placed over the side clamp brackets.
Important: The installation should be performed by two or more people for safety and efficiency.

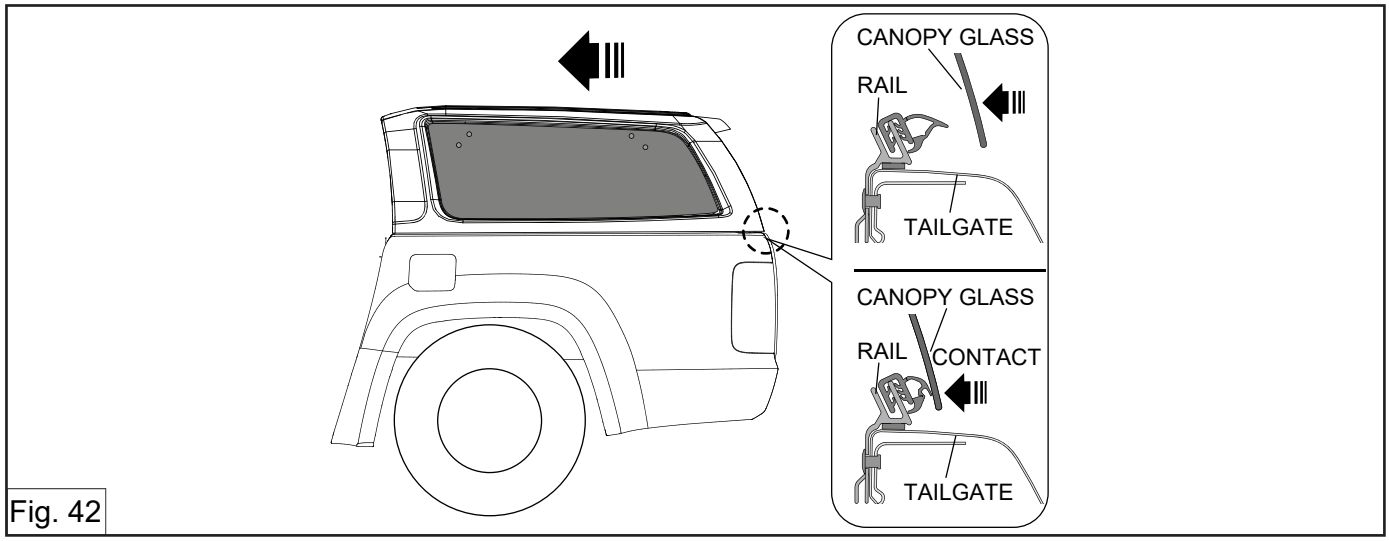


Fig. 42

42. With one person inside the canopy (A), slowly close the rear canopy window, and note how it closes. It should not touch the top of the tailgate and fully compresses the rubber extrusion of the tailgate rail (B).

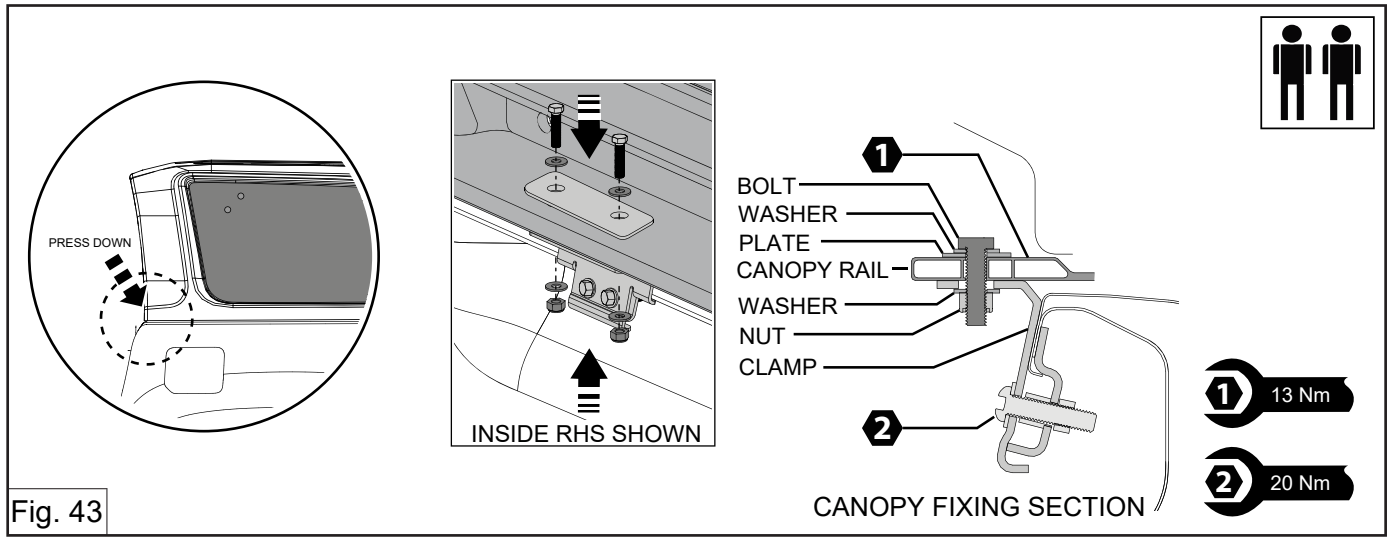
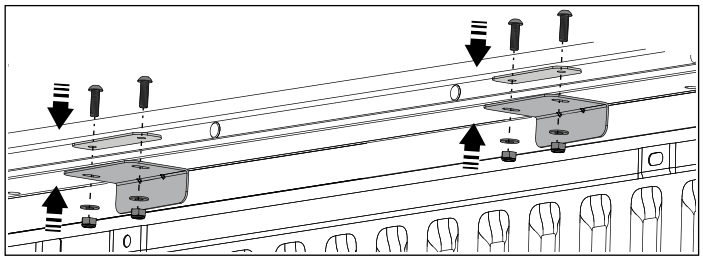


Fig. 43

43. Required tools: Torque wrench. Press down the front end of the canopy & install the front clamp then the middle clamp (1) using the M8x30 bolts (4), M8 washers (5), top plates (7), and M8 clutch nuts (6) provided.
Torque to 13Nm.
Important: The installation should be performed by two or more people for safety and efficiency.



SECTION VIEW

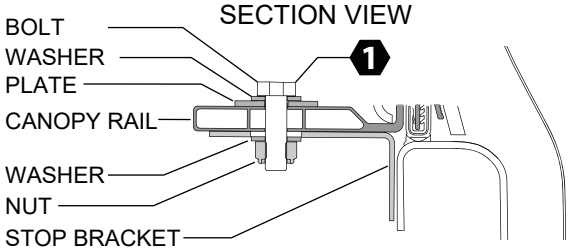


Fig. 44

44. Required tools: 13mm socket & Torque wrench
Locate the holes in the front rail of the canopy (A) and attach the stop brackets using the M8 bolts (4), washers (5), top plates (7) and clutch nuts (6) provided. **Torque to 13Nm.**

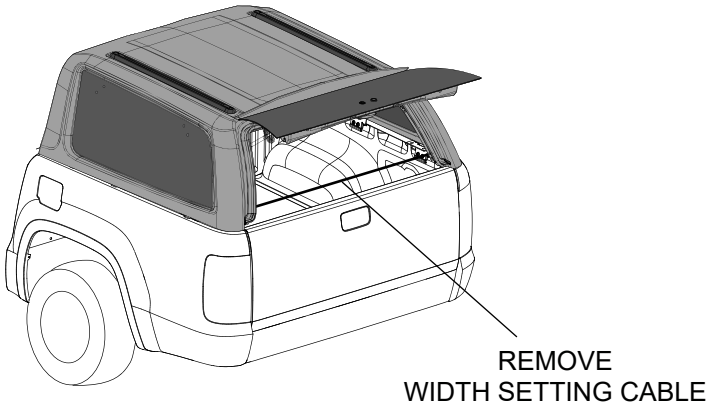
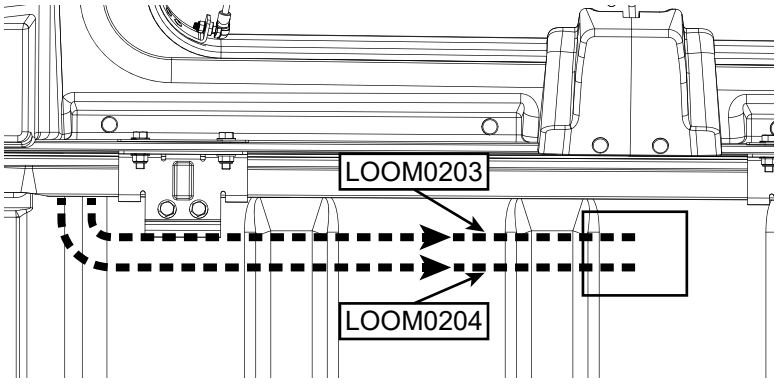


Fig. 45

45. Remove width setting cable from rear of the canopy (A).



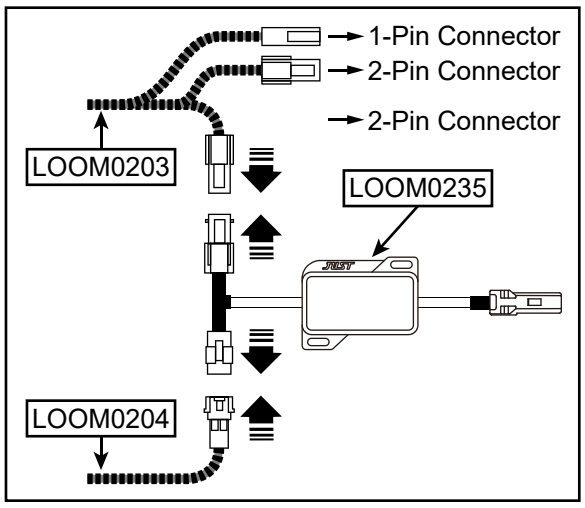


Fig. 46

46. Feed the Vehicle Patch Harness LOOM0204 (22) and Vehicle Patch Harness LOOM0203 (17) from the rear left corner of the tub to halfway toward the front.
Connect LOOM0204 to the indicated female connector of the Canopy T-Patch LOOM0235 (23), and one of the 2 Pin connectors from LOOM0203 to the indicated male connector of the Canopy T-Patch LOOM0235 (23).

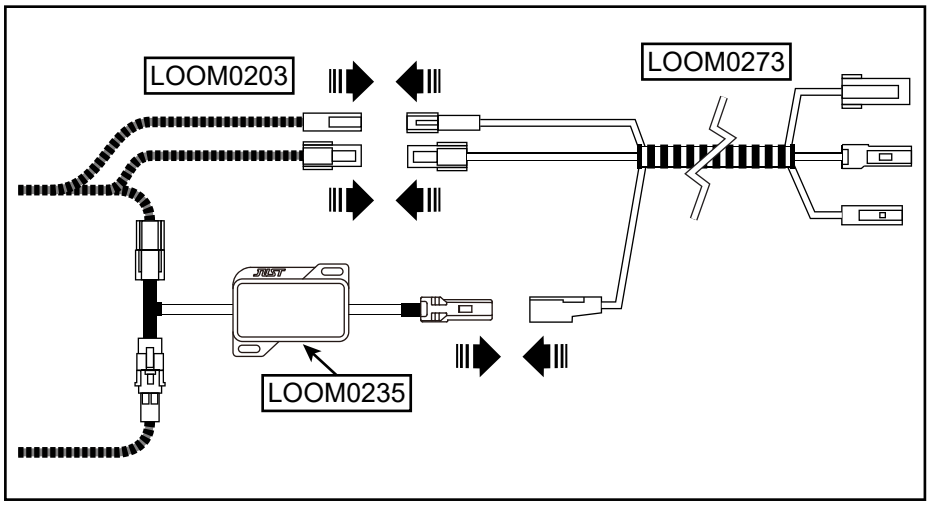


Fig. 47

47. Connect the female 1 Pin connector from LOOM0203 (17) to the 1 Pin Connector from the Extension Harness LOOM0273 (26). Connect the female 2 Pin connector from LOOM0203 (17) to the 2 Pin Connector from the Extension Harness LOOM0273 (26). Connect the female 3 Pin connector from LOOM0235 (23) to the 3 Pin Connector from the Extension Harness LOOM0273 (26).

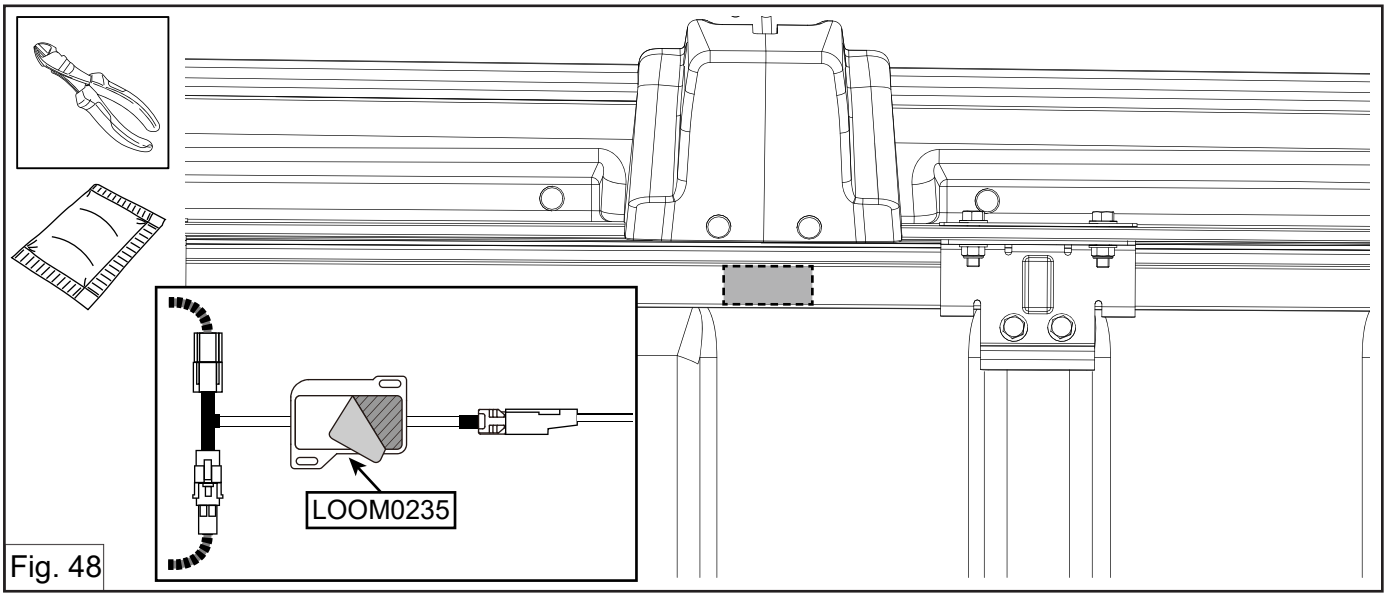


Fig. 48

48. Clean the indicated location under the tub flange with an Alcohol Wipe (12). Remove the liner backing and stick the Canopy T-Patch LOOM0235 (23) under the tub flange as shown.

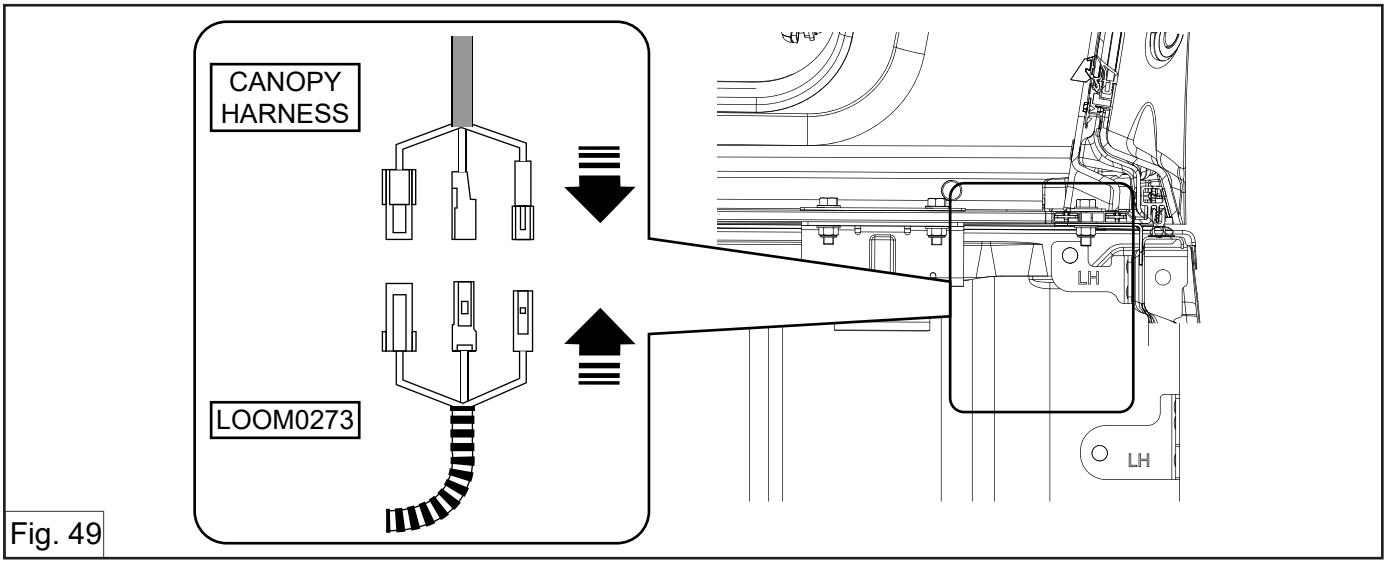


Fig. 49

49. Connect the 1 Pin to 1 Pin, 2 Pin to 2 Pin and 3 Pin to 3 Pin connectors from the Extension Harness LOOM0273 (26) to the Canopy harness in the front left corner of the tub.

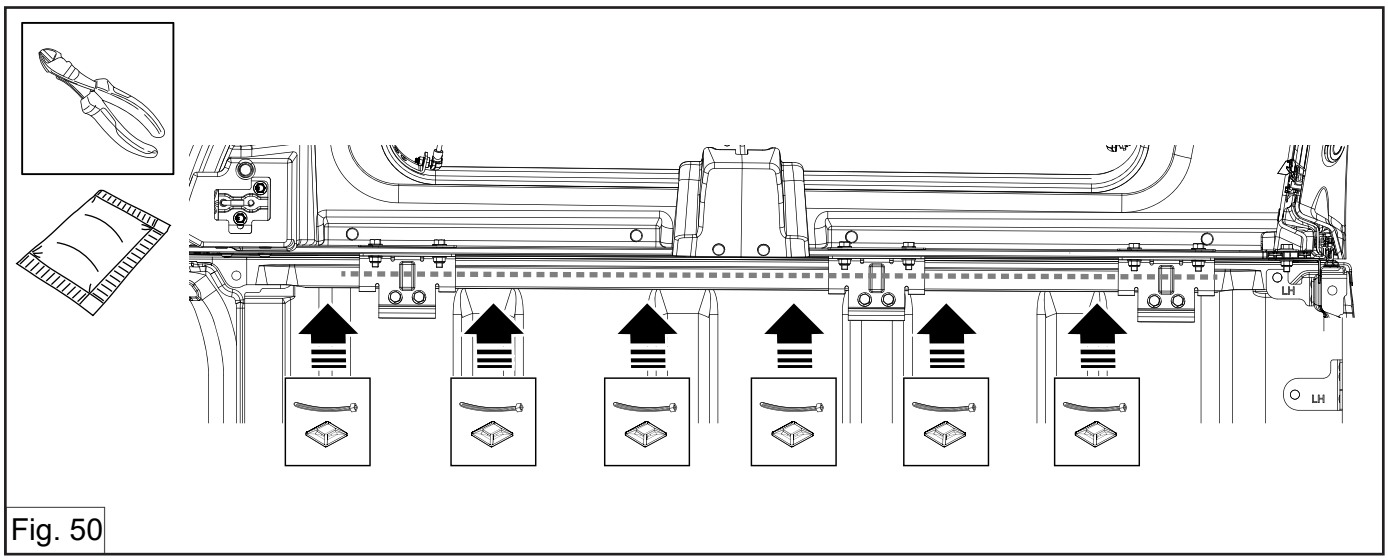


Fig. 50

50. Secure all harnesses under the tub flange as shown with cable tie M (14) and cable tie base (13). Note: Clean installation points using alcohol wipe (11) before sticking cable tie base (13).

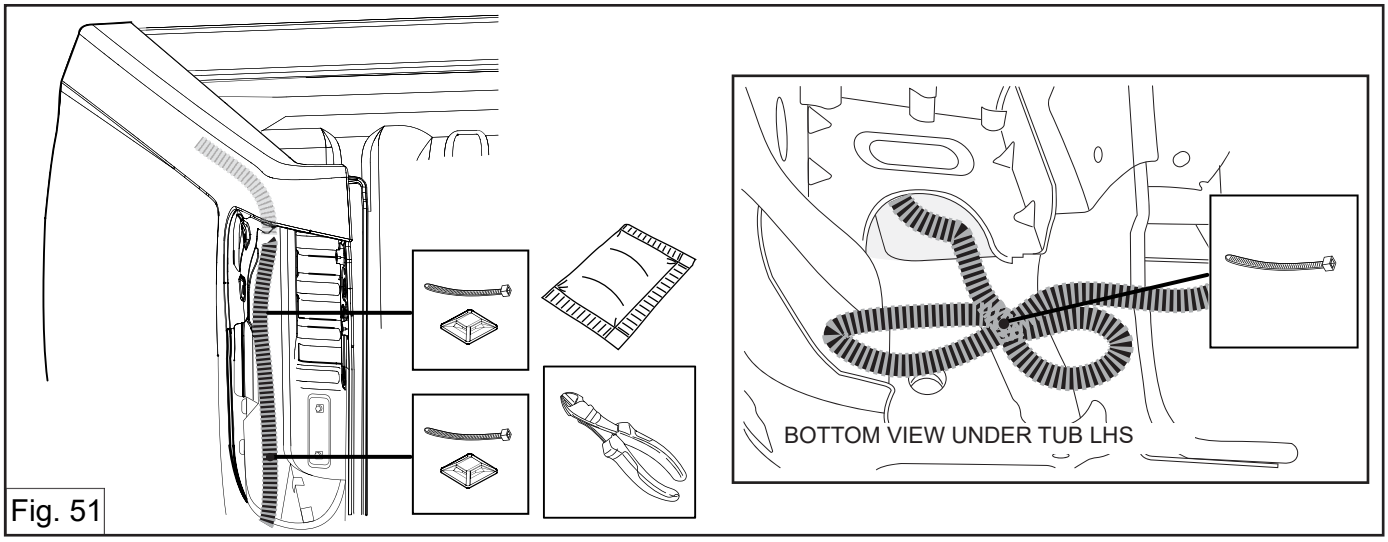


Fig. 51

51. Straighten and secure vehicle patch harness LOOM0204 (22) in the tail light cavity and secure with cable tie M (10) and cable tie base (18). Also tidy up the loose vehicle patch harness LOOM0204 (22) and secure with cable tie (10) under the vehicle. Note: Clean installation points using alcohol wipe (12) before sticking cable tie base (18).

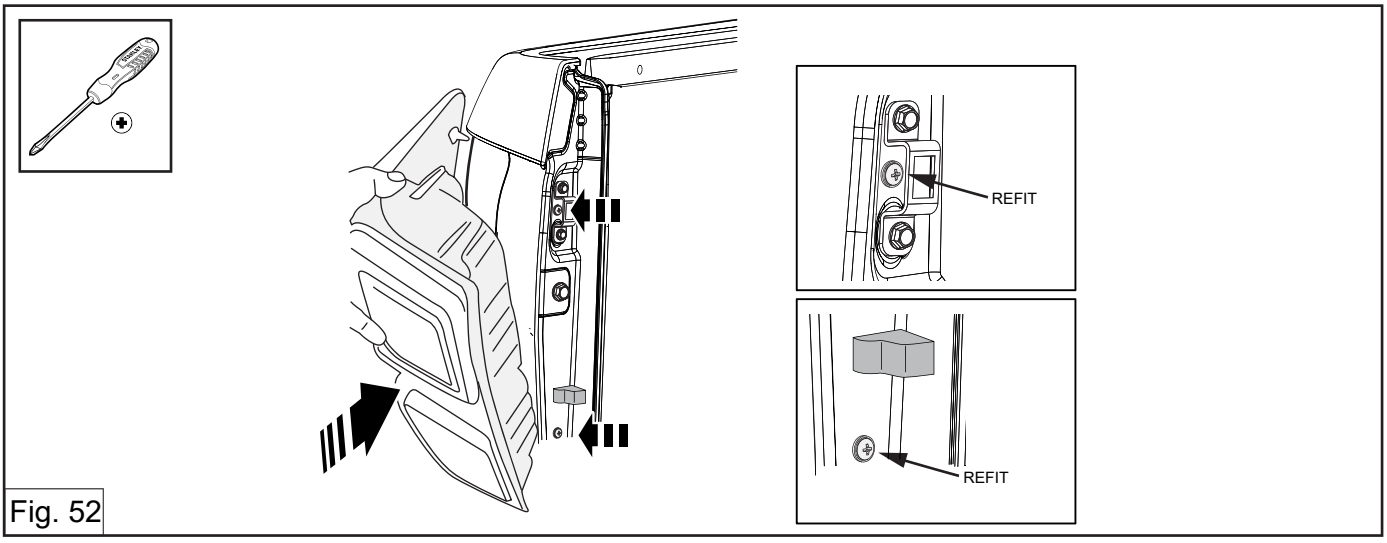


Fig. 52

52. Re- install tail light with the two retained screws.

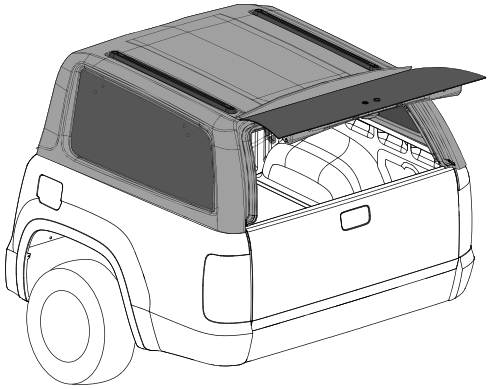


Fig. 53

53. Reconnect the negative battery terminal. Check the function of the Canopy Central Locking.
Caution: After installation return all parts original position.
Note: Refer to the vehicle workshop manual for tightening battery terminal.

STRIKER ADJUSTMENT GUIDE

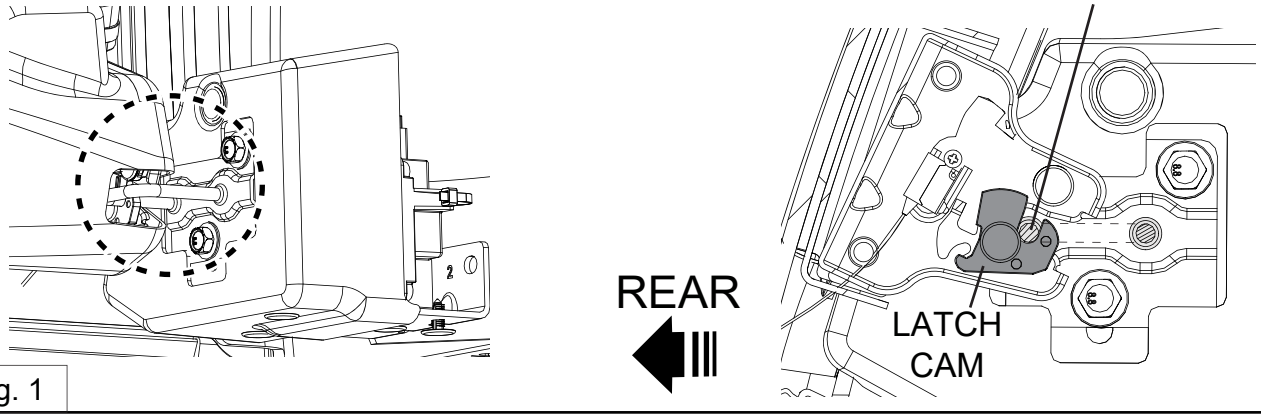


Fig. 1

1. Check that the Striker on both sides of the canopy closes correctly. The Latch Cam is a single stage locking mechanism. Listen for a single distinct click from each side of the canopy window when locking or unlocking the window. If the Latch Cam does not produce a click on either side of the window, the Striker is not engaging the Latch Cam correctly.

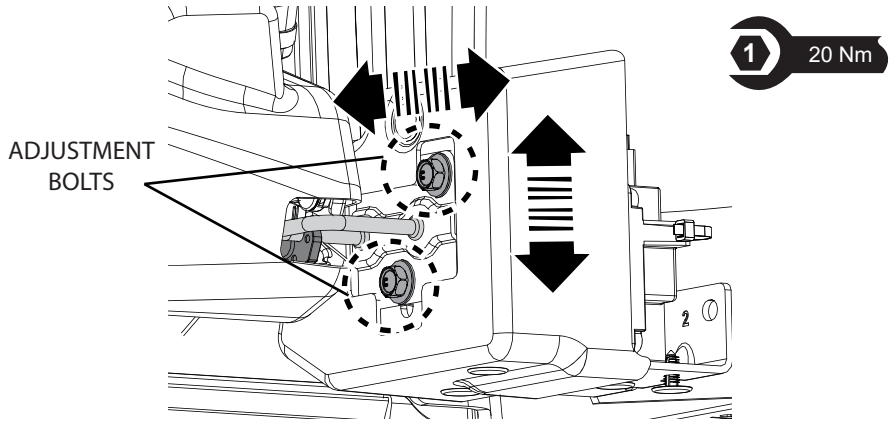


Fig. 2

2. If the striker is not engaging the latch, the depth or height of the Striker will need to be adjusted. To adjust, slightly loosen the adjustment bolts, and move the striker incrementally horizontally or vertically. Appropriately tighten the bolts and test the mechanism after each incremental change.The Striker should be centrally aligned with the Latch Cam. The Latch Cam should not catch or scrape the Striker on engagement or release. If catchment is occurring, readjust the Striker. Once desired result is achieved, torque the striker adjustment bolts to 20Nm.

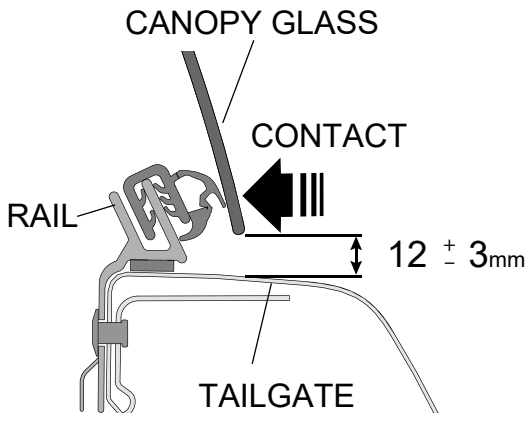


Fig. 3

3. Carefully close the window, ensuring the glass does not contact the tailgate. Ensure there is a minimum 9mm gap (15mm max) between the glass and the top of the tub. For an appropriate seal and correct latching to occur, the clearance gap must be within the values specified and also be approximately equal on both sides of the canopy. Adjust accordingly.

Example:
- If the LHS clearance gap is 12mm;
- The RHS clearance gap must be 12 ± 3mm.

If the rear window glass clearance measures outside of the above-mentioned min (9mm) and/or max (15mm) values, please contact EGR After Sales Support.