

OCAM

4x4
ACCESSORIES

INSTALLATION INSTRUCTIONS

PART NUMBER: BB2-BT50-21

APPLICATION: MAZDA BT50 09/2020 - 2024

FITTING TIME: 5 hrs



OCAM 4x4 Accessories
31 Shirley Way, Epping, VIC 3076
Telephone (03) 9357-0306
Email: hello@ocam.com.au
ABN: 33166112278

WARNING

- Do not attach Vehicle Frontal Protection System (**VFPS**) to the vehicle using anchor-ages 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.

During installation of this product some of the driver aids may have been relocated. Some of these may need to be re-calibrated after fitment by the dealer. While this product has been produced to provide continued functionality of “driver aids” as closely as possible to Original Equipment, road conditions and the combination of other accessories fitted to the vehicle may affect functionality and cannot be anticipated. ***The driver remains responsible for the vehicle at all times.***

IMPORTANT INFORMATION

- Always wear safety glasses and hearing protection.
- Make sure work area is kept clean at all times.
- Check that all components, as listed, are present.
- Thoroughly read all instructions.
- This product or its fasteners must not be modified in any way.
- These instructions are accurate as at the revision date and do not take into account any changes made by the vehicle manufacturer to vehicle design after the revision date, or other accessories that are or have been fitted to the vehicle.
- It is the responsibility of the installer to confirm correct operation/clearance of all components.
- All holes drilled must have all burrs and swarf removed then coated with a suitable rust preventative paint.
- Ensure that all hardware is fastened to torque list as detailed in these instructions.
- On completion of the job, these instructions are to be given to the customer.

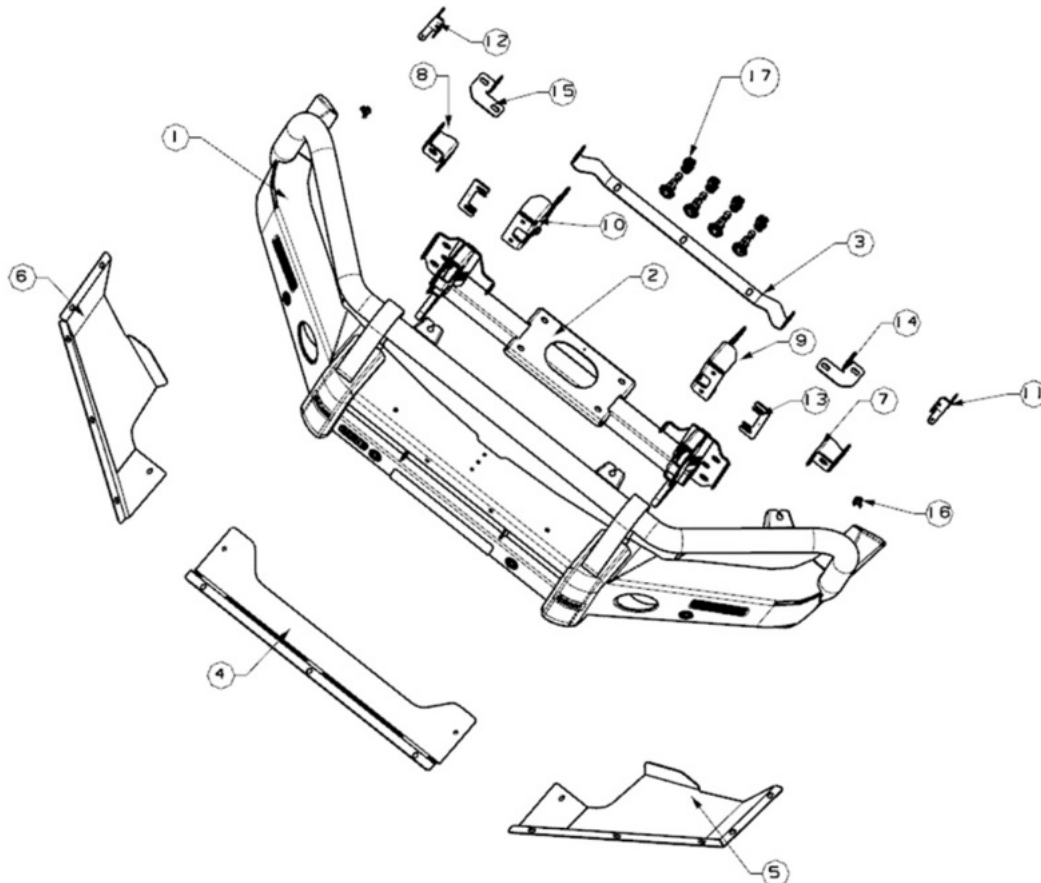
PRODUCT CARE

- To maintain the appearance of the product, wash and dry regularly using a quality car wash.
- The product should be periodically checked for tightness.

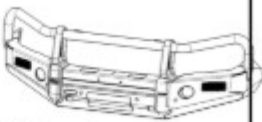


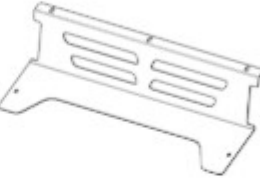


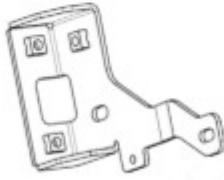
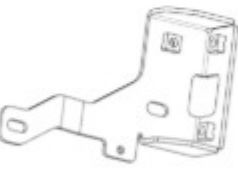


Torque Settings		
BOLT SIZE mm	TORQUE Nm	TORQUE ft.lb
M5	7	5
M6	11.8	8.7
M8	28.8	21.3
M10	57.5	42.3
M12	99.8	73.7

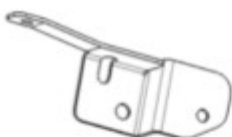




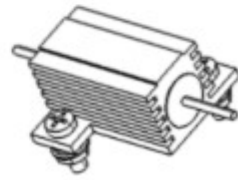

Tools Required

1. Metric socket and spanners
2. Phillips and flat head screwdrivers
3. Torx drivers
4. Torque wrench
5. Marking pen
6. 2" Masking tape
7. Air hacksaw or Multi-Tool

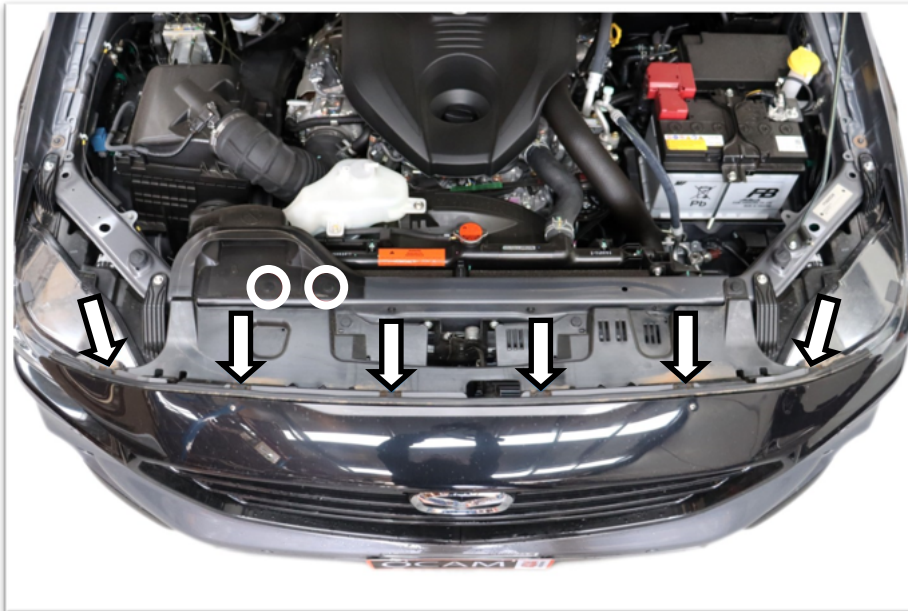


Part List

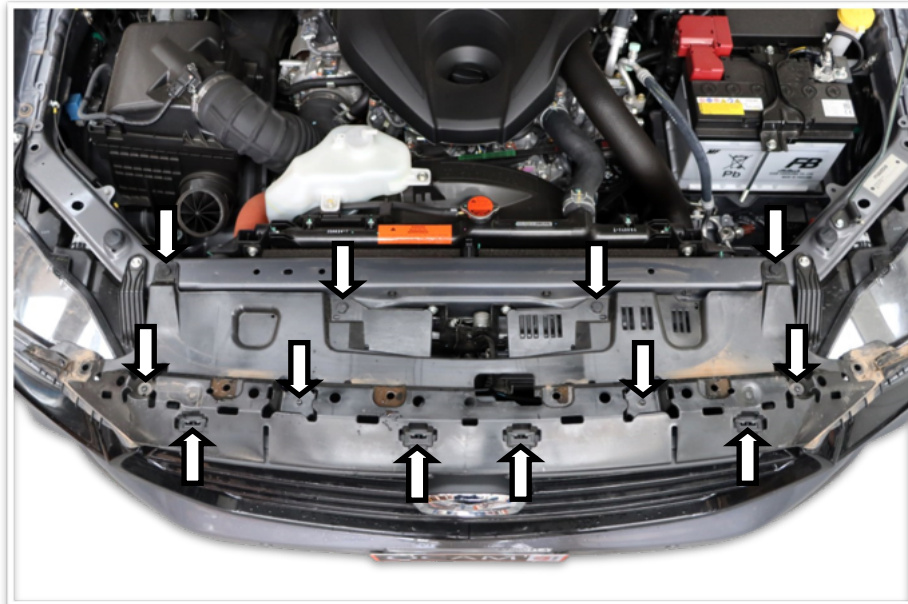
Item	Item No.	Description	Qty	Item	Item No.	Description	Qty
#1	200830498	 Bull Bar Assembly	1	#2	200830496	 Winch Frame	1
#3	200836011	 OEM Bash Plate Bracket	1	#4	200830590	 Center Bash Plate	1
#5	200830588	 Side Bash Plate LHS	1	#6	200830591	 Side Bash Plate RHS	1
#7	20830592	 Outer Chassis Bracket (LHS)	1	#8	200477587	 Outer Chassis Bracket (RHS)	1
#9	200830589	 Inner Chassis Bracket (LHS)	1	#10	200830593	 Inner Chassis Bracket (RHS)	1

#11	200830720		1	#12	200830721		1
		Headlight Fasten Bracket (LHS)				Headlight Fasten Bracket (RHS)	
#13	200830609		2	#14	200830613		1
		Bracket Spacer 1				Strengthen Bracket(LHS)	
#15	200830614		1	#16	200425688		2
		Strengthen Bracket(RHS)				Resistor (25W 8Ω)	
#17	200422766		1				
		Radar sensor fitting kit (4 sets)					

Item	Item No.	Description	Qty
18	200116564	M8 Nut	3
19	200297692	M6 Nut	4
20	200458777	Hex Flange Nut M10_30	2
21	3000160	Spring Washer D10	8
22	3000171	Spring Washer D12	14
23	3000245	Flat Washer D10(10x30x2.5mm)	8
24	3001505	Hex Nut M12	8
25	3002702	Hex Head Bolt (Full Thread) M10_30	2
26	3002805	Hex Head Bolt (Full Thread) M12_30	2
27	3002822	Hex Head Bolt (Full Thread) M12_40	10
28	3002886	Hex Head Bolt (Full Thread) M12_100	2
29	3003021	Hex Head Bolt (Full Thread) M10x1.25_30	6
30	3004967	Washer D12_32_3	22
31	3006212	Combo Hardware -Hex Head Bolt、Spring Washer、Flat Washer M8_25	5
32	3006351	Combo Hardware - Button Head Allen Bolt, spring washer, flat washer (OD 18mm) M6_20	17



1. Remove 2x retaining clips from intake pipe and remove intake pipe. Remove 6x retaining clips from nose cone, release rubber strip from 2 clips on either side. Pull nose cone forward to remove.



2. Remove 4x retaining clips and 4x screws from top radiator shroud. Pull shroud up to remove, using a flat blade screwdriver to release clips.



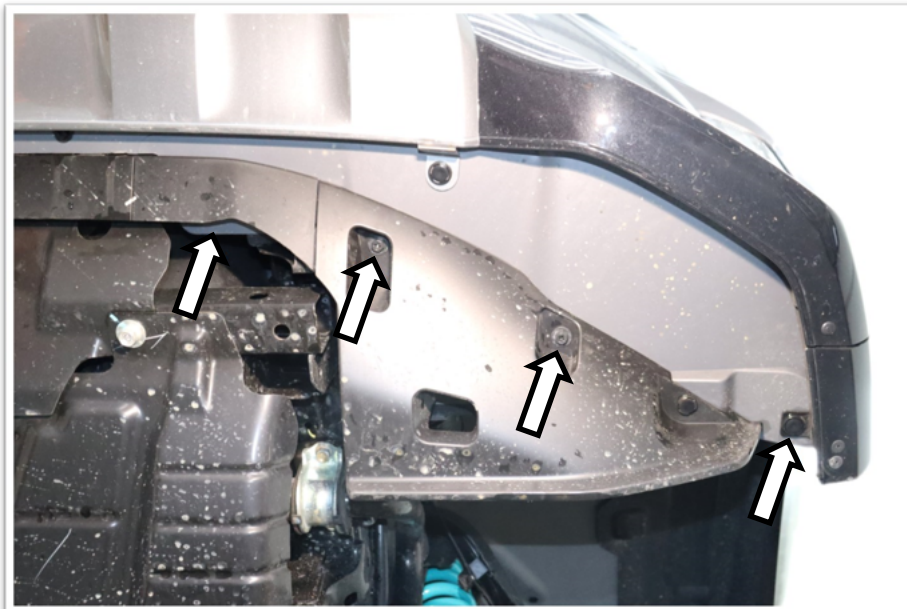
3. Remove 7x retaining clips and 1x screw to release grille. Screw is located in the badge.



4. Remove 1x screw, 1x nut, and 4x retaining clips to release wheel arch liner from bumper cover.

NOTE: To remove upper clip, press button in.

Repeat this step on both sides



5. Remove 2x screws and 2x retaining clips to release bumper from underside of vehicle.

Repeat this step on both sides



6. Pull bumper outwards from where it clips into the quarter panel to remove bumper.

NOTE: Best to do this with a second person to support the bumper as this is all that will be holding it to the vehicle at this stage.

Repeat this step on both sides



8. Disconnect 2x electrical connectors located below the LH headlight assembly to release the bumper harness vehicle.

You can now completely remove the front bumper assembly.



9. Remove 2x screws and release 8x clips to remove grille from bumper assembly.

10. Remove harness and parking sensors (if applicable) from bumper assembly.



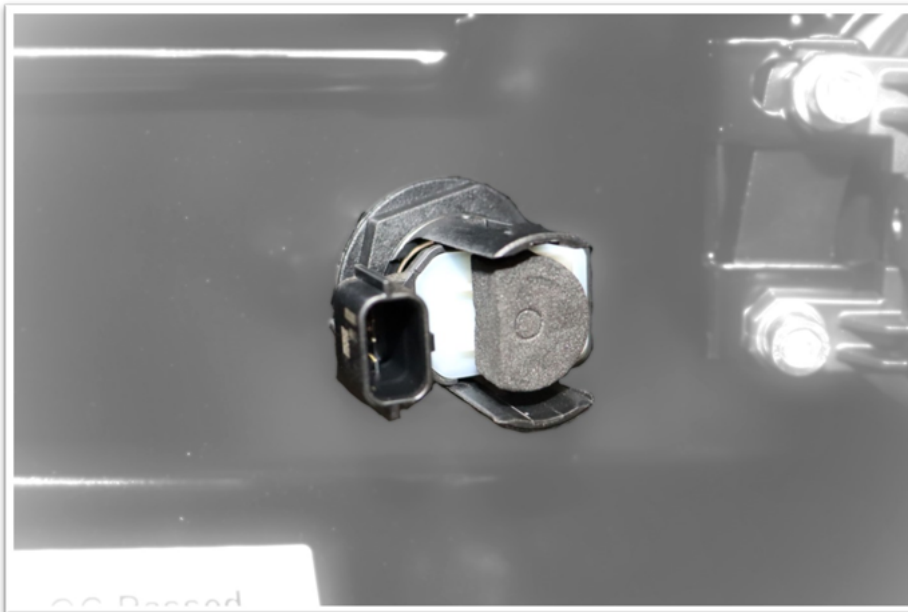
11. The grille will need to be cut to suit the bull bar. Use the image as a guide and follow the shape of the grille to find where cut.

REMEMBER: Cut leaving more material than you think you need. You can always take more off.



12. Install parking sensor housing to bull bar by inserting into hole and securing with nut.

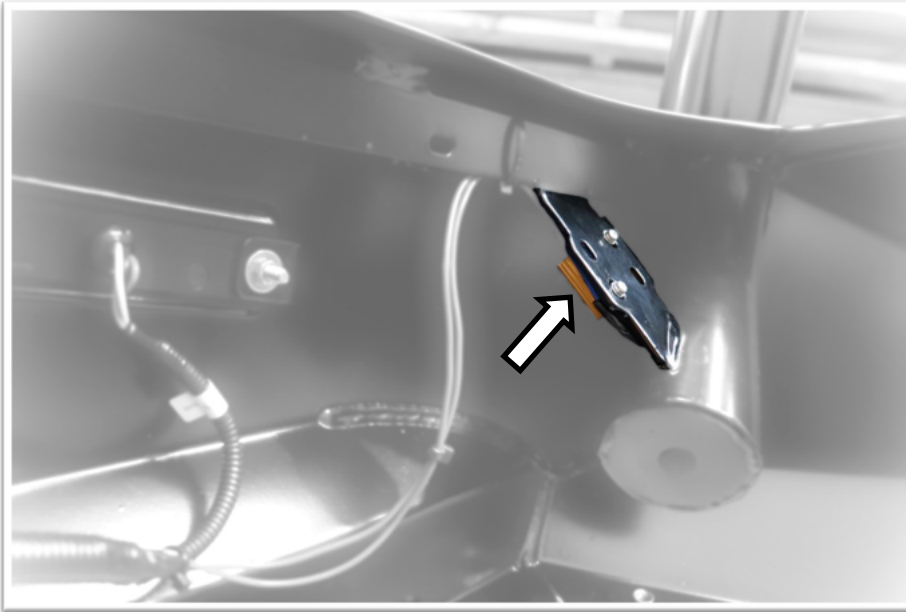
If the vehicle does not have parking sensors, install the blanking cap to sensor housing.



13. Install parking sensors to housing and stick foam pad to sensor.



14. Secure sensor in place with rear clip.

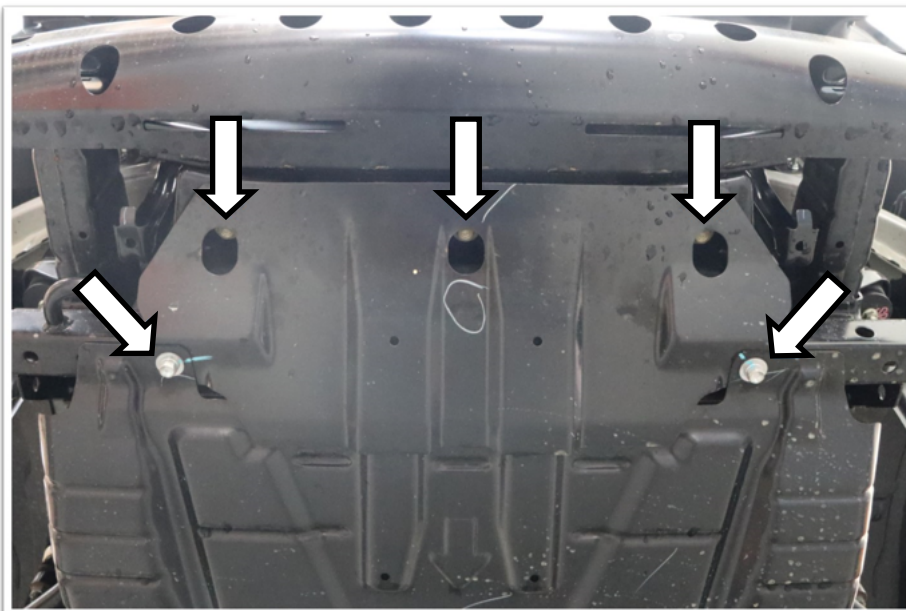


15. Resistors are to be wired in parallel with the indicators, one side to indicator signal and the other to indicator ground. Secure to plate on bull bar assembly shown.

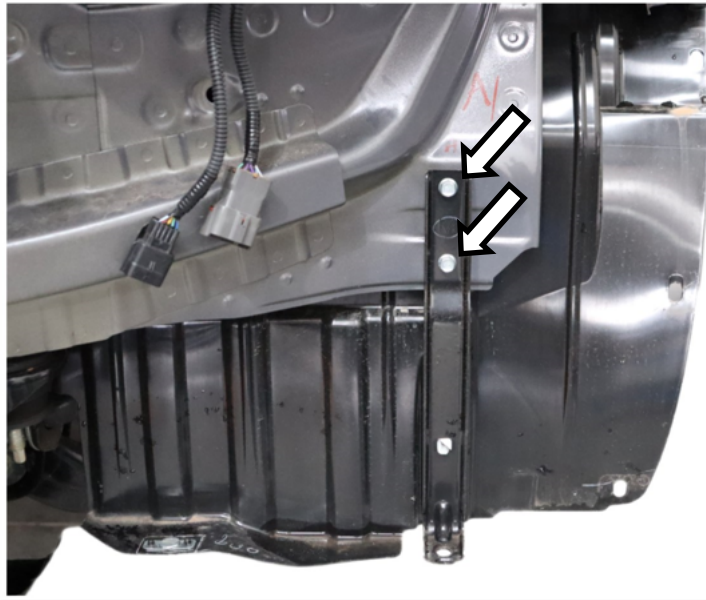


16. Wire vehicle harness to lights in bull bar, secure harness and connect to parking sensors

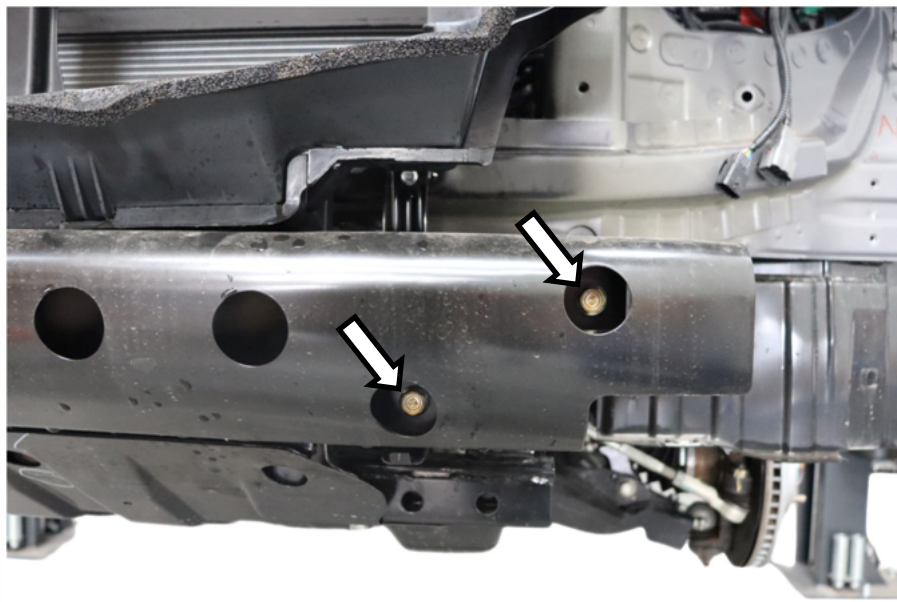
<u>VEHICLE</u>	<u>BULL BAR</u>
Blue	Green
Black	Black
Pink	Red
Black/Grey	Black
Purple	Red



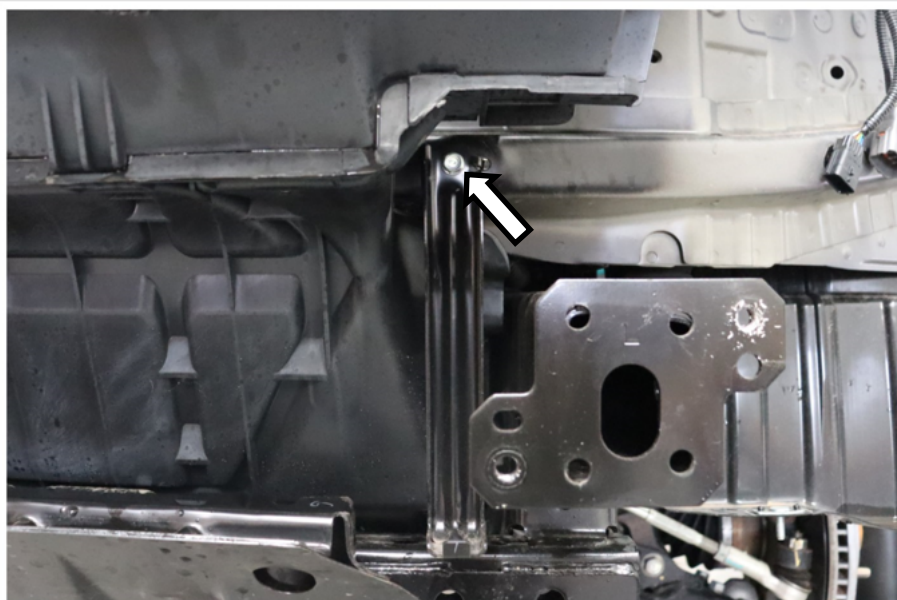
17. Remove 5x bolts and remove front skid plate.



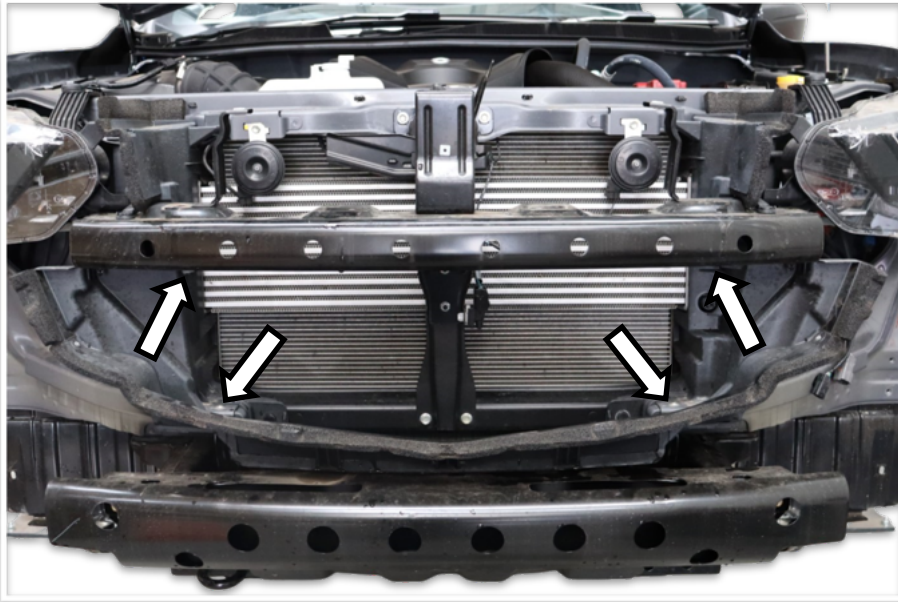
18. Remove and discard support brackets.



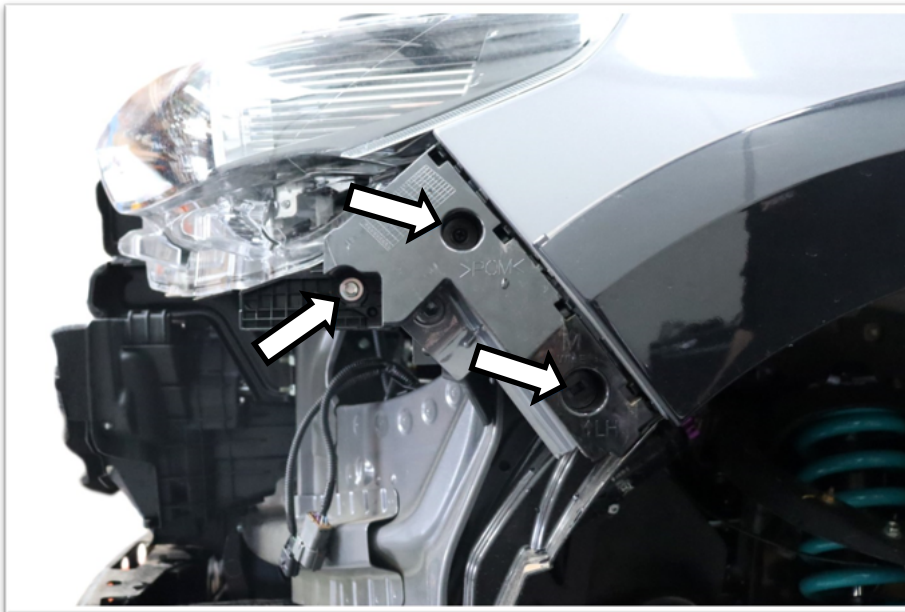
19. Remove 4x bolts and remove and discard front bumper support.



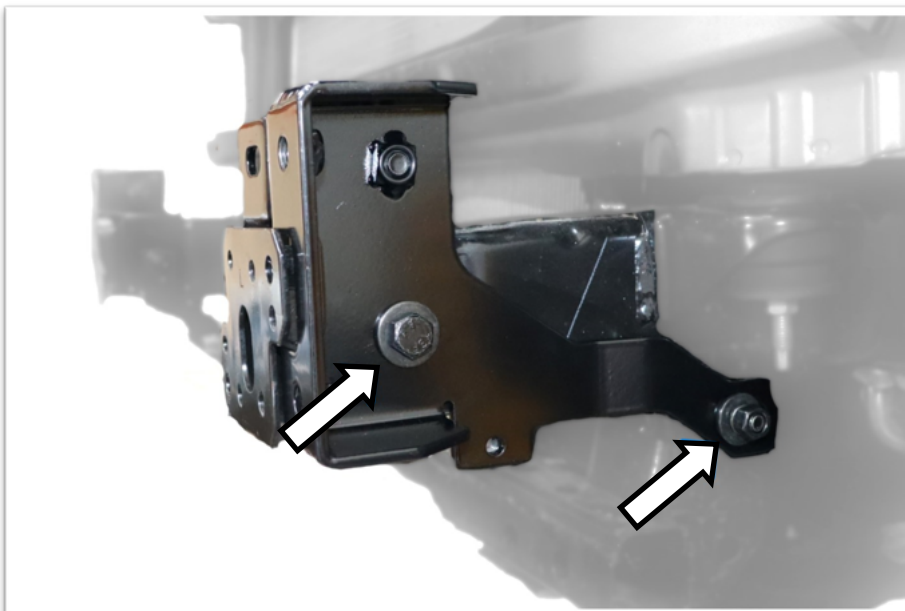
20. Remove and discard support brackets.



21. Remove 4x retaining clips and remove and discard lower radiator shroud.

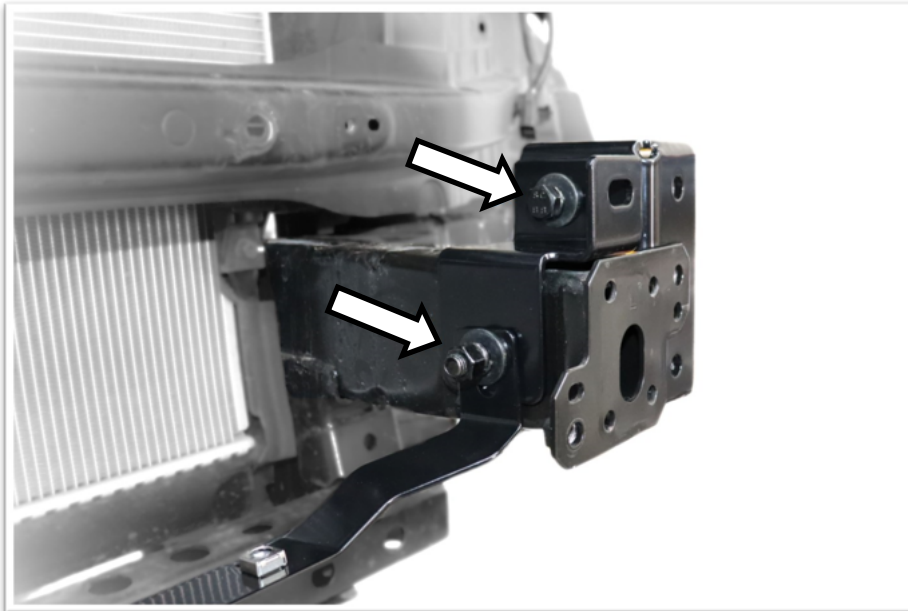


22. Remove 1x screw and 1x bolt, release clip and remove and discard plastic bumper mount.



23. Install outer chassis bracket using M10 bolt with spring washer, flat washer and nut for rear. M12 with spring washer, flat washer and nut on front, this will fix through inner chassis bracket and bash plate bracket.

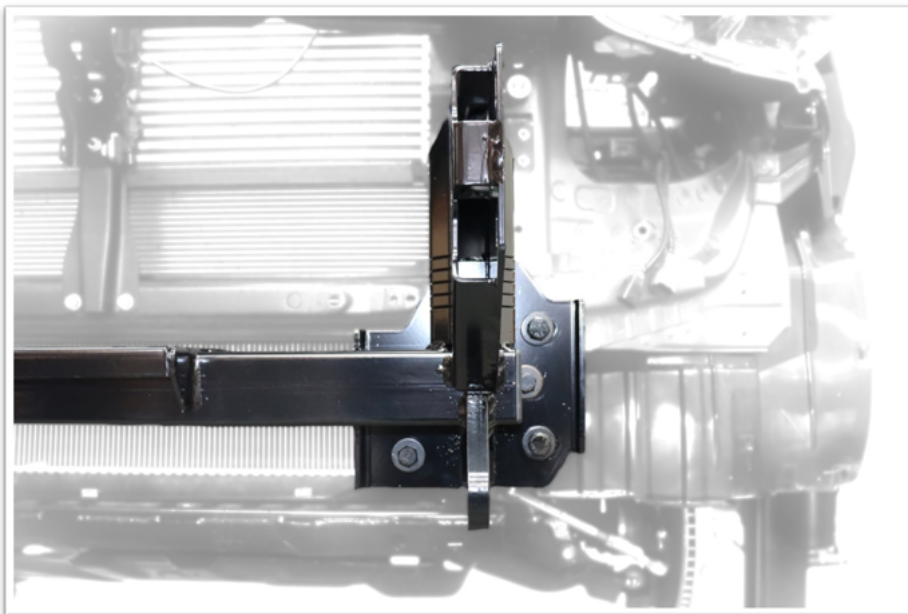
NOTE: Leave finger tight



24. Install inner chassis bracket and bash plate bracket. M12 bolt with spring washer and flat washer on top bolt.

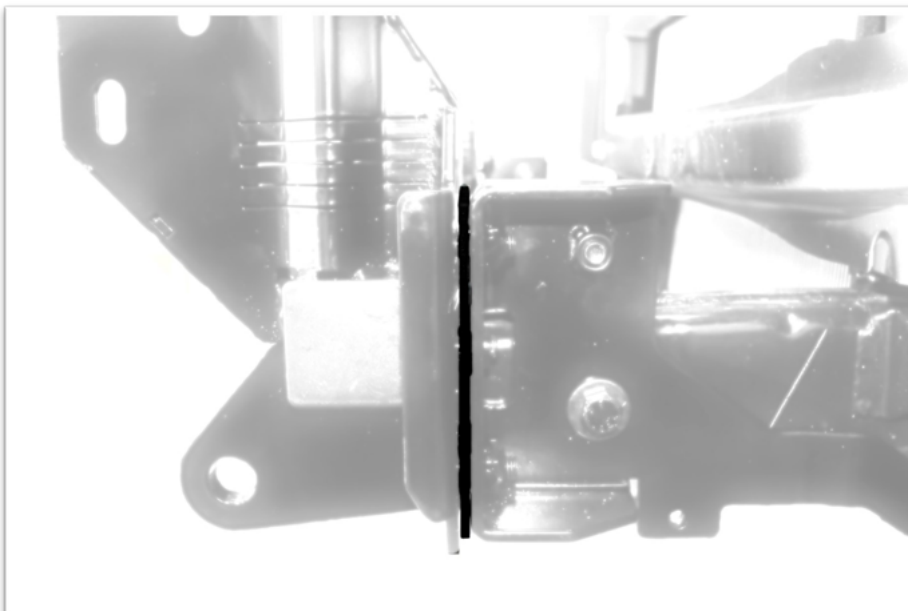
Install 3x M8 captive nuts to bash plate bracket.

NOTE: Leave finger tight

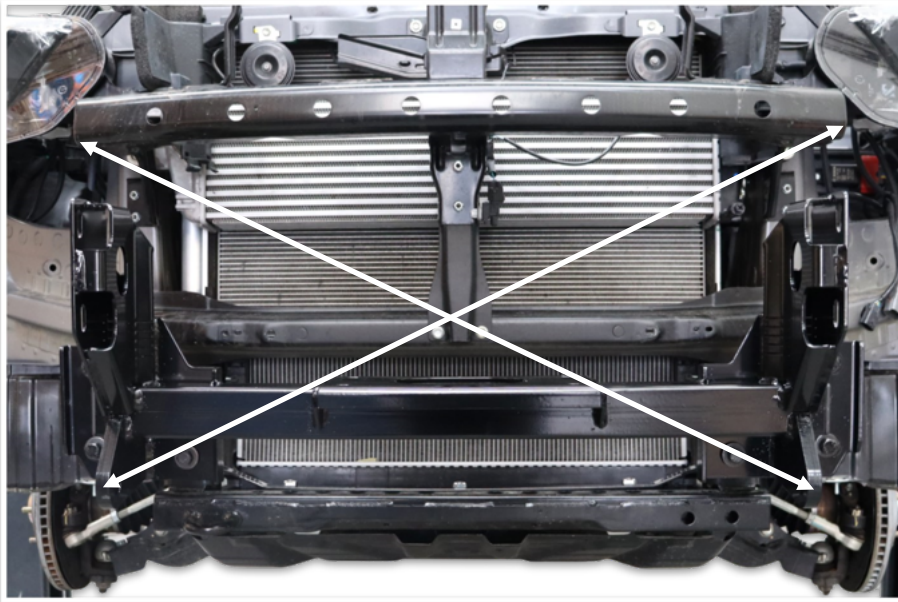


25. (a) Install winch cradle. Using 4x M12x40 bolts and 4x M10x30 bolts, using spring washer and flat washer. Install bracket spacer as shown below.

NOTE: Leave finger tight

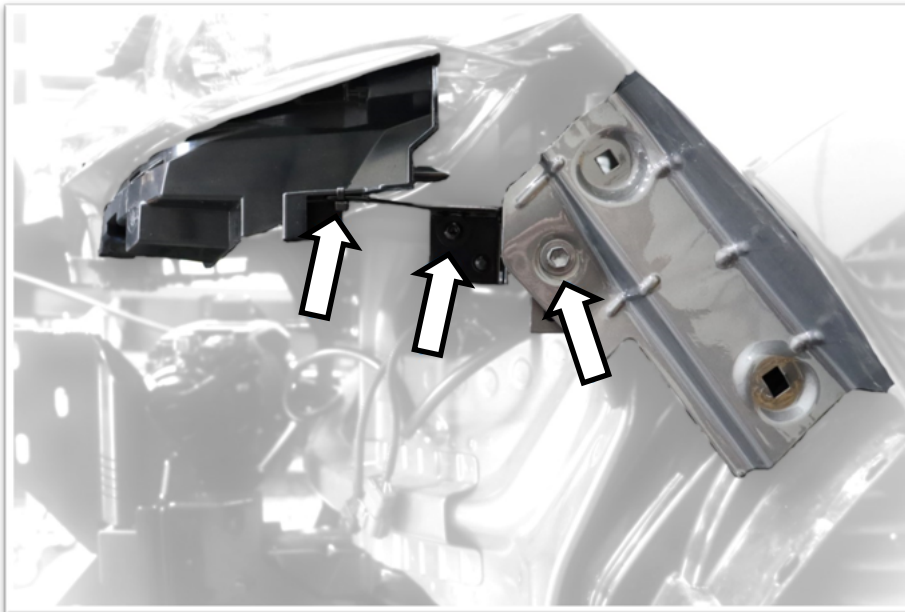


25. (b) Bracket spacer location.



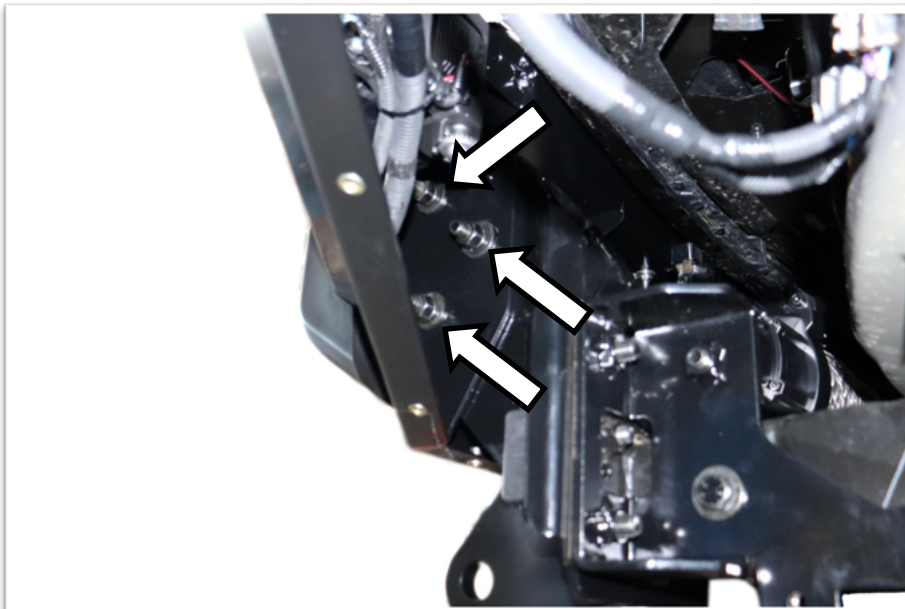
26. Measure diagonally to fixed points on the vehicle to ensure winch cradle is centred. Torque down all bolts left loose from step 23 on.

NOTE: If installing winch do so now and bull bar will need to be removed to install later.



27. Remove body panel bolt. Install head light support brackets using factory body mount bolt and screw. Drill hole in plastic grille section and secure using cable tie.

28. Refit grille, upper radiator shroud, nose cone and air intake.

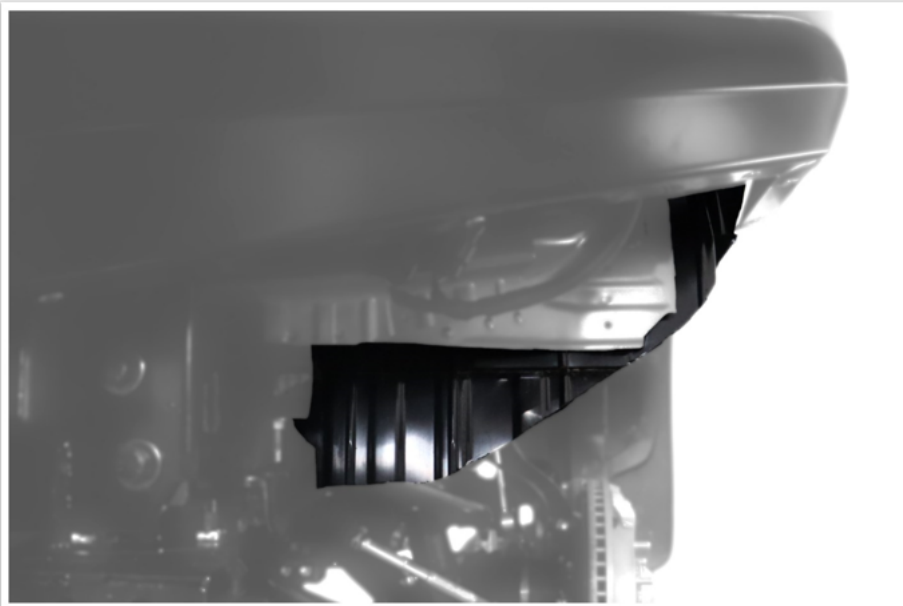


29. Mount bull bar to winch cradle, secure with 6x M12x40 bolts with spring washer, flat washer and nut. Adjust bull bar into position before torquing down hardware.

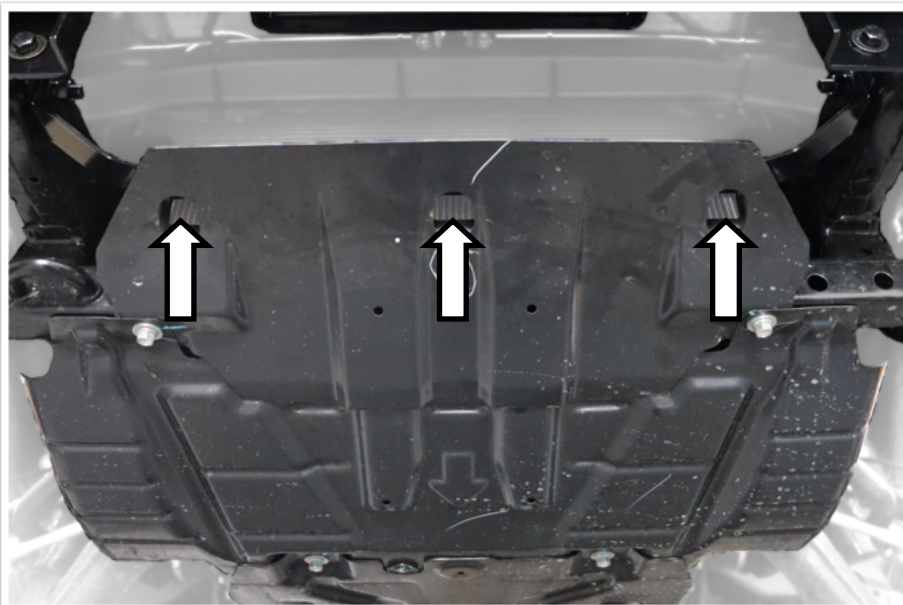
Reconnect bumper harness to vehicle and test light/sensor function before continuing.



30. Install strengthening brackets with M8 bolt with spring washer, flat washer and nut. Install M6 captive nuts to brackets.



31. Use side bash plates as a guide and trim wheel arch liners.



32. Use 3x M8 bolts with spring washer and flat washer and 2x factory bolts to refit front skid plate.



33. Install front and side bash plates using 17x M6 button head screws.



34. Installation is completed, double check all fixings are torqued correctly and all tools are accounted for and packed away.