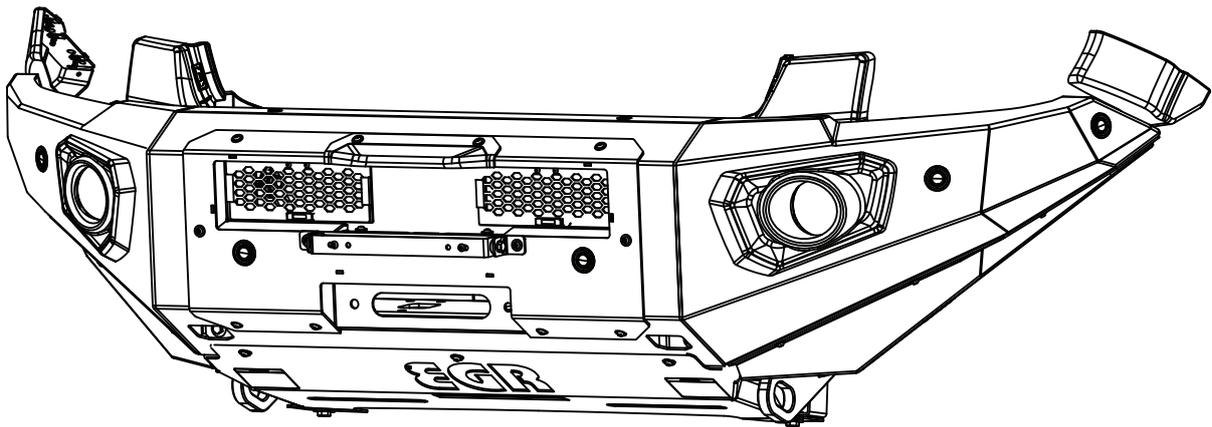




FITTING INSTRUCTION

Ford Ranger MY22 EGR CrossTrac Bullbar

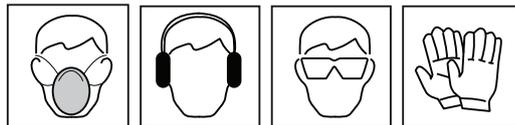


Caution

- Do not attach Vehicle Front Protection System (VFPS) to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- Do not remove the plaque or label from the VFPS.
- Do not modify the structure of the VFPS in any way.
- Do not attach EGR CrossTrac Bullbar to the vehicle using anchorages not intended for this purpose (eg. engine mounting points).
- Do not use this product for any vehicle make or model, other than those specified in this document.
- Do not modify the structure of the Bullbar in any way.

Safety Notes

- Check that all work practices comply with safety standards.
- Please wear appropriate clothing and use safety equipment.



General Notes

- Read through the fitting instructions before installation of accessory.
- Always install the accessory following the fitting instructions. Failure to do so may cause damage to the vehicle or the accessory.
- Ensure all recyclable discarded vehicle accessory components and packaging are recycled following local recycling regulations.
- Safely store and protect any removed vehicle components.
- Ensure that all lamp and sensor function is checked after fitment.

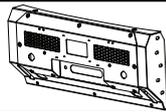
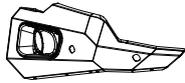
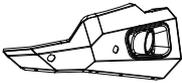
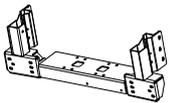
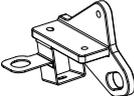
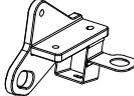
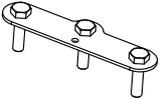
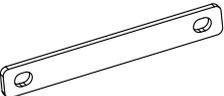


Care Instructions

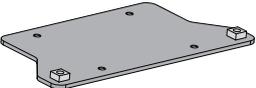
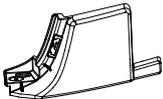
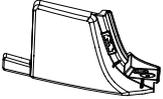
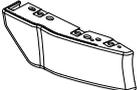
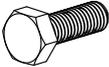
- Do not use any other mounting location / method other than described in this instruction.
- It is advisable to seek assistance of another person when installing this product.
- Repair or modification may affect proper operation of the airbag resulting in serious injury.
- Ensure all torque settings are followed.
- To maintain your Bullbar wash regularly with car wash detergent, hose off and chamois dry.
- Stubborn grime can be removed with kerosene.



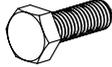
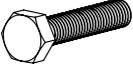
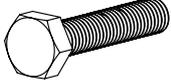
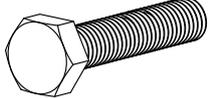
Parts Supplied (Assemblies)

ITEM	DESCRIPTION	QTY	IMAGE
1	Centre Grille Assembly	1	
2	Returns Assembly LHS	1	
3	Returns Assembly RHS	1	
4	Winch Cradle	1	
5	Bash Plate	1	
6	Undercover LHS	1	
7	Undercover RHS	1	
8	Recovery Hook LHS	1	
9	Recovery Hook RHS	1	
10	Mount Bracket Inner LHS	1	
11	Mount Bracket Inner RHS	1	
12	Bolt Plate	2	
13	Strap	2	
14	Number Plate Mount Assembly	1	

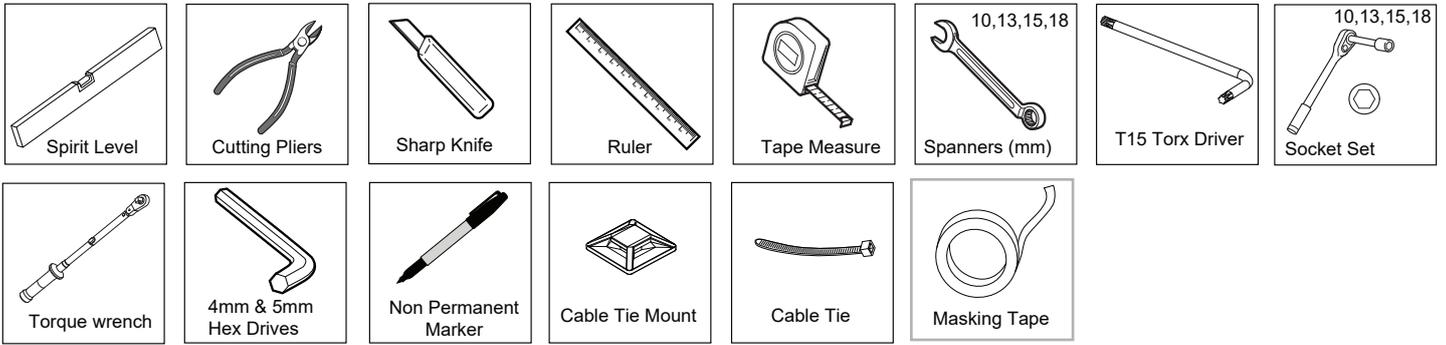
Parts Supplied (Hardware Kit)

ITEM	DESCRIPTION	QTY	IMAGE
15	Parking Sensor Bezel	6	
16	Parking Sensor Blank	6	
17	Parking Sensor Bezel Nut	6	
18	Radar Cover	1	
19	Winch Control Box Bracket	1	
20	Parking Sensor Extension Loom (LOOM0357)	2	
21			
22	Grille Moulding LHS	1	
23	Grille Moulding RHS	1	
24	Fender Moulding LHS	1	
25	Fender Moulding RHS	1	
26	Washer Plate	6	
27	Spacer with Wire	4	
28	M6 x 20 Button Head Allen Screw - Size 4 SCRW1064	24	
29	M6 x 20 Counter Sink Phillips Screw SCRW1077	4	
30	M8 x 30 Hex Head Bolt - AF13 SCRW1065	10	
31	M8 x 35 Button Head Torx Screw - T40 SCRW1078	2	

Parts Supplied (Hardware Kit)

ITEM	DESCRIPTION	QTY	IMAGE
32	M10 x 30 Hex Bolt - AF16 SCRW1066	6	
33	M10 x 50 Hex Bolt - AF16 SCRW1067	4	
34	M12 x 50 Hex Bolt - AF18 SCRW1068	4	
35	M12 x 120 Hex Bolt - AF18 SCRW1069	2	
36	Washer M6 WASH0297	18	
37	Washer M8 WASH0298	16	
38	Washer M10 WASH0299	24	
39	Washer M12 WASH0300	8	
40	M6 U Clip NUTS0355	6	
41	M8 Hex Nut - AF13 NUTS0345	4	
42	M10 Lock Nut - AF17 NUTS0343	14	
43	M12 Hex Nut - AF19 NUTS0346	2	

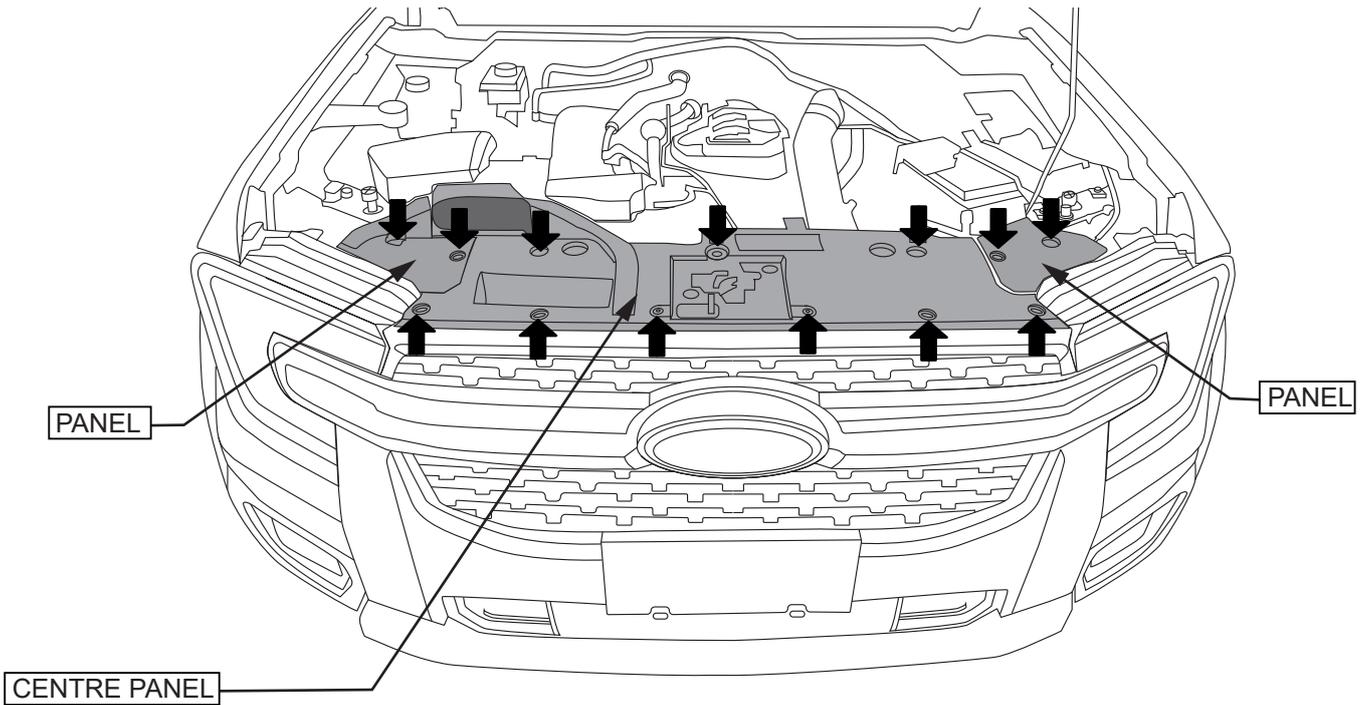
Tools and Materials Required



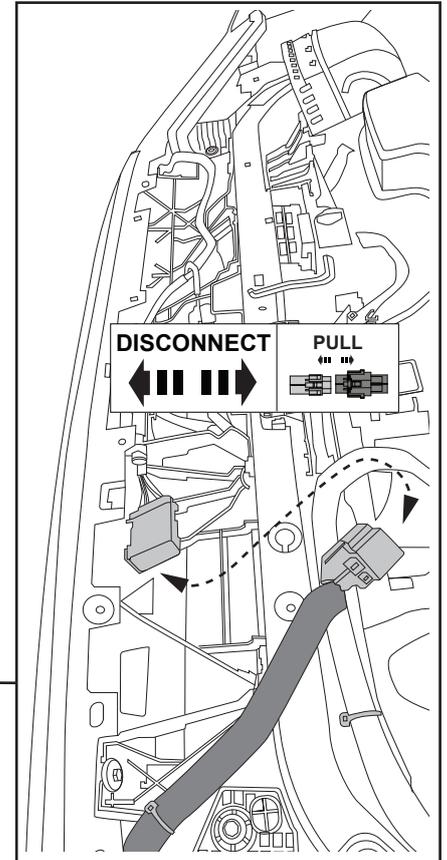
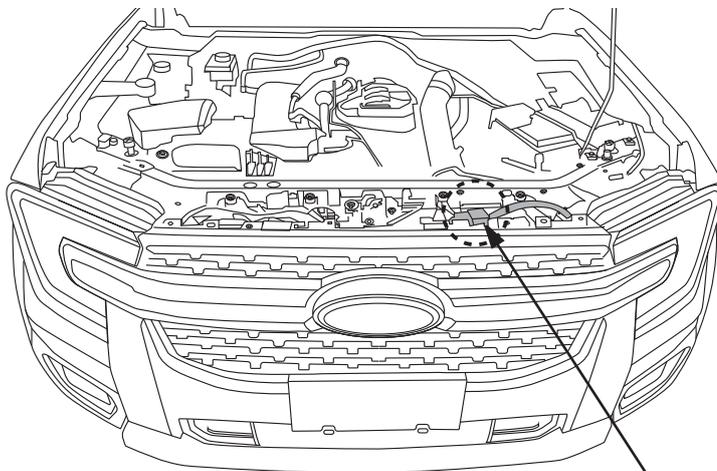
GLOSSARY

	: Vehicle Part		: Location
	: Sequence		: Loosen
	: Part Provided		: Adjust
	: Torque Setting		: Install & Remove
	: Even Space		: Equal
	: Reuse		: Disconnect
	: Discard		: Connect
	: Complete for Both Sides		: No Torque
	: Two People		: Lock
	: Check		
	: Caution		
	: Clean		

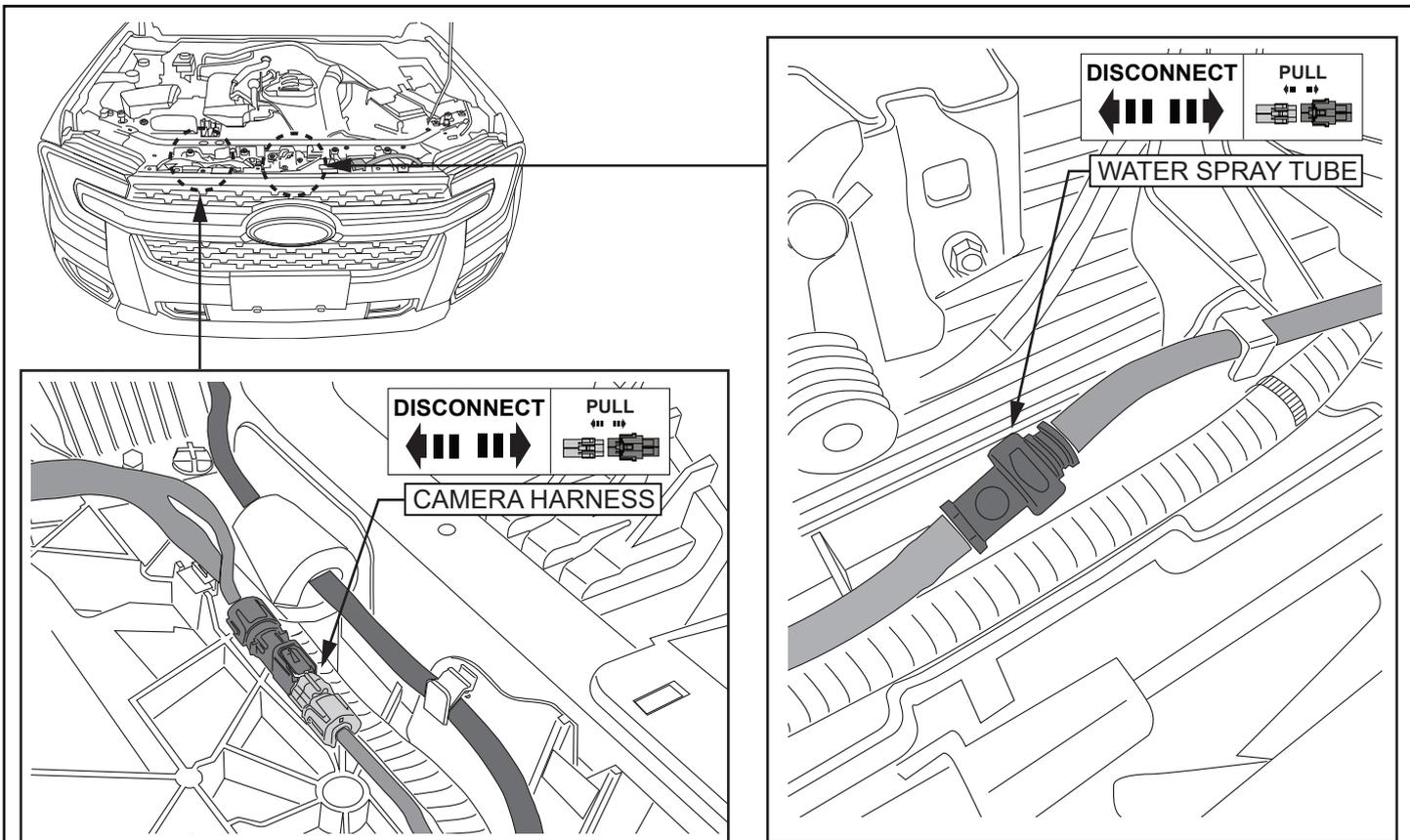
PART 1 - REMOVAL OF VEHICLE PARTS



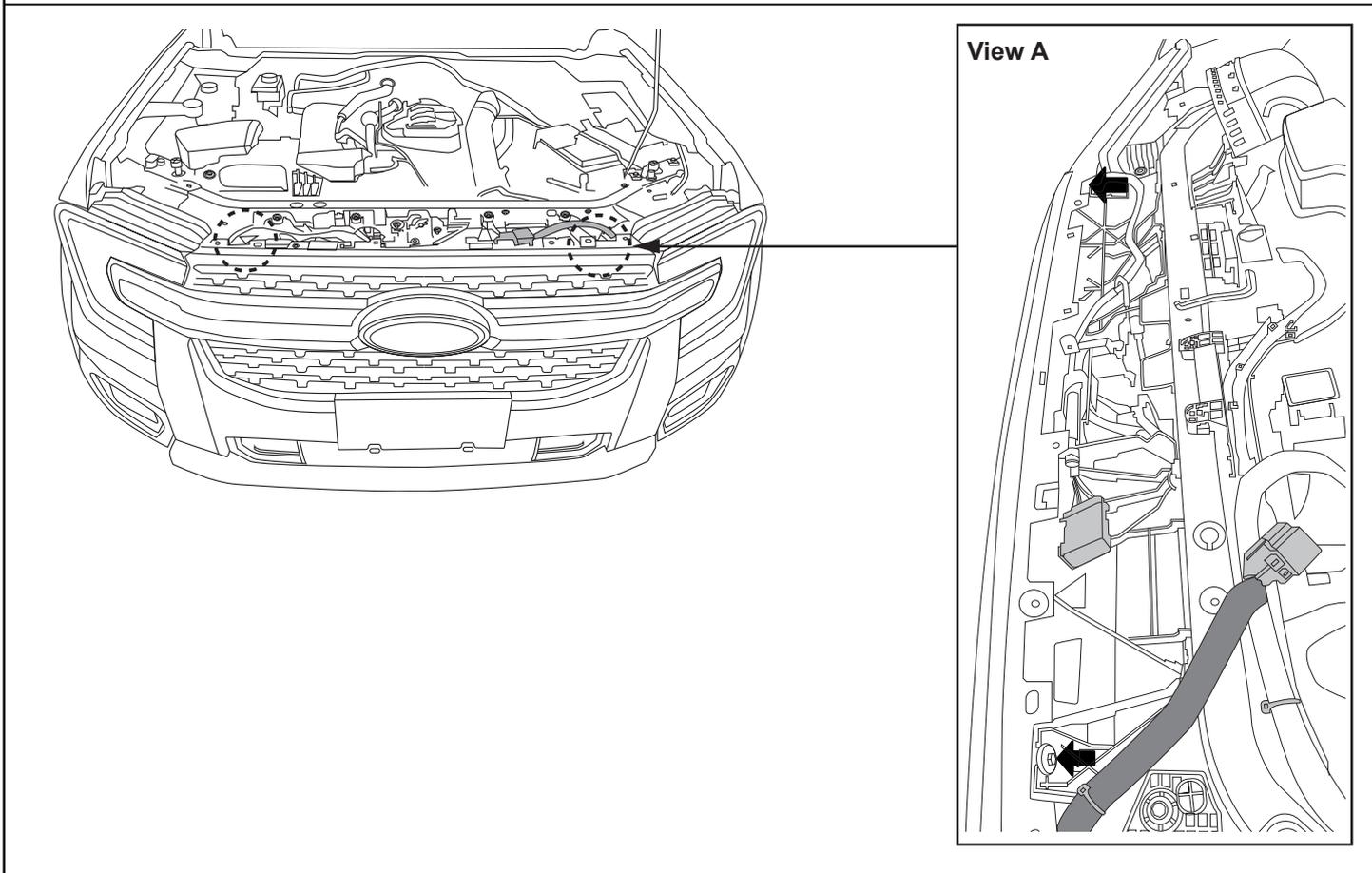
- 1 Remove the 13x Scrivets fixing in the Centre, LH and RH Trim Panel and remove the trim panels.



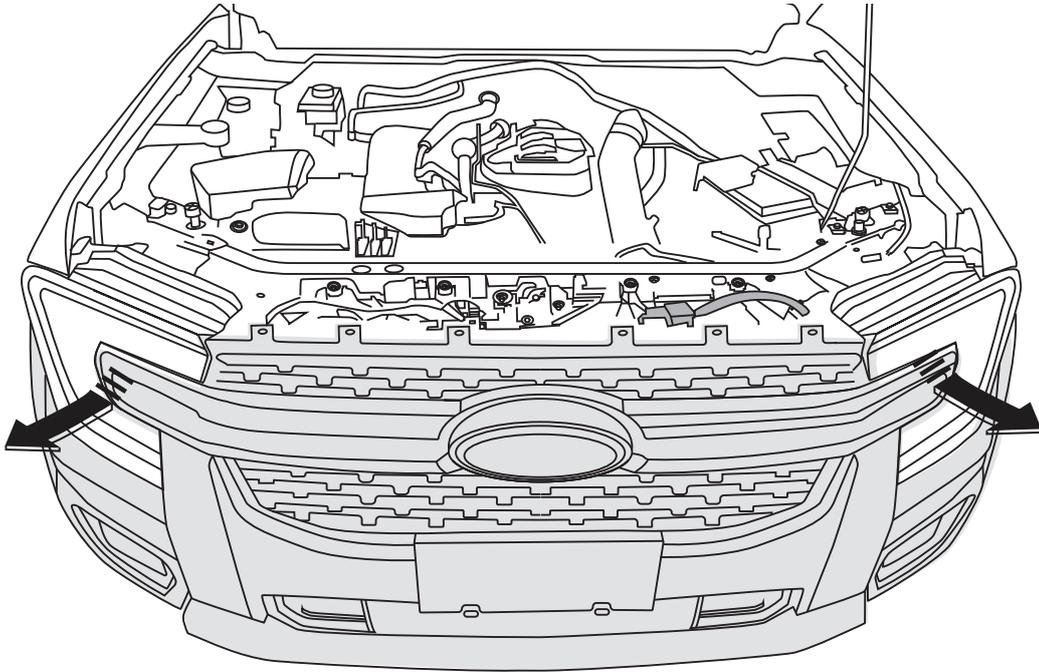
- 2 Unplug the Bumper Wiring Harness.



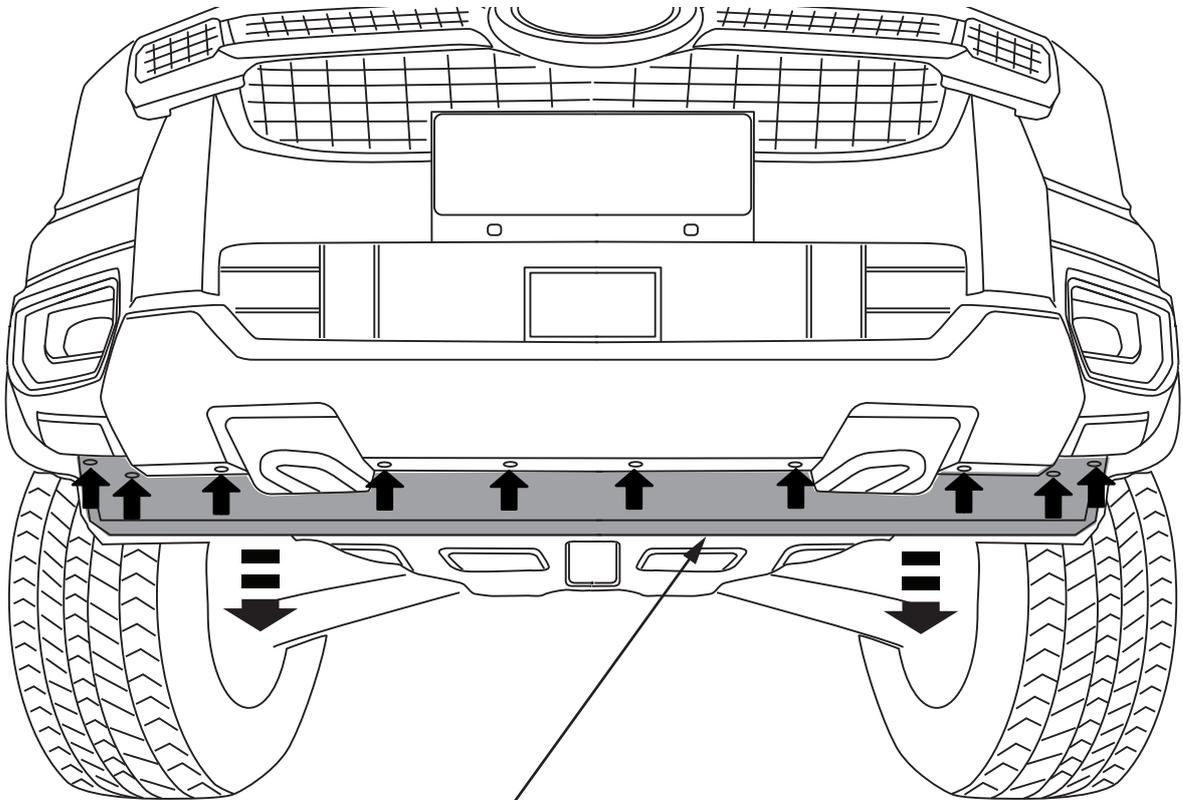
3 Disconnect the front camera harness and front water spray tube as shown (if applicable).



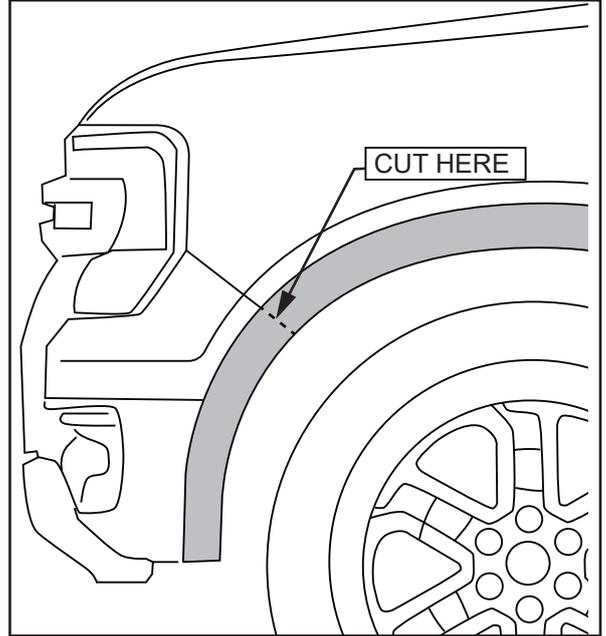
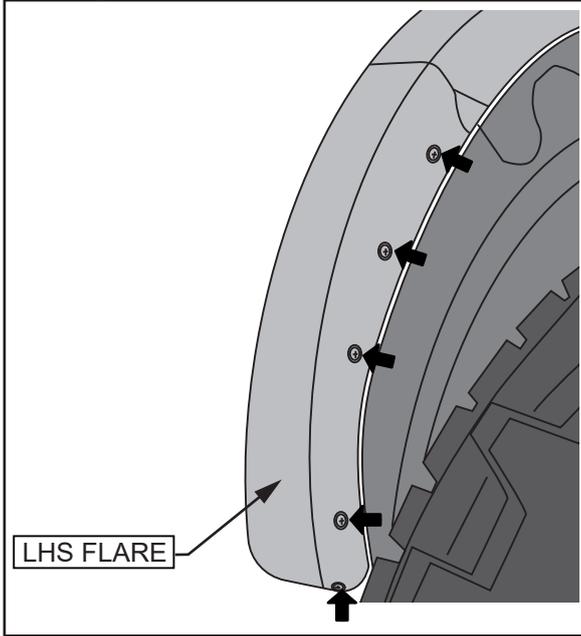
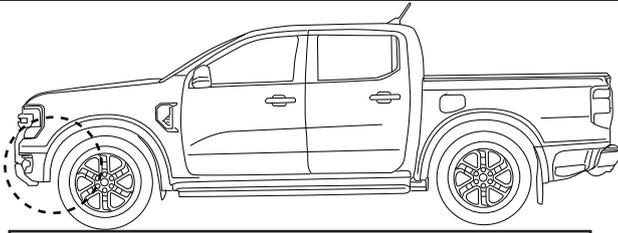
4 Remove the 2x screws using an 8mm Socket.



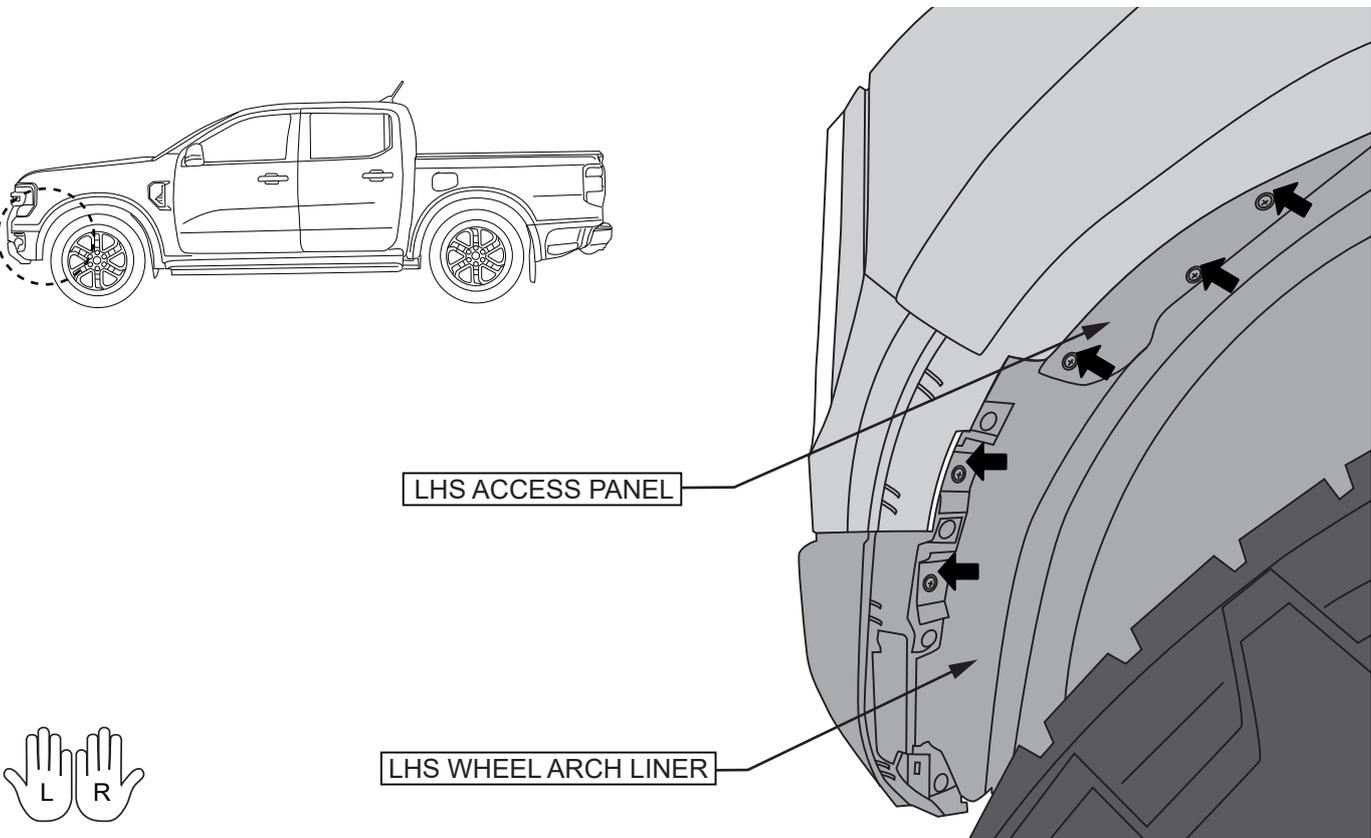
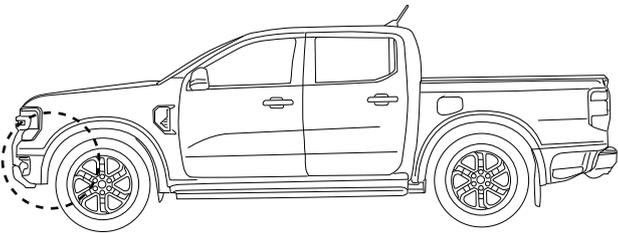
- 5** Slowly pull the bumper forwards at the positions shown to disengage the clips.



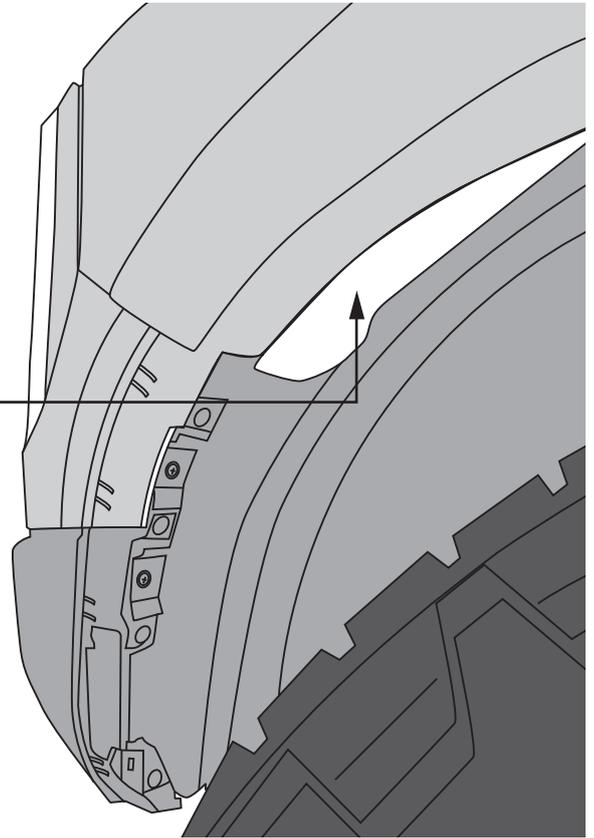
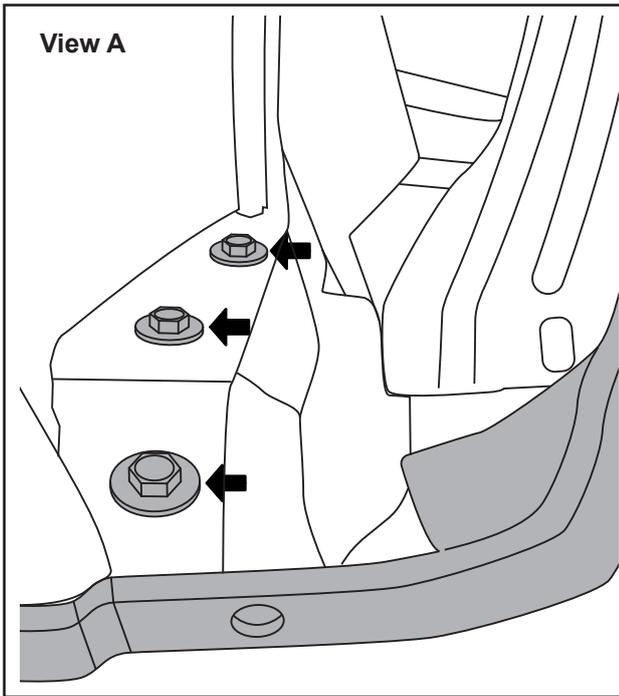
- 6** Remove the 10x Lower Bumper screws using 8mm Socket and remove the rubber trim.



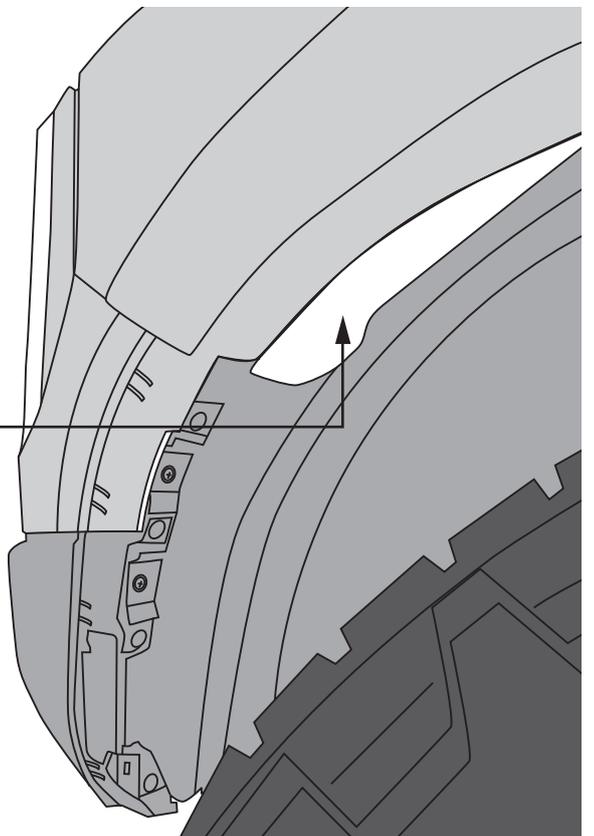
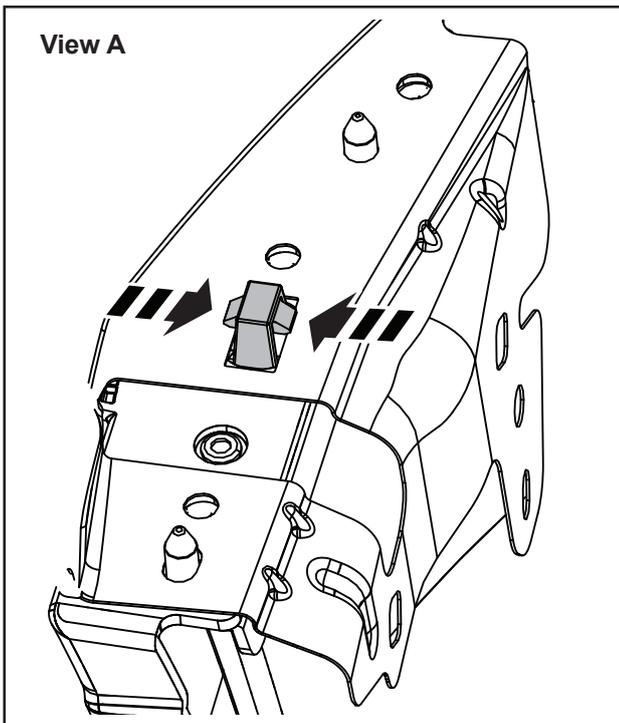
- 7** Remove the screws fixing the Fender Flare to the Bumper.
Apply Masking Tape onto the factory fender flare at the area of the split between the bumper and the fender. Mark a line onto the fender flare that continues the fender split line. Pull the fender flare away from the vehicle and cut the fender flare at this line. Discard the flare.



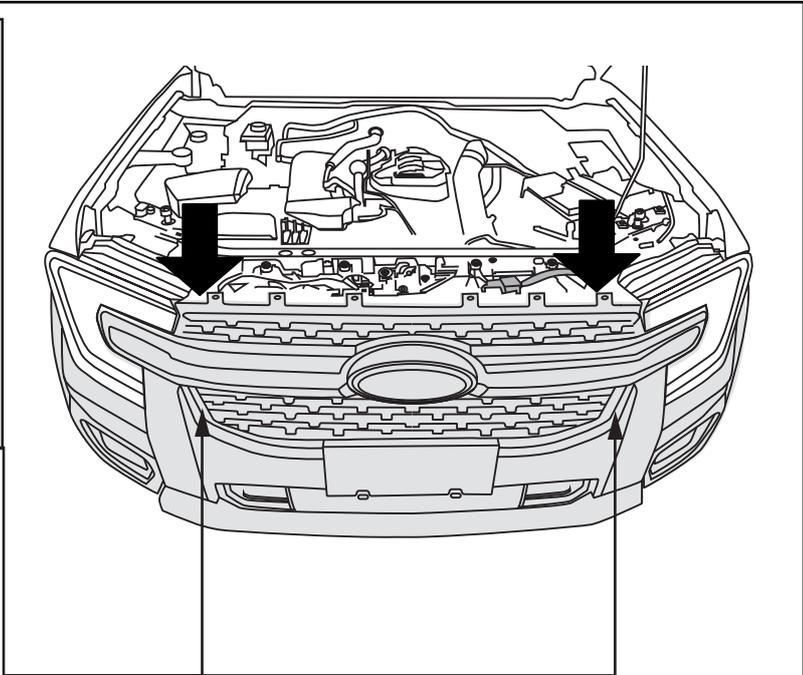
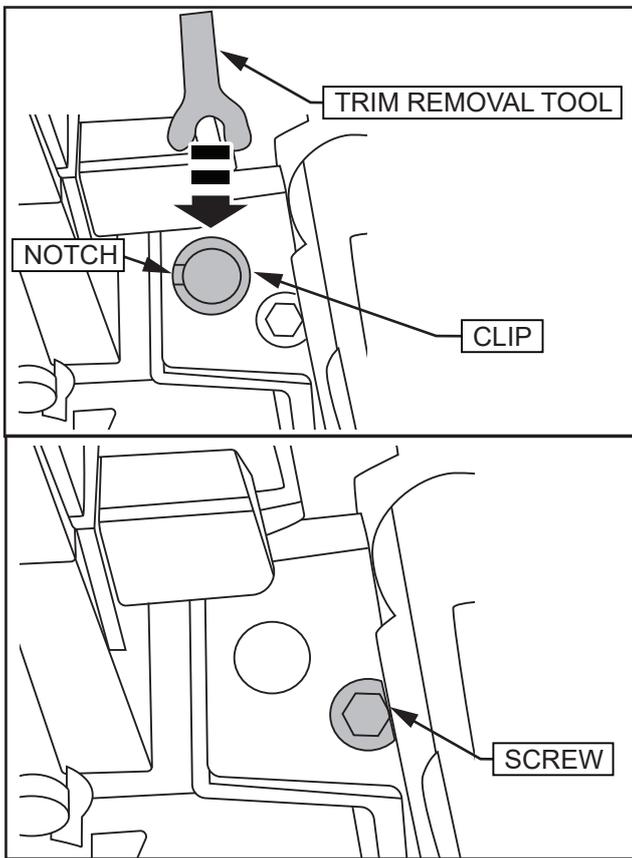
- 8** Remove the 2x Scrivets attaching the Wheel Arch Liner to the Bumper.
Remove the 3x Scrivets on the access panel and remove the access panel.



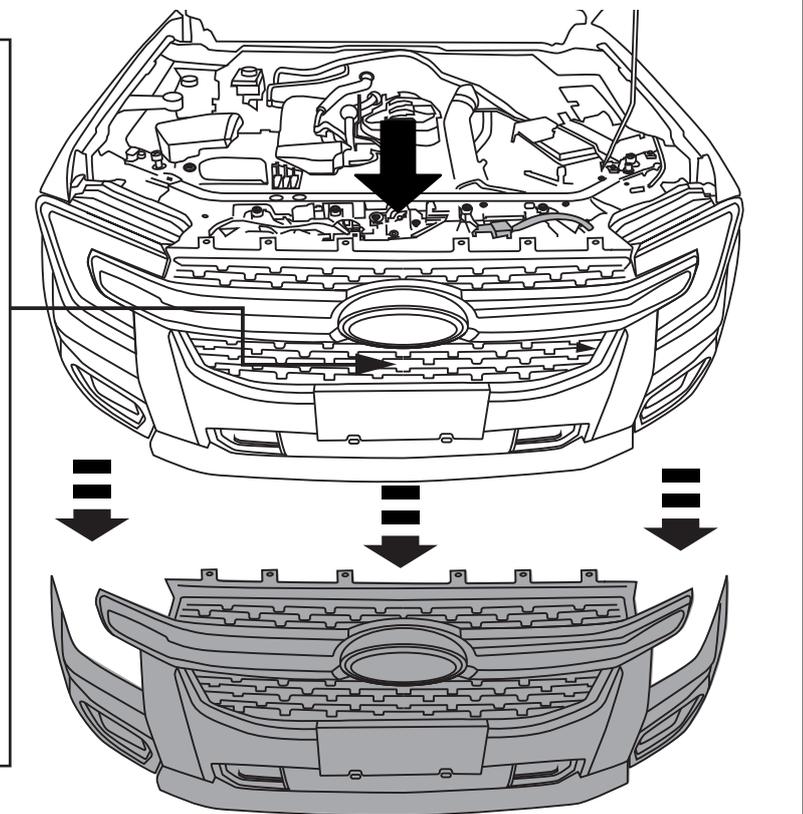
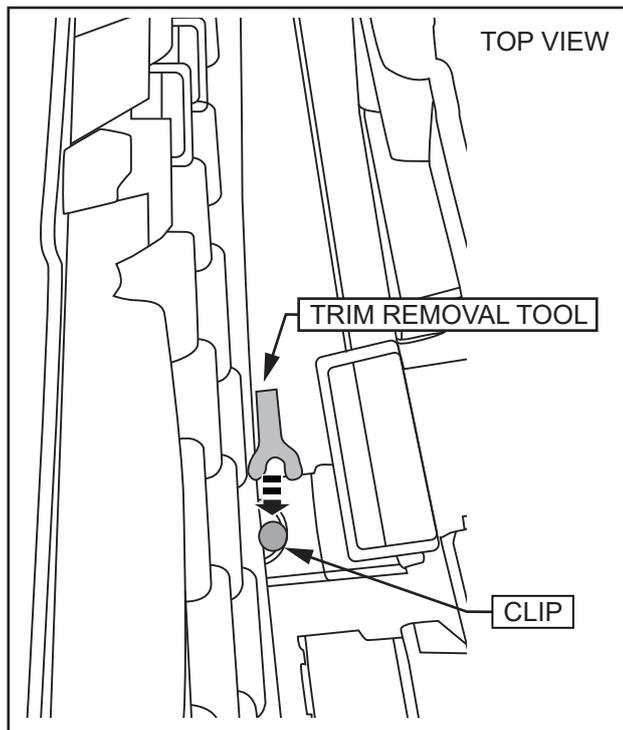
- 9** Remove the 3 x Screws inside the access panel that fix the Fender to the Bumper using an 10mm socket.



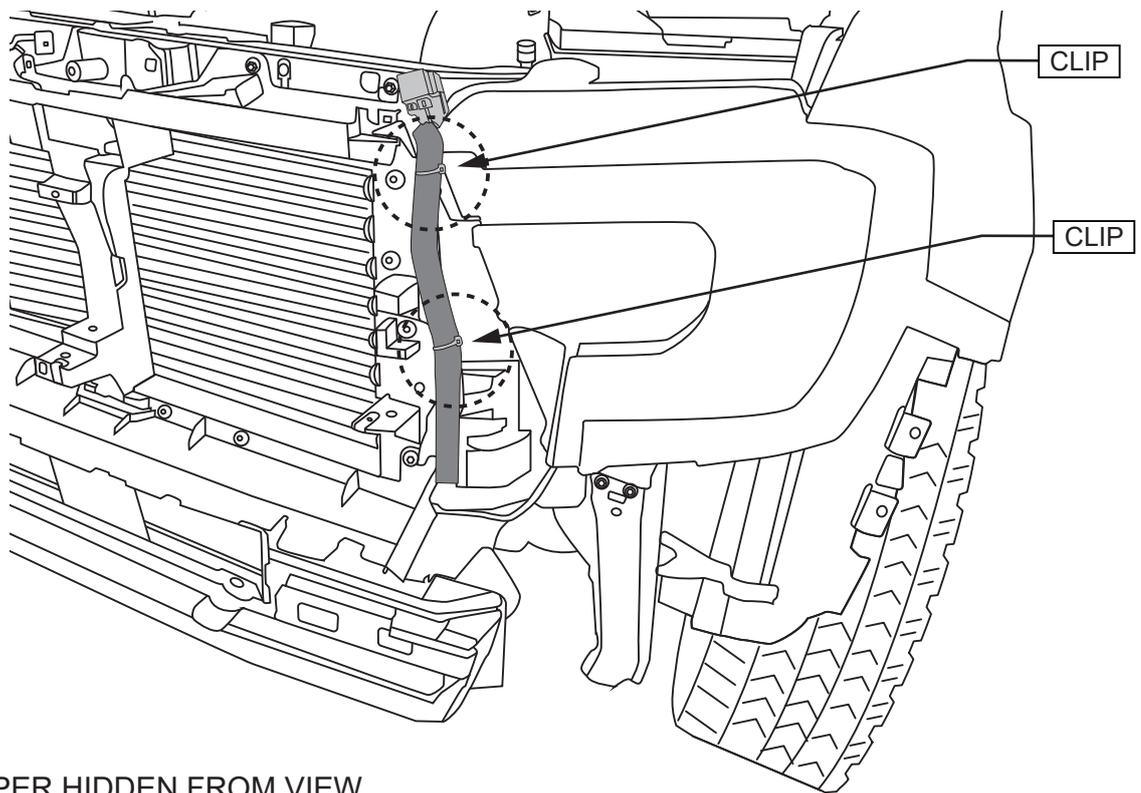
- 10** Using needle nose pliers squeeze the top of the clip and gently pull the Bumper downwards to disengage the Bumper Clip from the Fender



- 11** Looking from the top down slowly pull the grille away from the body to gain access to the 2x clips fixing the bumper to the body and the 2x screws using a 10mm socket.
Tip on Clip Removal: Locate the notch on the clip and using trim removal tool, gently pry the top half of the clip out of the housing.
 Once the top half of the clip is removed gently pry the bottom half of the clip out of the bumper.

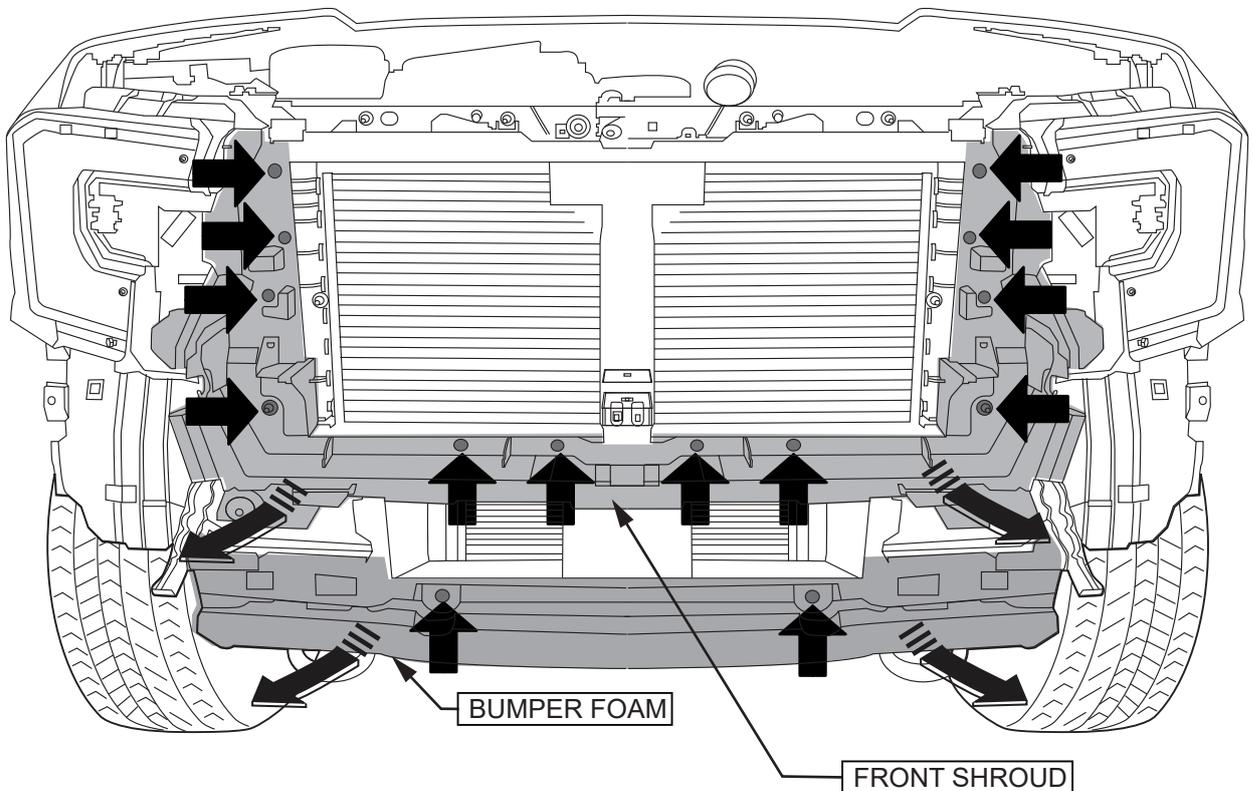


- 12** Looking down in the middle of the vehicle between the Grille and the Body remove the clip fixing the bumper to the Body using the process shown in Step 11. Slowly pull the bumper away from the body.

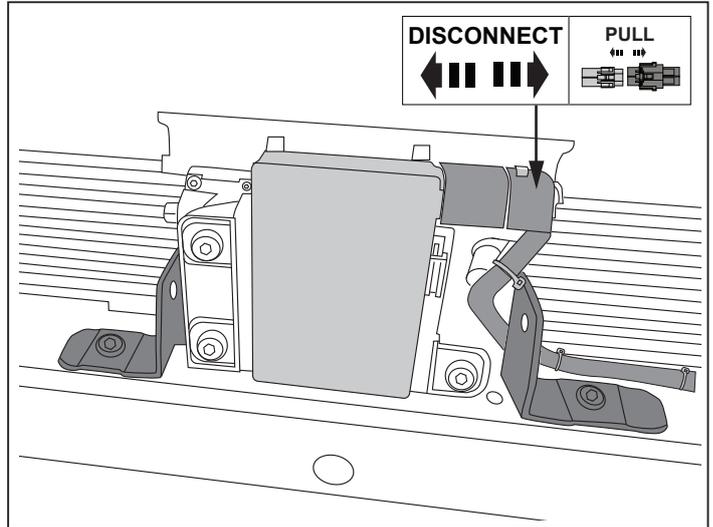
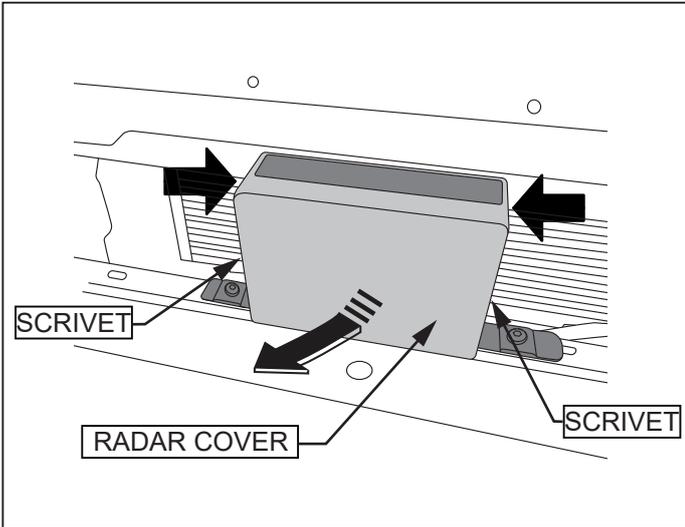
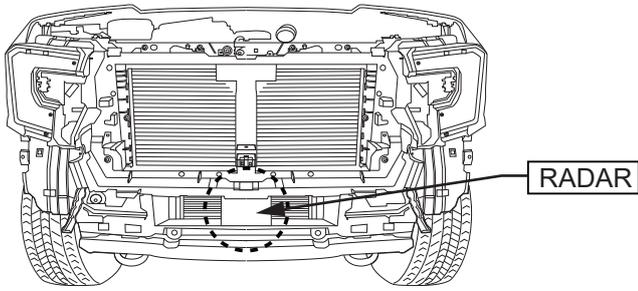


NOTE: BUMPER HIDDEN FROM VIEW

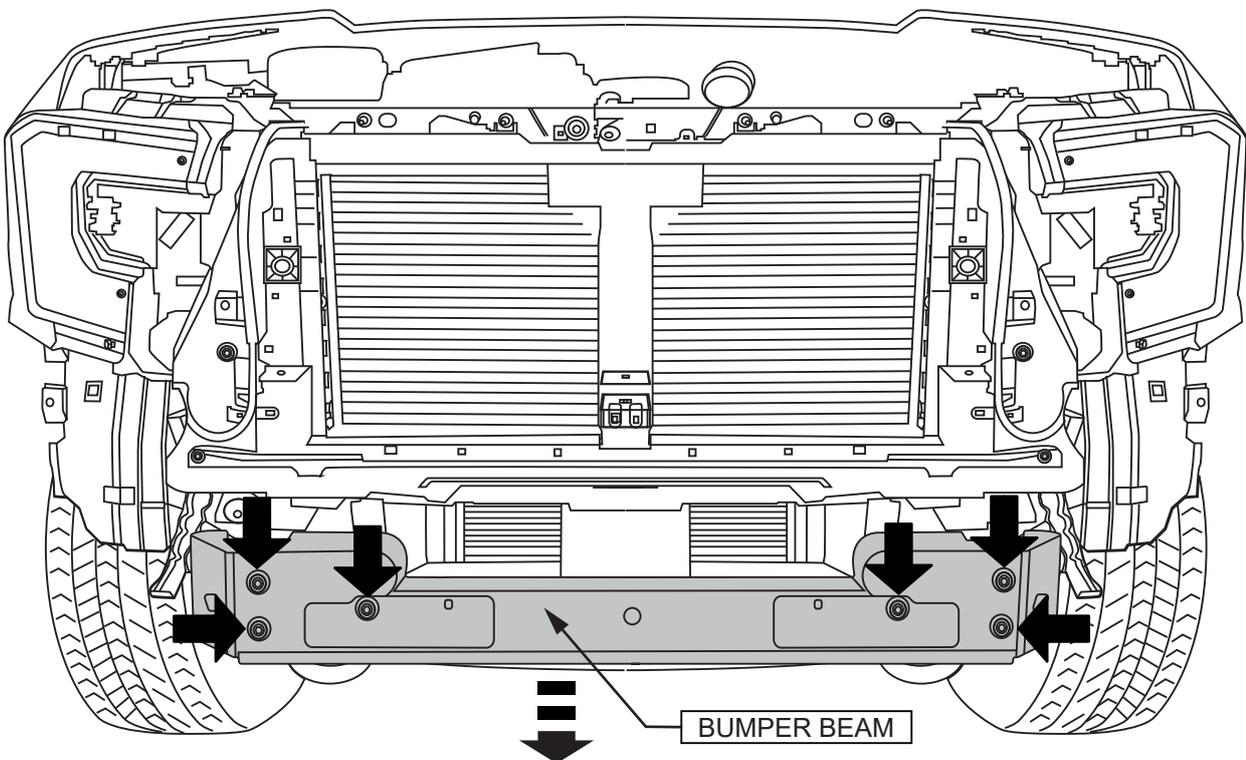
- 13** Remove the cable tie clip connecting the Bumper Harness to the body. The Bumper will now be free to be separated from the body.



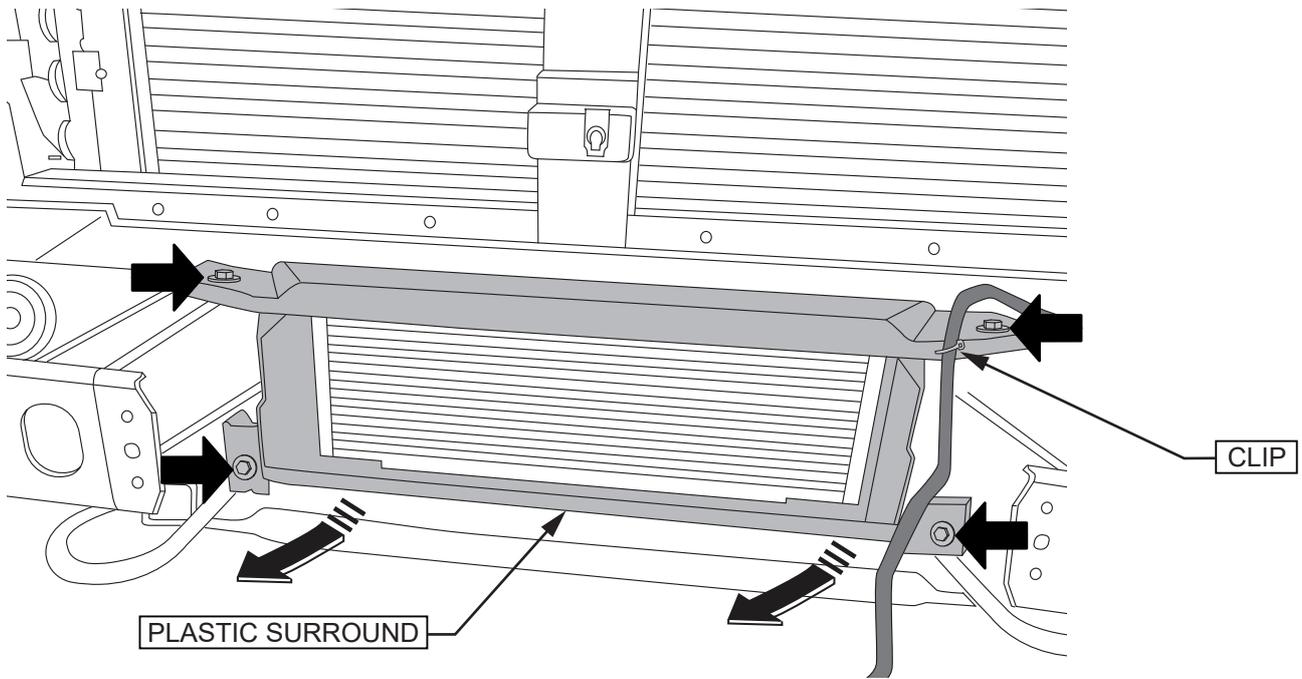
- 14** Remove the 10x Scrivets and 2x screws using 10mm socket around the Front Rubber Shroud. Remove the 2x Scrivets fixing the Bumper Foam. Remove the Bumper Foam and Front Rubber Shroud.



- 15** Remove the 2x scrivets fixing the Radar Cover using trim removal tool. Gently unclip the snap clips holding the Radar Cover to the Radar. Unplug the connector from the Radar and remove the 2x clips holding the harness to the Bumper Beam.

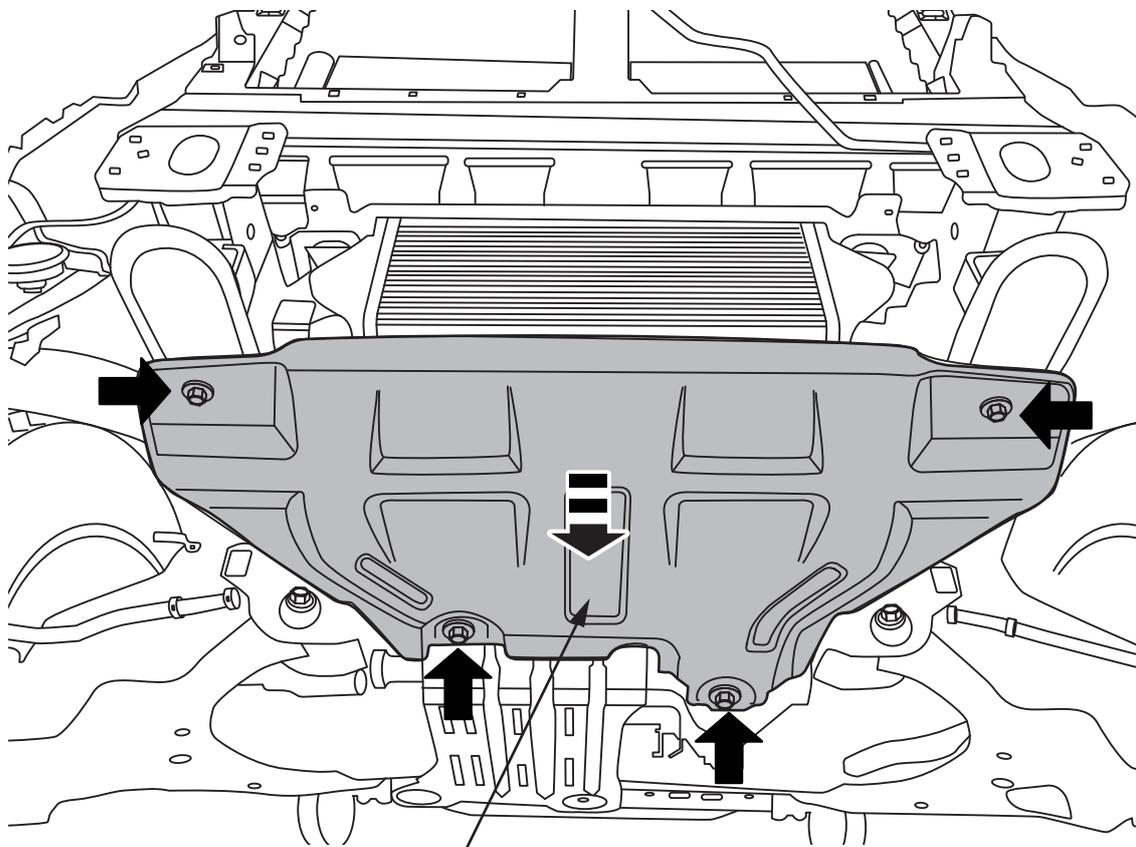


- 16** Remove the 6x Screws fixing the Bumper Beam using a 13mm Socket and remove the Bumper Beam.
The Radar will be removed from the Bumper Beam in a later step.

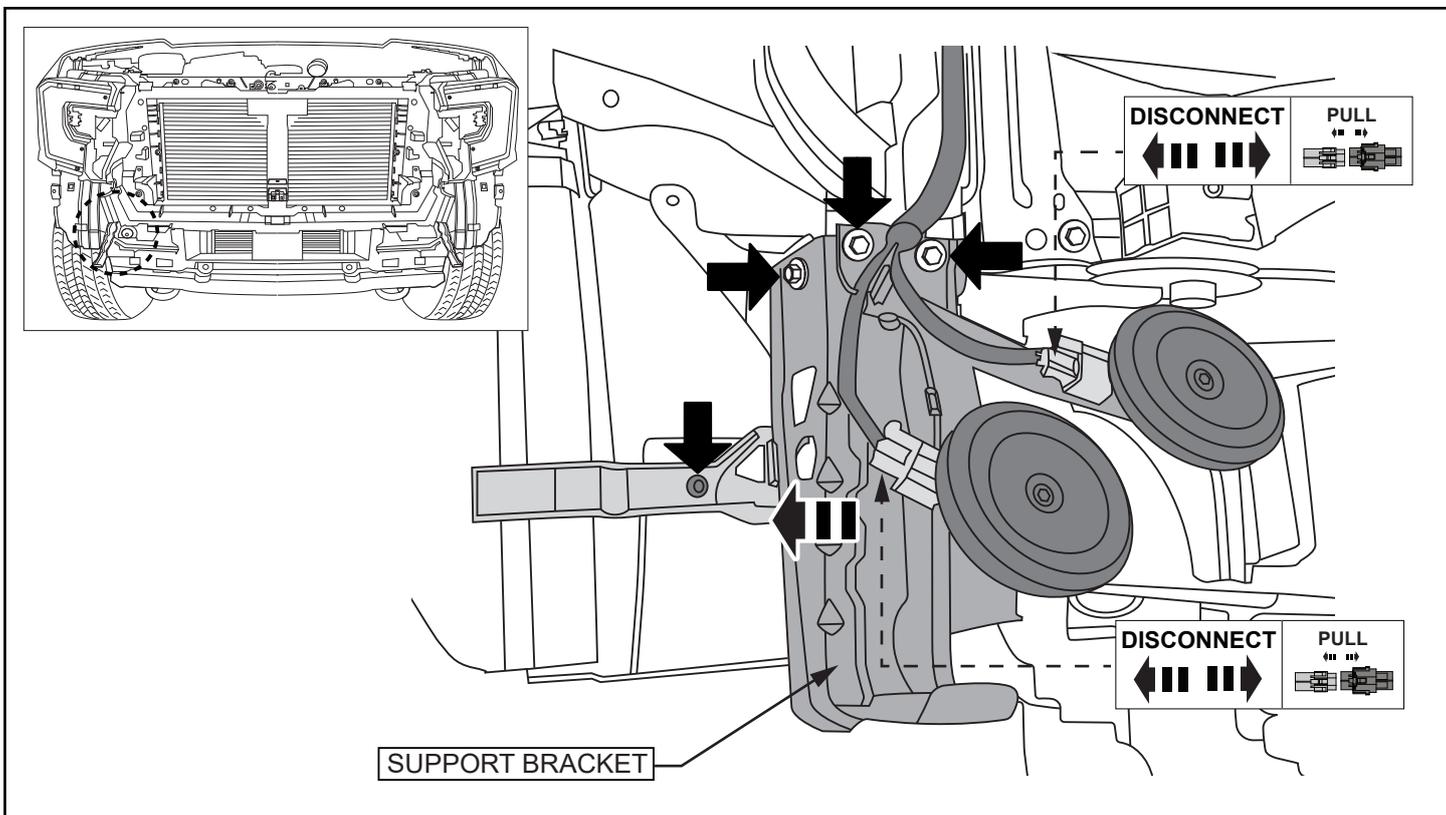


- 17** Remove the 4x Screws fixing the Plastic Surround using an 10mm Socket. Remove 1x clip holding the harness and remove the Plastic Surround.

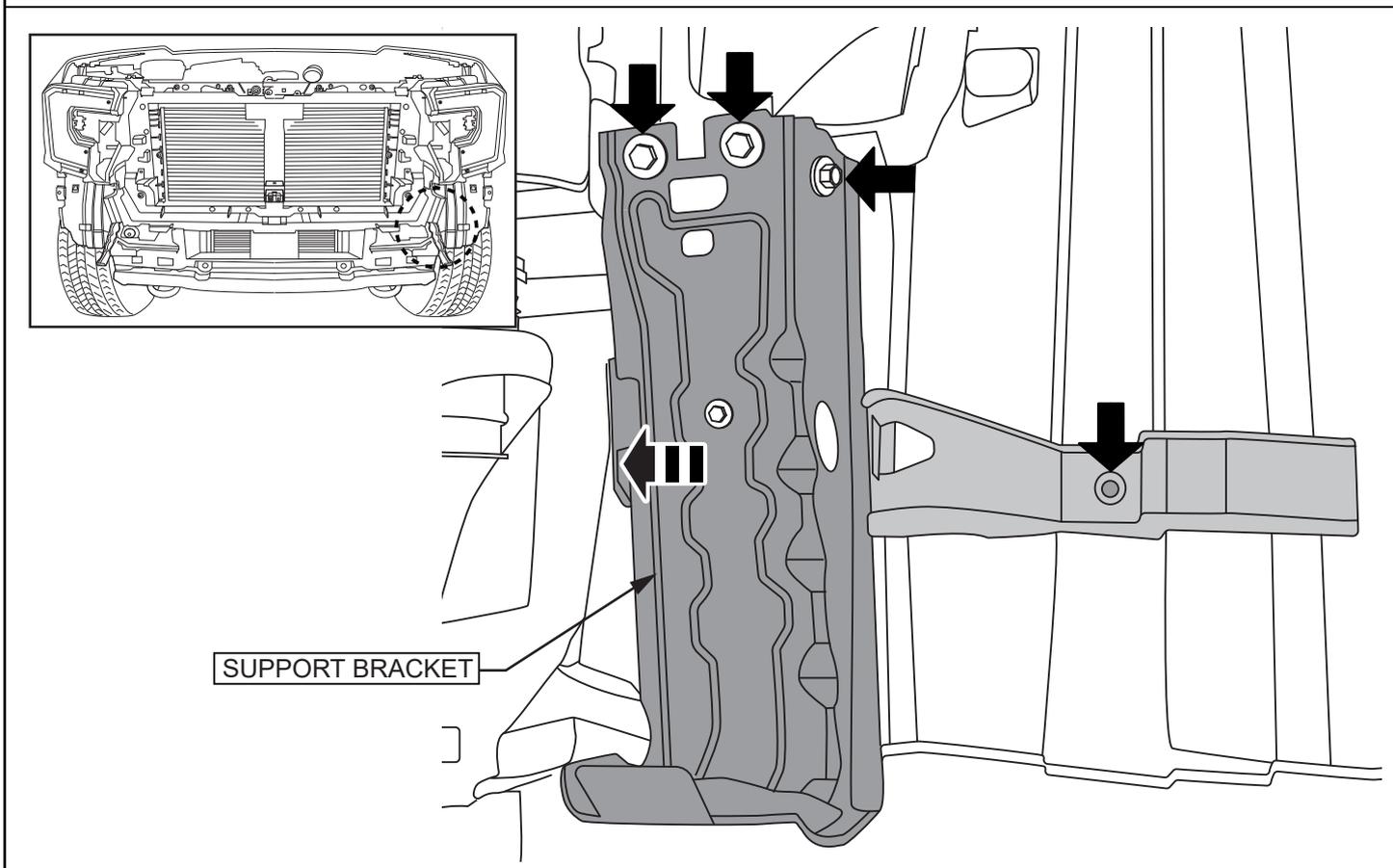
FOR VEHICLES WITH FACTORY STEEL UNDERBODY PROTECTION ONLY



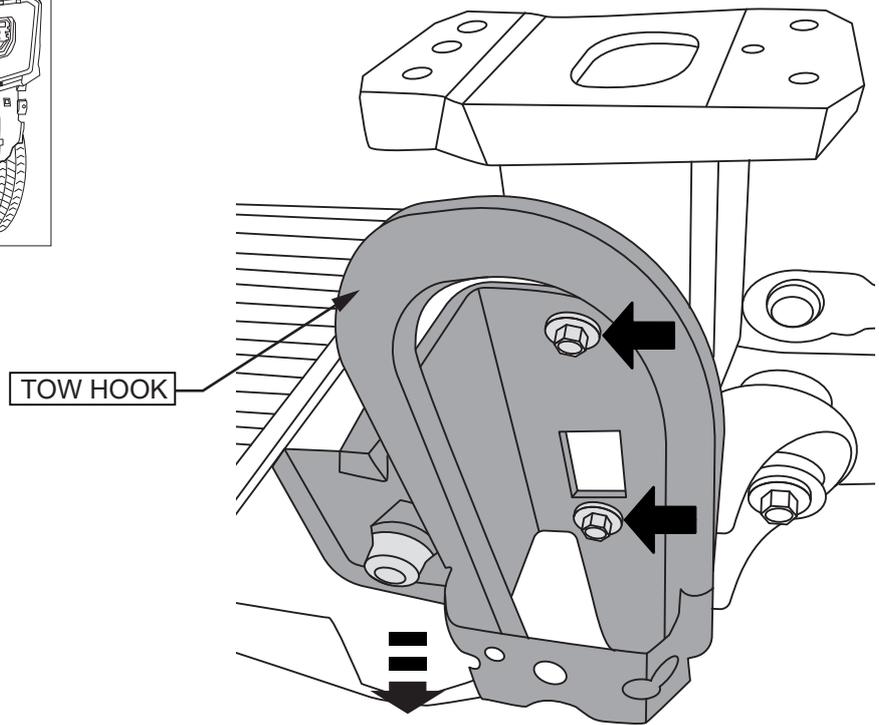
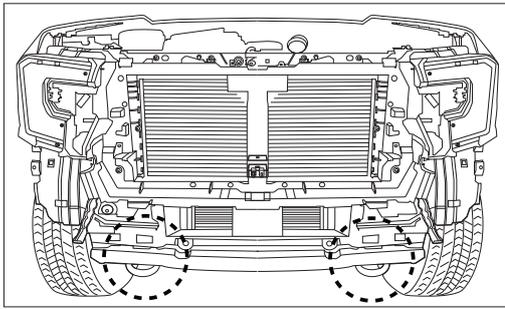
- 18** Remove the 4x Screws fixing the factory steel underbody protection cover, using an 15mm Socket. Remove and retain.



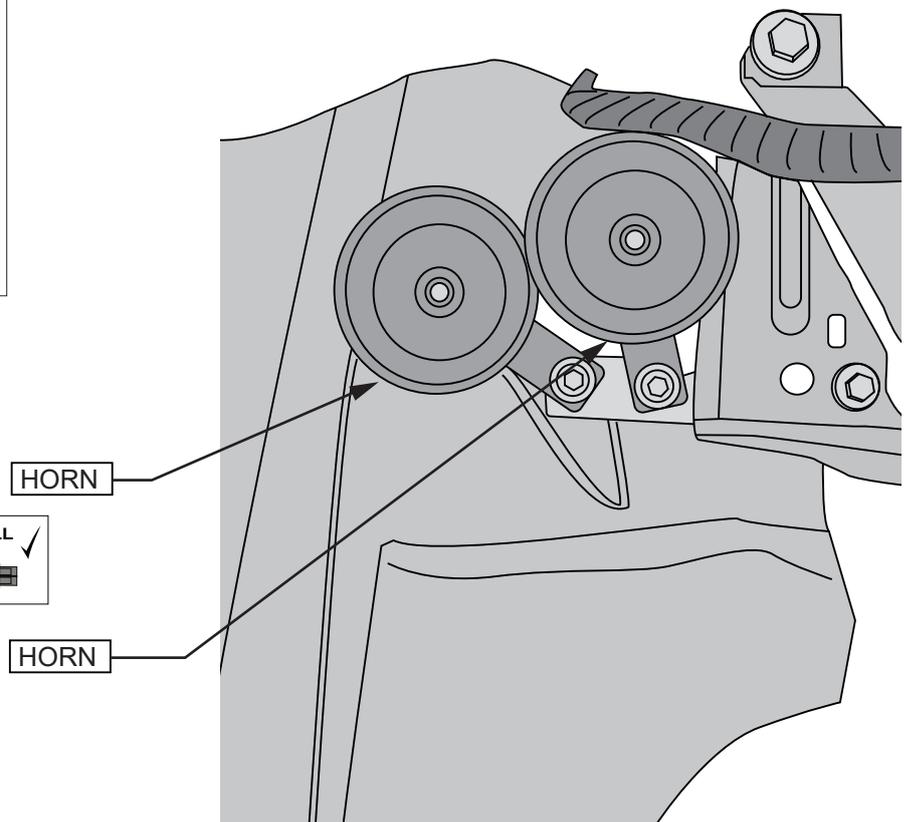
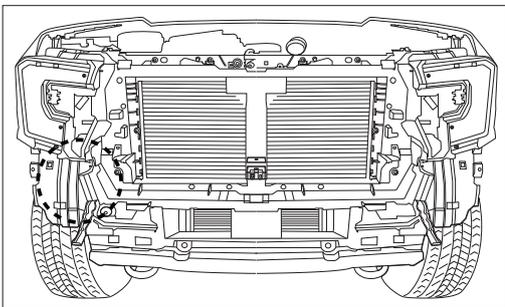
- 19** Unplug the connectors into the Horns.
 Remove the 3x Screws fixing the Bumper Support Bracket using an 8mm Socket.
 Remove the Scrivet fixing the lower Wheel Arch Liner.
 Remove the Bumper Support Bracket.



- 20** Remove the 3x Screws fixing the Bumper Support Bracket using an 8mm Socket.
 Remove the Scrivet fixing the lower Wheel Arch Liner.
 Remove the Bumper Support Bracket.

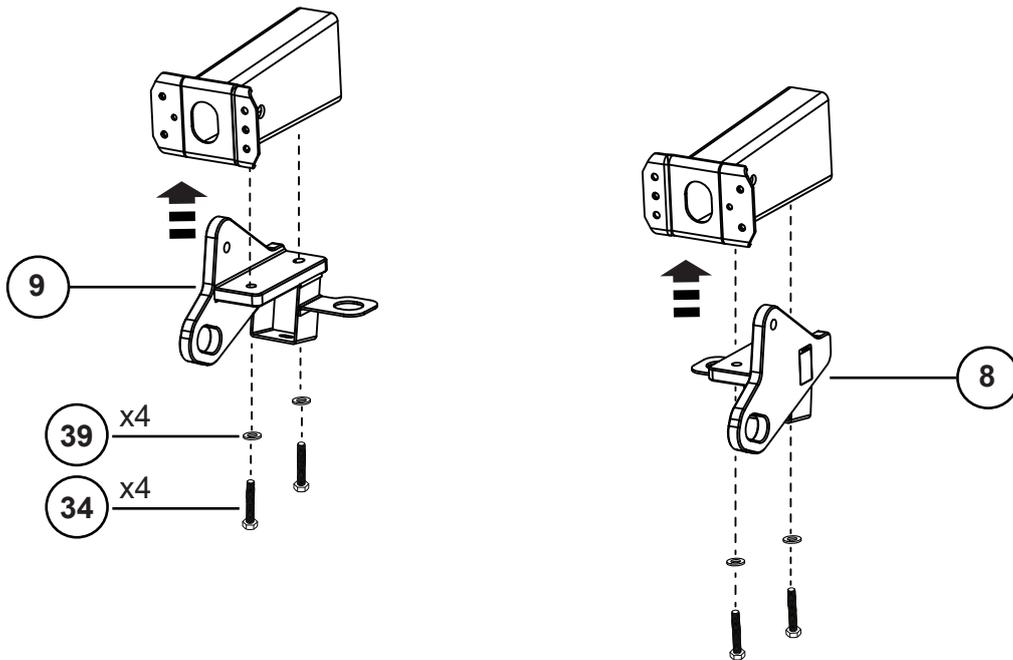


21 Remove the 2x Screws fixing the tow hook using 15mm Socket. Remove the hook. Repeat for both LH and RH tow hooks (if fitted).

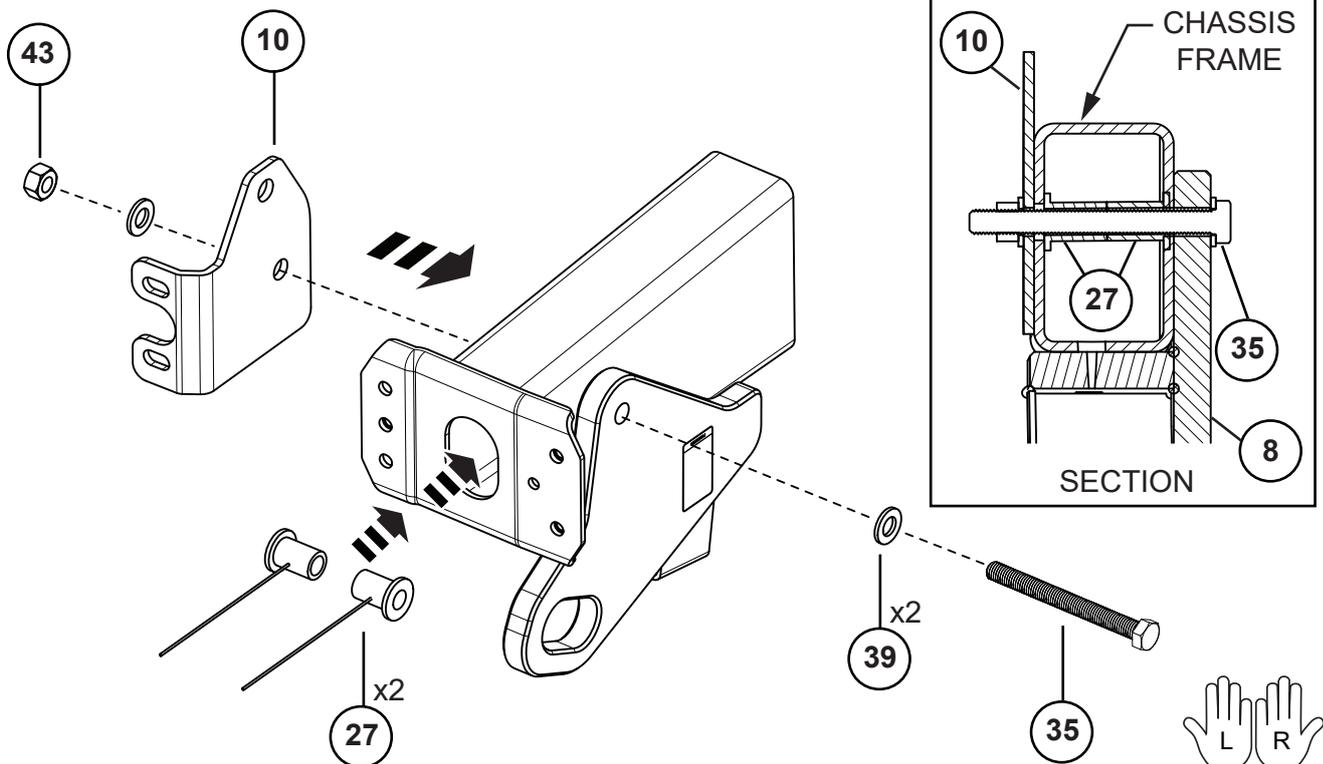


22 Remove the Horns from the bracket and using same screws mount to the chassis where the support bracket was removed. Use same M6 screws. Connect the horns to the harness.

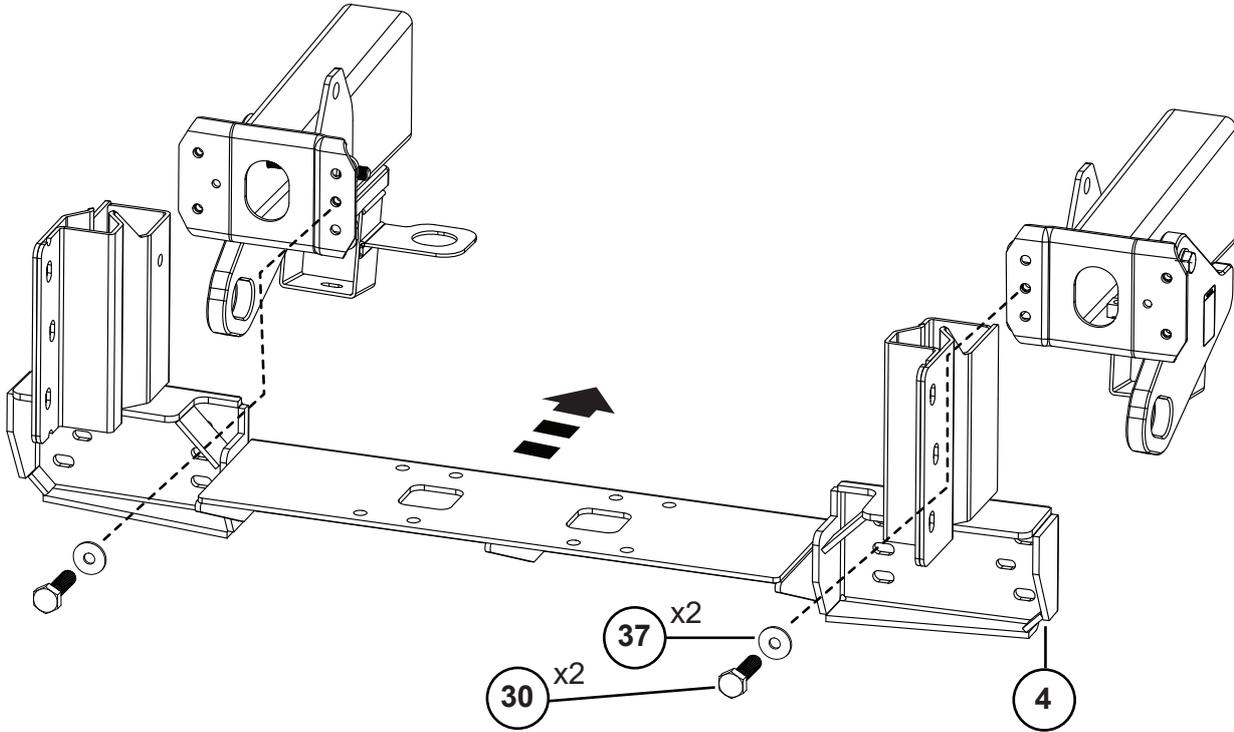
PART 2 - INSTALL OF FIXING STRUCTURE TO VEHICLE



- 25** Loosely secure the Recovery Hook LHS (8) and Recovery Hook RHS (9) to the chassis frame using 4x M12 x 50 Hex Head bolts (34) and 4x M12 Washers (39). Do not tighten the bolts.



- 26** Insert a Spacer with Wire (27) into the opening on the chassis frame feeding the Spacer onto an M12 x 120 Hex Bolt (35) with M12 Washer (39). Once the first Spacer is installed onto the bolt insert the second spacer and push the bolt fully through the chassis frame, see the section. Install the Mount Bracket Inner LHS (10) onto the end of the bolt and a loosely secure with an M12 Washer (39) and M12 Hex Nut (43). Do not tighten the bolt.

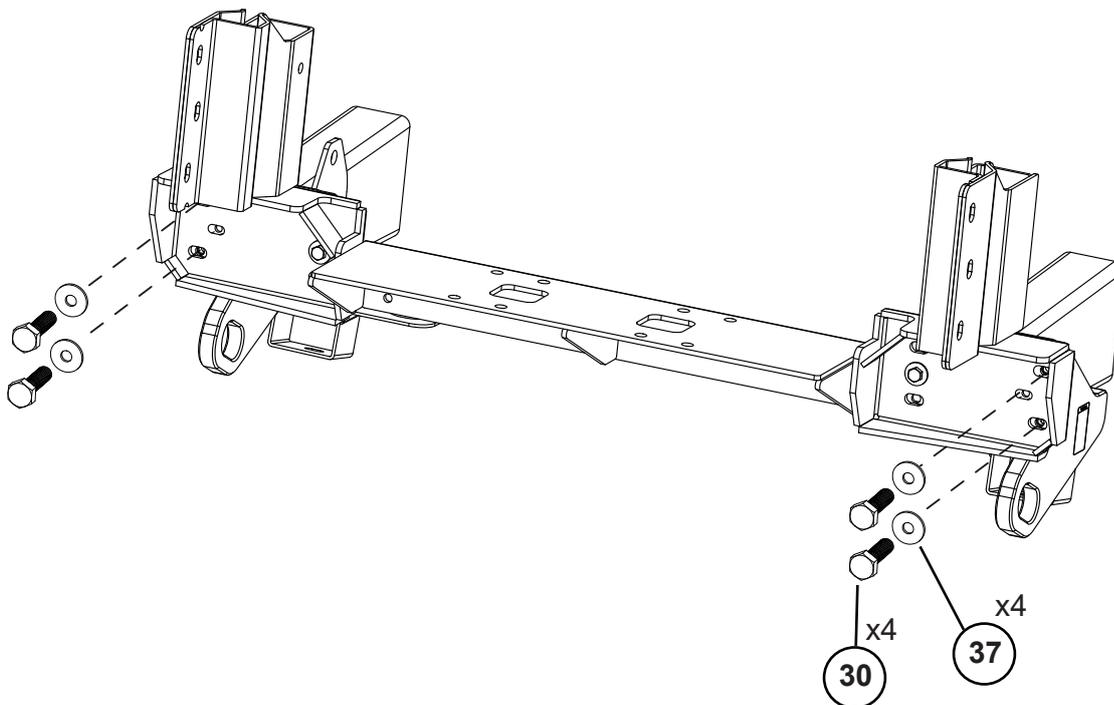


27 Loosely secure the Winch Cradle (4) onto the front of the chassis frame using 2x M8 x 30 Hex Head Bolts (30) and 2x M8 Washers (37).
Install the bolts into the inboard middle slot as shown.
Do not tighten the bolts.

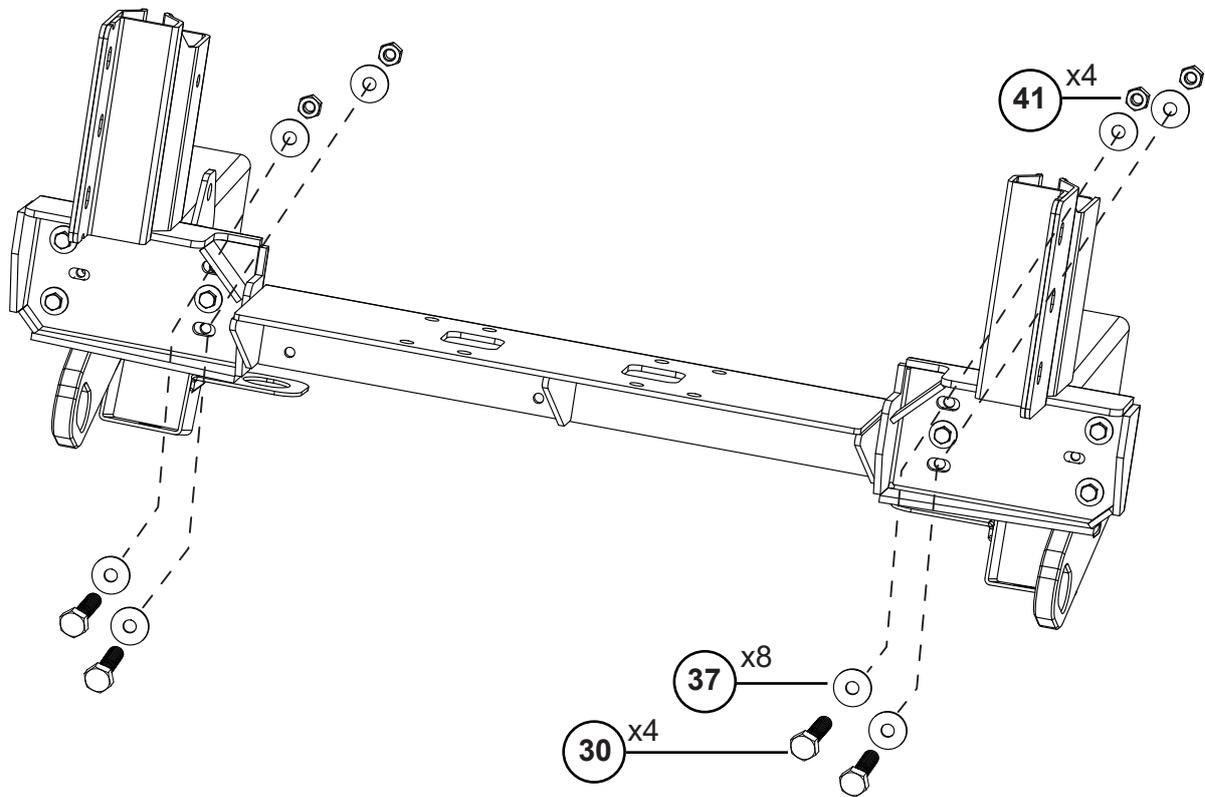
CAUTION:

Heavy Load – Two person lift or mechanical lifting aid required.

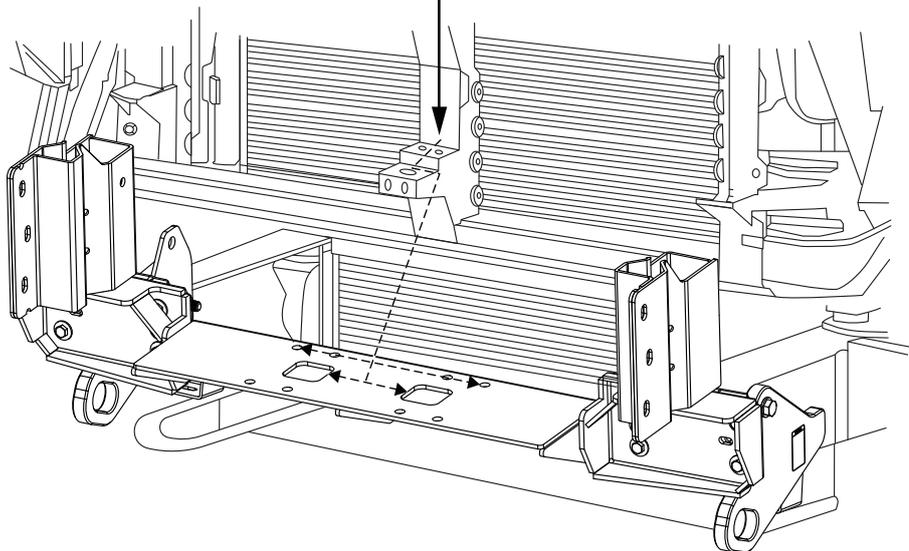
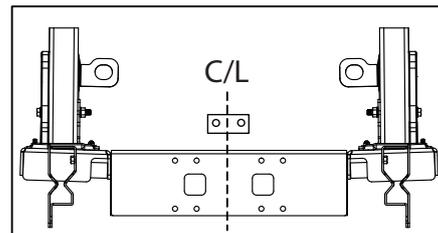
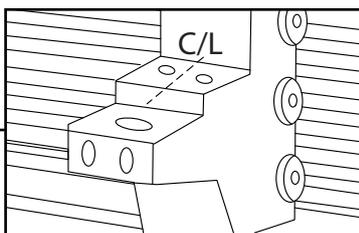
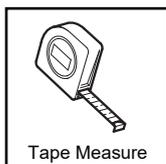
Unsecured Load – Keep clear of unsecured object. Spotter or mechanical lifting aid required.



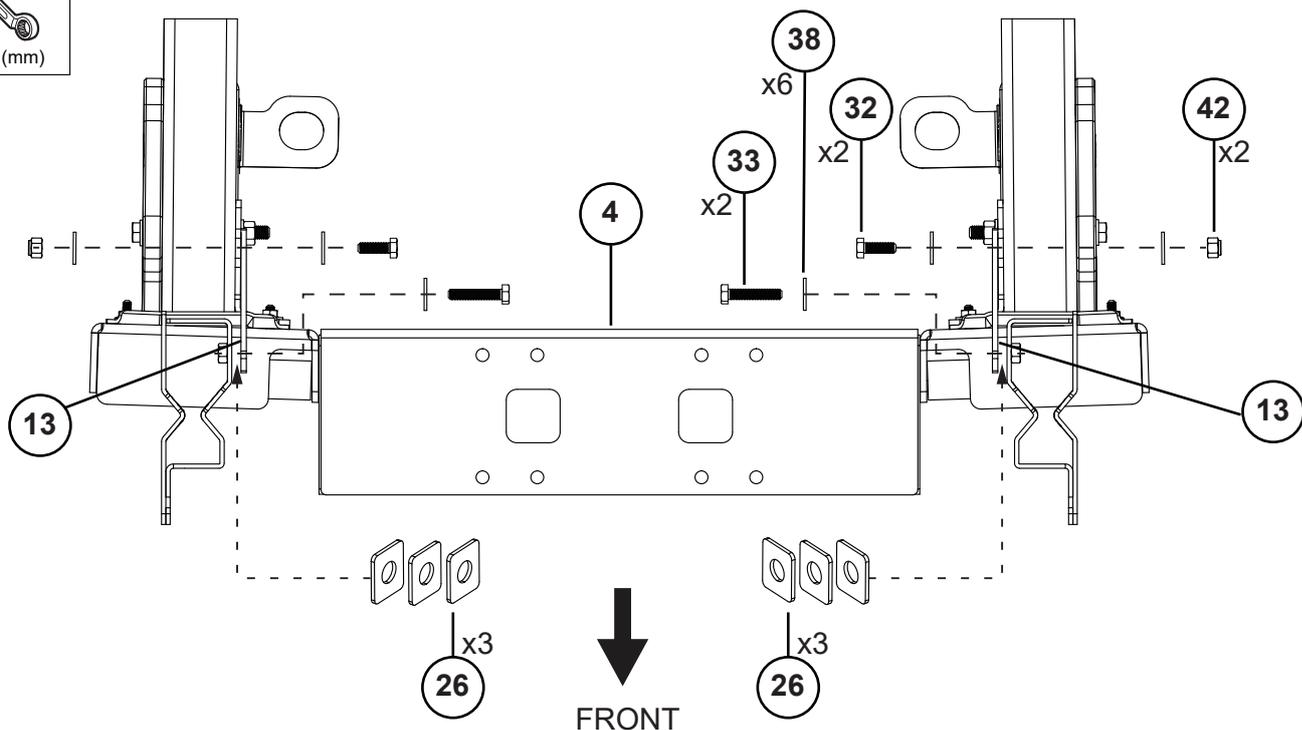
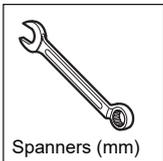
28 Loosely install 4x M8 x 30 Hex Head Bolts (30) and 4x M8 Washers (37).
Install the bolts into the outboard upper and lower slots as shown.
Do not tighten the bolts.



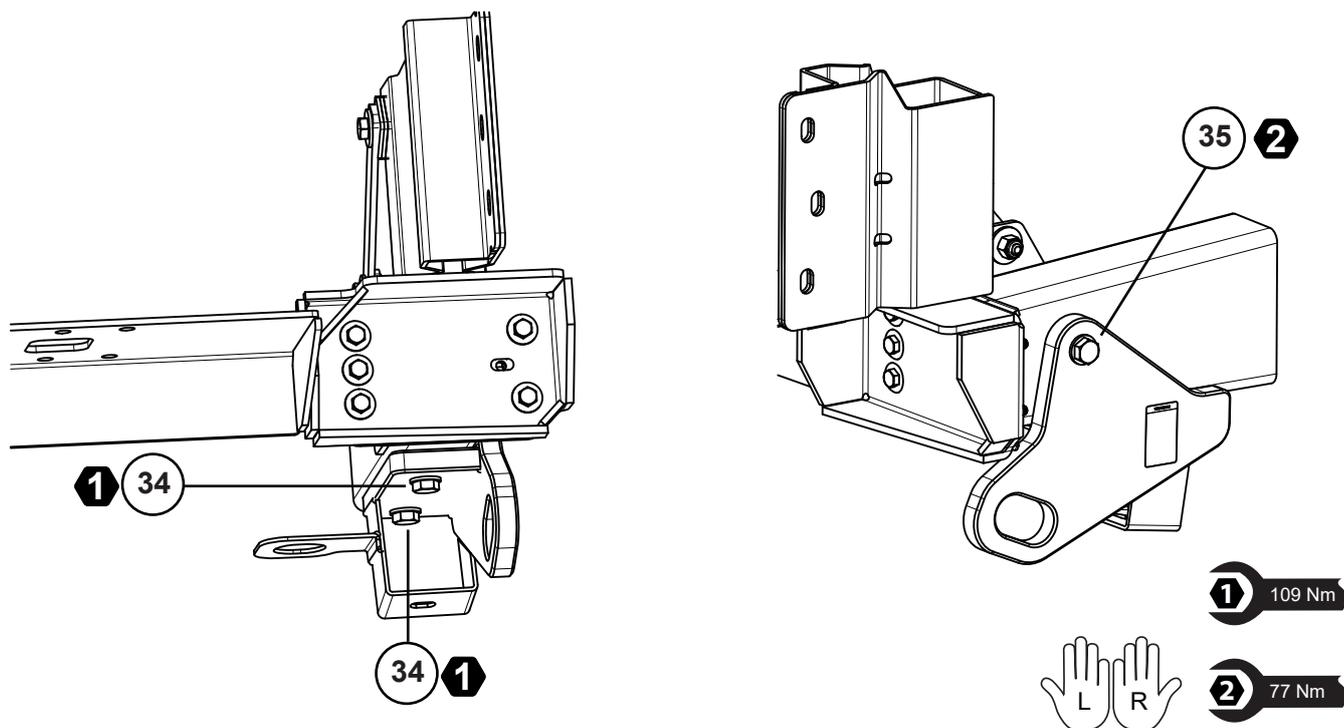
29 Loosely install 4x M8 x 30 Hex Head Bolts (30), 8x M8 Washers (37) and 4x M8 Hex Nuts (41). Install the bolts into the outboard upper and lower slots as shown. Do not tighten the bolts.



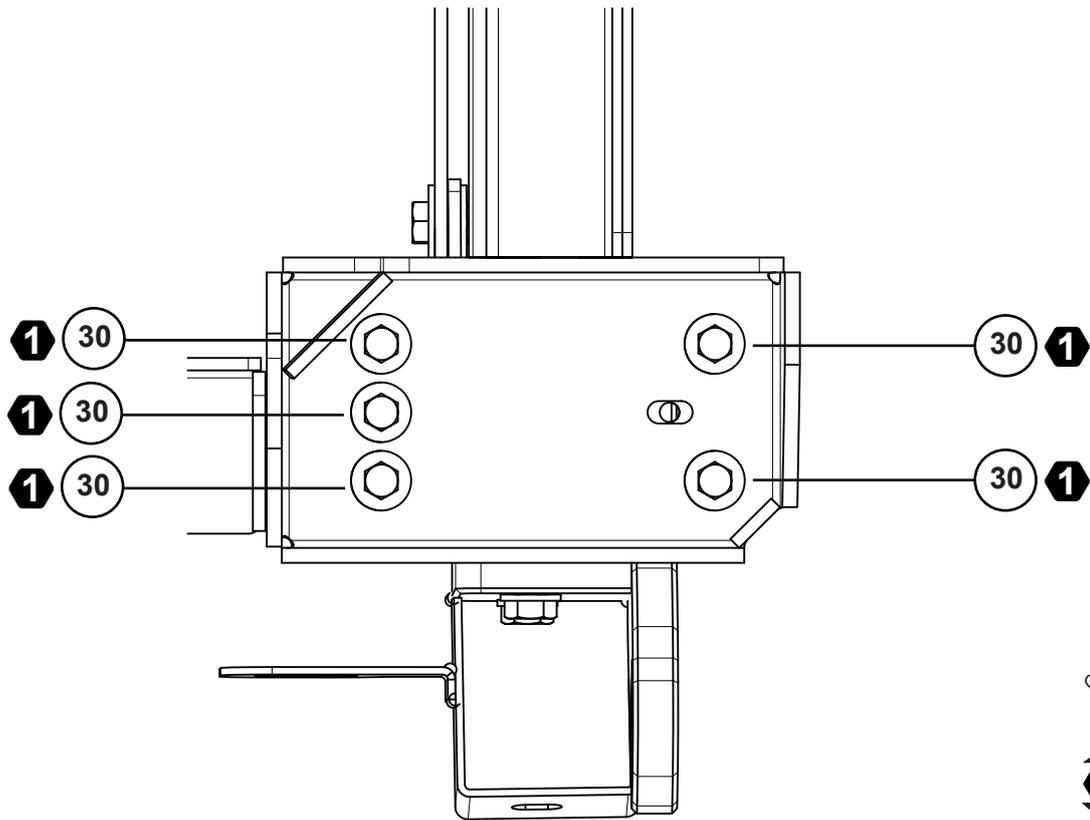
30 Using a Non-Permanent marker, Masking Tape and Tape Measure find then mark the centre of the Winch Cradle (4) using the edge of the rectangular cutouts. Also find and mark the centre of the vehicle body using the two holes in the horizontal surface of the radiator support moulding. Align the Winch Cradle to the vehicle body centre line by adjusting the horizontal position of the Winch Cradle. Once aligned finger tighten bolts securing the Winch Cradle so that it does not move.



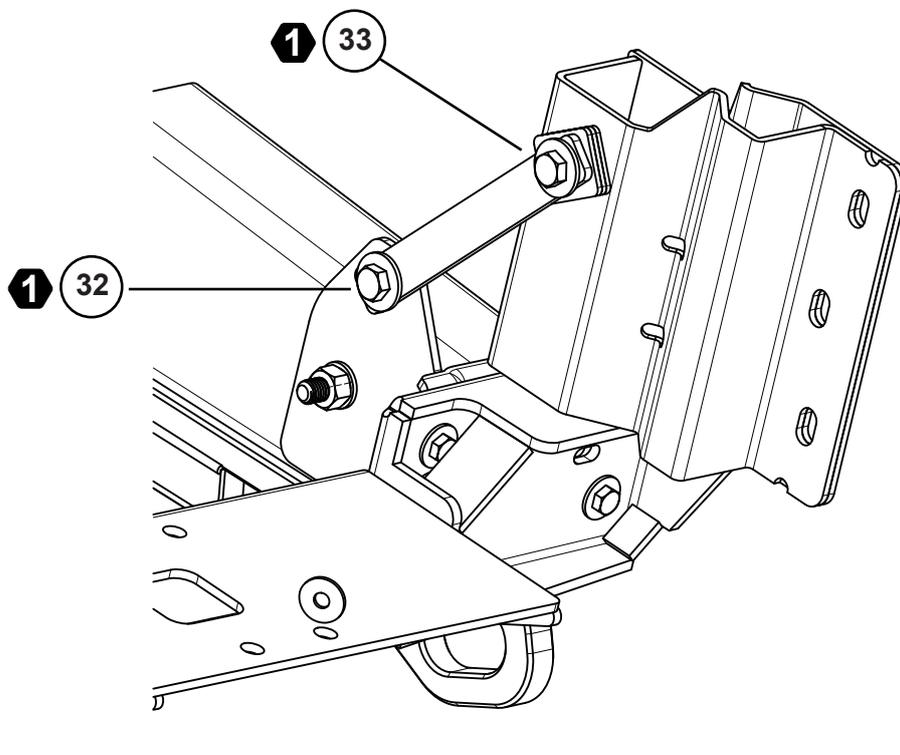
- 31** Loosely secure the Strap (13) to the Mount Bracket Inner LHS (10) using an M10 x 30 Hex Head Bolt (32), M10 Washer (38) and M10 Lock Nut (42).
 Take note of the gap between the Strap and the Winch Cradle (4) on each side by trialling the number of Washer Plates (26) that will fit without pushing the strap away from the Winch Cradle. Loosely secure the other end of the strap to the Winch Cradle (4) using an M10 x 50 Hex Head Bolt (33) and M10 Washer (38) through the strap and the number of Washer Plates noted earlier. Repeat on RHS.



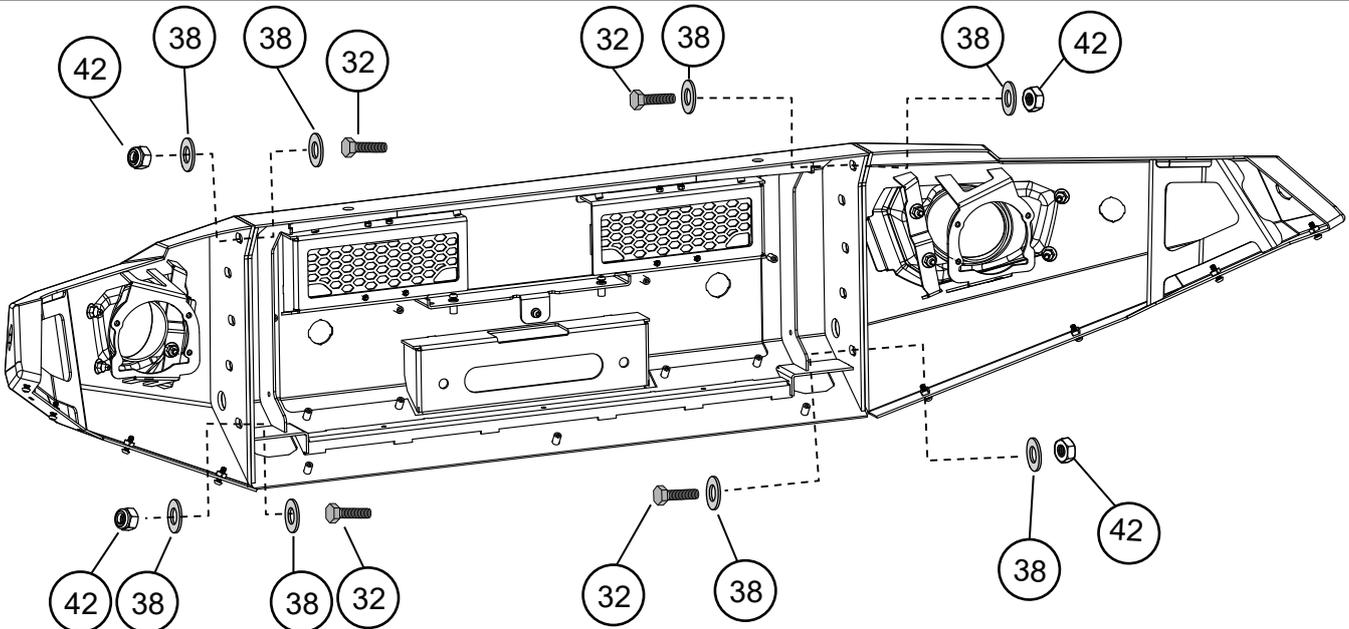
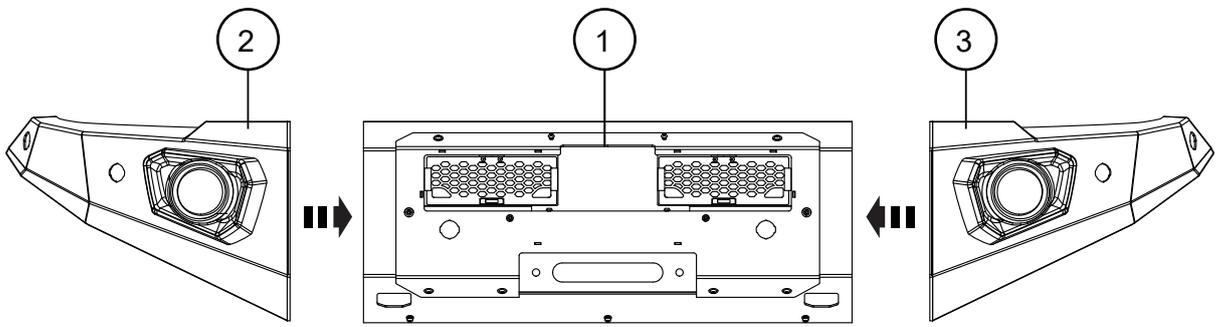
- 32** Tighten the M12 x 50 Hex Head Bolts (34) to 109 Nm.
 Tighten the M12 x 120 Hex Head Bolts (35) to 77 Nm.



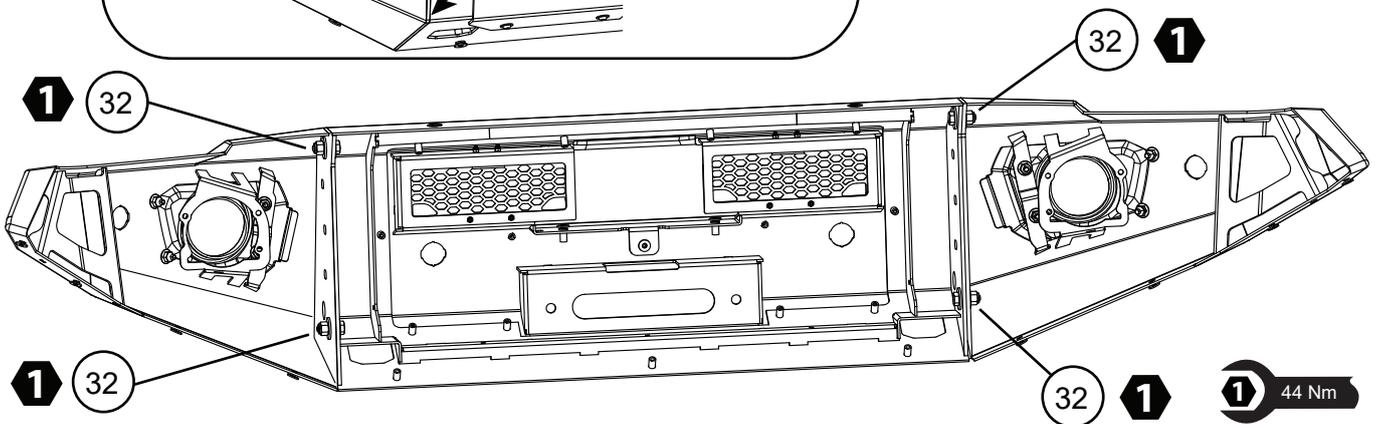
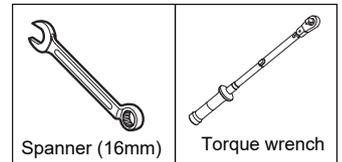
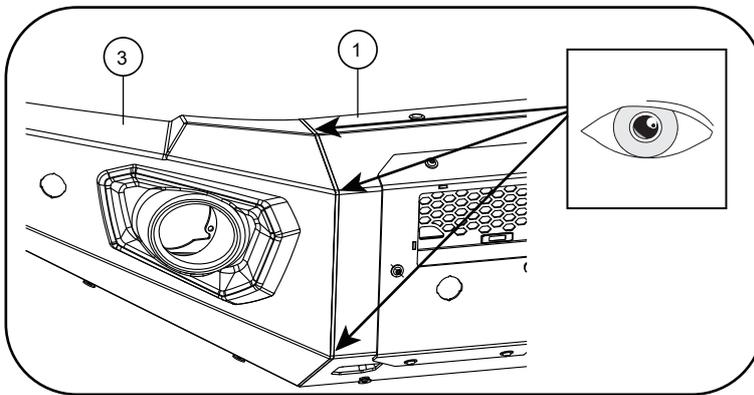
33 Tighten the M8 x 30 Hex Head Bolts (30) to 22 Nm.



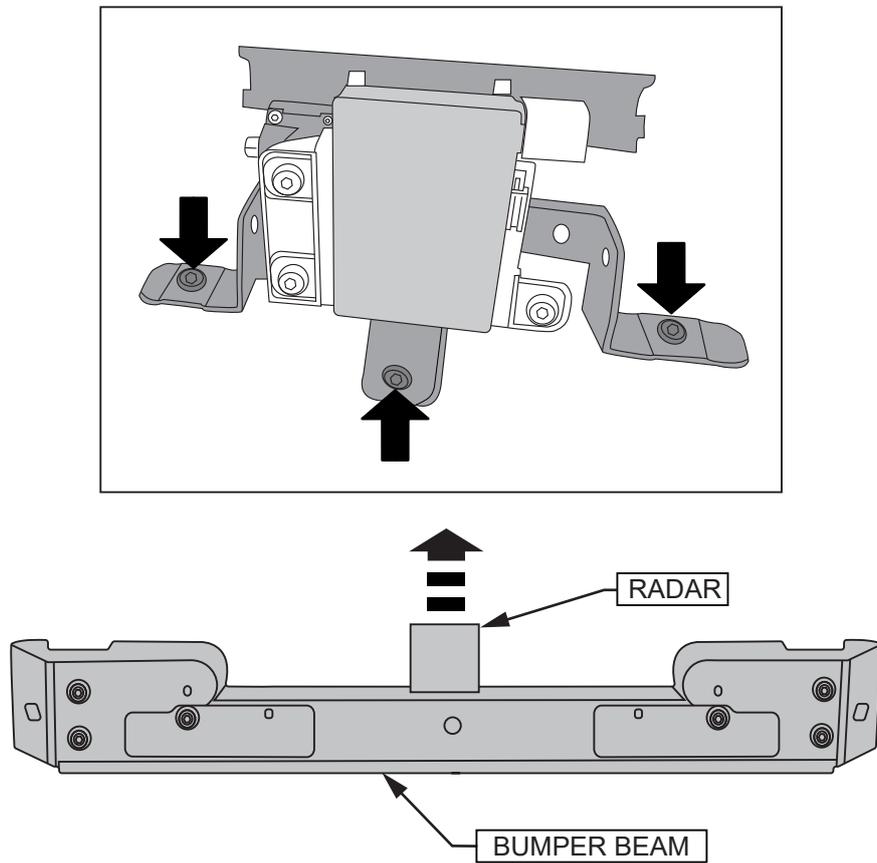
34 Tighten the M10 x 30 Hex Head Bolts (32) and M10 x 50 Hex Head Bolt (33) to 44 Nm. If installing WARN VR EVO 10-S winch (sold separately) refer to Appendix A, then continue to step 35.



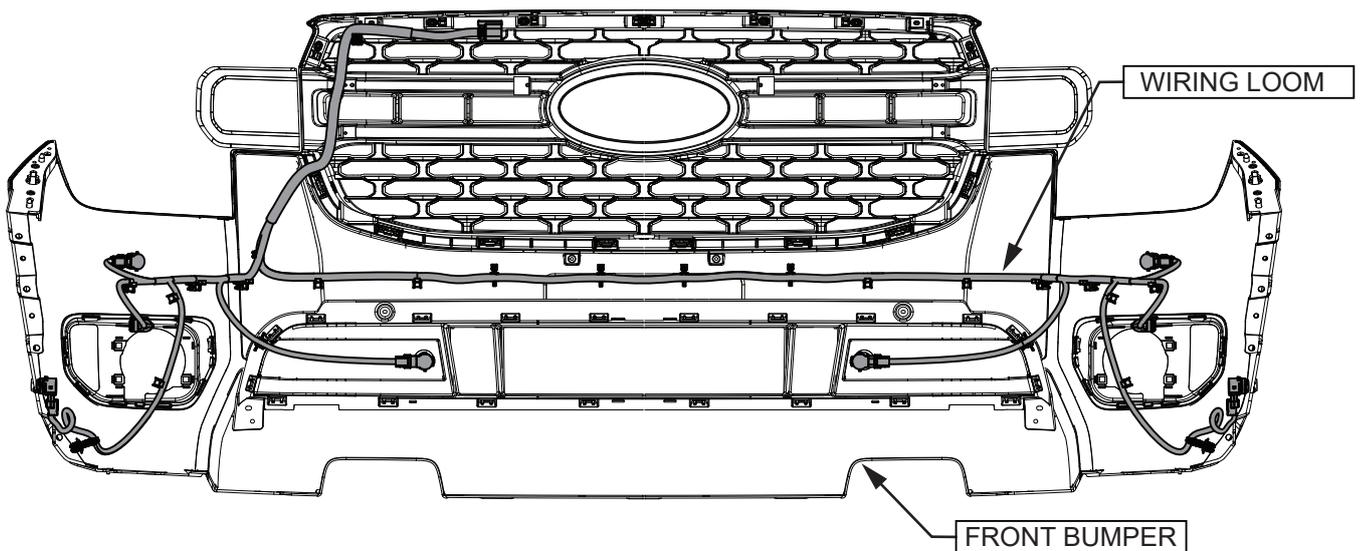
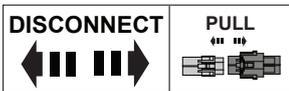
35 Loosely secure the LHS & RHS Return Assemblies (2)(3) to the Centre Grille Assembly (1) with 4x M10 x 30 Hex Head Bolts (32), 8x M10 Washers (38) and 4x M10 Lock nuts (42). Do not tighten.



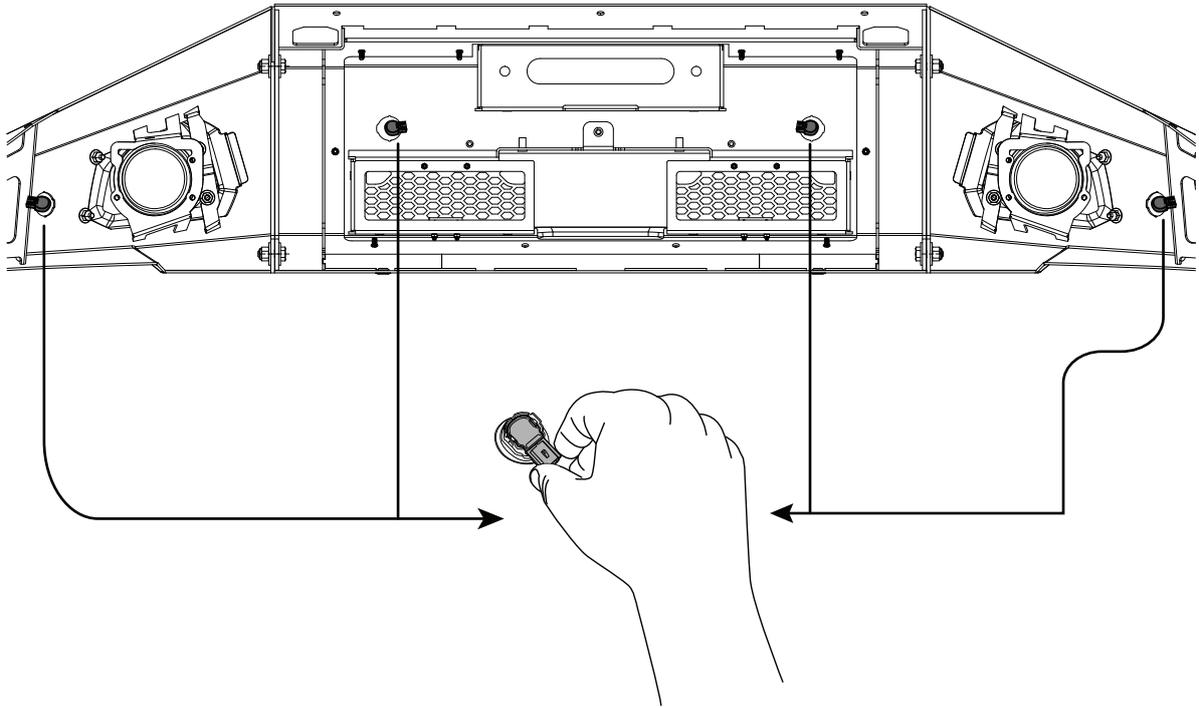
36 Visually inspect the front facing surfaces of the Centre Grille Assembly (1) and the Return Assemblies (2),(3) to ensure they are sitting as flush as possible. Torque the M10 x 30 Hex Head Bolts (32) to 44 Nm.



37 Remove the 3x Screws securing the Radar Bracket to the Bumper Beam. Retain the Radar for later fitment.

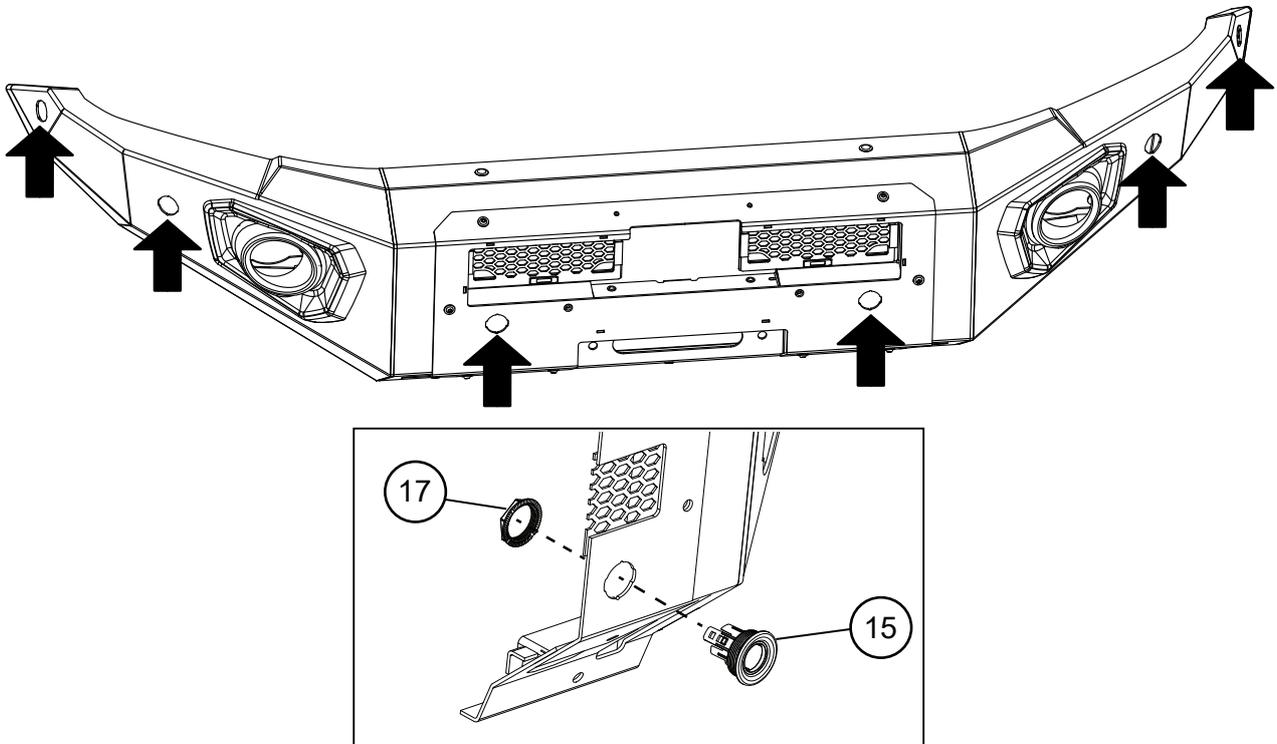


38 Disconnect the vehicle wiring loom parking sensor and fog lamp. Remove the vehicle wiring loom from the previously removed front bumper and retain for later fitment. Note: The vehicle wiring loom is not symmetrical, take note which side is LH and which is RH. Note: The number and position of the sensors/fog lamps may vary depending on the model of vehicle.

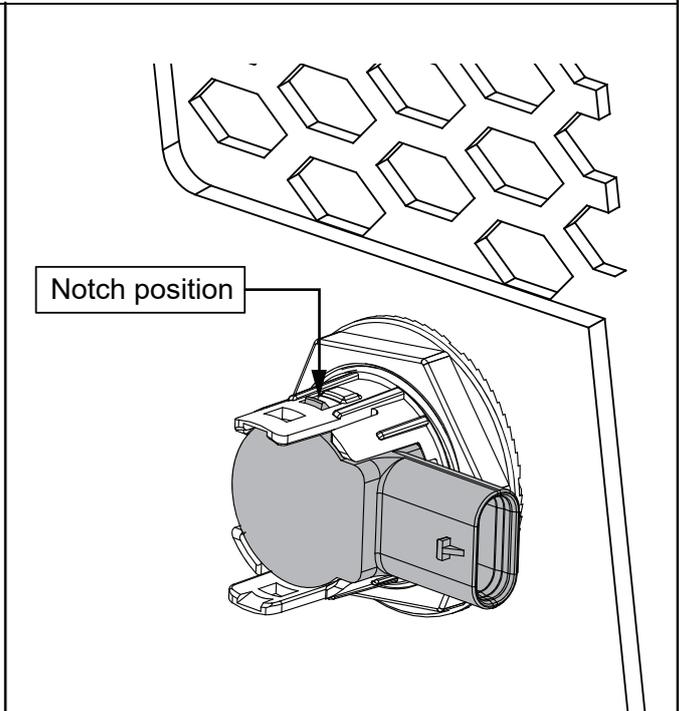
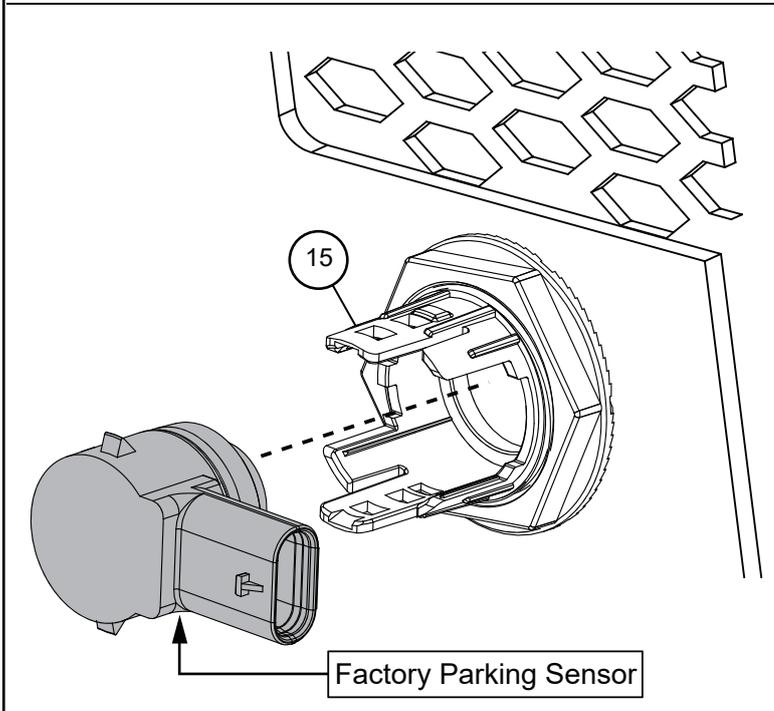
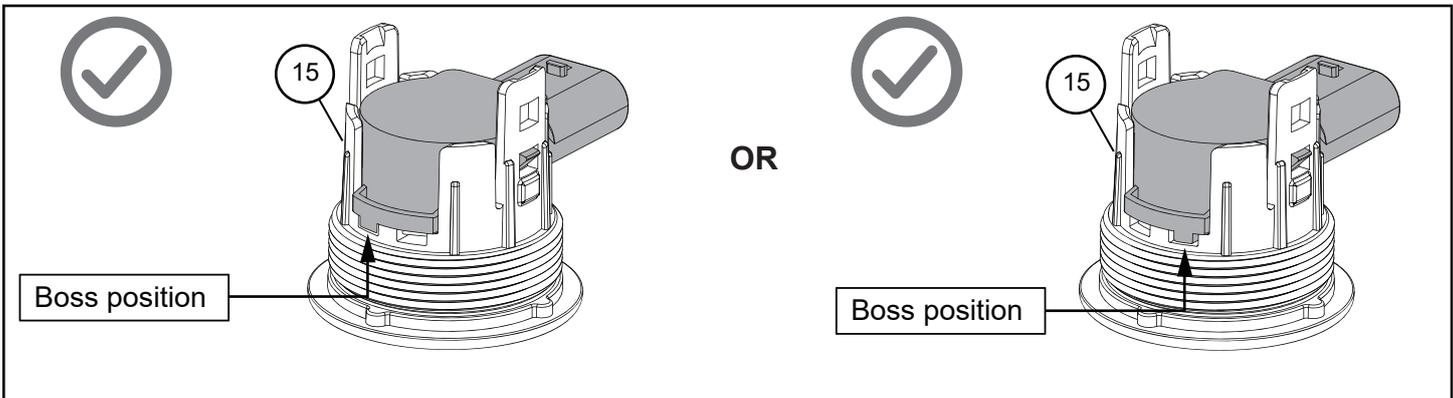


39 Carefully remove the factory parking sensors from their housings by pushing in the side clips and pulling up to release from the front bumper. Once removed retain the parking sensors. If present, remove Factory Radar Unit from front bumper and retain for later.

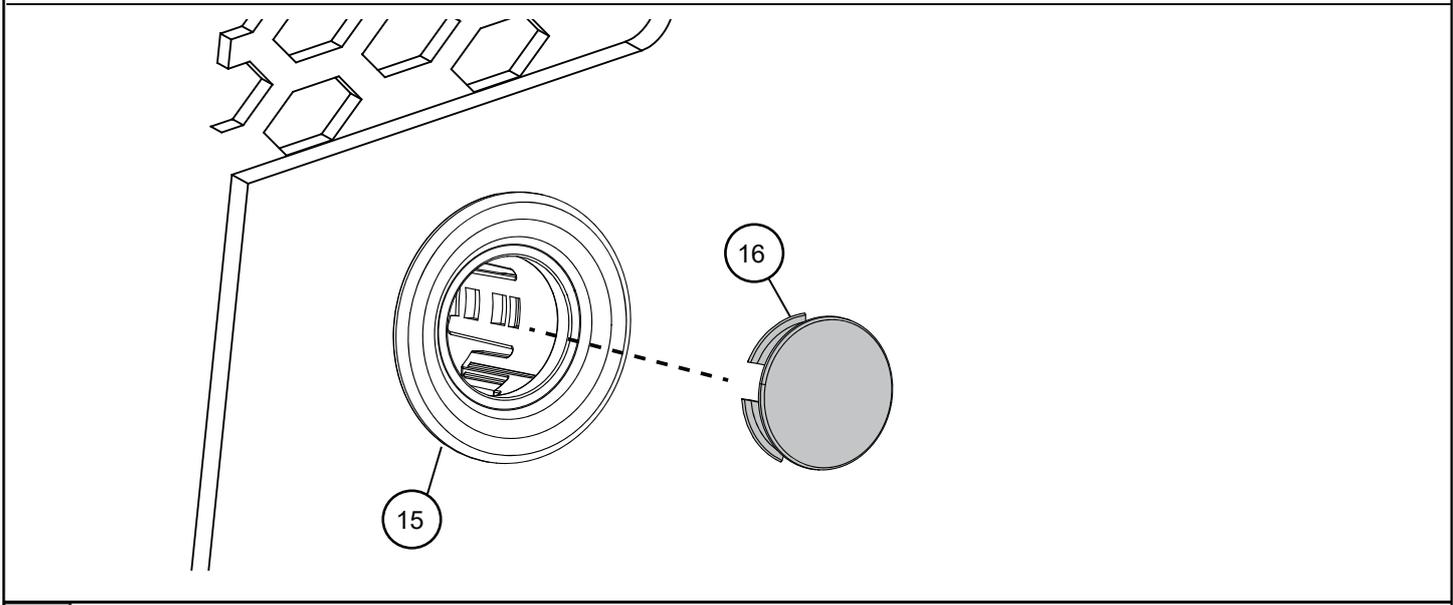
Note: Before removing the parking sensors take note of the direction of the parking sensor so that it can be installed in the same direction on the Bull bar.



40 Insert the Parking Sensor Bezel (15) through the holes marked above. Ensure the notch on the Parking Sensor Bezel is aligned with the notches in the hole. Secure the Parking Sensor Bezel (15) with the Parking Sensor Bezel Nut (17). Repeat for all Parking Sensors.



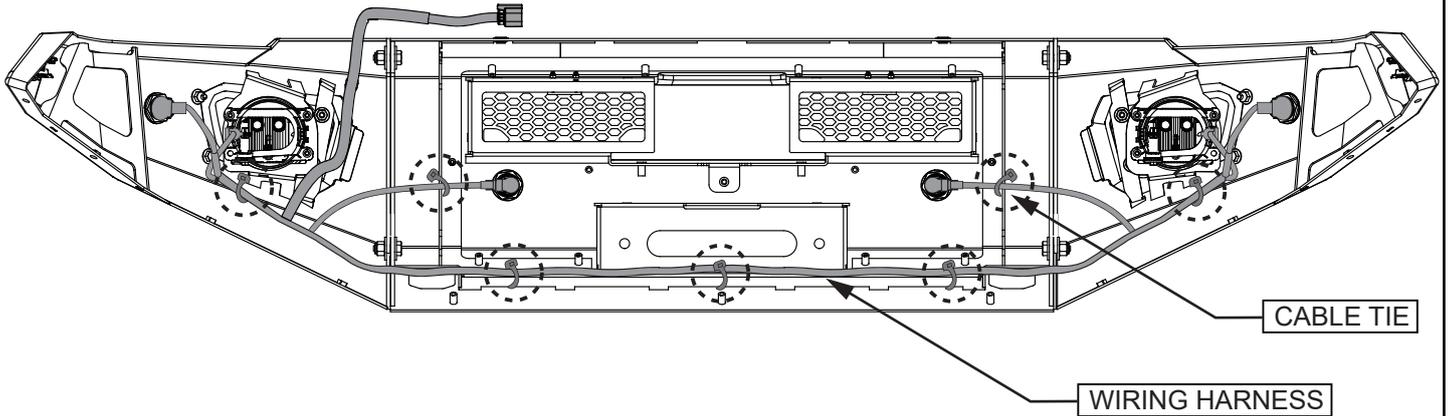
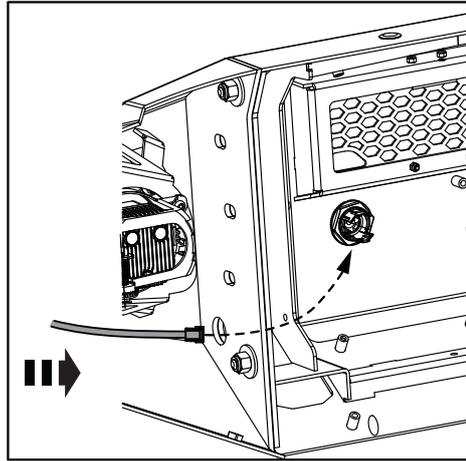
41 Insert the factory parking sensor into the Parking Sensor Bezel (15) ensuring that the boss on the factory parking sensor is installed into the Parking Sensor Bezel (15) at the double opening side of the bezel.
 Ensure that the factory parking sensor is inserted until the notch on the parking sensor engages the forward most hole on the Parking Sensor Bezel (15).
 If there is no factory parking sensor present refer to Step 42, otherwise proceed to Step 43.



42 If there is no factory parking sensor present simply press the Parking Sensor Blank (16) into the Parking Sensor Bezel (15).



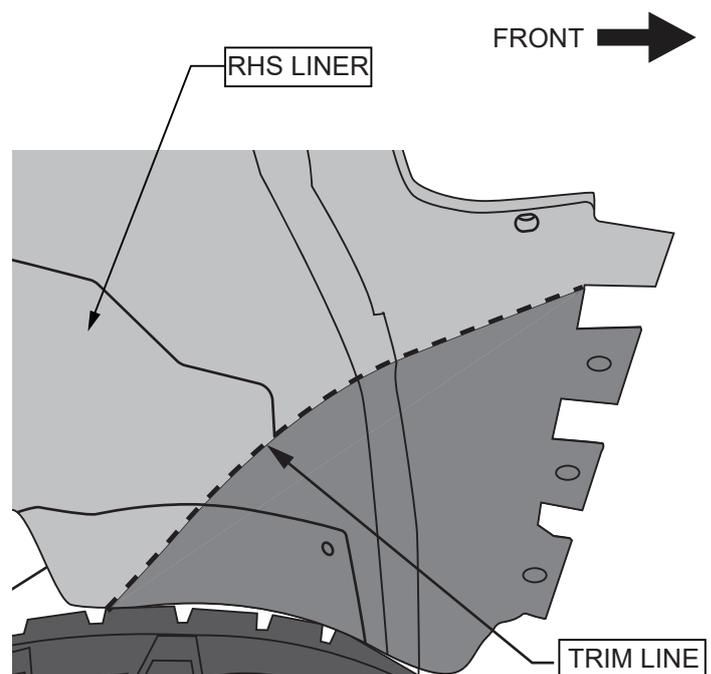
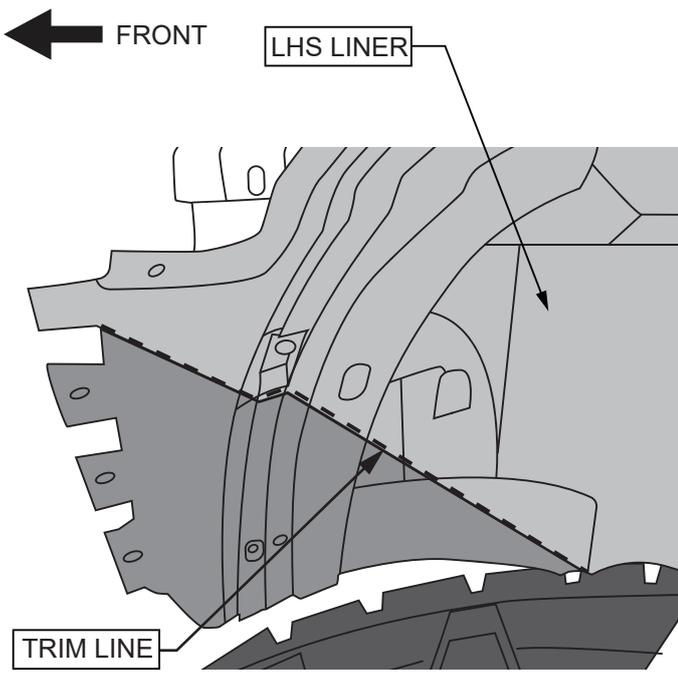
CABLE TIES



43

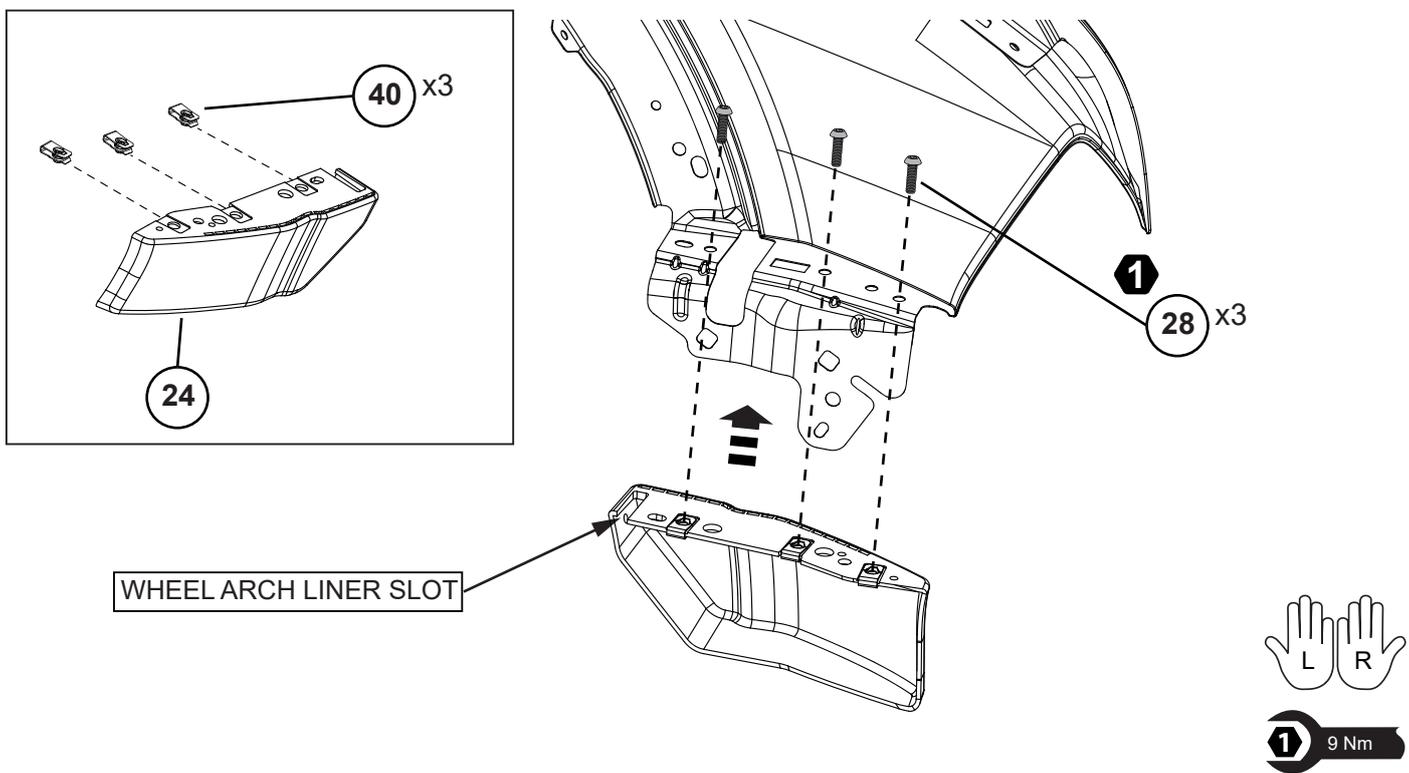
Install the factory vehicle wiring harness removed from the bumper into the Bull Bar. Connect the 4 parking sensors (some models 6) into the vehicle wiring loom. Ensure that the inner most parking sensor cables are passed through the hole as shown in detail. Connect the Lamps in the Bull Bar into the vehicle wiring harness. Secure harness with cable ties as shown.

NOTE: If the factory vehicle wiring harness can't reach the sensors installed in the Returns, then the Parking Sensor Extension Loom (20) can be used.

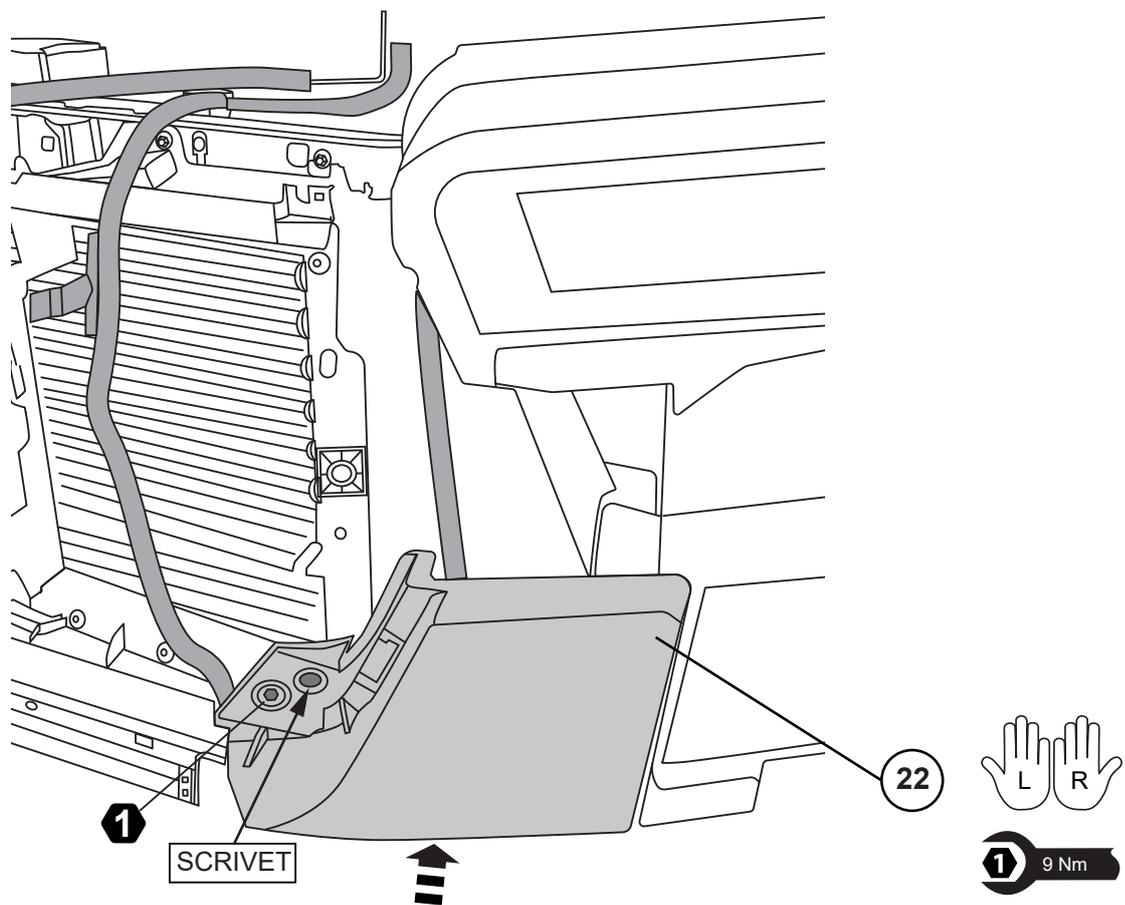


44

Mark the RH & LH wheel arch liner as shown and trim the liner.

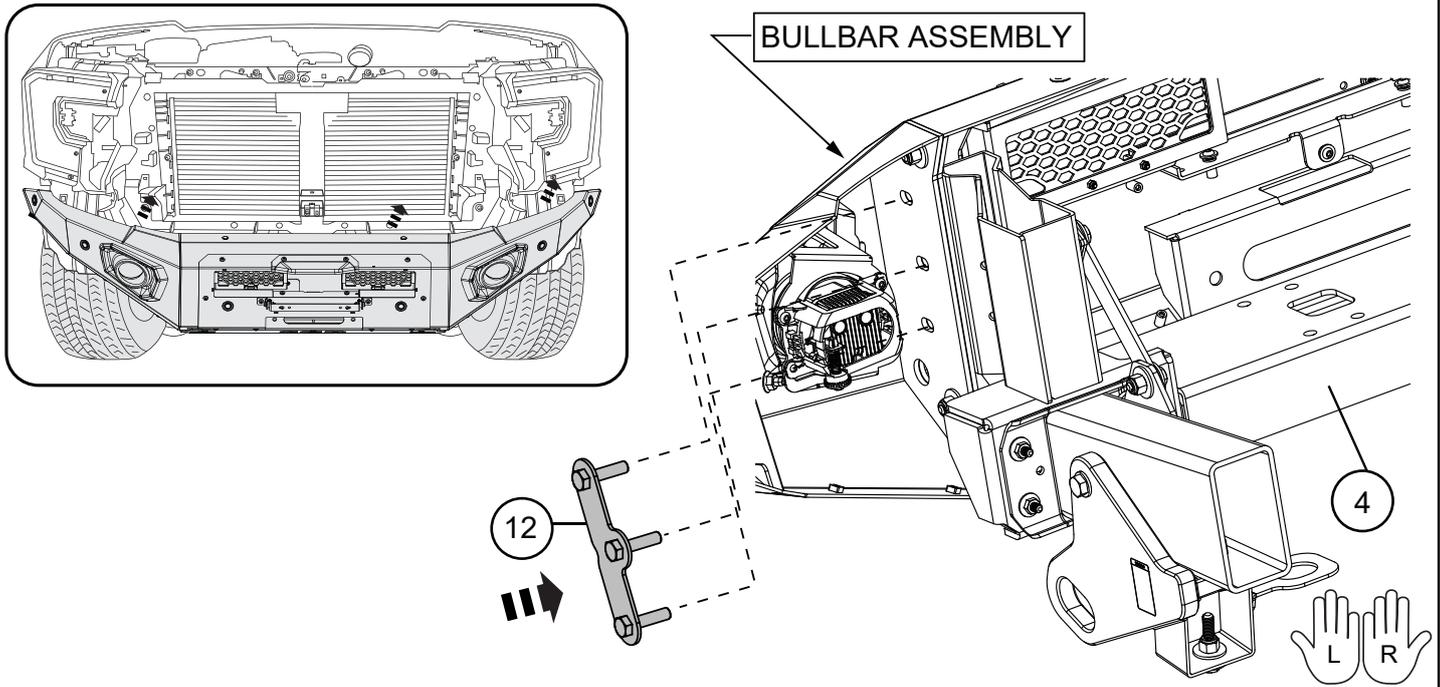


- 45** Push 3x M6 U Clip (40) onto the Fender Moulding LHS (24) as shown. Looking inside the wheel arch access panel install 3x M6 x 20 Button Head screws (28) using a Size 4 Allen drive. Ensure the Wheel Arch liner is tucked into the wheel arch liner slot. Tighten to 9 Nm.



- 46** Install the Grille Moulding LHS (22) using the screw and scrivet retained earlier. Tighten the screw to 9 Nm.

LHS INNER VIEW: SHOWN WITHOUT VEHICLE FOR CLARITY



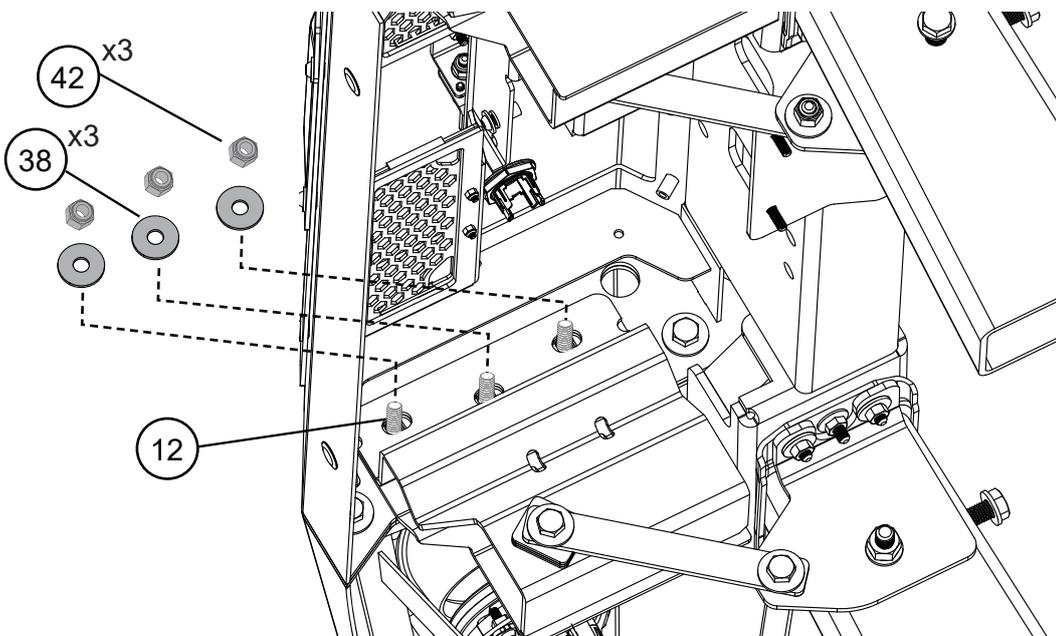
- 47** Lift and position the Bullbar Assembly onto the Winch Cradle (4). Once in position, insert the 2x Bolt Plates (12) from the underside of the vehicle. The Bolt Plates (12) must be installed from the outboard side on the LHS and RHS Winch Cross Member uprights.

CAUTION:

Heavy Load – Two person lift or mechanical lifting aid required.

Unsecured Load – Keep clear of unsecured object. Spotter or mechanical lifting aid required.

LHS UNDER VIEW

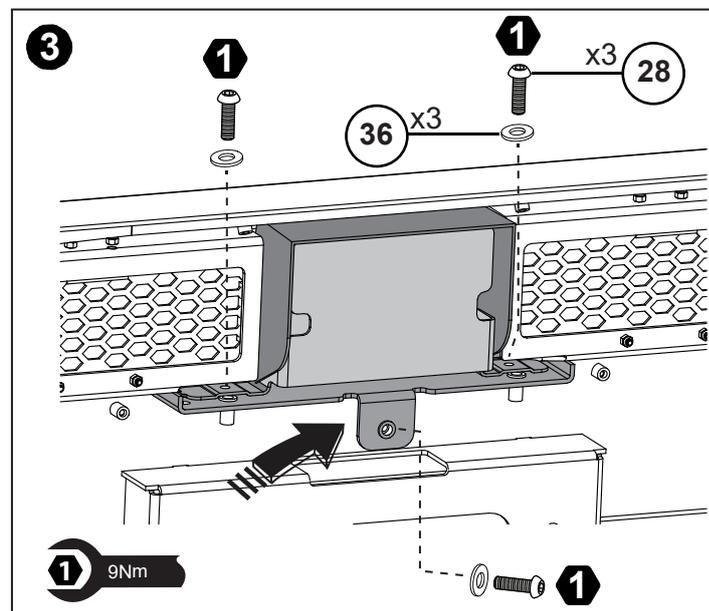
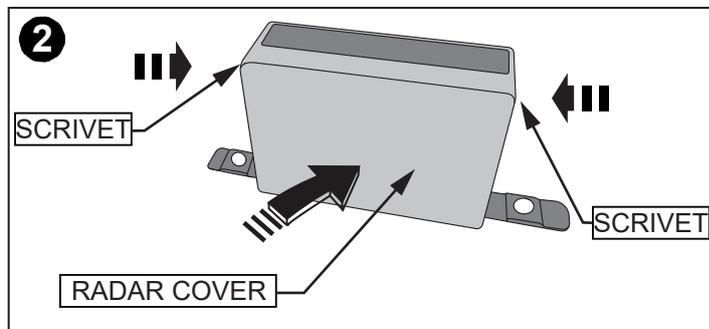
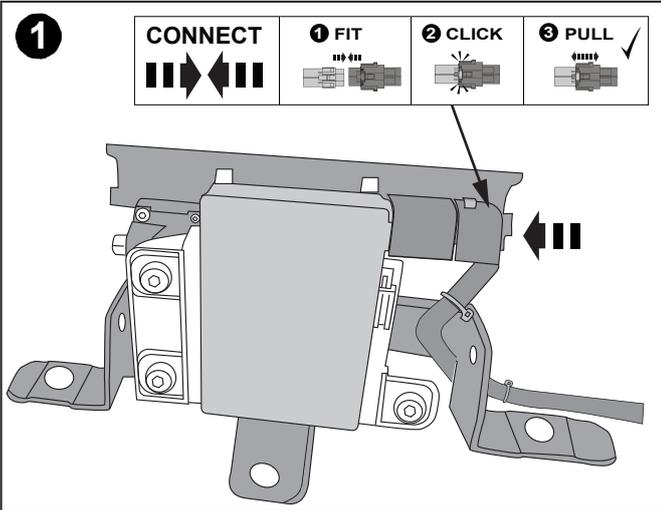


- 48** From the underside of the vehicle, Loosely secure 3x M10 Washers (38) and M10 Lock nuts (42) to the Bolt Plate (12).

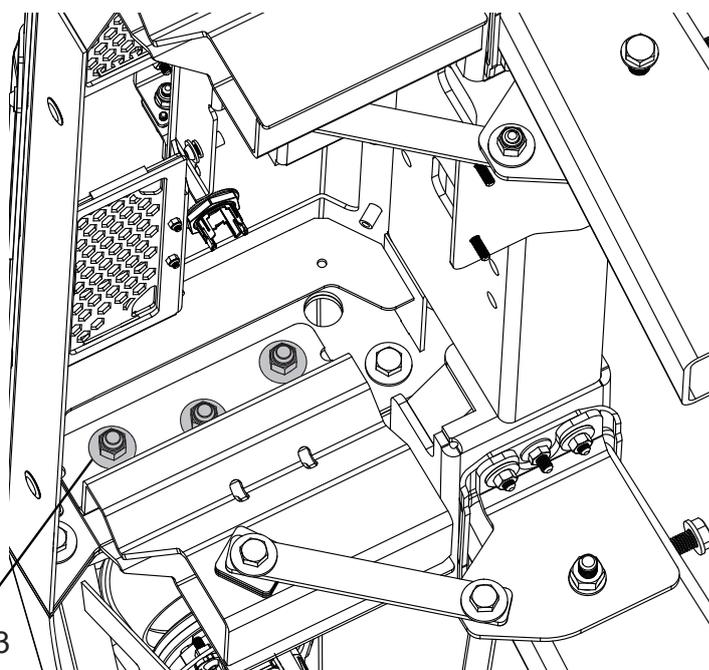
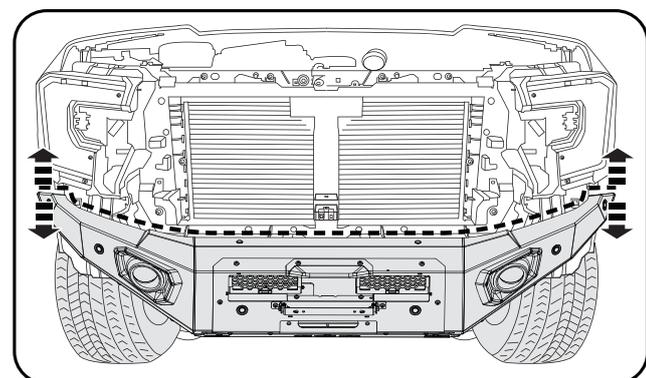
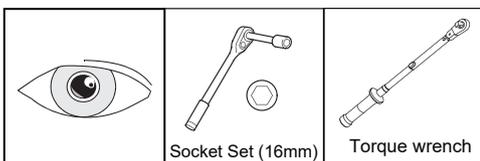
CAUTION:

Heavy Load – Two person lift or mechanical lifting aid required.

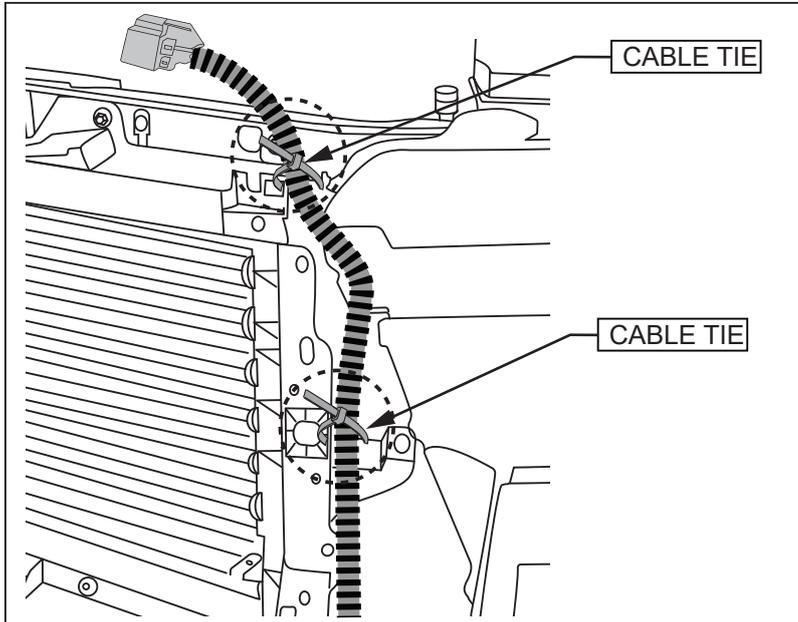
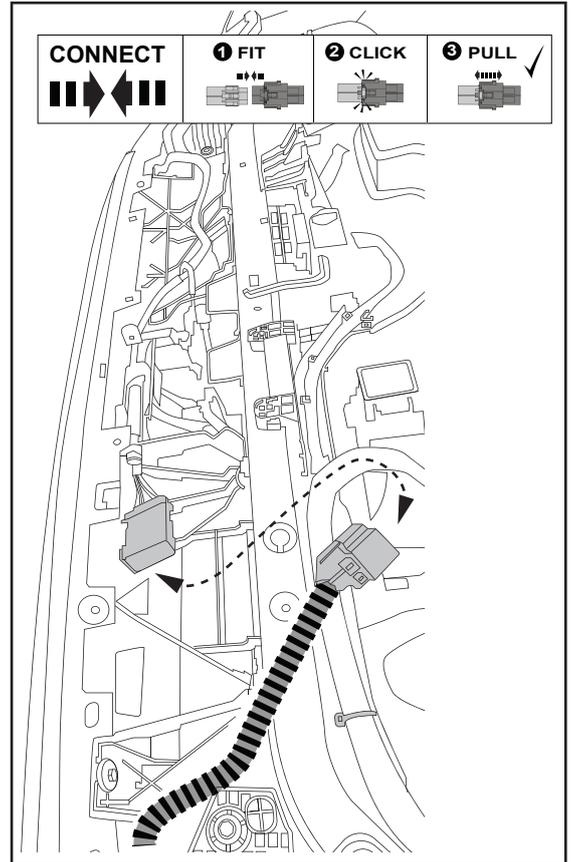
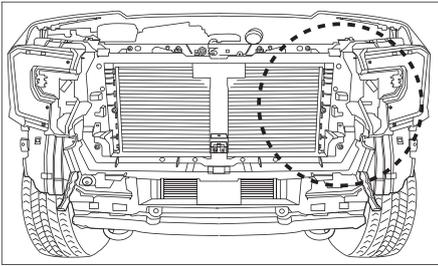
Unsecured Load – Keep clear of unsecured object. Spotter or mechanical lifting aid required.



49 Plug the factor Radar sensor into the vehicle radar wiring loom.
 Re-install the cover onto the radar sensor assembly using the push clips removed during Step 15.
 Secure the Radar to the Centre Grille Assembly (1) using 3 x M6 x 20mm Screws (28) and 3 x M6 Washers (36). Tighten the M6 Screws to 9 Nm.



50 Adjust the vertical positioning of the assembly to ensure there is an even gap beneath each headlight. A second person is required to torque the M10 Nuts (42) installed in the previous step once an even fitment is achieved. Access to the M10 Nuts (42) is possible from the underside or top side. Once correctly positioned, torque to 44 Nm.



- 51** Route the vehicle wiring loom up next to the LHS light.
 Fix the vehicle wiring loom to the radiator support moulding in the positions shown using cable ties.
 Connect the Vehicle Harness in the Bull Bar to the vehicle in the position shown

FIGURE A

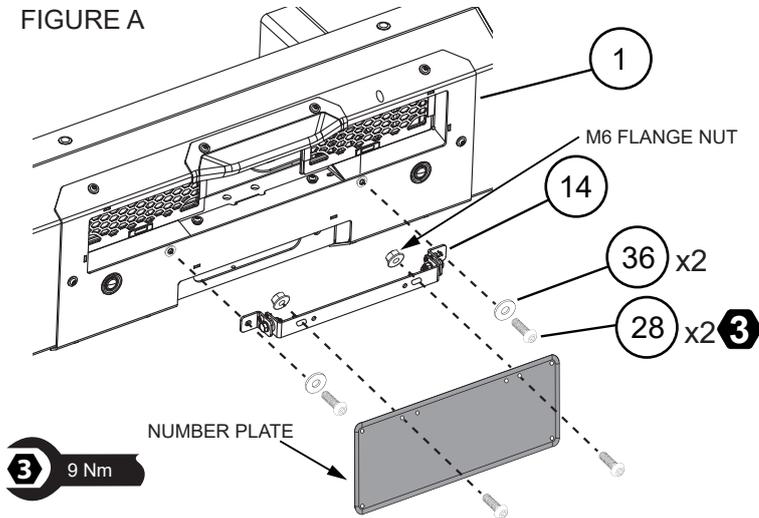
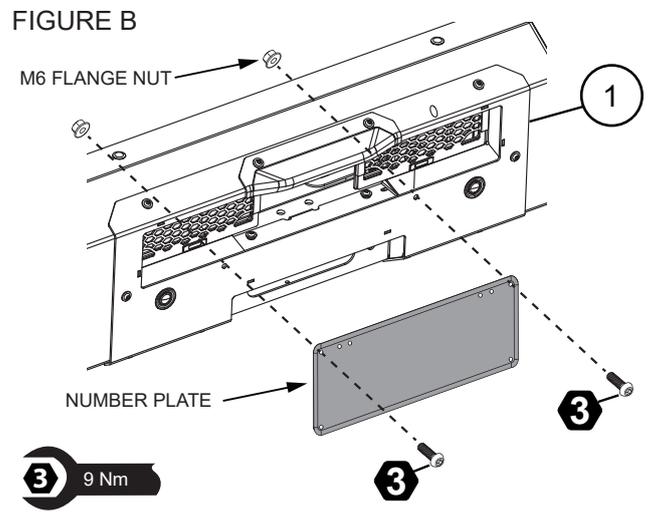


FIGURE B



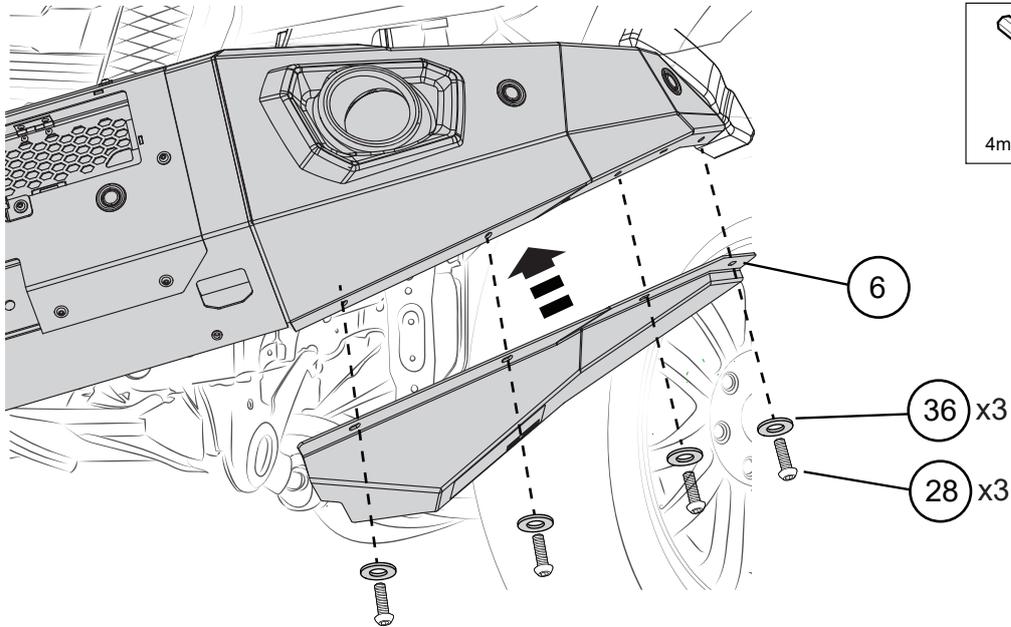
- 52** The Number Plate Mount Assembly rotates to allow access to the Fairlead and Winch Rope. If a winch is not installed the Number Plate can be installed directly onto the Centre Grille Assembly as shown in **Figure B**.

Attach the Number Plate Mount Assembly (14) to the Centre Grille Assembly (1) using 2x M6 x 20mm Screws (28) and 2x M6 Washers (36). Torque to 9 Nm.

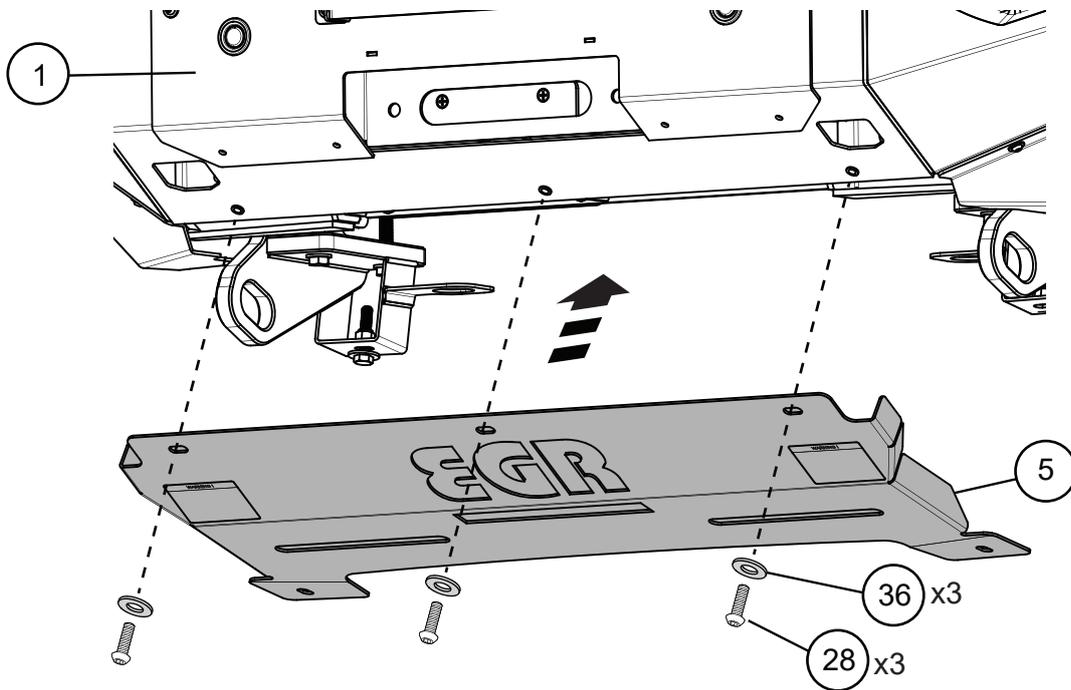
Use the 2 x M6 Screws and Nuts pre-installed in the front of the Number Plate Mount Assembly to install the Number Plate onto Bull Bar as shown in **Figure A**.

OR

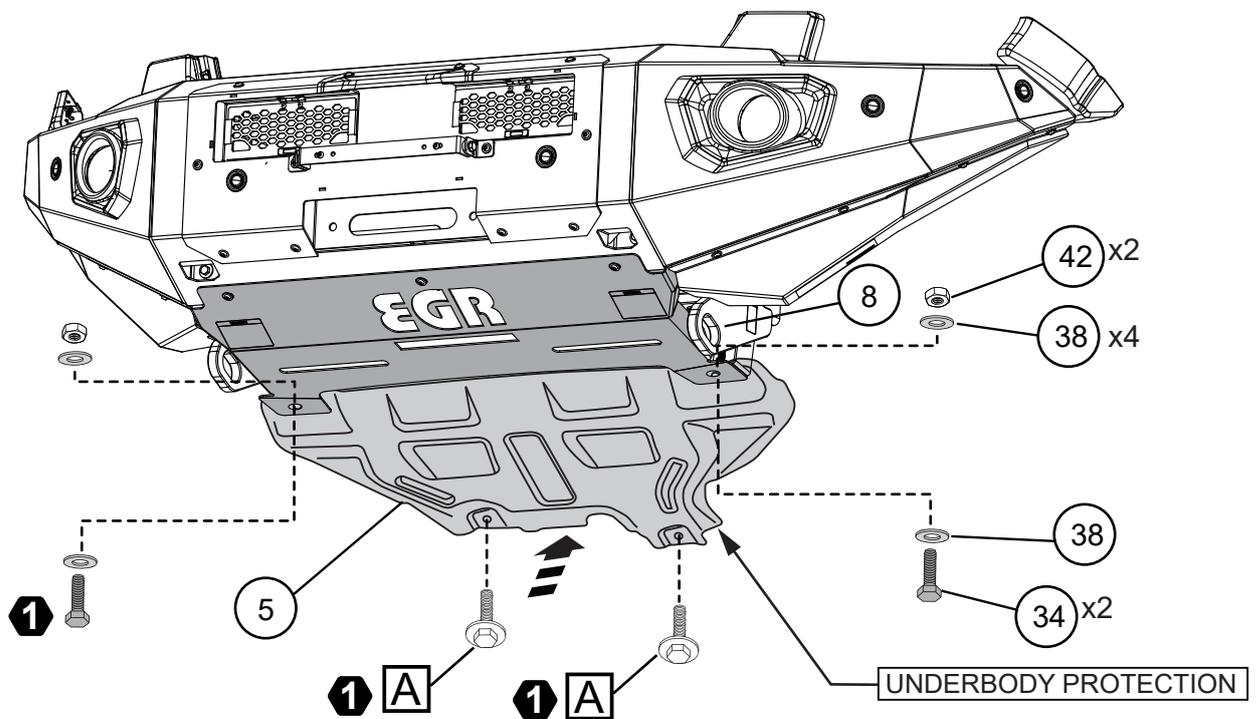
Use the 2x M6 Screws and Nuts pre-installed in the front of the Number Plate Mount Assembly (14) to install the Number Plate onto the Centre Grille Assembly (1) as shown in **Figure B**.



53 Attach the Undercover LHS (6) to the Returns Assembly LHS (2). Secure using 4x M6 x 20mm Screws (28) and 4x M6 Washer (36). Torque to 9 Nm.



54 Attach the Bash Plate (5) to the Centre Grille Assembly (1) using 3 x M6 x 20mm Screws (28) and 3 x M6 Washers (36). Do not Tighten.



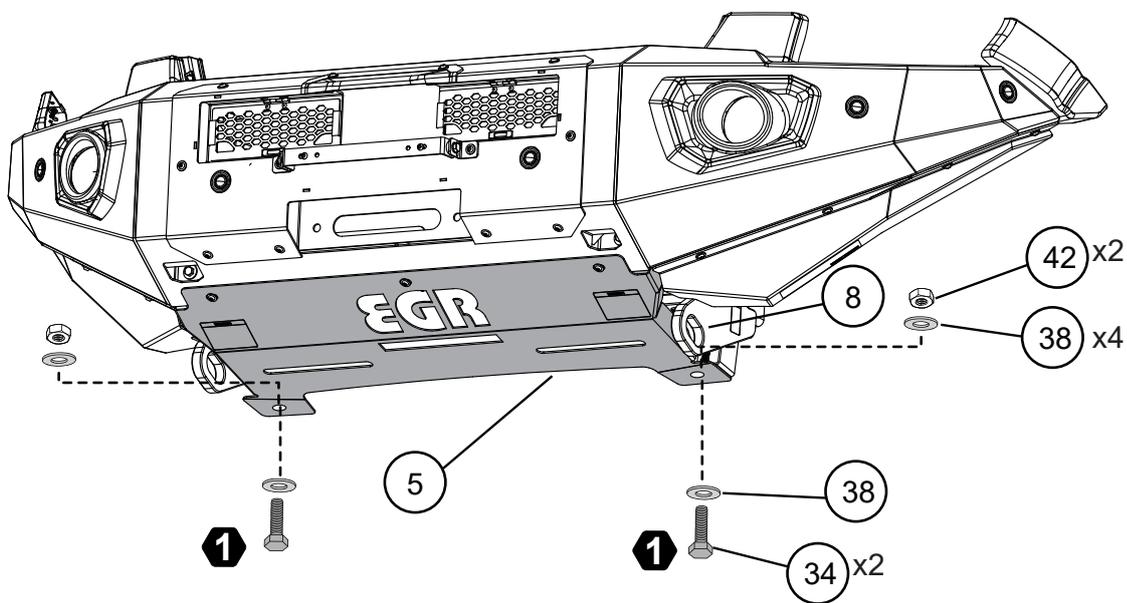
1 44 Nm

55

OPTION A :

Factory Steel Underbody Protection is fitted.

Install the Bash Plate (5) to the Recovery Hook LHS (8) using an M10 x 50mm Hex Bolt (33), 2 x M10 Washers (38) and an M10 Lock Nut (42). Ensure that the factory Steel Underbody Protection is installed between the Bash Plate (5) and the Recovery Hook LHS (8). Secure the rear of the factory plate using the factory screws (A). Torque all 4 screws to 44Nm. Continue to step 57.



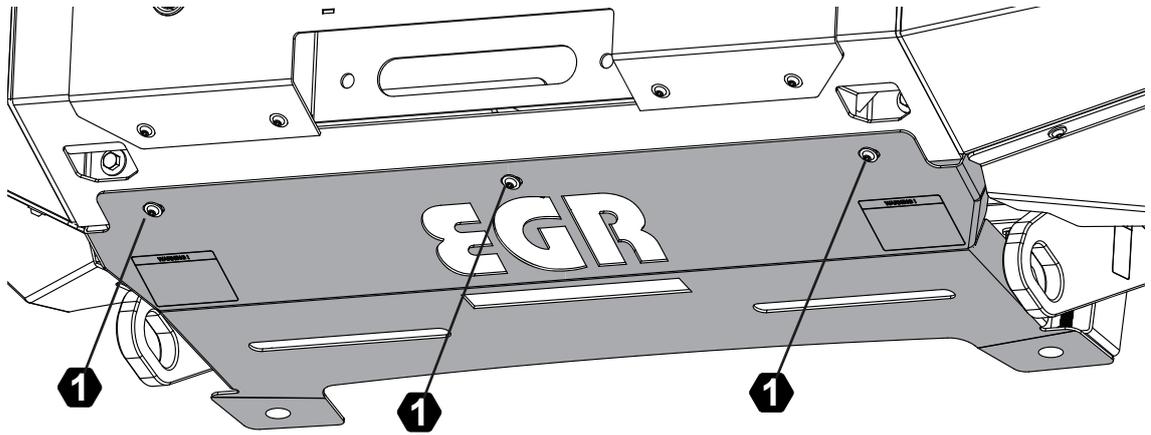
1 44 Nm

56

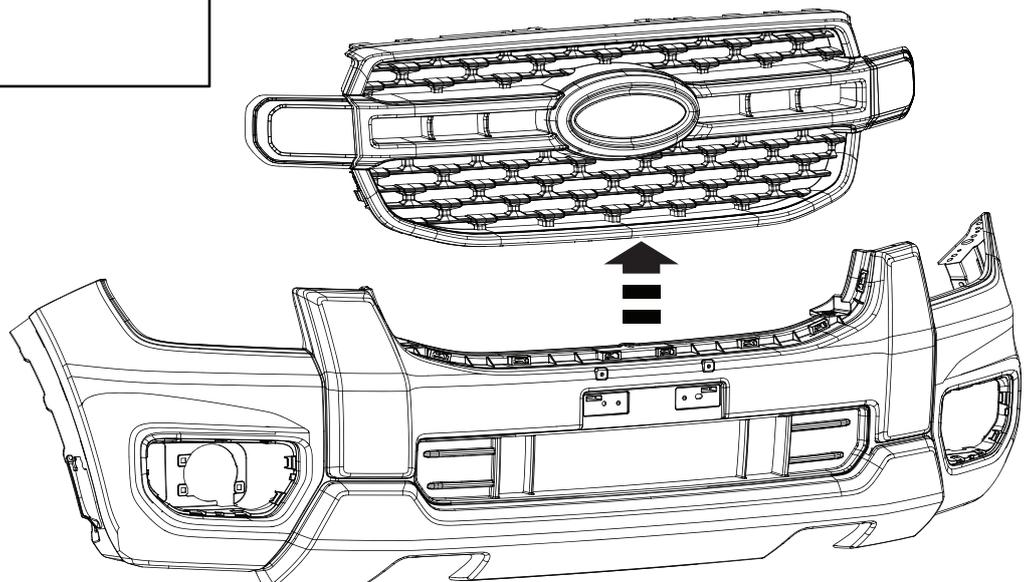
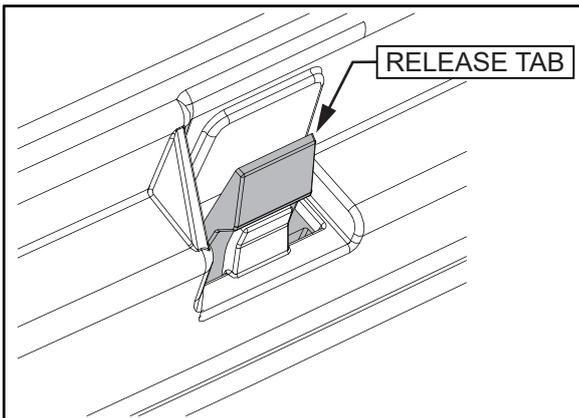
OPTION B:

Factory Steel Underbody Protection is not fitted.

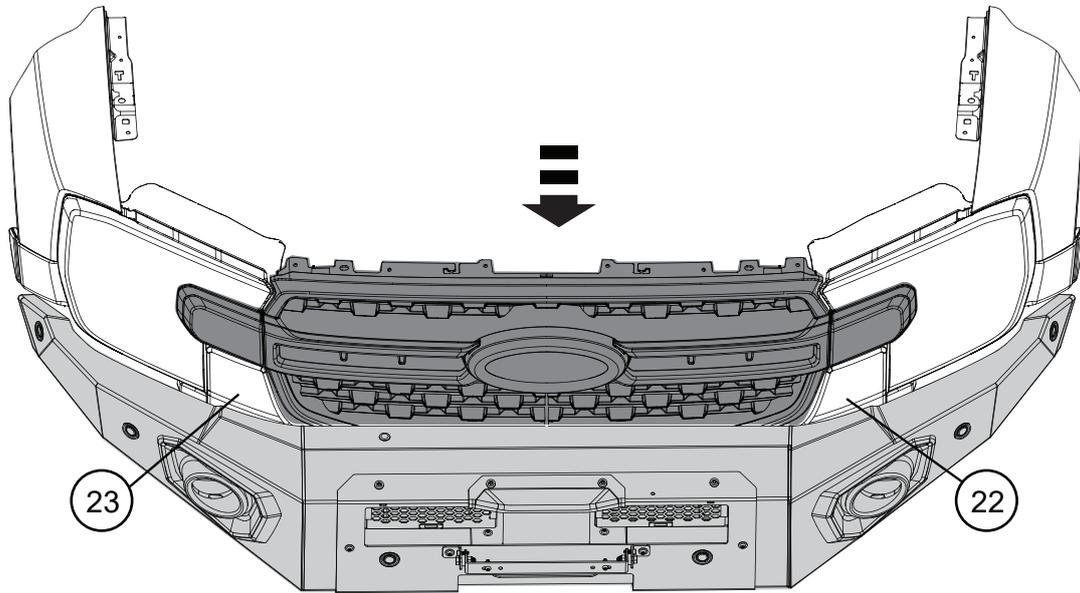
Install the Bash Plate (5) to the Recovery Hook LHS (8) using an M10 x 50mm Hex Bolt (33), 2 x M10 Washers (38) and an M10 Lock Nut (42). Torque to 44Nm.



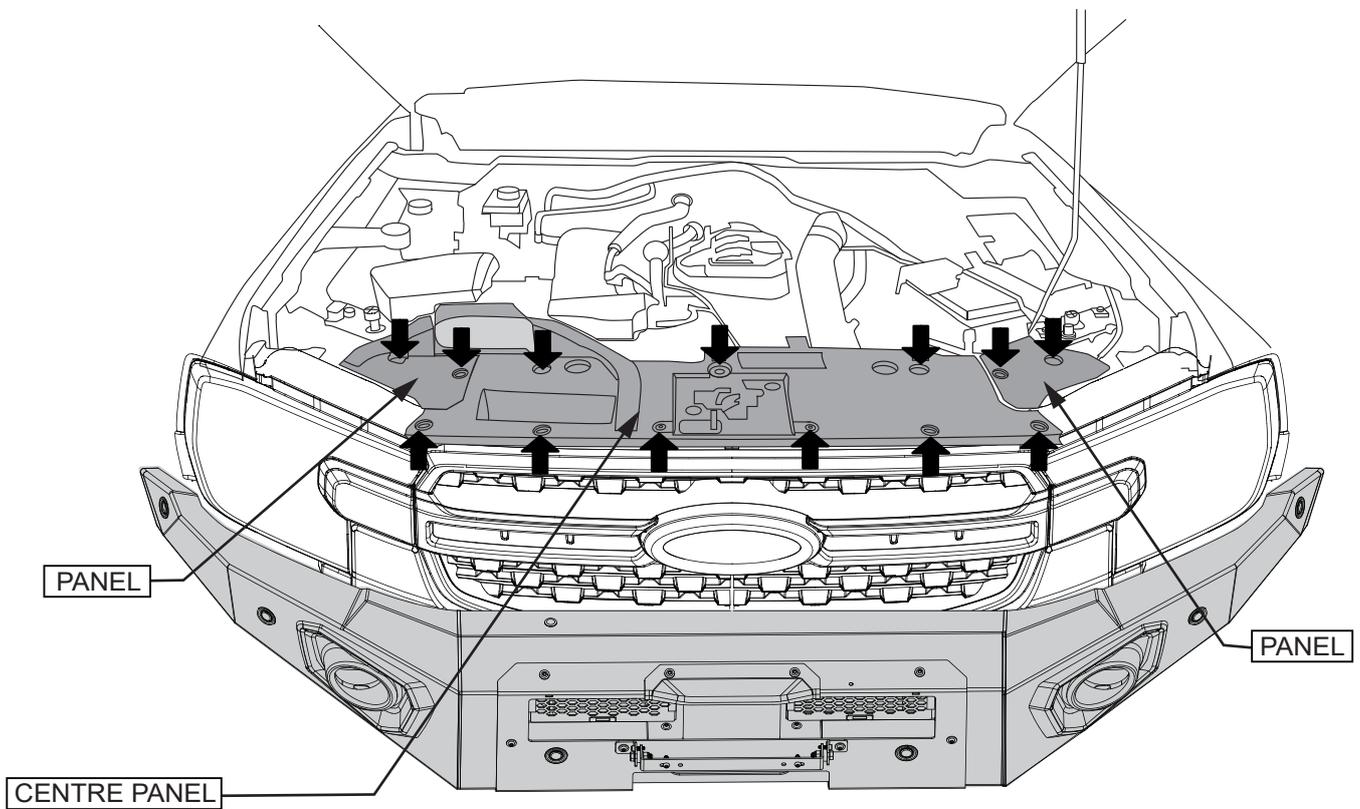
57 Tighten the M6 screws to 9Nm.



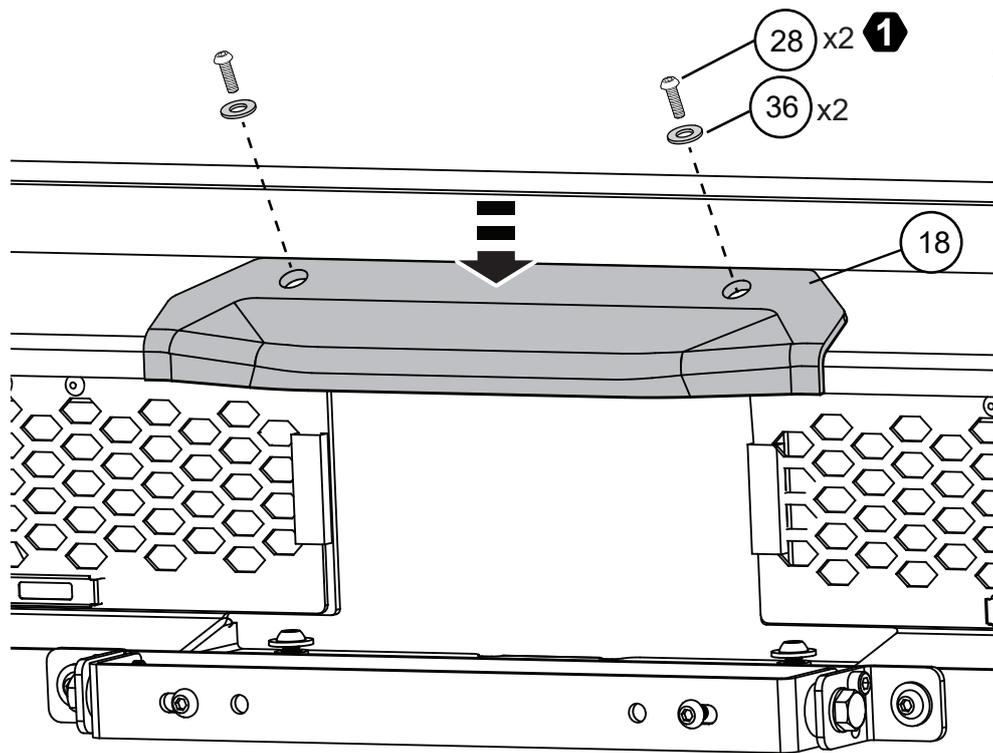
58 Remove the front grill from the bumper assembly by releasing multiple grill tabs on the inside of the bumper bar top edge. Note: use flat head screwdriver to assist releasing the tabs.



- 59** Fit the front grill into the vehicle as shown. Connect the side tabs to the Grille Moulding LHS (22) and Grille Moulding RHS (23).
Secure the grill top part with the two screws removed in step 4.

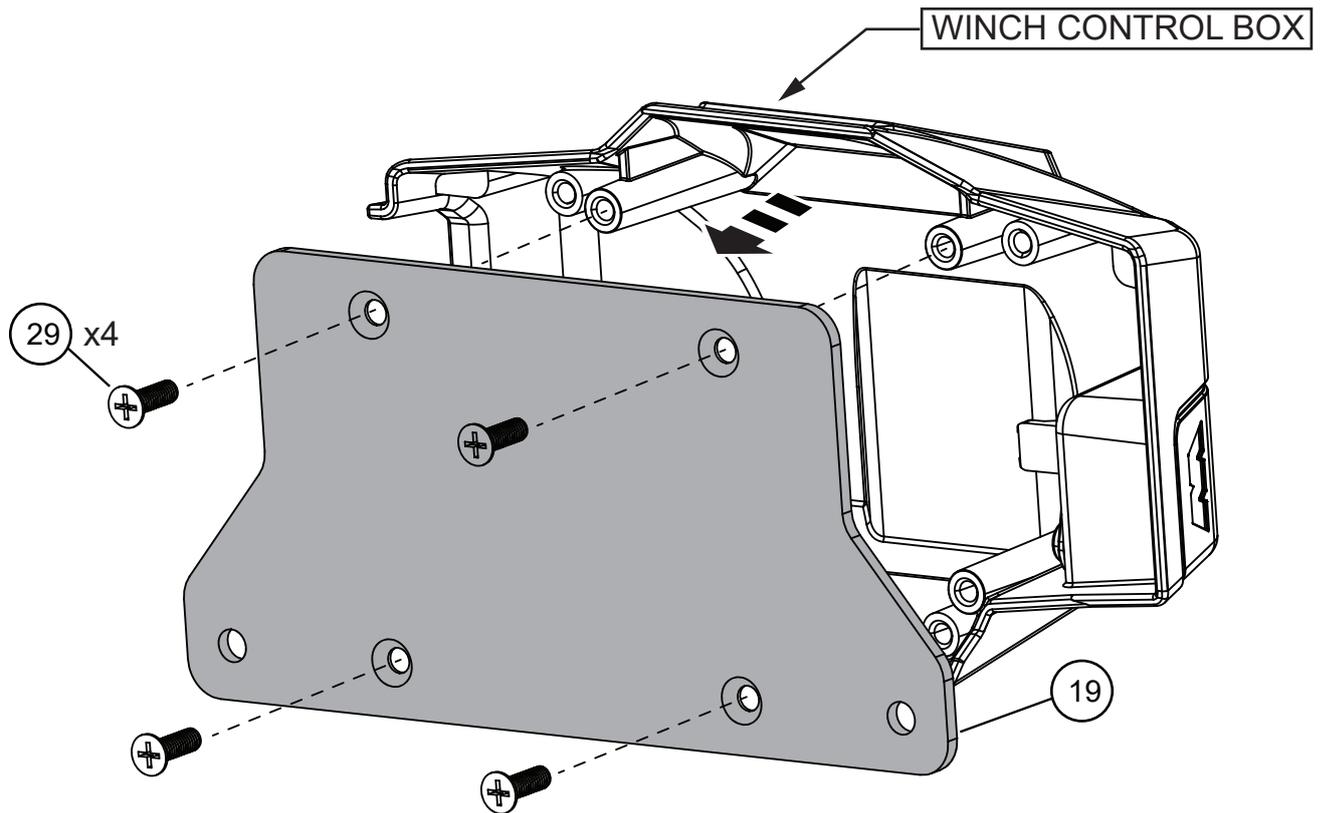


- 60** Refit the trim panels using 13x Scrivets fixing removed in step 1.

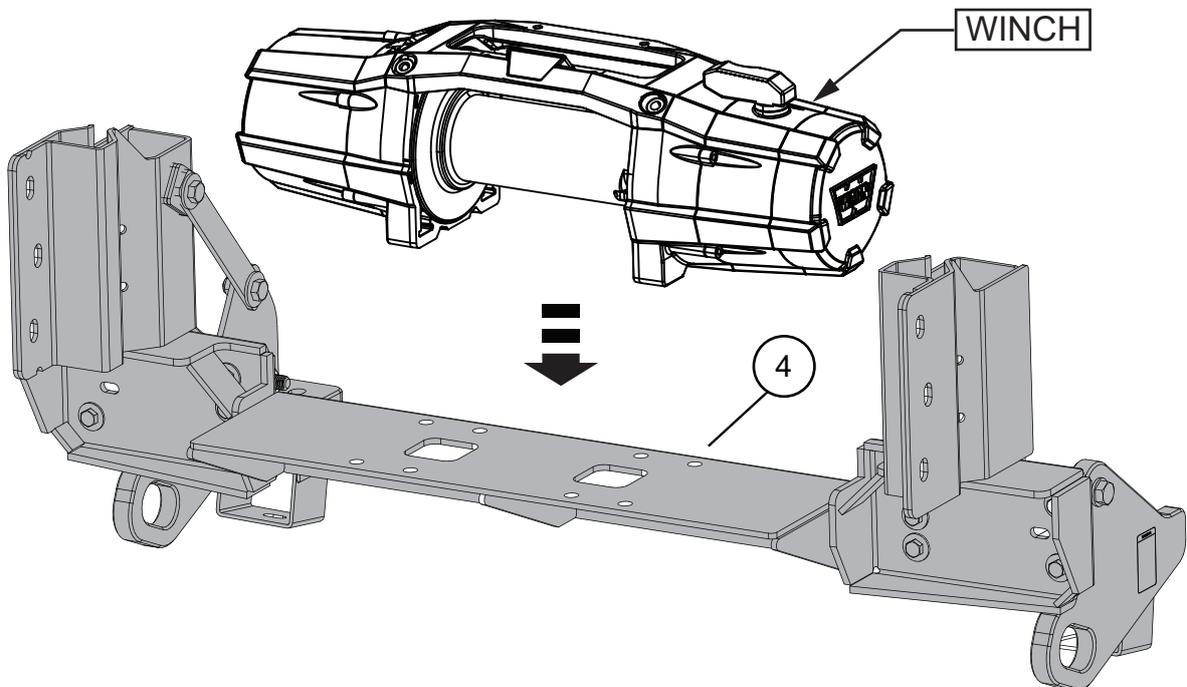


61 Install the Radar Cover (18) into the Centre Grille Assembly (1) using two M6 Washer (36) and two M6 x 20 Button Head Allen Screws (28). Torque to 9Nm.

APPENDIX A - INSTALLATION OF WARN VR EVO 10-S WINCH

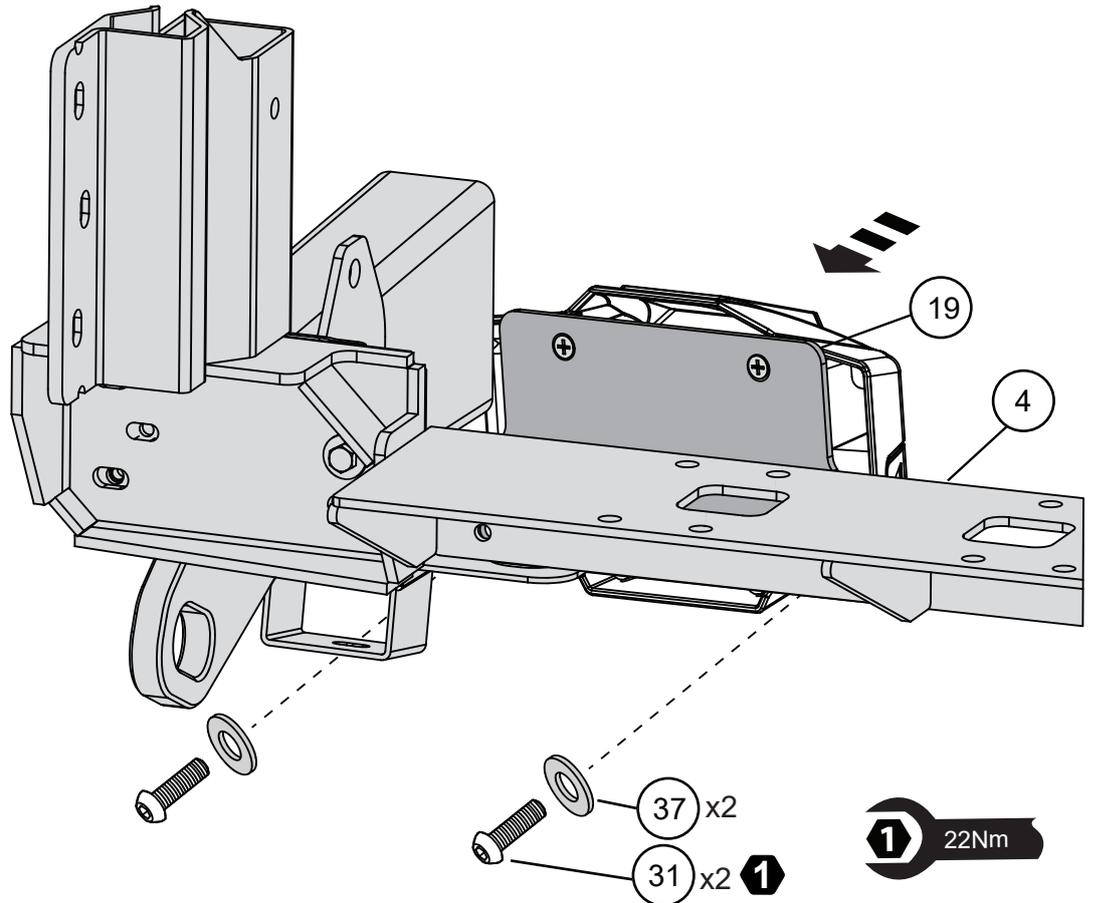


- A1** Attach the winch control box to the Winch Control Box Bracket (19) using four M6 x 20 Counter sink Phillips Screws (29).

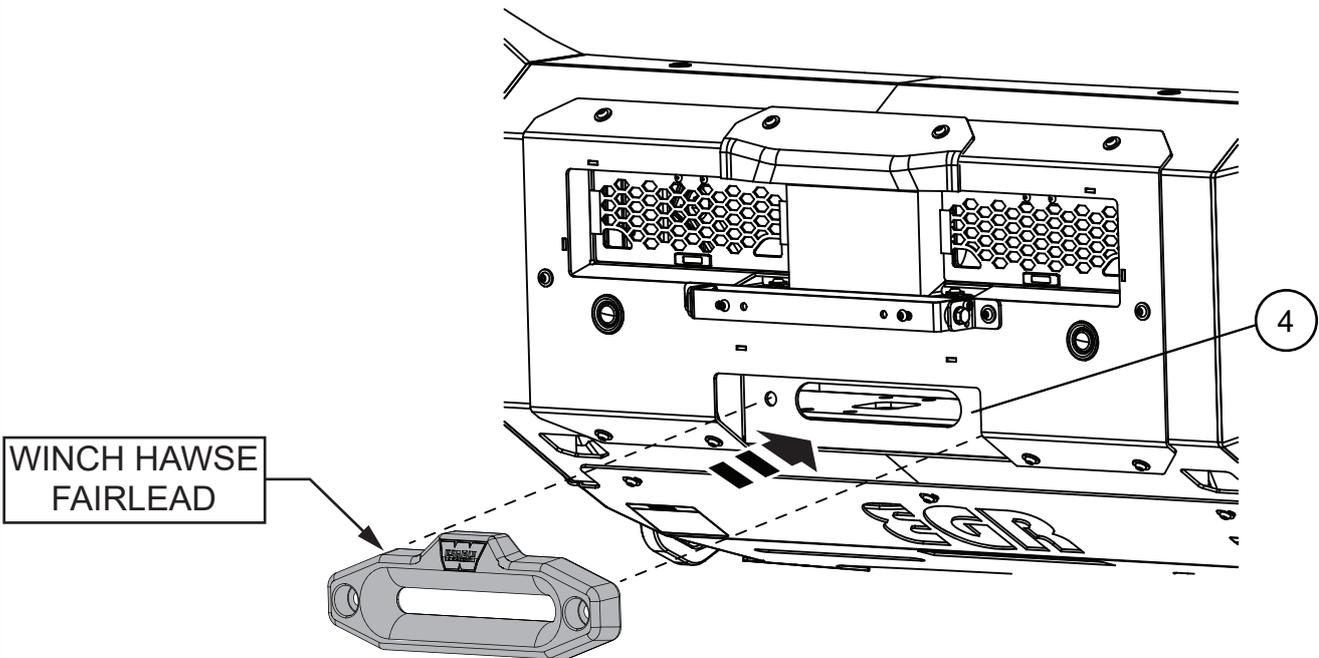


- A2** Place the winch onto the Winch Cradle (4) and align the holes in the winch with the holes in the Winch Cradle (4).
Use the fasteners supplied with the winch to secure the winch to the Winch Cradle (4).
Tighten the fasteners supplied with the winch to the torque specified in the installation manual for the winch.

APPENDIX A - INSTALLATION OF WARN VR EVO 10-S WINCH



- A3** Attach the Winch Control Box Bracket (19) to the Winch Cradle (4) using two M8 Washers (37) and two M8 x 35 Button Head Torx Screws (31) using a T40 bit. Tighten to 22 Nm.



- A4** Install the winch hawse fairlead supplied with the winch into the Centre Grille Assembly (1) using the fasteners supplied with the winch. Tighten the fasteners supplied with the winch to the torque specified in the installation manual for the winch.