ARB FITTING INSTRUCTIONS

Part Number: **3436070 | 6178487 | 6178498**

Product Description: **3436070 ZENITH WINCH BAR MT BLACK | FORD F150 23 ON**
6178487 F/KIT BOX 3436070 | SUITS F150
6178498 KIT BASE PLT SUIT 3436070

Suited to vehicle/s: **FORD F150 23 ON**

Options: **3570070 HARNESS CAN BUS ADAPTOR (FOR DRIVING LIGHTS)**

WARNING

REGARDING VEHICLES EQUIPPED WITH SRS AIRBAG;

When installed in accordance with these instructions, the front protection bar does not affect operation of the SRS airbag.

ALSO, NOTE THE FOLLOWING:

- This product must be installed exactly as per these instructions using only the hardware supplied.
- In the event of damage to any bull bar component, contact your nearest authorised ARB stockist. Repairs or modifications to the impact absorption system must not be attempted.
- Do not use this product for any vehicle make or model, other than those specified by ARB.
- Do not remove labels from this bull bar.
- This product or its fixing must not be modified in any way.
- The installation of this product may require the use of specialized tools and/or techniques.
- It is recommended that this product is only installed by trained personnel.
- These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- During installation, it is the duty of the installer to check correct operation/clearances of all components.
- Work safely at all times.
- Unless otherwise instructed, tighten fasteners to specified torque.

ARB 4x4 ACCESSORIES

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GENERAL CARE AND MAINTENANCE

By choosing an ARB Bar, you have bought a product that is one of the most sought after 4WD products in the world. Your bar is a properly engineered, reliable, quality accessory that represents excellent value. To keep your bar in original condition it is important to care and maintain it following these recommendations:

- Prior to exposure to the weather your bar should be treated to a Carnauba based polish on all exposed surfaces. It is recommended that this is performed on a six monthly basis or following exposure to salt, mud, sand or other contaminants.
- As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of the bar is carried out, making sure that all bolts and other components are torqued to the correct specification. Also check that all wiring sheaths, connectors, and fittings are free of damage. Replace any components as necessary. This service can be performed by your local authorized ARB Stockist.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

METRIC SOCKET SET	**METRIC COMBINATION SPANNER SET**
ALLEN KEY SET	**TORX KEY SET**
OSCILLATING MULTI-TOOL	**DRILL WITH A Ø5.0MM AND Ø10MM DRILL BIT**
BASIC MEASURING AND MARKING TOOLS	**TORQUE WRENCH 9-100Nm CAPACITY**
TERMINAL CRIMPS	**DIGITAL ANGLE GAUGE**

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear 	**Hearing protection** 

NOTE: When installing ground terminals, please ensure the ground point is clean and secure with good contact. Do not stack more than <u>one</u> additional ground terminal onto any ground point. If adding a ground terminal to an existing ground point, please ensure the fastener is correctly tightened after installation.

NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

FASTENER  **TORQUE SETTINGS:**

SIZE	PROPERTY CLASS	Torque Nm	Torque lbft
M4	8.8	3.8Nm	2.8lbft
M6	8.8	9Nm	7lbft
M8	8.8	22Nm	16lbft
M10	8.8	44Nm	32lbft
M12	8.8	77Nm	57lbft
M12	11.9	102Nm	75lbft

PARTS LISTING - 3436070			
APPLICATION.	**PART NO.**	**QTY**	**DESCRIPTION**
BULLBAR	**4655699**	**1**	**WELDED ASM ZENITH**

PARTS LISTING - 6178498			
APPLICATION.	**PART NO.**	**QTY**	**DESCRIPTION**
CENTRE BASH PLATE	**6523706**	**1**	**ZENITH FRONT PANEL WELDMENT | SUITS F150**
UNDER WING PANELS	**6523715R/L**	**1R/1L**	**UND PNL SORB RH ZENITH**
SORB COVER	**6523716R/L**	**1R/1L**	**SORB COVER RH**

PARTS LISTING - 6178487			
APPLICATION.	**PART NO.**	**QTY**	**DESCRIPTION**
MOUNTS & RECOVERY POINTS TO CHASSIS	**4655700R/L**	**1R/1L**	**CHASSIS MNT RH/LH | SUITS F150**
	3197074	**2**	**RECOVERY POINT POWDERED RED**
	4601347R/L	**1R/1L**	**INTERNAL CHASSIS SUPPORT RH/LH | SUITS F150**
	4601348R/L	**1R/1L**	**RECOV SUPPORT RH/LH | SUITS F150**
	4655701R/L	**1R/1L**	**CHASSIS WINCH MNT RH/LH**
	3197073	**4**	**CHASSIS SPACER | SUITS F150**
	4617102	**4**	**SPIGOT DIAM 35 M12 THRD**
	6151817	**16**	**BOLT HXHD FL M12x1.25x40**
	6151480	**6**	**NUT FLANGE M12x1.25**
BAR TO MOUNTS	**6151897**	**10**	**BOLT HXHD FL M10x1.5x30**
	6151321	**10**	**NUT FLANGE M10x1.5**
LIGHTS AND MOULDINGS	**3163344R/L**	**1R/1L**	**FOG LIGHT HOUSING RH/LH**
	3163395R/L	**1R/1L**	**DUCT MOULDING INNER RH/LH**
	37500461R/L	**1R/1L**	**FOG MNT 6° RAKE RH/LH**
	3501101	**1**	**LED FOG LAMP SUIT FORD**
	6151649	**4**	**SCREW BHD M4x16**
	4584294	**8**	**WASHER FLAT M4x9x0.8**
	6151646	**4**	**NUT HEX NYLOC M4x0.7**
	6151223	**28**	**NUT HEX NYLOC M6X1.0**
	4584329	**28**	**WASHER FLAT M6x12.2x1.2**
	6151729	**8**	**BOLT HXFL M6X1.0X20 FT**
	6821601	**1**	**DEUTSCH DT PLUG KIT**
GRILLE MOUNTING	**3163400**	**3**	**ZENITH BAR CENTER GRILLE**
	4601349R/L	**1R/1L**	**ZENITH GRILLE CHNL RH/LH**
	4681908R/L	**1R/1L**	**ZENITH TOP GRILLE MNT RH/LH**
	4681909R/L	**1R/1L**	**ZENITH LOWER GRILLE MNT RH/LH**
	6821189	**8**	**GROMMET RND FL 1500 080 090**
	6152091	**8**	**SCREW PHD 4.8X1.59X26**
	6151729	**8**	**BOLT HXHD FL M6x1.0x20**
	6151173	**8**	**NUT FLANGE M6**
	6151652	**2**	**SCREW PHD 8Gx15**
	6151921	**2**	**BOLT COHD M8x20**
	4581085	**2**	**WASHER FLAT M8x19x1.2**
	6151212	**2**	**NUT HEX NYLOC M8x1.25**

RADAR AND CAMERA BRACKETRY	**37500463**	**1**	**CAMERA RADAR MNT | SUITS F150**
	3195389	**1**	**PLATE CAMERA RETENTION**
	37500464	**1**	**RADAR ADJUST MNT | SUITS FORD**
	37500465	**1**	**RADAR CLAMP | SUITS F150**
	3163091	**1**	**PLUG BLANKING BLK 17.4mm (0-6.4mm PLATE)**
	3163221	**1**	**COVER RADAR GRILLE CENTRE MNT**
	6152021	**1**	**SCREW HXHD FL M6x65**
	6151975	**2**	**SCREW BHD M6x12 | SS**
	4584329	**5**	**WASHER FLAT M6x12.2x1.2**
	6151223	**5**	**NUT HEX NYLOC M6x1.0**
	6151729	**2**	**BOLT HXHD FL M6x1.0x20**
	6151921	**2**	**BOLT COHD M8x20**
	4581085	**2**	**WASHER FLAT M8x19x1.2**
	6151212	**2**	**NUT HEX NYLOC M8x1.25**
WINCH MOUNTING	**4655719**	**1**	**REAR WINCH MNT**
	6151897	**4**	**BOLT HXHD FL M10x1.5x30**
WING BRACES	**4681904R/L**	**1R/1L**	**WING BRACE ZENITH RH/LH | SUITS F150**
	6151897	**8**	**BOLT HXHD FL M10x1.5x30**
	6151321	**8**	**NUT FLANGE M10x1.5**
NUMBER PLATE	**37500431**	**1**	**NUM PLATE BRKT F150 ZENITH**
	37500462R/L	**1R/1L**	**NP BRKT RH/LH | SUITS F150**
	6151729	**8**	**BOLT HXHD FL M6x1.0x20**
	4584329	**8**	**WASHER FLAT M6x12.2x1.2**
	6151223	**8**	**NUT HEX NYLOC M6X1.0**
	5848302	**2**	**PACKER RBAR NYLON**
FRONT PANEL AND UNDER PANEL MOUNTING	**4681907R/L**	**1R/1L**	**UNDR PNL SORB MNT RH/LH**
	6151428	**4**	**NUT FLANGE M12x1.75**
	6152153	**2**	**BOLT HXHD FL M8x1.25x30**
	6151548	**2**	**NUT FLANGE M8x1.25**
	6151729	**18**	**BOLT HXHD FL M6x1.0x20**
	6151223	**2**	**NUT HEX NYLOC M6x1.0**
	6151173	**4**	**NUT FLANGE M6**
	6151278	**2**	**NUT SERT M6**
	6151475	**10**	**NUT U M6X1.0**
	4581082	**2**	**WASHER FLAT M6x20**
	6152277	**2**	**BOLT HXHD FL M12x1.75x40**
	6152153	**6**	**BOLT HXHD FL M8x1.25x30**
	6152034	**4**	**NUT U M8X1.25**
	4655055	**2**	**NUT PLT M8x1.25**
MISC.	**3540290**	**1**	**SENSOR SURROUND KIT (4)**
	6821557	**1**	**COAX EXTENSION M/F 500MM**
	6821477	**1**	**SENSOR EXTEND INNER SUITS FORD**
	6821559	**1**	**SENSOR EXTEND MF 650MM FORD**

Note: Read the instructions thoroughly before starting.

1. Open the bonnet and remove all scrivets (13) retaining plastic cover. Set aside the scrivets and cover for re-use later.

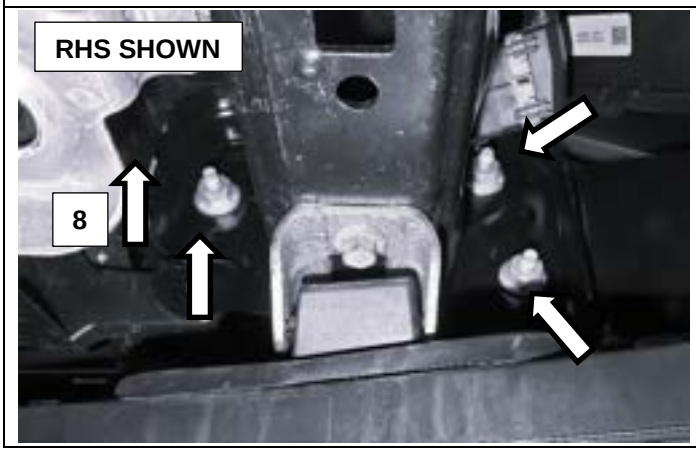
2. Gently unclip and remove the radar cover on the RHS of the bumper.
3. Push the radar upwards to release and remove. Place somewhere safe and do not drop!

4. Disconnect the loom plug located on the top of the RHS chassis.
5. Unclip the plug from the chassis.

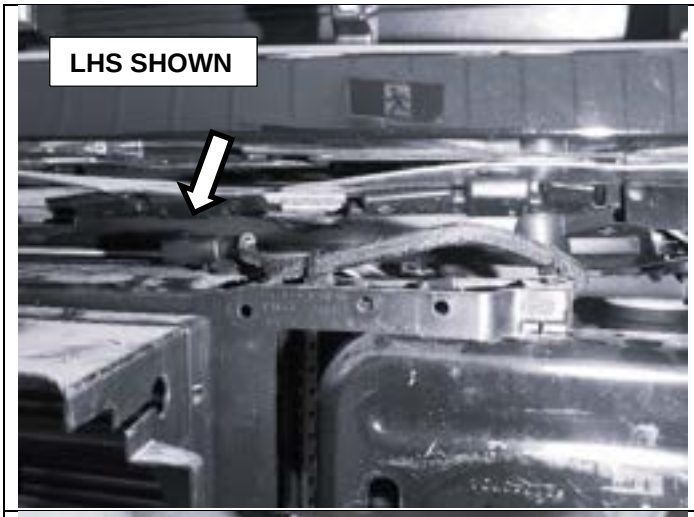
LHS SHOWN

6. Remove the air dam mount screws (three per side) and air dam, discard.

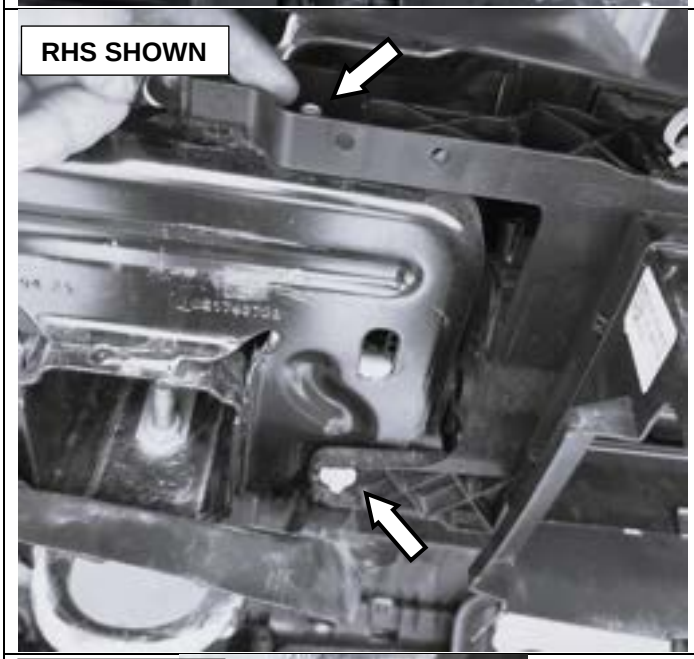
RHS SHOWN



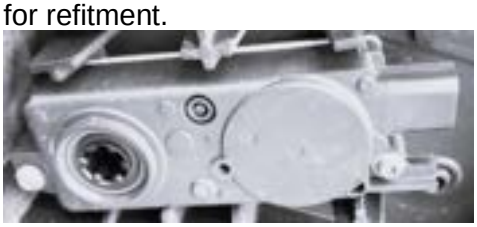
7. With the vehicle on a hoist, support the bumper on a trolley.
8. Unplug the intercooler louver control motor located beside the RHS chassis.
9. Remove the six nuts on the front chassis plates.

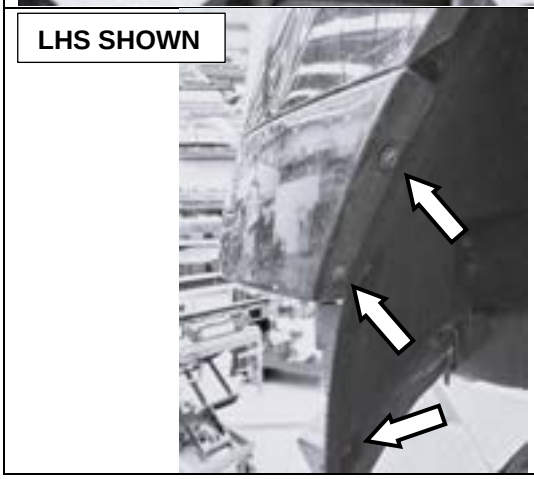


10. While carefully bringing the bumper away from the vehicle, the wastegate plug will become exposed on the LHS above the chassis.
11. Unplug the wastegate loom and remove the bumper.
12. Place the bumper front down on a bench for disassembly.

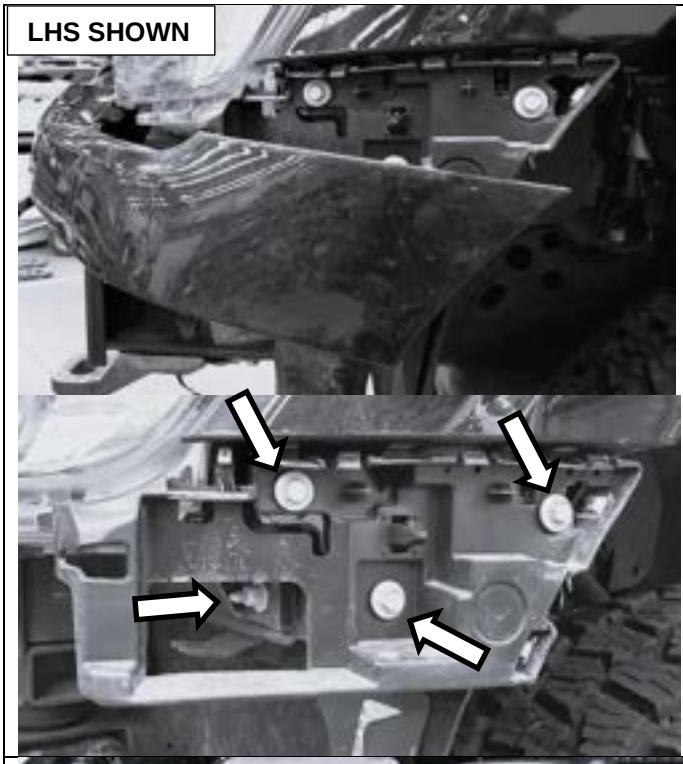


13. Remove the four bolts retaining the louvre box and remove.
14. Fitted to the RHS of the louvre box is the control motor, remove and place in a safe place for refitment.



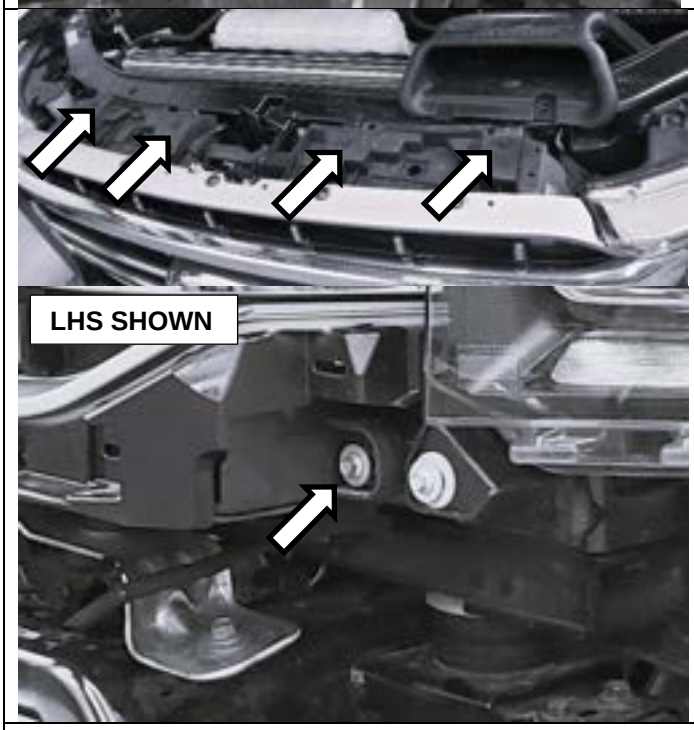


15. Remove all fasteners from inner lining to the grille trim on both sides.

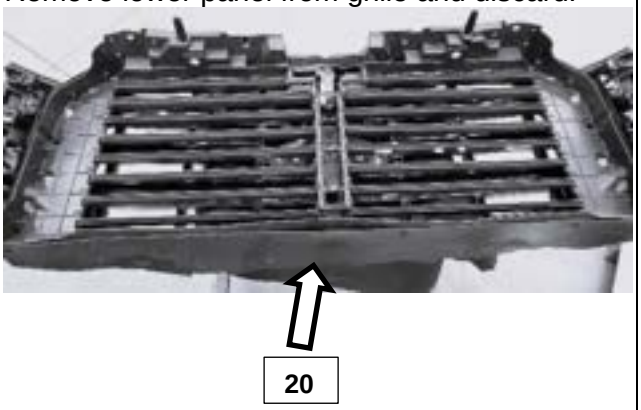


16. Begin unclipping the grille lower from one side working to the other, once removed this can be discarded.
17. Remove the side grille retainer and inner lining mount from both sides.
18. Use one M6x20 FL bolt, M6x20 washer and M6 nyloc nut to secure the lining to the body on both sides.

This area can be cleaned and painted black.

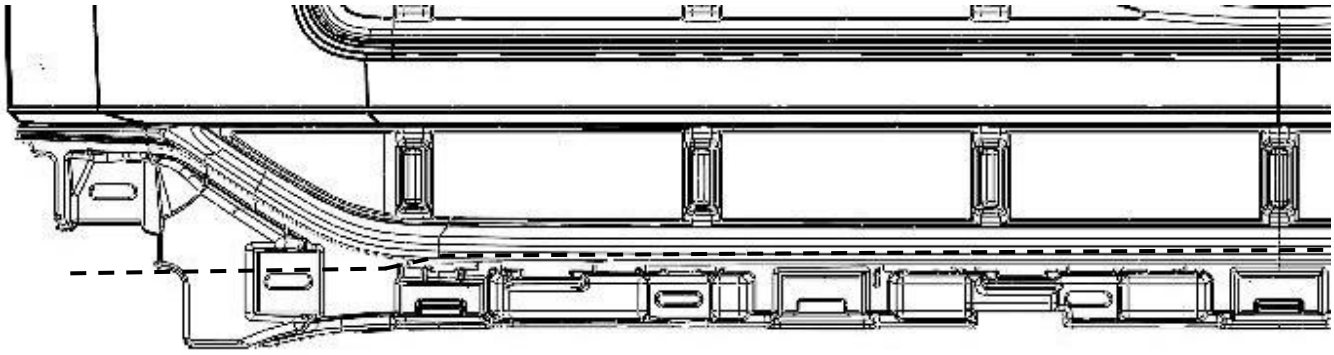


19. Remove the four upper and two lower grille bolts, remove grille and place face down on a soft surface.
20. Remove lower panel from grille and discard.

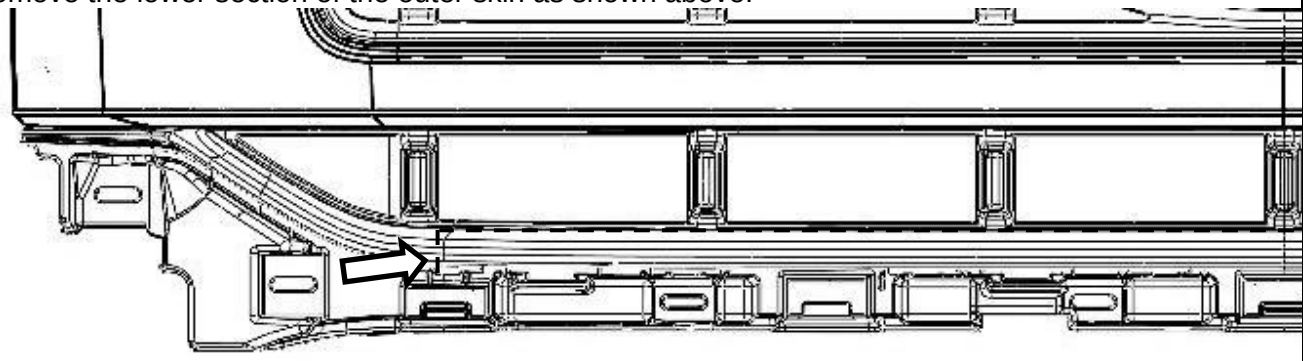


21. Open the louvres and remove the LH and RH blades from the fifth row counting down.
22. Unplug the camera and remove the three screws holding the camera mount, place the camera in a safe location.
23. Refit the removed blades.

GRILLE CUT



24. Remove the lower section of the outer skin as shown above.

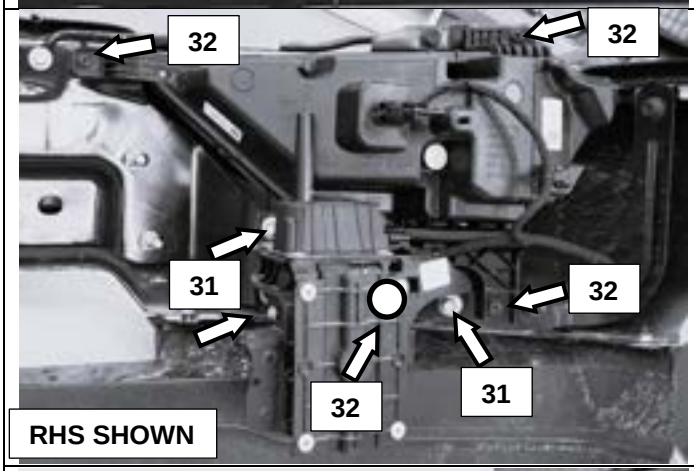


25. Cut the lower rib vertically as shown above, and all the way horizontally following the rib to keep the lower section linked.

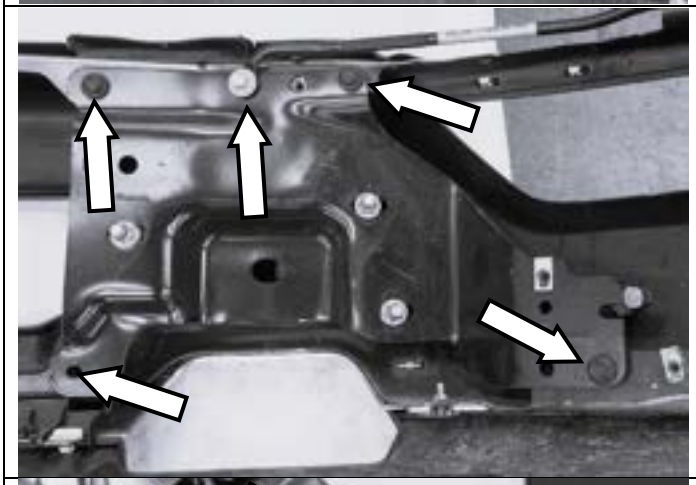
26. Cut the protruding areas of the remaining grille as shown above.
27. Debur all of the cuts.

Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

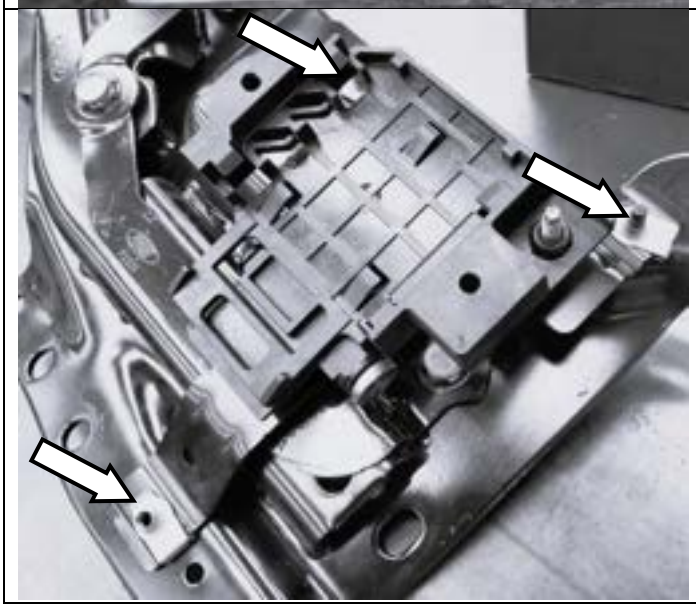
28. Connect the COAX extension to the camera plug and route the tail as shown.
29. Refit the grille to the car using the six fasteners and connect the two plugs.



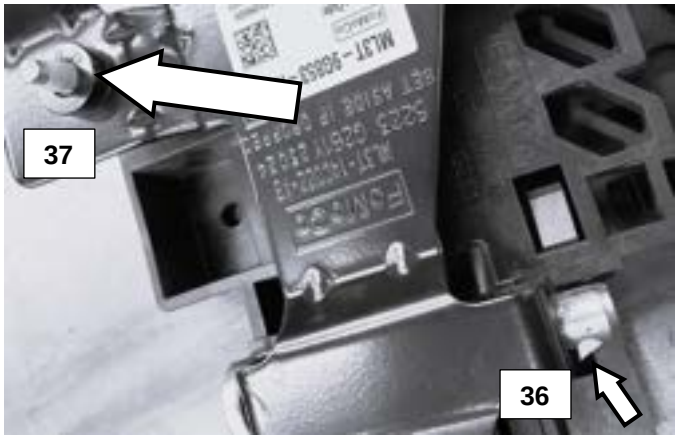
30. Unclip the plugs on the bumper loom to the lights and air dam motors. Unclip all accessible loom retainers.
31. Remove the air dam motors from the bumper retained by three bolts each. Place on a bench for further diassembly.
32. Remove both lamps from the bumper.



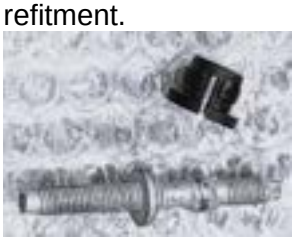
33. Remove both chassis mount plates.
34. Unclip the parking sensors (pictured below) from their housings and remove the loom and store safely.

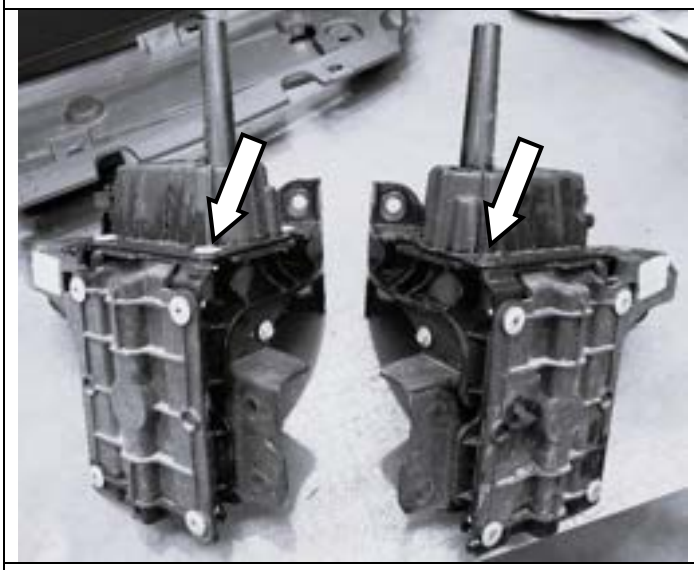


35. Remove the three screws retaining the radar mount assembly on the LHS chassis mount.



36. Push in latch and remove the pivot pin.
37. Wind out the adjustment screw and remove the retainer cup.
    Save the adjustment screw and cup for refitment.

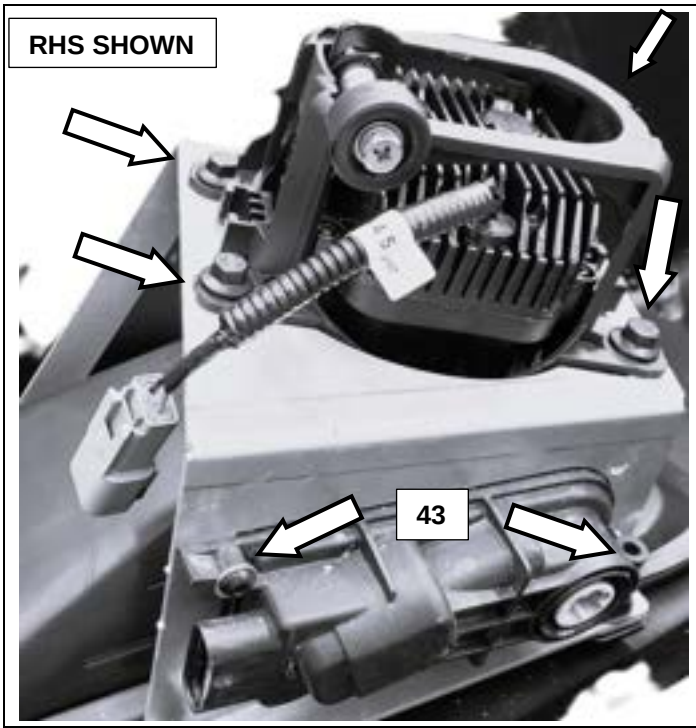




38. Remove the pop rivets from the air dam motors using a drill and Ø5.0mm drill bit. Four on each.
39. Remove the cover, then the shaft cover tube.
40. Wind the motor off the actuater shaft and place the motors with the loom.

BAR ASSEMBLY

41. Place the bar face down on a soft material.



42. Assemble a fog lamp onto the mounting bracket using four M6 x 20 flange bolts, four M6 washers and four M6 nyloc nuts. Torque to specification.

M6 - **9 Nm.**

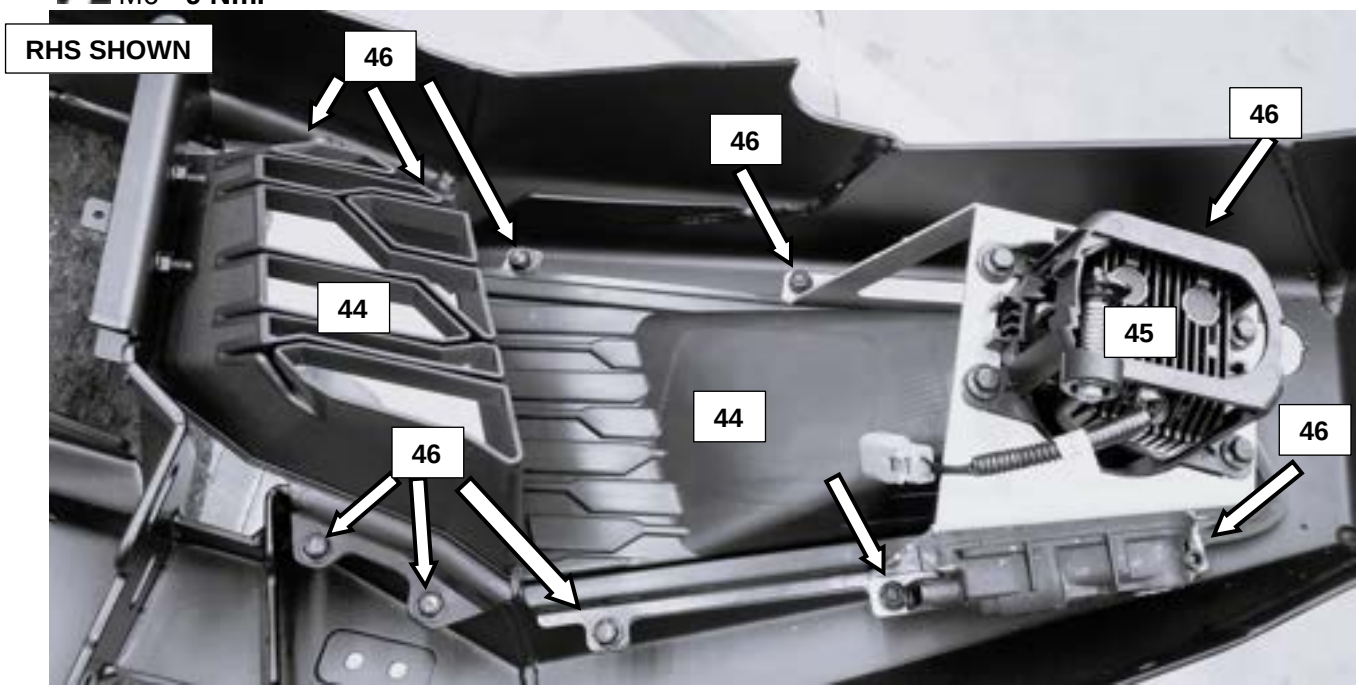
43. Fit the RHS air dam motor using two M4x16 BHD screws and two M4 nyloc nuts. Torque to specification.

M4 – **3.8 Nm.**

REPEAT ASSEMBLY FOR LHS.

44. Place the fog light housing and then the duct moulding onto the bar.
45. Place the RHS assembled fog light and mount over the fog light housing.
46. Using ten M6 washers and ten M6 nyloc nuts to secure inplace.
47. Torque to spec then repeat for LHS.

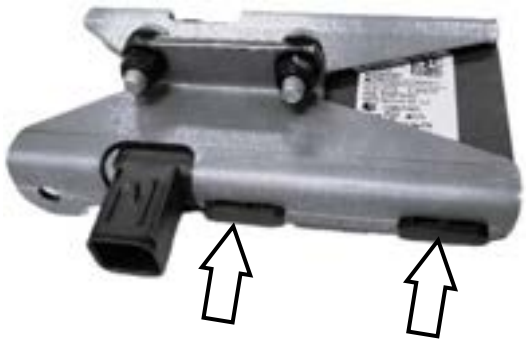
M6 - **9 Nm.**



48. To assemble the Radar and Camera mount, the follow parts are needed.

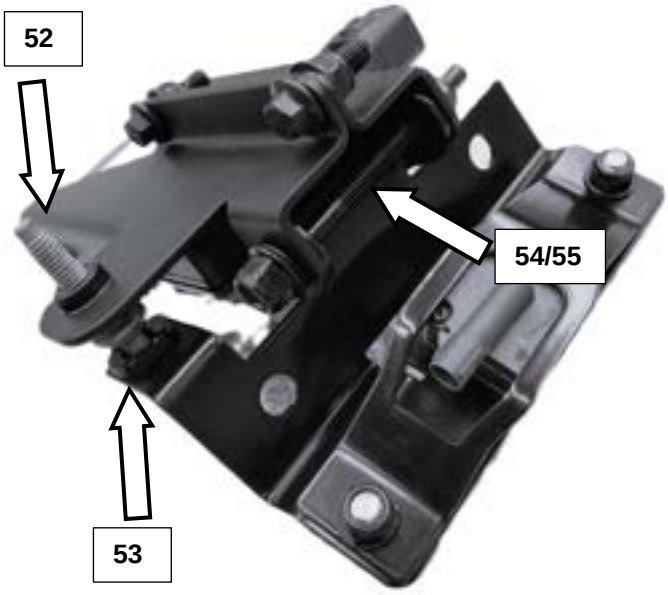
    M6x65 Screw x one
    M6x20 FL bolts x two
    M6x12 SS BHD x two
    M6 Washers x five
    M6 Nyloc nuts x five
    Bracket camera x one
    Camera Radar mnt x one
    Radar clamp x one
    Radar adjust mnt x one

    RADAR
    CAMERA
    ADJUSTMENT SCREW AND CUP



49. Click the radar into the radar clamps and use two M6 FL bolts, two M6 washers and two M6 nyloc nuts to secure.
    Torque to spec.
    M6 - **9 Nm.**

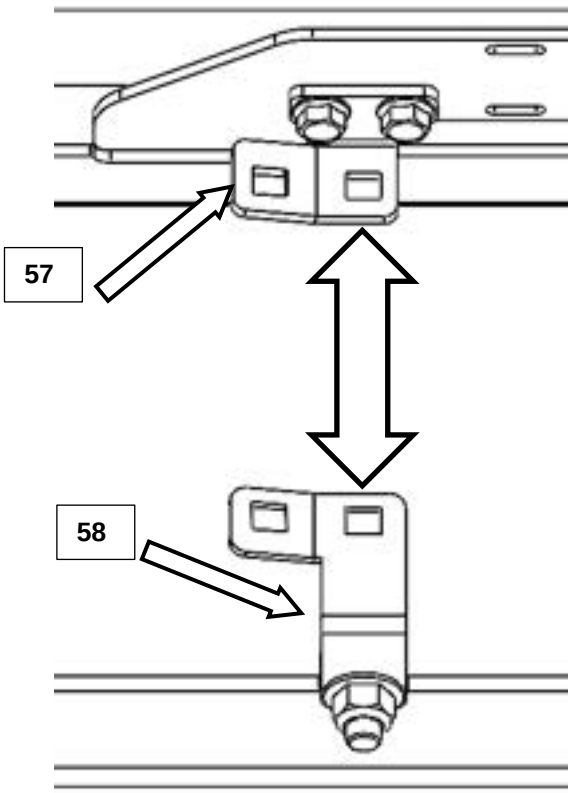
50. Fit the camera onto the mount and place the clamp on top.
51. Fit two M6x12 BHD, two M6 washers and two M6 nyloc nuts and torque to spec.
    M6 - **9 Nm.**



52. Wind the adjustment screw into the radar mount.
53. Push the adjustment screw cup into the camera mount, then fit the radar onto the mount by click the ball of the screw into the cup.
54. Use one M6x65 screw, one M6 washer and one M6 nyloc nut to complete the assembly.
55. Tighten to a snug fit.

56. Attach the assembly to the bar using two M8x20 coach bolts, two M8 washers and two M8 nyloc nuts.
    Torque to spec.
    M8 - 22 **Nm.**

RHS SHOWN

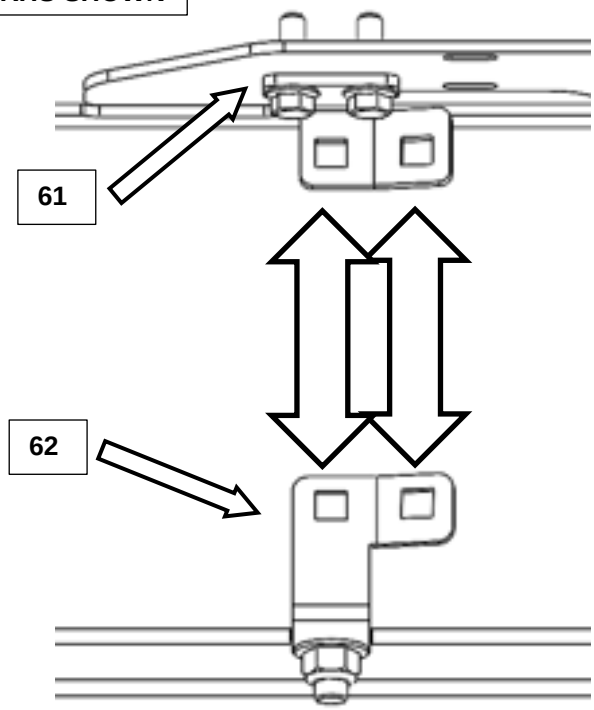


GRILLE MOUNT ALIGNMENT FOR LIGHTS

57. Fit the TOP grille mount using two M6x20 FL bolts (fitted from the underside), two M6 washers and two M6 nyloc nuts.
58. Fit the LOWER grille mount using one M8x20 coach bolt (from the top), one M8 washer and one M8 nyloc nut.
59. Align the sides of the lower mount and then tighten all to spec.
    M6 - **9 Nm.** M8 - 22 **Nm.**

60. Repeat steps for LHS then insert grommets in the two locations shown.

RHS SHOWN

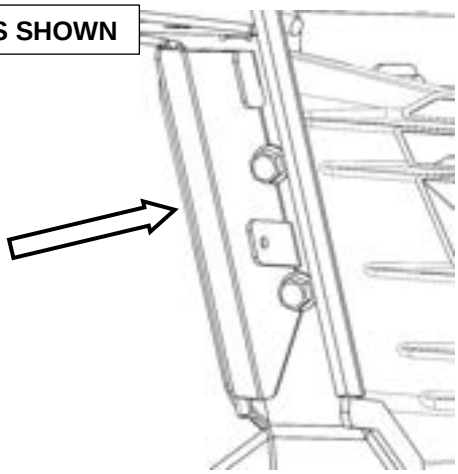


GRILLE MOUNT ALIGNMENT FOR THREE GRILLES

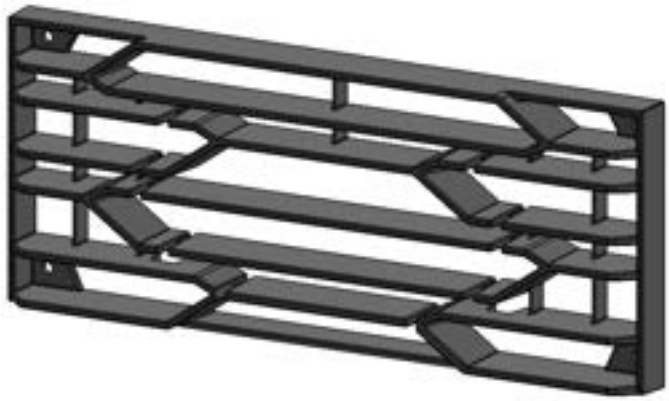
61. Fit the TOP grille mount using two M6x20 FL bolts (fitted from the underside), two M6 washers and two M6 nyloc nuts.
62. Fit the LOWER grille mount using one M8x20 coach bolt (from the top), one M8 washer and one M8 nyloc nut.
63. Align the sides of the lower mount and then tighten all to spec.
    M6 - **9 Nm.** M8 - 22 **Nm.**
64. Repeat steps for LHS then insert grommets in the four locations shown.

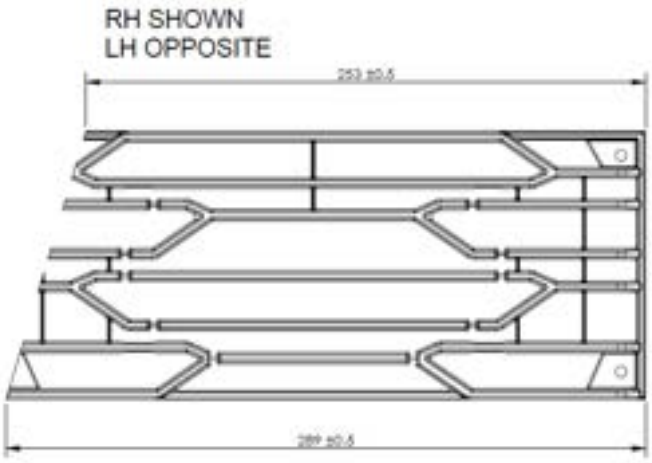
IF LIGHTS ARE BEING FITTED, SKIP TO STEP 69.

RHS SHOWN



65. Fit the grille channels to the bar upright using two M6x20 FL bolts and two M6 flange nuts per side.
    Torque to spec.
    M6 - **9 Nm.**

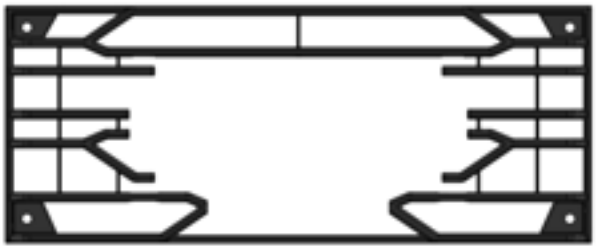




66. Mark out two grille pieces as shown and cut, one LHS and one RHS.
67. Debur all sharp edges.

Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

68. Fit each cut grille with two PHD screws from the front and one PHD x 15mm screw from the rear.

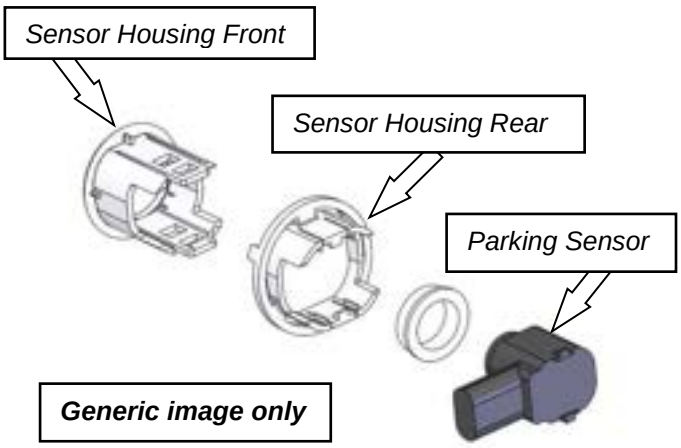


69. Remove the break outs on the grille to be fit in the centre. Debur sharp edges.

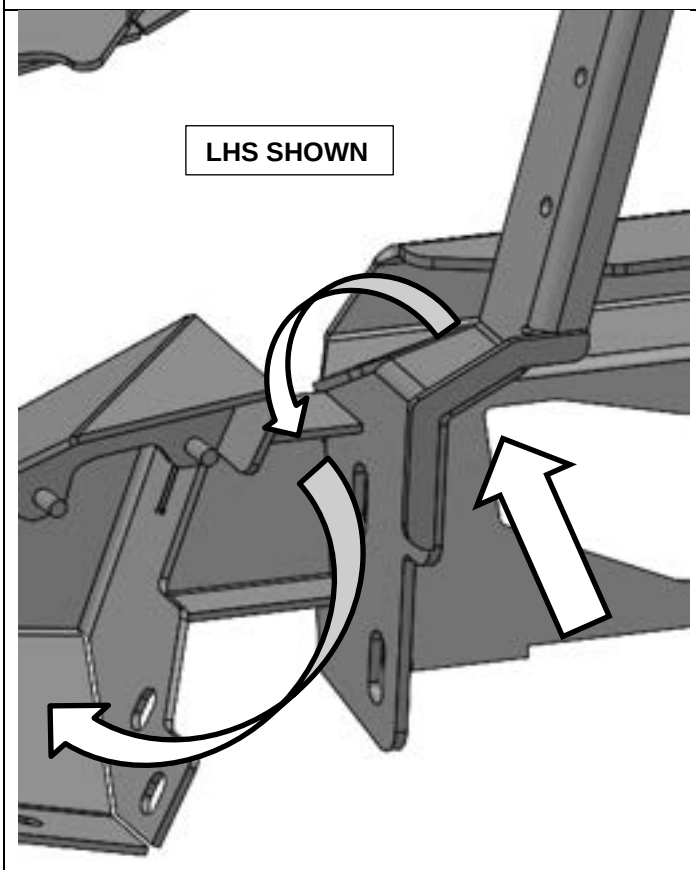
IF LIGHTS ARE NOT FITTED, SKIP TO STEP 72.

70. Fit two lights per side.
71. Align the back edge of the light mount and the bar plate and then tighten following manufactures specifications.

FITTING THE LOOM.

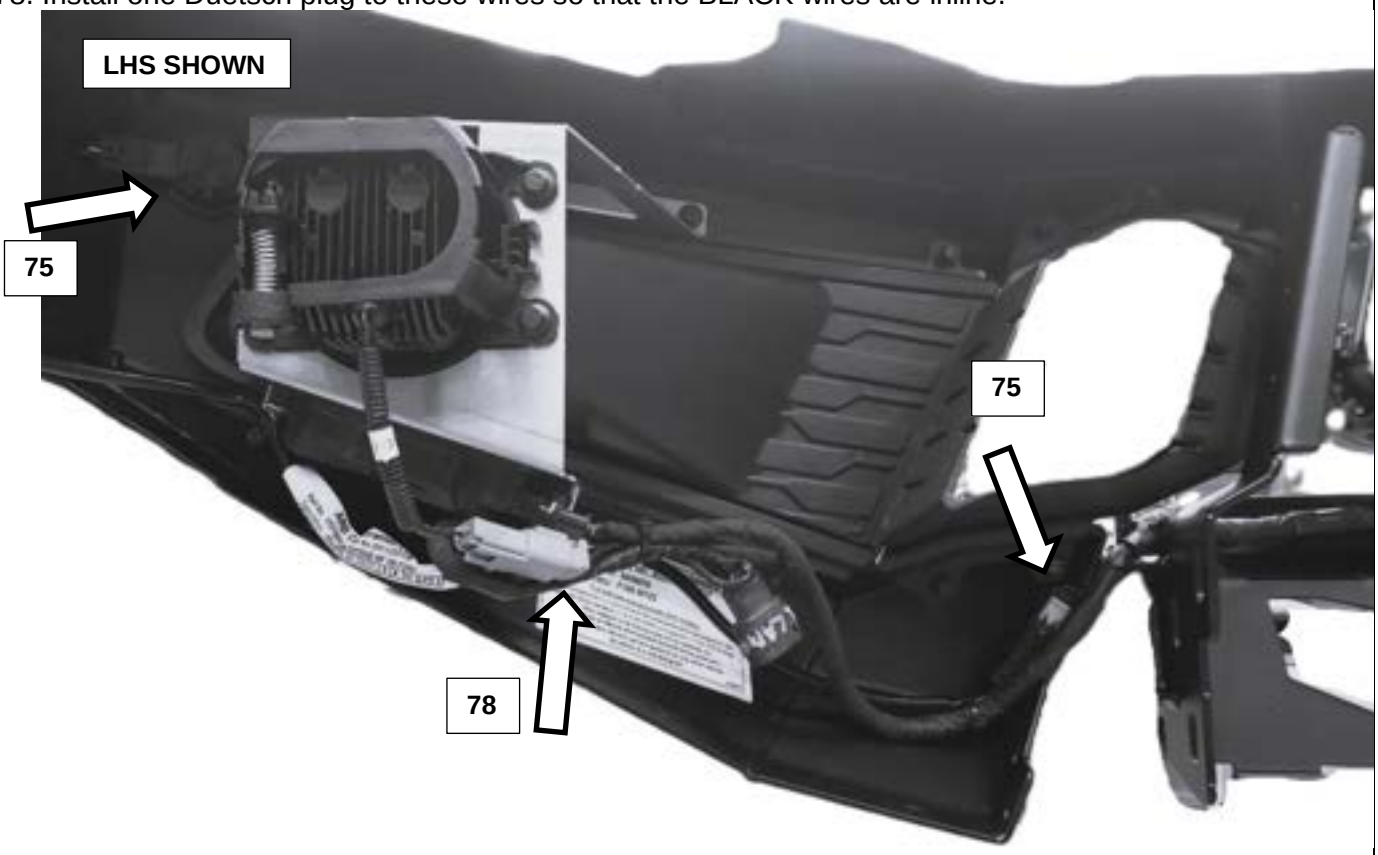


72. Fit two sensor surrounds to the bar on the wings.

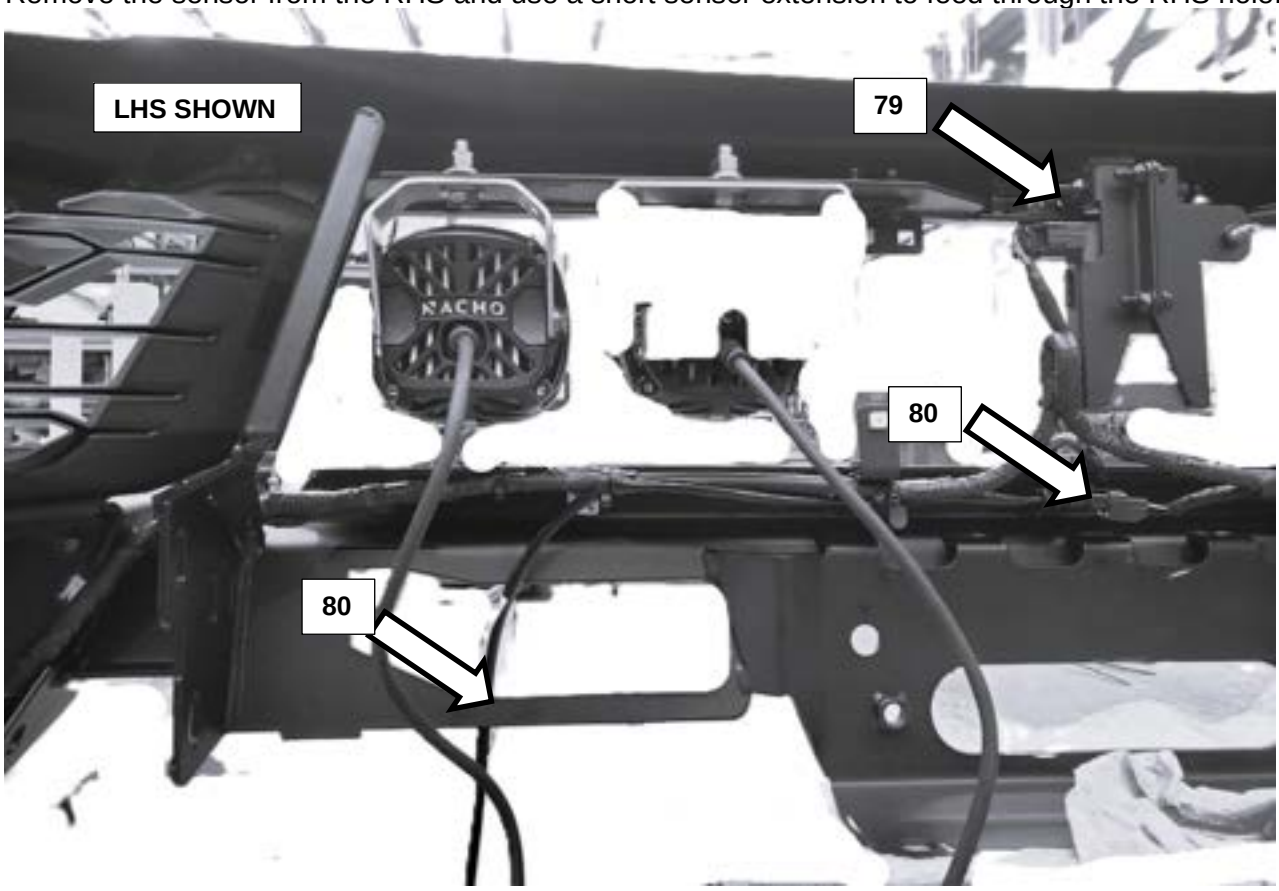


73. Feed the LHS of the loom up and around the bar upright.
74. Then feed the loom to the fog lamp.

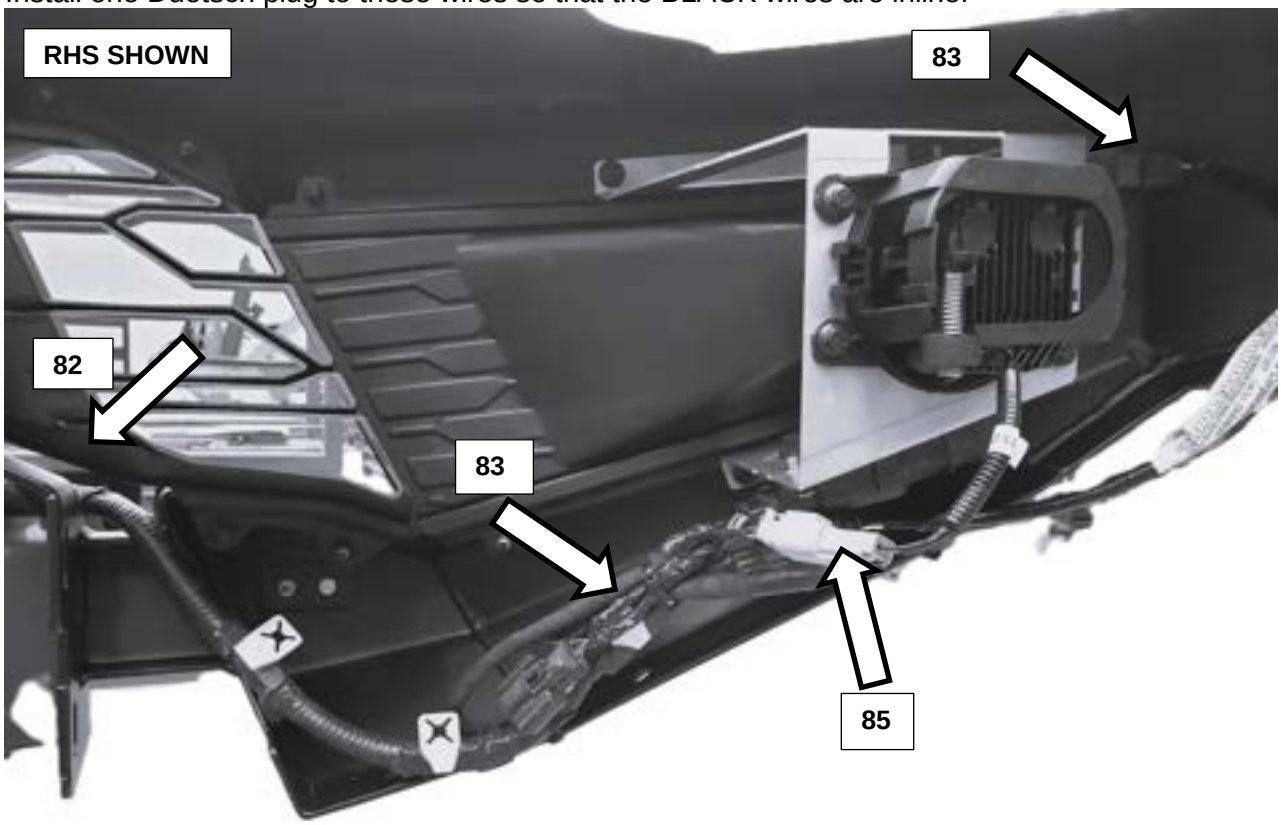
75. Remove the outer most sensor and use one 650mm long sensor extension to fit into the housing.
76. Connect the plug to the air dam motor.
77. To connect the fog light plug, cut two wires from the lamp plug. One is BLUE/RED, the other is BLACK/WHITE.
78. Install one Duetsch plug to these wires so that the BLACK wires are inline.

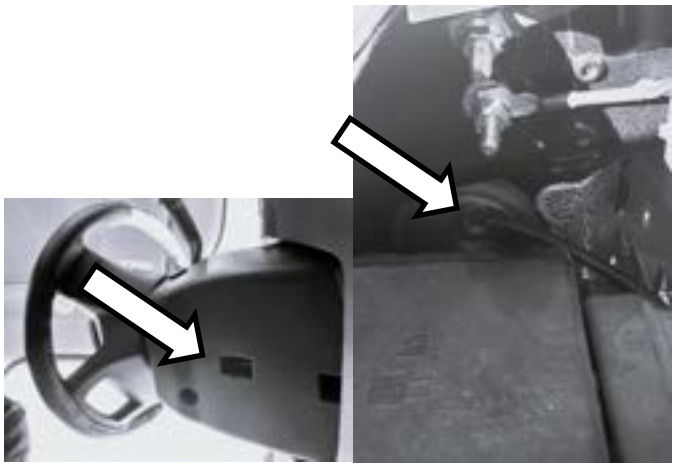


79. Connect the plug to the radar.
80. Remove the sensor and install the second 650mm sensor extension with the tail through the hole.
81. Remove the sensor from the RHS and use a short sensor extension to feed through the RHS hole.

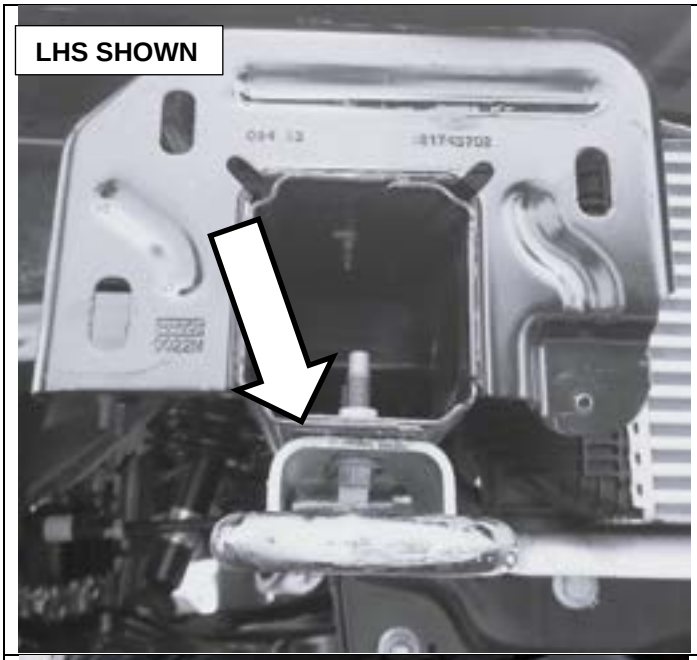


82. Feed the RHS of the loom as per LHS.
83. Use a short sensor extension to fit the outer sensor into the housing.
84. Connect the plug to the air dam motor.
85. To connect the fog light plug, cut two wires from the lamp plug. One is BLUE/WHITE, the other is BLACK/WHITE.
86. Install one Duetsch plug to these wires so that the BLACK wires are inline.



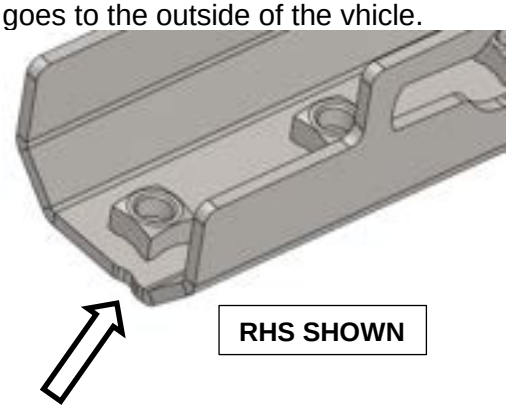


87. If lights are fitted to the bar, follow the fitting instructions for the wiring loom.
88. Route the loom down behind the RHS headlight.
89. Fit the switch underneath the steering column.
90. Access through the firewall is the body grommet on the RHS.



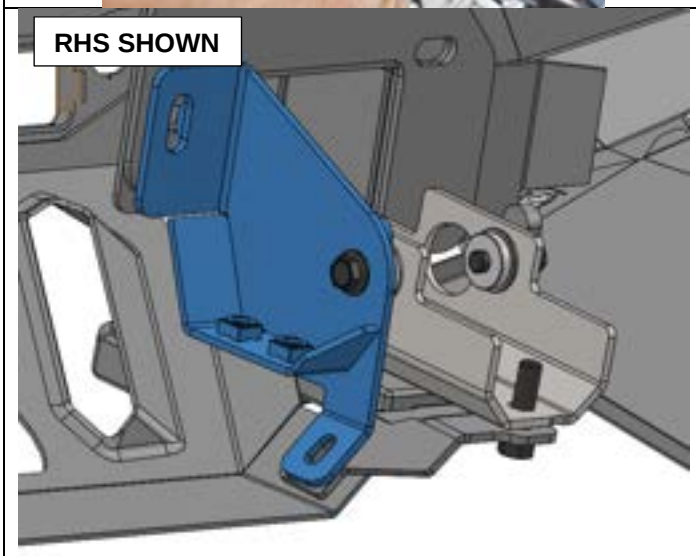
91. Remove both tow points and discard.

92. Insert the internal chassis braces, the notch goes to the outside of the vhicle.

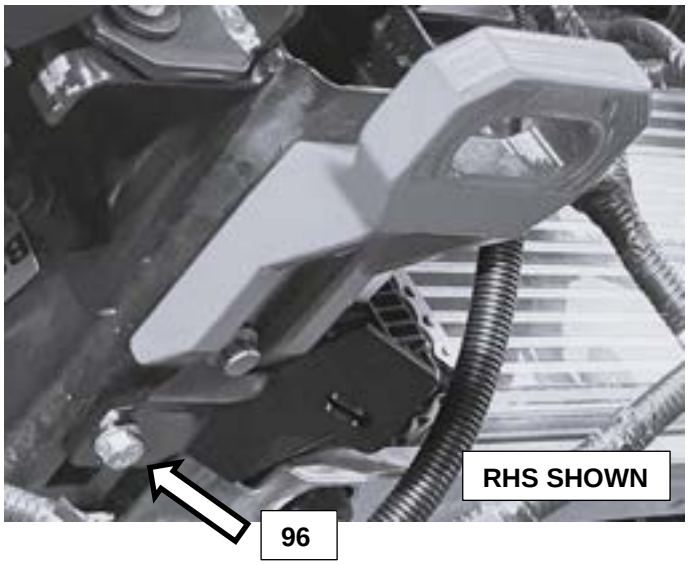


93. Insert two spigots per side in the slots of the internal chassis brace.

94. Fit one chassis spacer and one M12x1.25x40 FL bolt into the spigot on the outside of each chassis rail.
    Leave loose.



95. Fit the chassis winch mount using a chassis spacer and one M12x1.25x40 FL bolt into the spigot on the inside of each chassis rail.
    Leave loose.

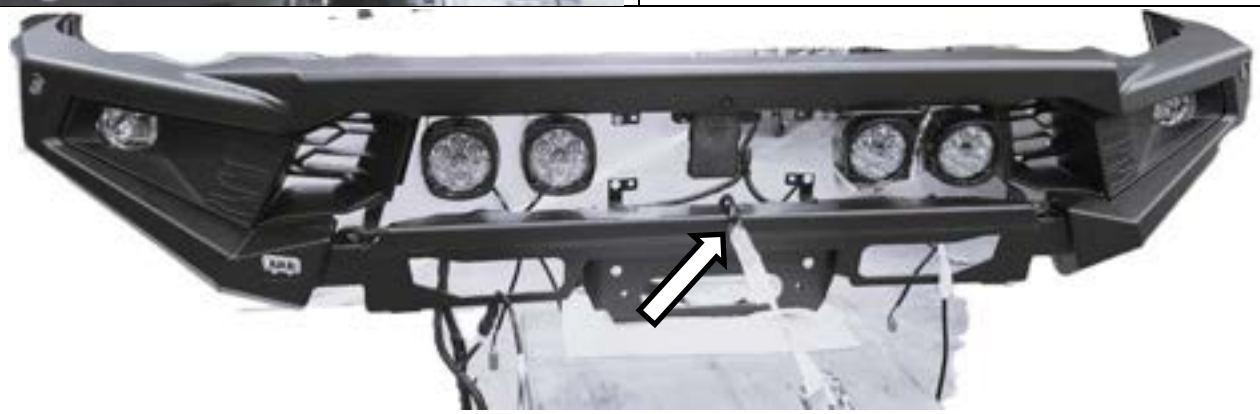


96. Install the recovery support bracket with one M12x1.25x40 FL bolt into the rear most position.

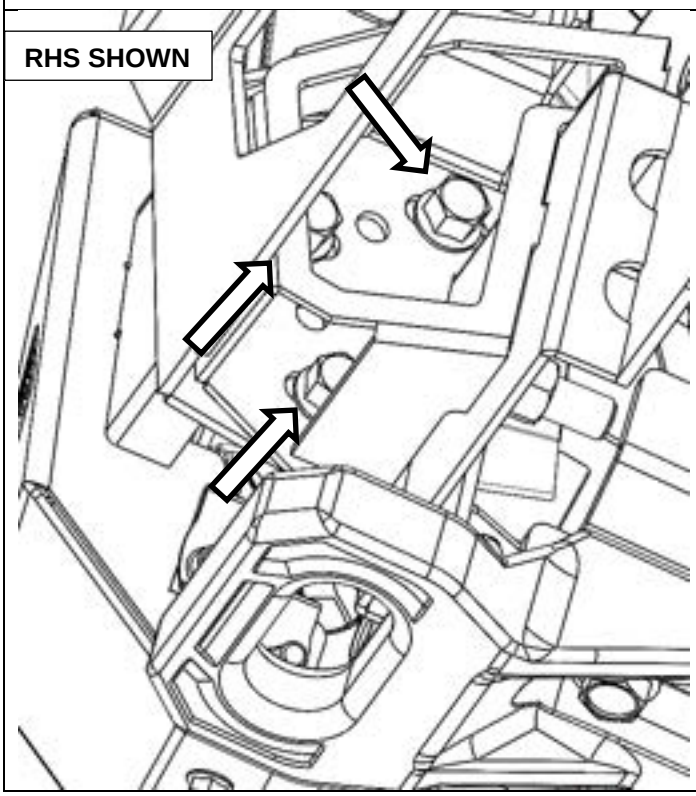
97. Place the recovery point between the chassis and bracket.
98. Fit two M12x1.25x40FL bolts through the bracket and recovery point into the internal chassis mount.

    Leave all loose and repeat for LHS.

99. Use three M12x1.25x40 FL bolts and three M12x1.25 FL nuts per side, to attach the chassis mounts. Tighten to a snug fit.

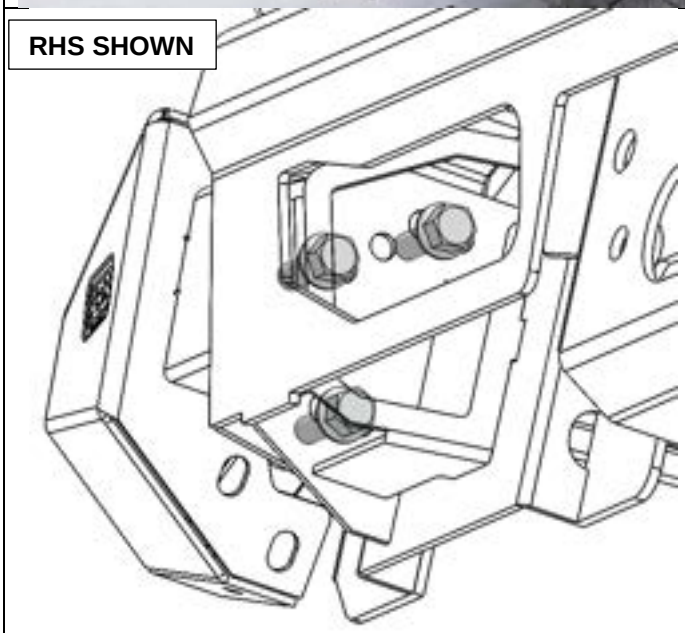


100. Place the bar onto a lifting trolley for fitment to the car, a hook can be placed in the position shown.

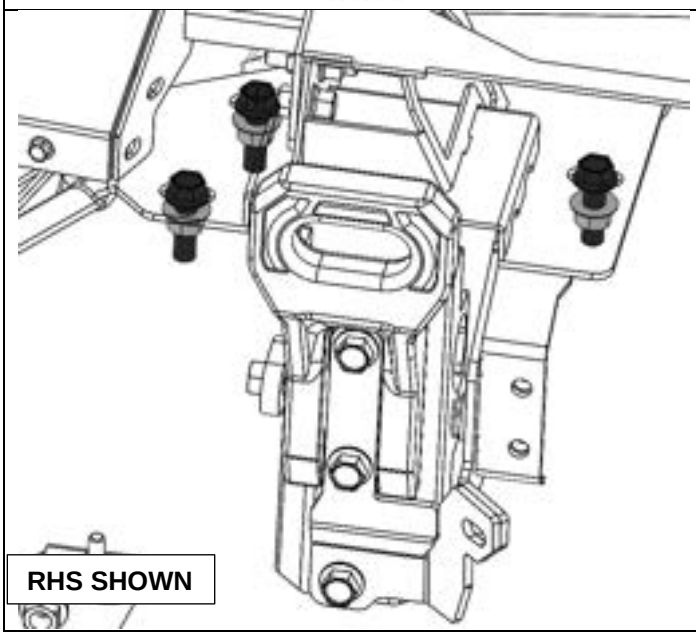


101. Bring the bar towards the car and connect the extension loom to the camera.
102. Fit the bar to the mounts and on both sides, fit three M10x1.5x30 FL bolts through the bar into the chassis mounts. Fit three M10 FL nuts and leave loose.

103. Place the bar so that the wing edge is tangent to the wheel arch and equally spaced each side of the car.
104. The top pan is 5 degrees down toward the vehicle.



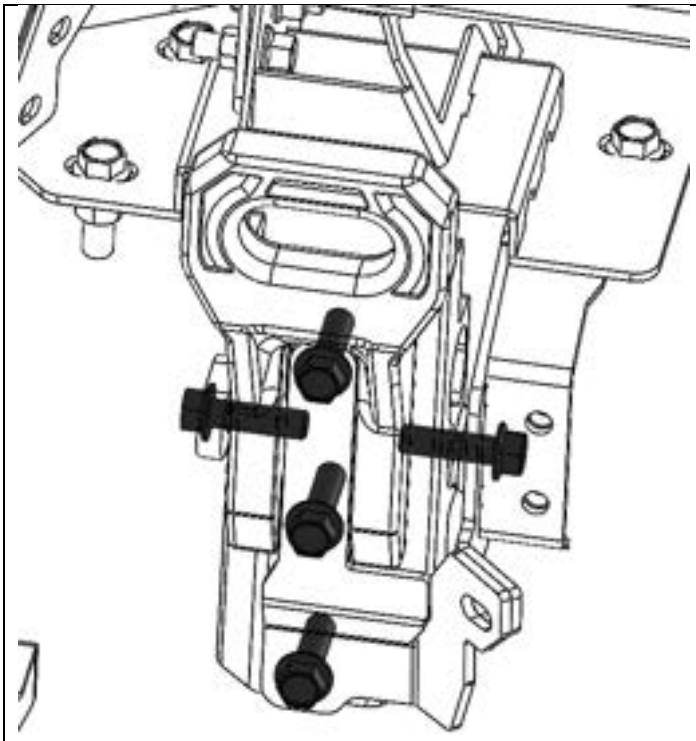
105. With the bar in the correct position, tighten the (three per side) M10 FL bolts to support the bar to the mounts.



106. Tighten the (three per side) M12 FL bolts on the chassis mounts.
107. Check alignment of the bar to the car and if suitable, torque the M12 FL bolts to specification.
108. Torque the M10 FL blts from step 100. To specification.

M10 – **44 Nm.**

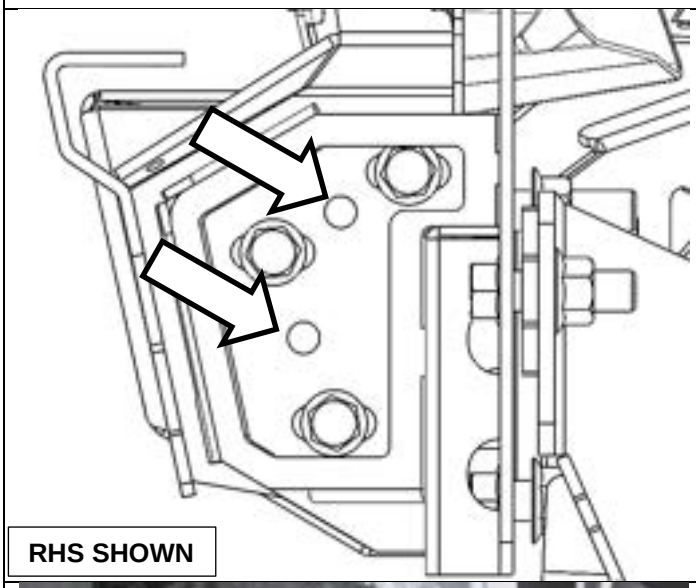
M12 PC11.9 – **102 Nm.**



RHS SHOWN

109. Pull the recovery points forward and torque all of the M12 FL bolts to specification.

M12 PC11.9 – **102 Nm.**

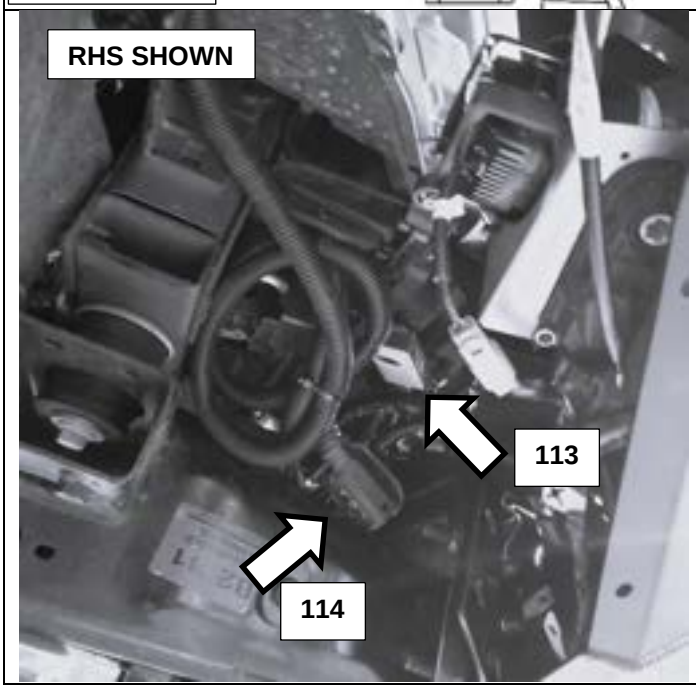


RHS SHOWN

110. Using a Ø10.0 drill bit, drill both pinning holes through the upright.
111. Fit two M10x1.5x30 FL bolts and two M10 FL nuts, then torque to specification.
112. Repeat for LHS

M10 – **44 Nm.**

Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.



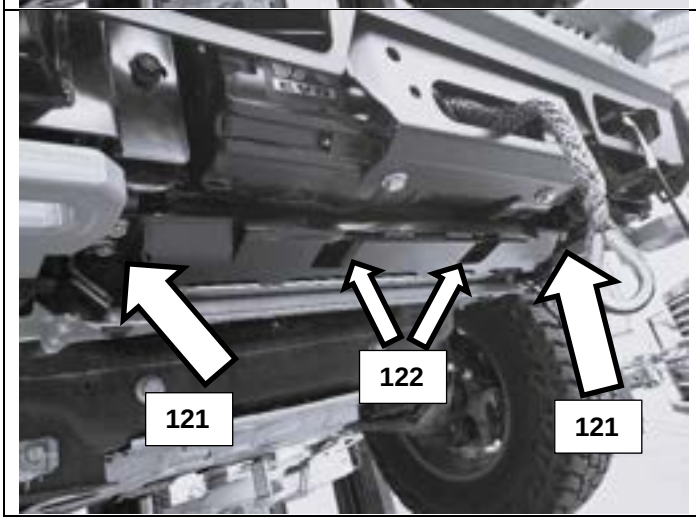
113. Connect the louvre motor to the loom and secure.
114. Reconnect the main loom plug and refit to the chassis.
115. Reconnect the wastegate plug.
116. Secure all loose wires.
117. If lights are fitted, connect to the driving light loom.

118. Fit each wing brace using four M10x1.5x30 FL bolts and four M10 FL nuts.
Torque to specification.

M10 – **44 Nm.**

If a winch is being fitted, continue below, if not skip to step 125.

119. While lifting the winch onto the front mounts on the bar, feed the rope through the access hole.
120. Use two of the supplied fasteners through the bar into the winch to hold it in place.

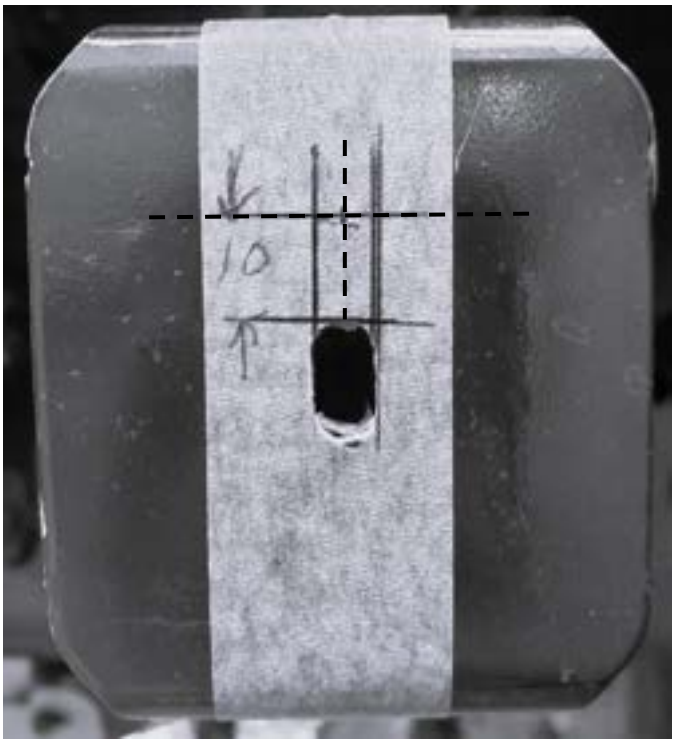


121. Loosely fit the rear winch mount with four (two per side) M10x1.5x30 FL bolts.

122. Fit the remaining two winch bolts into the rear of the winch, leaving loose.
123. Centre the winch and torque all bolts to specification.

M10 – **44 Nm.**

124. Follow Winch instructions to complete the wiring.

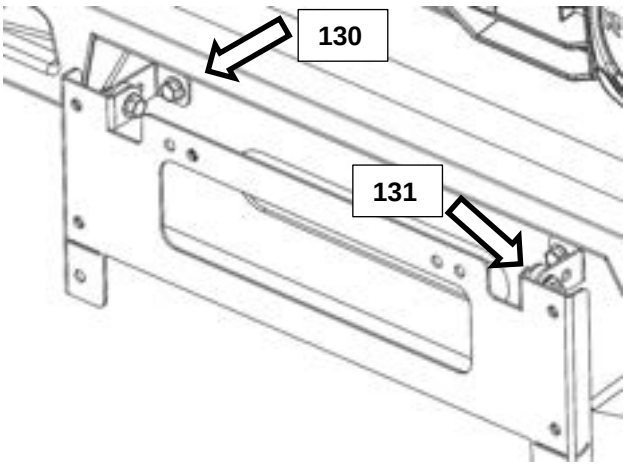


125. Mark out both front SORB's as shown.
126. Centre punch and drill using a Ø10.0mm drill bit.
127. Debur the holes and apply touch up paint.

128. Install a M6 nutsert in the drilled holes.

Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

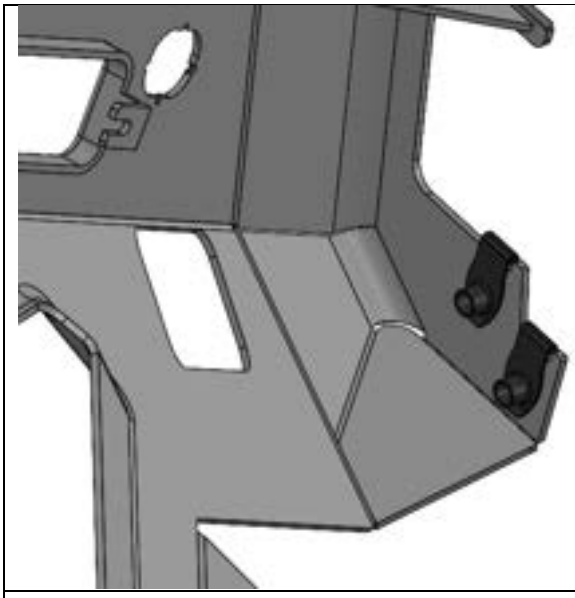
129. Loosly fit the under panel mount to the exposed threads retaining the SORB's using two M12 FL nuts per side.



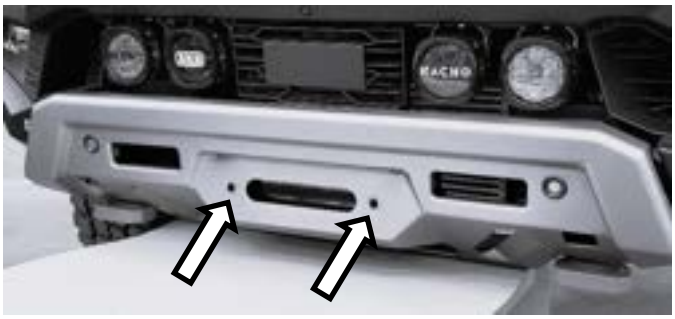
130. Fit the number brackets to the front panel using one M6x20 FL bolt, one M6 washer and one M6 nyloc nut per side. Torque to specification.

M6 - 9 Nm.

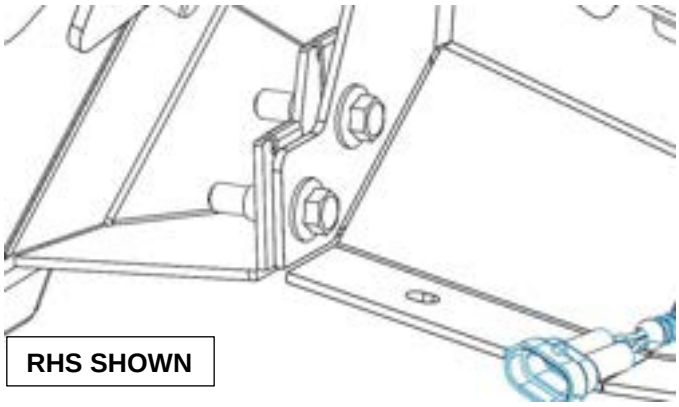
131. Install the main plate the brackets using one M6x20 FL, one nylon packer, one M6 washer and one M6 nyloc nut per side. Tighten to a snug fit.



132. Each side of the front panel, fit two M8 U nuts with the threaded side towards the centre.
133. Fit the remaining two sensor housings to the front panel.

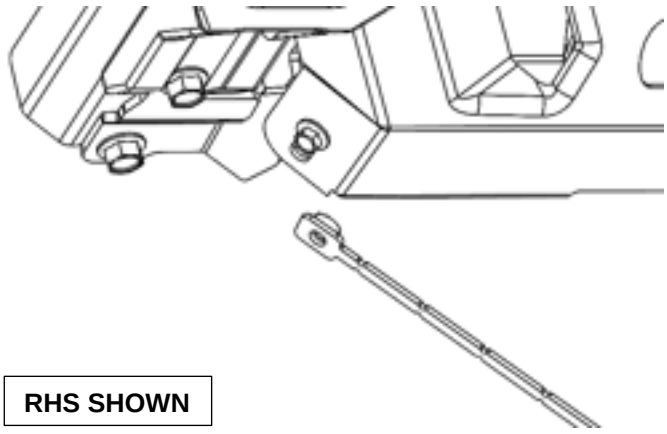


134. Support the front panel on a trolley and while close to the bar, insert the two parking sensors.
135. If a winch is fitted, feed the rope through the hole.
136. Carefully fit the front panel to the bar, make sure the parking sensor looms are not pinched.
137. Loosely fit two M12x1.75x40 FL bolts (with the Hawse if needed).



RHS SHOWN

138. Fit two M8x30 FL bolts per side into the U nuts fitted to the front panel and leave loose.



RHS SHOWN

139. Use an M8x30 FL bolt and M8 nut stick per side to mount the front panel to the recovery mounts.
140. Torque all fasteners to specification.

M8 - 22 **Nm.**

M12 - 77 **Nm.**

141. Fit five M6 U nuts to each under panel and fit inplace using five M6x20 FL bolts.
142. Use one M8x30 FL bolt and one M8 FL nut per side to secure the under panel to the SORB mount.
Tighten to specification.

M6 - 9 **Nm.**

M8 - 22 **Nm.**

143. Fit each SORB cover with three M6x20 FL bolts and two M6 FL nuts and torque to specification.
144. Torque the M12 nuts to specification.

M6 - 9 **Nm.**

M12 - 77 **Nm.**

145. Refit the wheel arch scrivets to both side, then trim the wheel arch liners to be retained by the under panel return fold.

146. With the vehicle on the ground, adjust the radar to be level to the gound using a digital spirit level.
147. Fit the centre cut grille using four PHD screws.
148. Click the radar cover into place with the arrow pointing down.

FITTED PRODUCT

ONCE ZENITH BAR IS FITTED:

- **Ensure all bolts are tensioned correctly.**
- **All wiring is clear of sharp edges or moving surfaces and secured properly.**
- **Piping is secured well away from sharp or moving components.**
- **Check operation of winch, if fitted.**

Check all wiring and connections to turn signal lamps, parking sensors, camera, washers etc. are functioning correctly.