



FITTING INSTRUCTIONS

Part Number: **3440520**
Product **BT50 STEEL SUMMIT COMBAR 110N|**
Description:
Suited to **2011 MAZDA BT50 ONWARDS**
vehicle/s:
Optional **3500640 - ARB AUX Fog Light Adaptor**
Fitting Kits: **3500530 - ARB AUX Fog Light Loom (non-factory fog lamp vehicles)**
3500680 - Fog Lamp Housing Clear Lens Kit
3500590 - Fog Light Kit (LH&RH Lights)
3500720 - SUMMIT BAR WINCH INSTALL KIT
3500840 - CONTROL BOX BRACKET LARGE (Smittybuilt, Warn
XP, Magnum control boxes)

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

Corporate Head Office

42-44 Garden St
Kilsyth, Victoria 3137
AUSTRALIA

Tel: +61 (3) 9761 6622
Fax: +61 (3) 9761 6807

Australian enquiries
North & South American enquiries
Other international enquiries

sales@arb.com.au
sales@arbusa.com
exports@arb.com.au

www.arb.com.au

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

Important electrical system information

The 2011 On Mazda BT-50 uses an advanced wiring system allowing new chassis control systems to be used. Due to this, placing large amounts of additional load to the wiring harness may trigger faults in the ECU or cause permanent damage to the wiring harness.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC TOOL KIT	ELECTRIC DRILL
JIG SAW WITH BLADE SUITABLE FOR PLASTIC	MATTE BLACK SPRAY PAINT
FILE OR SAND PAPER	LOW TACK MASKING TAPE
TAPE MEASURE	ELECTRICAL TAPE (BLACK)
STEEL RULER	WHITE FELT MARKER
TORQUE WRENCH (9-90Nm)	HACKSAW
CONVOLUTED TUBE (7MM & 12MM)	CLAMP
UTILITY KNIFE	COMPLETE METRIC DRILL SET
LOCTITE 243	MULTI-TOOL WITH BLADE SUITABLE FOR PLASTIC

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear



Hearing protection



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	Torque Nm	Torque lbft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

PARTS LISTING

APPLICATION.	PART NO.	QTY	DESCRIPTION
FIT MOUNTS TO CHASSIS	3759563	1	MOUNT BRACKET ASSEMBLY
	3759574R	1	CHASSIS BRACE RH
	3759574L	1	CHASSIS BRACE LH
	3759575R	1	CHASSIS BRACE RH
	3759575L	1	CHASSIS BRACE LH
	3759576R	1	CHASSIS MOUNT BRACE RH
	3759576L	1	CHASSIS MOUNT BRACE LH
	5848427	4	CHASSIS MOUNT PACKER
	3758956	1	OE STONE SHIELD BRACKET
	4581011	10	WASHER FLAT M12 x 27 x 4
	6151360	10	HEX BOLT M12 x 1.75 x 35 G8.8
	6151428	10	FLANGE NUT M12
	4581050	10	WASHER SPRING M12
	6151357	10	SEMS BOLT ASSY M10 X 30
	6151727	2	HEX BOLT M16 x 2.0 x 35 PC8.8 TZP
	6151728	2	FLANGE NUT M16
	6151456	2	BOLT M10 x 1.5 x 45
	4581083	2	WASHER FLAT M10 x 21 x 2
	6151321	8	FLANGE NUT M10
	4581048	2	SPRING WASHER M10
	6151234	3	HEX BOLT M8 x 25 BLACK
	4581047	3	WASHER SPRING M8 BLACK
	6151132	3	FLANGE NUT M8
	4581307	3	WASHER FLAT M8 BLACK
FIT LIGHTS AND MOULDINGS	3500880	1	GRILLE SPLIT PAN KIT
	5100200	1	BUFF KIT 2PCE FRONT SECTION KIT
	5100210	1	BUFF KIT 2PCE REAR UPRIGHT BAR KIT
	6821287	1	LAMP LED IND CLEARANCE KIT
	3163082	1	SURROUND ARB FOGLIGHT KIT
	6821116	4	GROMMET NYLON SNAP IN TYPE
	5848428	4	SHIM OVER RIDER 1.6MM

PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
BAR TO VEHICLE	3194293	2	CAGE NUT PLATE
	6151306	6	CAGE NUT M12
	6151360	4	HEX BOLT M12 x 1.75 x 35 G8.8
	4581050	6	WASHER SPRING M12
	6151168	2	BOLT M12 x 1.75 x 80
	4581007	6	WASHER FLAT ½" x 1.1/2" x 4mm
	6151357	4	SEMS BOLT ASSY M10 X 30
	4584375	2	SPACER 15mm LONG
	4584376	2	SPACER 35mm LONG
	6151321	4	FLANGE NUT M10
UNDER PANELS TO BAR	6522838	1	STONE SHIELD CENTRE
	6523069R	1	UNDER WING PANEL RH
	6523069L	1	UNDER WING PANEL LH
	3758956	1	BRACKET STONE SHIELD CENTRE
	3758957	2	BRACKET WING PANEL
	6151301	7	CAGE NUT M8
	6151234	11	HEX BOLT M8 x 25 BLACK
	4581047	11	WASHER SPRING M8 BLACK
	4581307	11	WASHER FLAT M8 BLACK
	6151357	2	SEMS BOLT ASSY M10 X 30
	6151321	2	NUT FLANGE M10 x 1.5 ZP
	6151300	10	CAGE NUT M6
	6151213	10	BOLT M6 x 20 BLACK
	4581082	10	WASHER FLAT M6 BLACK
	4581287	10	SPRING WASHER M6 BLACK
	6151132	4	FLANGE NUT M8
LICENSE PLATE TO BAR (NO WINCH FITTED)	3759488	1	BRACKET REG PLATE FIXED LARGE RAD
	6151213	3	BOLT M6x1.0x20 8.8 BZ
	4581287	3	WASHER SPRING M6 x 2.5 x 1.6 BLK ZN
	4584295	3	WASHER FLAT M6 x 12 x 1.3 BLK ZN
	6151128	3	NUT FLANGE M6 x 1.0 ZP
	6821189	2	GROMMET RND FC 1500 080 090
	6151384	2	SELF TAPPING SCREWS 10G x 5/8
WINCH COVER PANEL FITMENT (NO WINCH FITTED)	6522985	1	PRESS FORM WINCH COVER PANEL
	6151213	4	BOLT M6x1.0x20 8.8 BZ
	4581287	4	WASHER SPRING M6 x 2.5 x 1.6 BLK ZN
	4584295	4	WASHER FLAT M6 X 12 X 1.3 BLK ZN
	6151128	4	NUT FLANGE M6 x 1.0 ZP
MISCELLANEOUS	6191025	2	PINCH WELD 480MM
	3789489	1	TEMPLATE BT50 COMBAR 15ON
	180302	10	CABLE TIE 4.8 x 180mm BLACK
	3758973R	1	BRACKET GRILLE BT50 RH
	3758973L	1	BRACKET GRILLE BT50 LH

FITTING PROCEDURE



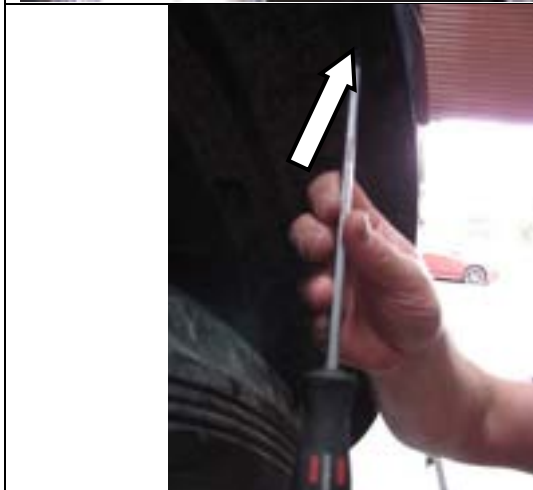
1. Read the instructions thoroughly before starting.
2. Open the bonnet and remove the plastic cover above the grille.



3. Remove the plastic clips from the top / rear corners of the grille. Place clips in a safe place.

Note: Take note where fasteners are removed from as some have to be replaced later in the fitment.

4. Remove the grille by carefully rolling forward and releasing the clips at the bottom.



5. Remove all the bumper fasteners along the inside edge of the wheel arches.



6. Remove all the fasteners securing the bottom of the bumper to the vehicle.

FITTING PROCEDURE



7. Undo and remove the screws and plastic clips behind the grille near the lower inner edge of the head lights.



8. Starting on the RH side of the vehicle, carefully pull the rear most corner away from the vehicle un-clipping the bumper. With the assistance of another person remove the bumper from the vehicle and place in a safe place where it will not be damaged. Disconnect the sensor attached to the bumper and allow it to hang loose. If fog lights are fitted they will need to be disconnected.



9. Remove the plastic panel attached to the front cross beam by removing the plastic clips. Discard the panel.

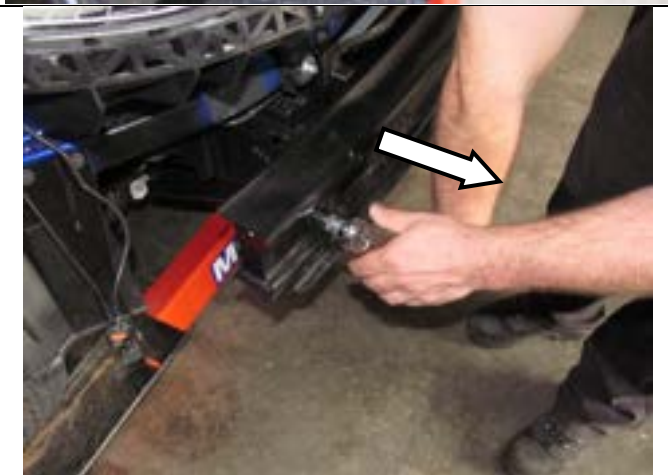
FITTING PROCEDURE



10. Use a screw driver to push the 2 plastic clips inward from the front cross beam. Do not remove the clips as they will be used later.



11. Carefully unclip the sensor from the side air deflector above the LH chassis rail. Allow the sensor to hang on it's wiring.



12. Remove the front cross beam and discard



13. Remove the factory under panel and place in a safe place. Do not completely remove the rear bolts. Leave loose.

FITTING PROCEDURE



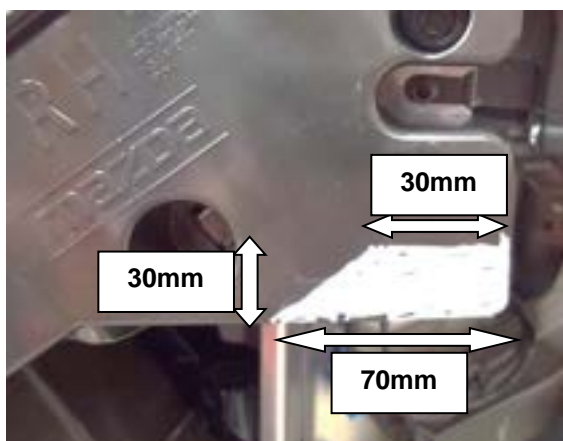
14. Remove and set aside the 2 air deflectors on either side of the intercooler. Retain the fasteners.



15. Remove the RH and LH bumper retention blocks from either side of the vehicle and place in a safe place.

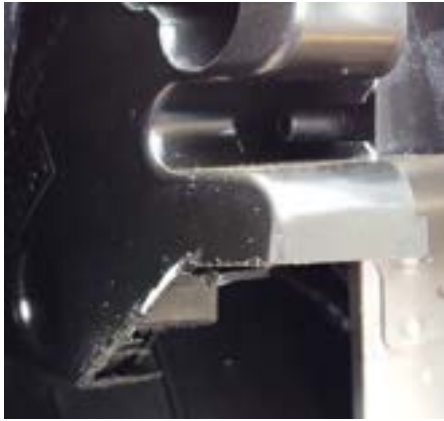


16. Remove and discard the inner guard support brackets from both sides of the vehicle.



17. Starting with the right hand side bumper retention block, mark section as shown from the bottom edge of the forward notch. (The line should be parallel with bottom edge).

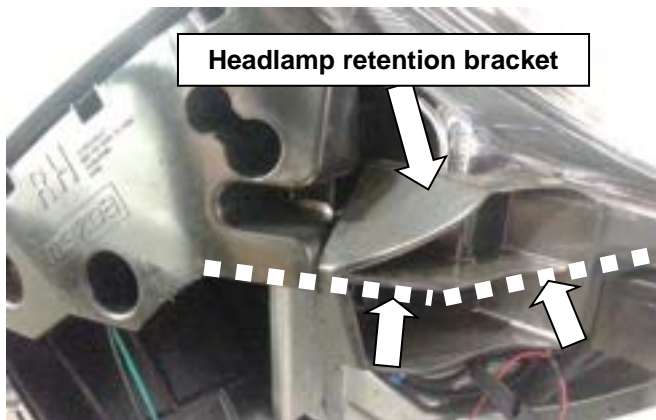
FITTING PROCEDURE



18. Use a saw suitable for cutting plastic and cut along the marked line all the way through section.
19. Use a file or sandpaper to de-bur all cut edges. The final part should like the one pictured.
20. Repeat steps 17-19 for LH block.



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



21. With bumper retention block repositioned, mark a continuous line onto headlamp retention block as shown just below ridge of block using newly cut edge from bumper retention block as a guide.



22. Use a saw suitable for cutting plastic and cut along the marked line all the way through section.
23. Use a file or sandpaper to de-bur all cut edges. The final part should like the one pictured.
24. Repeat steps 21-23 for LH block.
25. Remove bumper retention blocks and set aside for later fitment.



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



26. Starting on the RH side of the vehicle, remove the plastic clip, the 2 hex screws and the torx screw holding the headlight assembly in place and set aside.
27. Repeat on the LH side.



28. Carefully remove the head light assemblies from the vehicle, carefully unclipping the main head light globe plugs and completely removing both the turn light globes and left hand side clearance light globe.
29. Place the head light assemblies in a safe place where they will not be damaged.

FITTING PROCEDURE

Refer to table below for Wire Colour designations

DESCRIPTION	WIRE COLOUR
Main battery positive	Red
Main battery negative	Black
Clearance Light signal wire	Blue / Black
Left hand turn light signal wire	Green / Black
Right hand turn light signal wire	Yellow / Black

Function	LED Wire
Ground	Black
Indicator	Green
Clearance	Red

30. Following fitting instructions 3789197 supplied in kit 6821287; install the LED combination lamp looms (also supplied in same kit).

Notes:

-Use a test light or multimeter to pick the appropriate wire to attach the loom to.

-Cover each joint with either insulation tape or heat shrink tube.

For vehicles without factory fog lamps and where optional ARB fog lamps are to be fitted:

31. Install optional ARB wiring loom 3500530 and switch into vehicle. Refer to instructions supplied with loom. Place switch inside cabin in a suitable position.
32. Connect optional ARB fog lights (# 3500590) to wiring loom.
33. Proceed to step 40.

CAUTION: Ensure that all cables are securely fastened away from sharp, abrasive or hot surfaces.

Keep these items

Discard these items



Black/white trigger wire

Cover black wire bullet terminal with tape



For vehicles with factory fog lamps:

34. The factory fog light switch can be used in conjunction with the ARB loom 3500530 to power the ARB fog lights.
35. Discard loom switch and thin yellow wire from 3500530.(Harness from bullet terminals to switch)
36. Install ARB wiring loom 3500530 to vehicle.
Do not install switch or yellow wire with fuse.

CAUTION: Ensure that all cables are securely fastened away from sharp, abrasive or hot surfaces.

37. Identify the black/white trigger wire from 3500530 as shown.
38. Connect the black/white trigger wire to the positive terminal on the factory fog light wire using the supplied scotch lock or a female bullet connector.
39. Tape the bullet terminal from the black wire from 3500530 to prevent short-circuits. Securely fasten it away from sharp, abrasive or hot surfaces.

Notes:

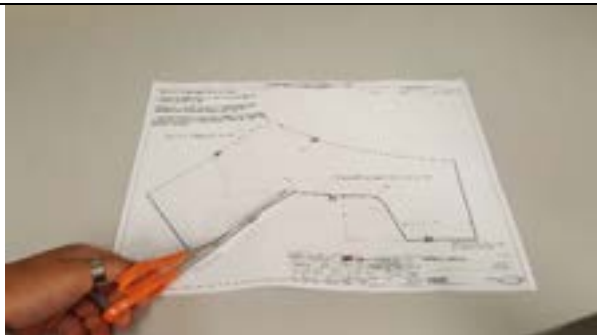
- Use a test light or multimeter to pick the appropriate wire to attach the loom to.***
- Check the operation of all lights wired during bar fitment***

FITTING PROCEDURE

Note: All wiring should be checked against the wiring diagram attached at the end of these instructions.

40. Replace the head light assemblies by reversing the removal step 28.
41. Connect the positive and negative battery wires to relevant terminals on the vehicles battery.
42. Re-fit the bumper retention blocks modified earlier.

FITTING PROCEDURE



43. Using scissors carefully cut out the supplied paper template.



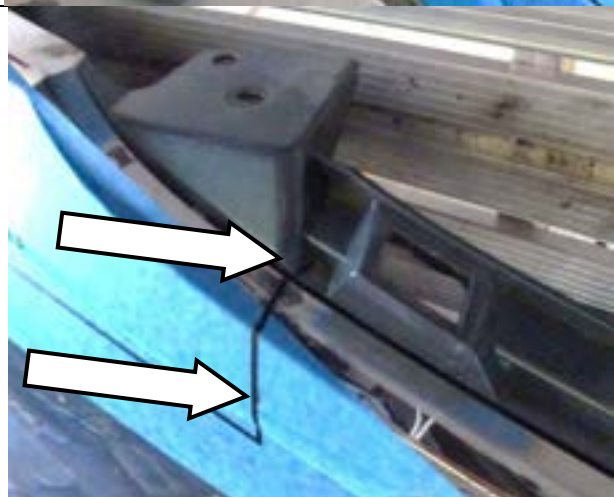
44. Sit the bumper bar facing upwards on a stand.
45. Place masking tape over the bumper as shown. This will help protect the paint during cutting.



46. Place the paper template on the RH side of the bumper bar as shown and attach with masking tape.

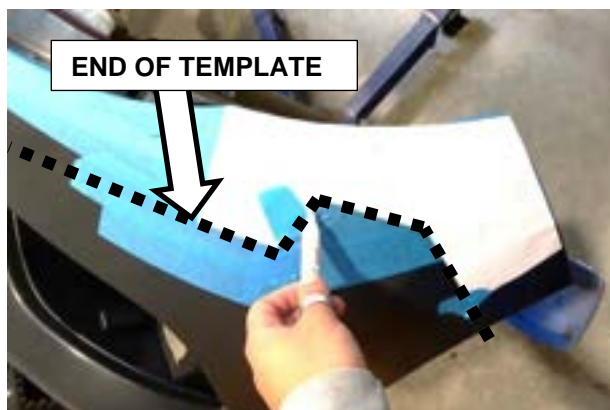


47. On the RH side of the bumper bar, locate the point on the top edge at the intersection of the grille and the head light.
48. From that point, mark a line 70mm down towards the bottom of the bumper.
- (THIS IS NOT A CUTTING LINE, IT IS A GUIDE ONLY)**



49. Mark a vertical line down from the inside edge of the mounting lug as shown.
- (THIS LINE IS FOR CUTTING)**

FITTING PROCEDURE



50. Using a marker pen, trace a line along the bottom edge of the paper template.
51. From the end of the template, rule a straight line along the bumper through the 70mm mark of the line drawn in step 48. Continue this line until it intersects with the line marked in step 49.



52. Carefully remove the template and attach to the LH side of the vehicle (upside down). Repeat previous marking steps on the LH side.



53. Carefully cut along the lines marked along the template, the bottom horizontal edge and the vertical line from the mounting lug keeping the top corner sections.

Warning: Do not cut the 70mm line marked in step 48.

54. De-bur the cut edges with a file or sandpaper.

Warning: Be careful when cutting and de-burring that you don't damage the paint on the visual surfaces of the bumper.

Note: Some variants will come with a chrome dressing piece attachment, in which case the bumper cut will go through both bumper and dressing piece attachment.



Vehicles built from April 2018 onwards will look like the image below:





55. Remove the RH and LH air deflectors from either side of the vehicle by un-doing the bolts at the top and bottom.



56. On the RH side air deflector mark a line as shown from the bottom of the lower mount boss to the bottom of the front mid mount boss.
57. Repeat on the LH side.



58. Carefully cut along the marked lines keeping the top corner sections.
59. De-bur the cut edges with a file or sandpaper.
60. Repeat on the LH side
61. Re-fit the air deflectors to the vehicle.



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



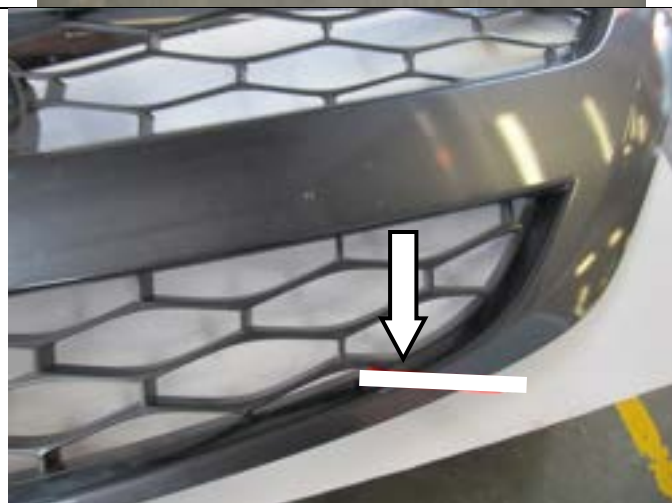
62. Refit the 2 bumper sections to the vehicle by reversing the removal steps. On the inboard ends attach the bumper sections to the vehicle using the plastic plugs.
63. Re-fit screws removed during bumper removal to attach bumper section to blocks.
64. Attach the grille support brackets to the vehicle as shown using the screws removed in step 7. Leave the screws loose at this stage.

For Pre-2015 BT-50 go to steps 65-71,
For '15 On BT-50 go to steps 72-76
For April 18 On BT50 go to step 77



Warning: To prevent incorrect trimming of the grille it is important that you read and understand the following steps before proceeding.

65. Place the grille facing upwards on a flat surface



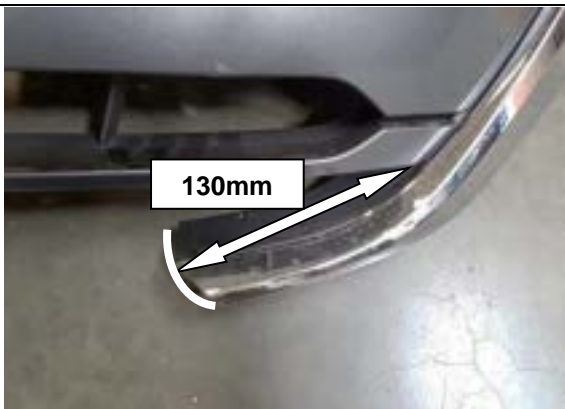
66. On the RH side (as it faces you), mark a line as shown, in line with the grille web.
67. Repeat both sides.
68. Using a hacksaw carefully cut along the 2 marked lines ensuring that you finish on the bottom side of the grille webs.



69. Using a hacksaw blade, cut along the top of the vertical posts where they intersect with the lower most grille webs. Continue until you reach both cuts made in the previous step.



70. Discard the bottom section.
71. Using a file or sand paper, remove any sharp edges.

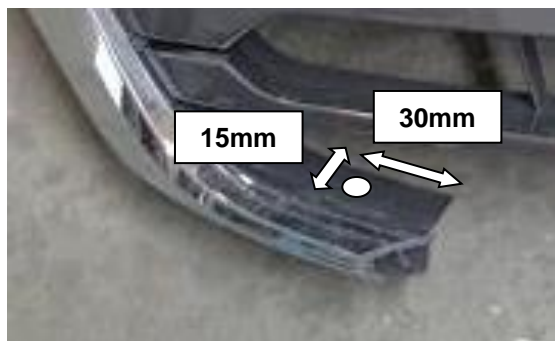


2015 Vehicles

72. Cut section of bumper as shown and use a file or sand paper to remove sharp edges.
73. Mirror cut onto opposite side.



74. Cut three tabs connecting lower lip of grille as shown and use a file or sand paper to remove sharp edges.



75. Mark and drill 8mm hole in grille as shown 30mm from cut edge and 15mm forward of back edge
76. Repeat for LH side.

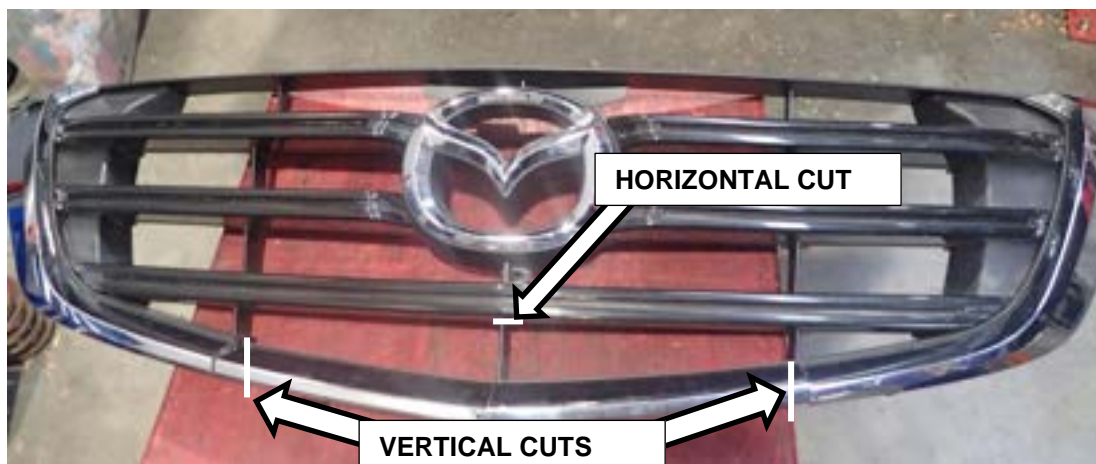


Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

Vehicles built April 2018 onwards:

77. Using a hacksaw blade, carefully cut vertical lines on the inboard side of the lowest uprights in the grille, as shown below. Also remove the middle upright with a horizontal cut.

**** Warning: BE CAREFUL TO AVOID SCREWS ON INSIDE OF GRILLE****



GRILLE SHOULD APPEAR AS SHOWN BELOW



AVOID THIS
SCREW










78. Refit the grille to the vehicle by reversing the removal steps above.
79. Attach the grille to the 2 grille brackets using the cable ties included in the kit.
80. Tighten the screws holding the brackets and bumper sections.

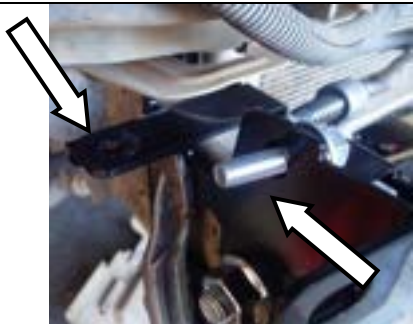


81. Fit pinch weld to both sections of the trimmed bumper.



82. Fit the inner brace with the packer to the chassis rail end. Ensure that the front edge is pushed forward to the chassis flange. The brace may need to be tapped to ensure a flush fitment to the chassis is achieved.

	<p>83. Fit the M16 x 35 flange bolt through the front access cut out of the front flange of the chassis.</p>
	<p>84. Loosely position the outer bracket brace with the packer to the chassis rail. Apply LOCTITE 243 then fit the M16 flange nut to hold it in place. Ensure that the front edge is pushed forward to the chassis flange.</p>
	<p>85. Fit 4 x M12 x 35 bolts, 4 x M12 flat washers, 4 x M12 Flange nuts.</p> <p> M12 - 77 Nm.</p> <p>NOTE: Do not fit the M12 spring washers these will be fitted later on.</p>
	<p>86. Using a spanner to hold the M16 flange bolt, torque the M16 flange nut.</p> <p> M16 - 90 Nm.</p> <p>NOTE: Take care to torque as per requirement. DO NOT torque outside the specs provided.</p>
	<p>87. Using a large G-clamp, clamp the top rear corner of the outer and inner brace together. This will make the alignment of the top flange easier for fitment of the brace.</p>



88. Fit the M10 x 1.5 x 45 bolt, M10 spring washer and M10 flat washer.



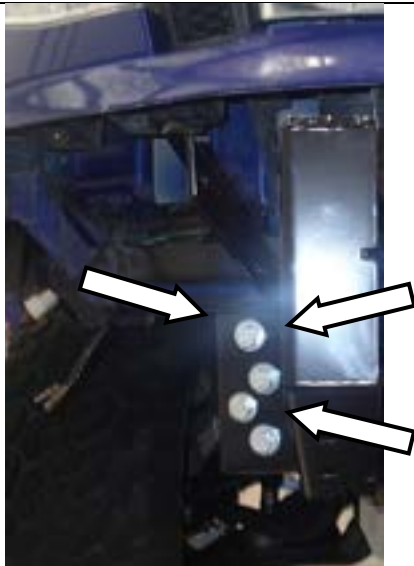
89. Fit the 2 x M10 x 30 SEMS bolts and M10 flange nuts to the bottom of the brackets to clamp them together.
90. Fit the M10 x 30 SEMS bolt and M10 flange nut to the brace and outer bracket.
91. Fit the 15mm wide spacer between the brace and the outer bracket and then fit the M10 flange nut
92. Remove the 4 x M12 x 35 bolts, 4 x M12 flat washers and 4 x M12 flange nuts fitted in step 81 and set aside for later.
93. **NOTE:** Keep all M10 fasteners loose and only finger tight at this point.

Repeat steps 82-93 for the LH side.



94. Attach the mount bracket to the chassis end plates using 4 x M10 x 30 SEMS bolts into the captive nuts. ***Leave loose at this stage.***

FITTING PROCEDURE

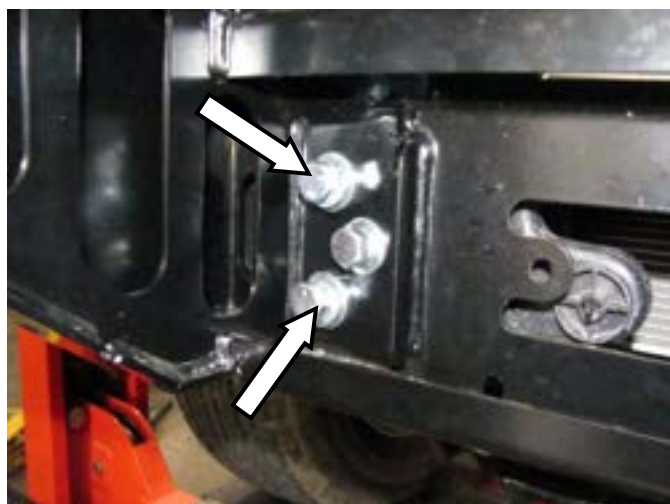


95. Attach the mount bracket to the chassis using 3 x M12 x35 bolts, 3 x M12 spring washers, 3 x M12 flat washers and 3 x M12 Flange nuts.

Repeat on the LH side.

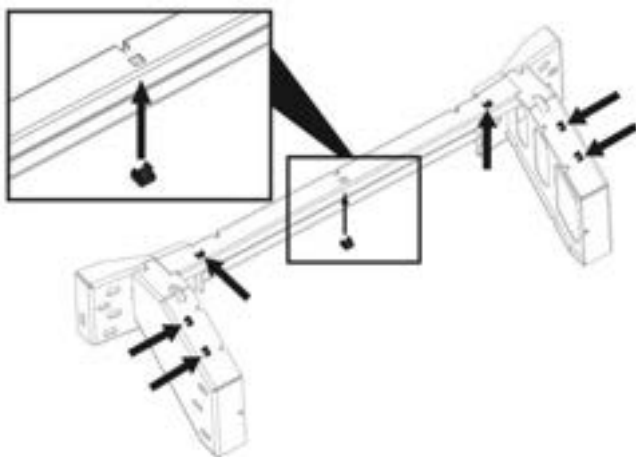


M12 - 77 Nm.



96. Place 2 x M12 x 35 bolts, 2 x M12 spring washers, 2 x M12 flat washers and 2 x M12 Flange nuts into the 2 holes on the inboard side of each chassis face plate. **Leave loose at this stage.**

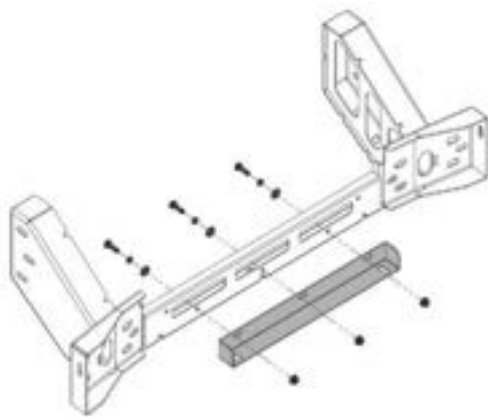
97. Repeat on the LH side.



98. Fit 7 x M8 cage nuts into the mount bracket from the inside.

Note: A flat blade screw driver can be used to aid placement of the cage nuts.

FITTING PROCEDURE



99. Attach the OE stone shield bracket to the chassis mount using 3 x M8 x 25 black bolts, 3 x M8 black flat washers, 3 x M8 black spring washers and 3 x M8 flange nuts. ***Leave loose at this stage.***



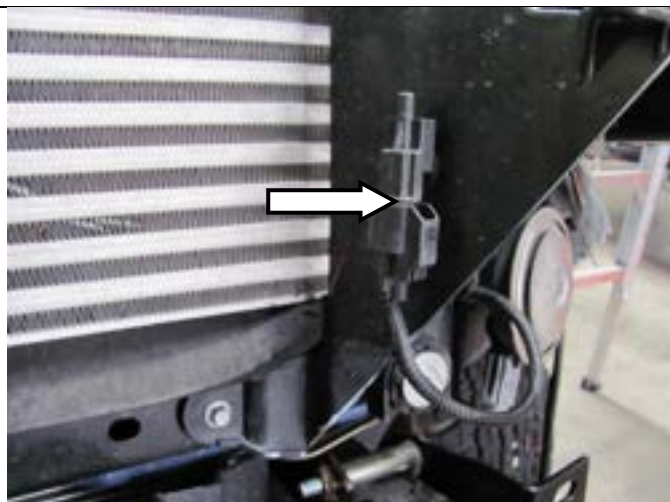
100. Re fit the OE stone shield to the bracket fitted in step 96 using 2 x M10 x 30 SEMS bolts and 2 x M10 flange nuts.



M10 - **44 Nm.**



101. Using the original plastic clips re-fit the factory air deflector to the 2 holes in the mount bracket.



102. Using the pegs on the sensor removed in step 8 as a guide, Drill 2 Ø5.5mm holes in the LH air deflector so that the sensor can be fitted approximately 40mm forward of the rear edge of the air deflector as shown.
103. Push the pegs into the drilled holes, attaching the sensor.

FITTING PROCEDURE



104. Fit 3 x M12 cage nuts to each of the cage nut plates as shown and set aside.

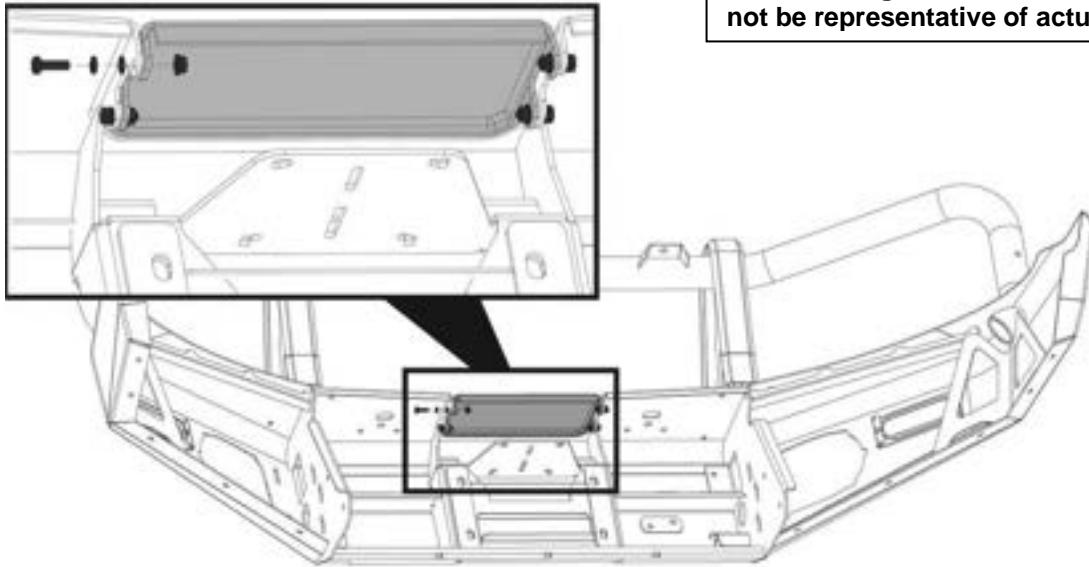
FITTING PROCEDURE

Note: If fitting a winch proceed from here using fitting instructions 3789337 supplied with 3500720 winch install kit. Once the winch is fitted please continue to step 108. If no winch is being fitted continue from here.

105. Slide the winch cover panel from the bottom up until it is level with the top face of the bar.

106. Fit the winch cover panel to the bar using 4 x M6 x 20 hex bolts, spring washers, flat washers and flange nuts.

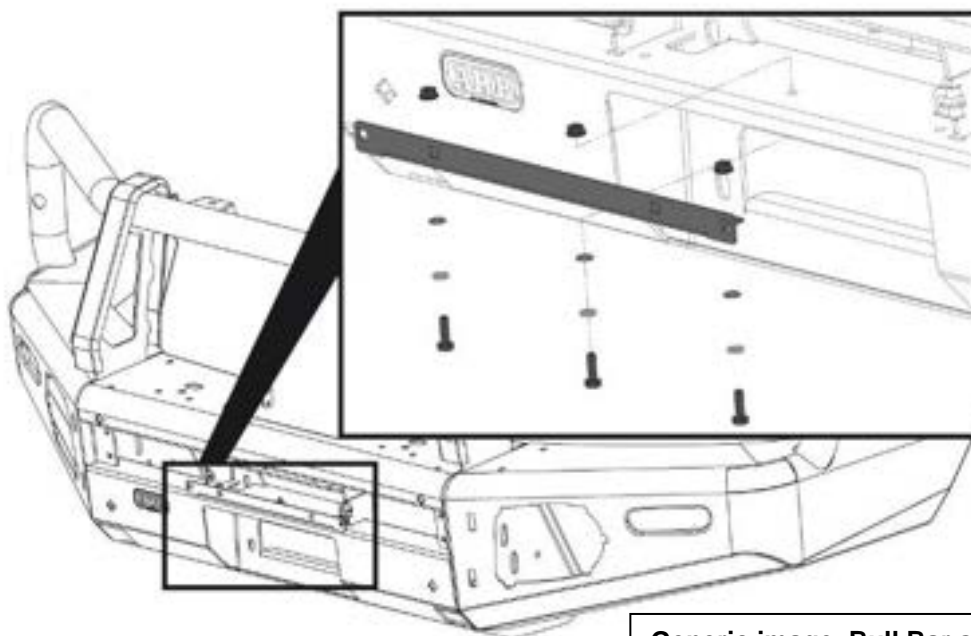
Warning: Be careful not to scratch the finish of the winch cover panel.



Generic image. Bull Bar shown may not be representative of actual product.

107. Fit the number plate bracket to the top face of the lower-centre pan on the bar using 3 x M6 x 20 hex bolts, spring washers, flat washers and flange nuts.

Note: If you are fitting a winch, fit the folding number plate bracket supplied in winch install kit "3500720 WINCH INSTALL KIT" – See fitting instructions 3789337



Generic image. Bull Bar shown may not be representative of actual product.

Note: The following steps show the fitment of the plastic moulded parts. The mouldings are supplied in kits along with all fasteners required for fitment. It is important that the fasteners supplied with each kit are only used for the mouldings from the same kit.

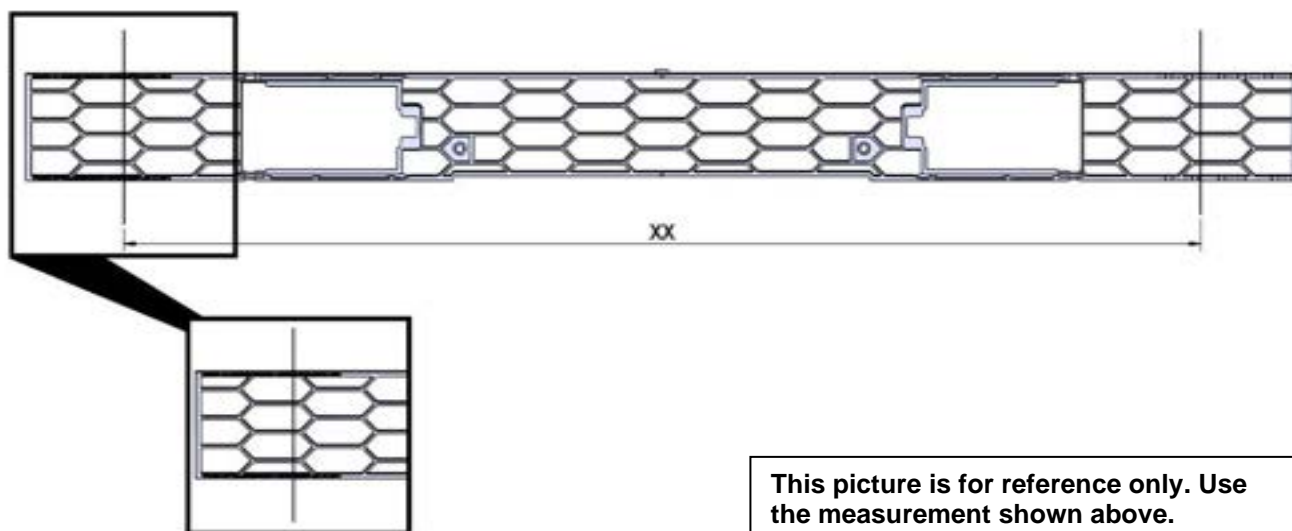
The kits included in this bar kit are as follows:

108. Layout the contents of each of the following kits ensuring the contents are kept separate from each other.

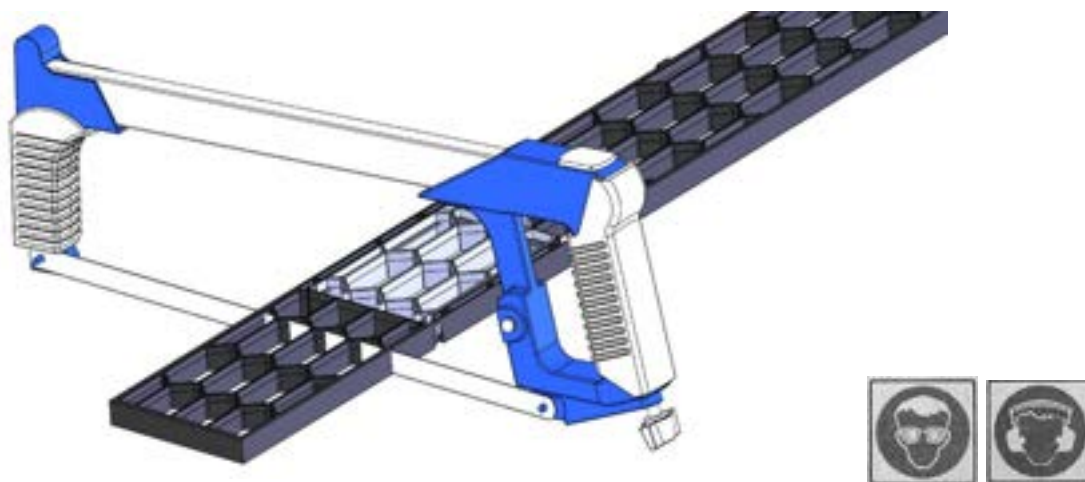
Kit No.	Description
5100200	BUFF KIT 2PCE FRONT SECTION
5100210	BUFF KIT 2PCE REAR UPRIGHT BAR
3500880	SPLIT PAN MESH KIT
3163082	FOG SURROUND KIT

109. Mark the grille panel to be cut at the 810mm marks at each end on the back face.

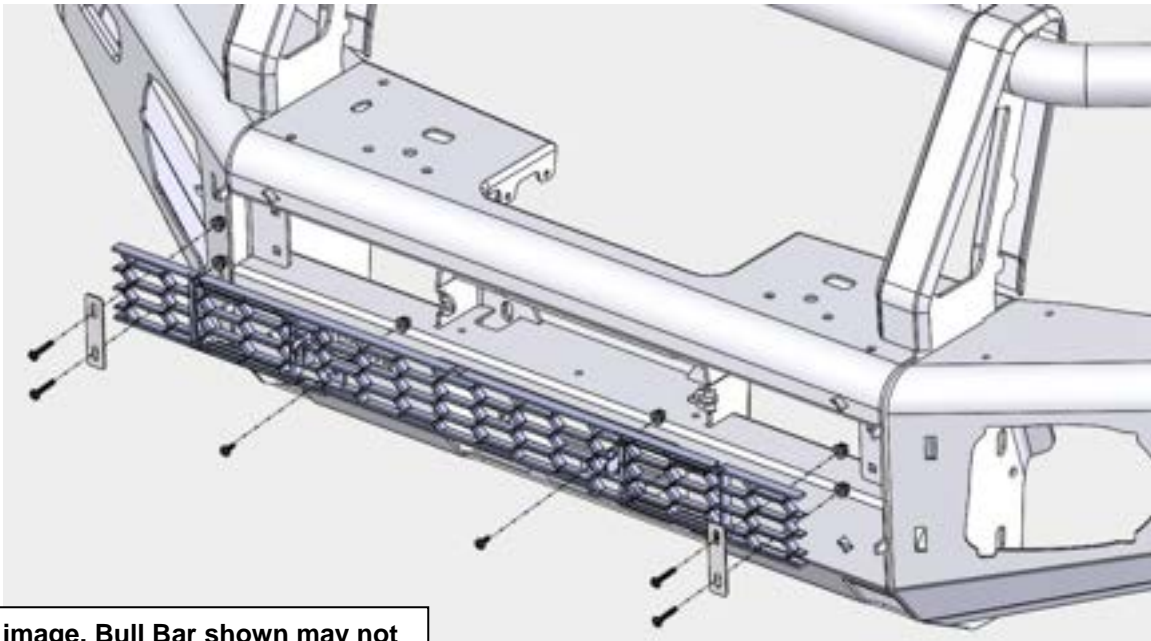
Note: When marked, double check the measurement with a measuring tool.



110. Use a hacksaw or similar cutting tool to carefully cut the grille panel at the positions marked in the step above.
111. Discard the off cuts and clean up the cut edges using a file or sandpaper.



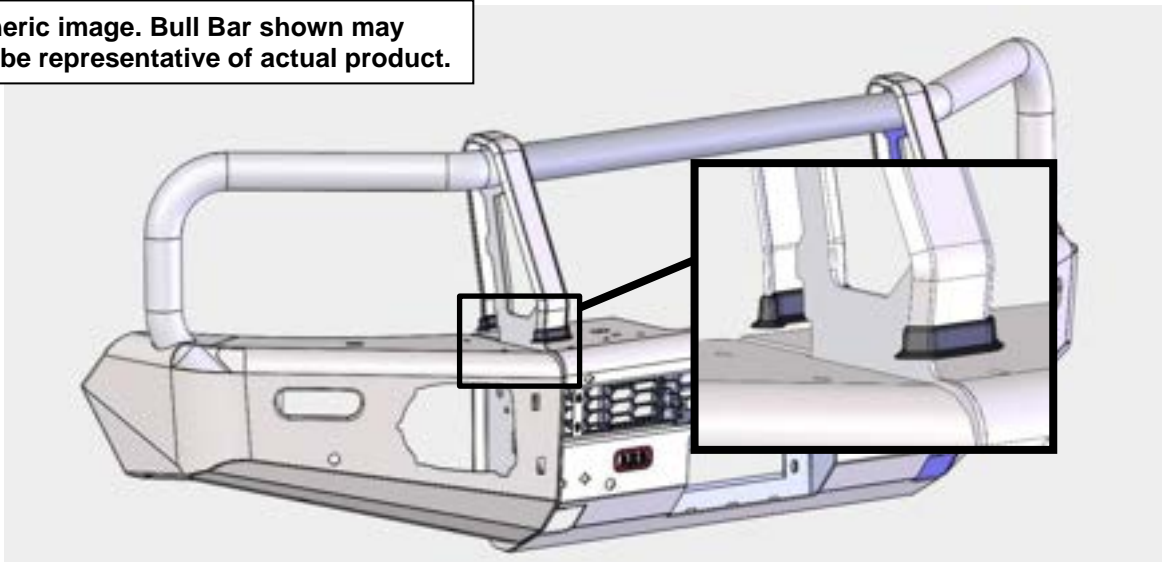
112. Insert the 6 x plastic grommets into the 6 square holes in the front face of the bar.
113. Insert the grille into the bar so that the latches open outward (facing the front of the bar).
114. Attach the grille to the centre of the bar using the short screws into the grommets fitted above.
115. Attach the ends of the grille to the bar using the longer screws, through the clamp plates into the remaining grommets.



Generic image. Bull Bar shown may not be representative of actual product.

116. Fit the rubber intersection mouldings to the base of each upright cover strap.

Generic image. Bull Bar shown may not be representative of actual product.

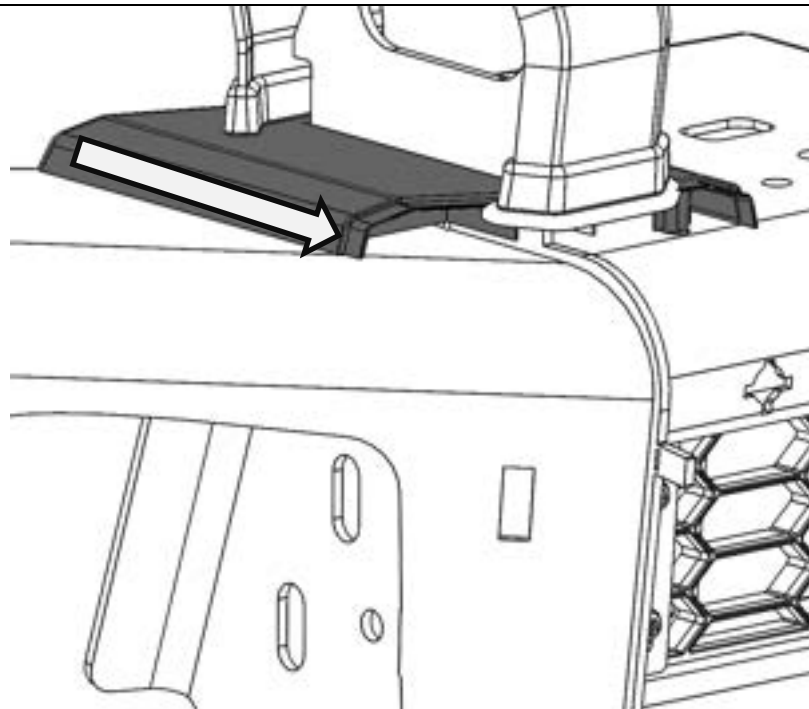


117. From the rear of the bar, slide the rear buffer sections under the rubber mouldings.

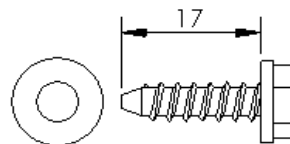
Fit 4 x screws and washers. Do not tighten screws. Leave enough play in buffers for adjustment later.

Note: Ensure that the skirts of the rubber intersection mouldings are not folded back on themselves and are sitting flat against the buffers.

Generic image. Bull Bar shown may not be representative of actual product.



Fit washers under screw heads

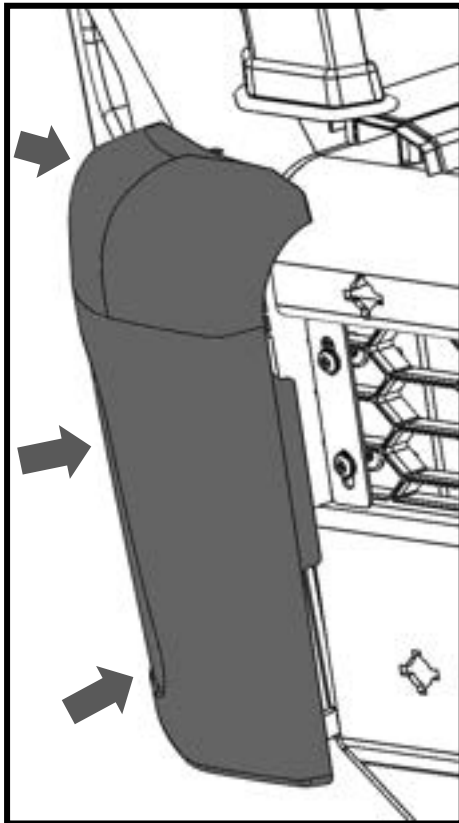


118. By aligning the front buffer with the tongue of the rear buffer, attach the front buffers to the front face of the bar. Ensure each buffer sits flat against the face of bar and is keyed into the top section of the rear buffer.

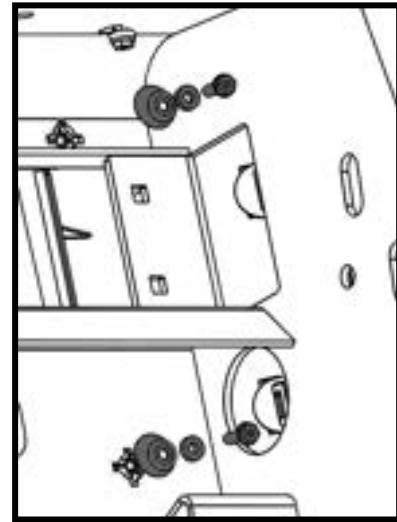
Secure wing side using retaining clips.

Secure inner side using the angled cup washers, flat washers and screws.

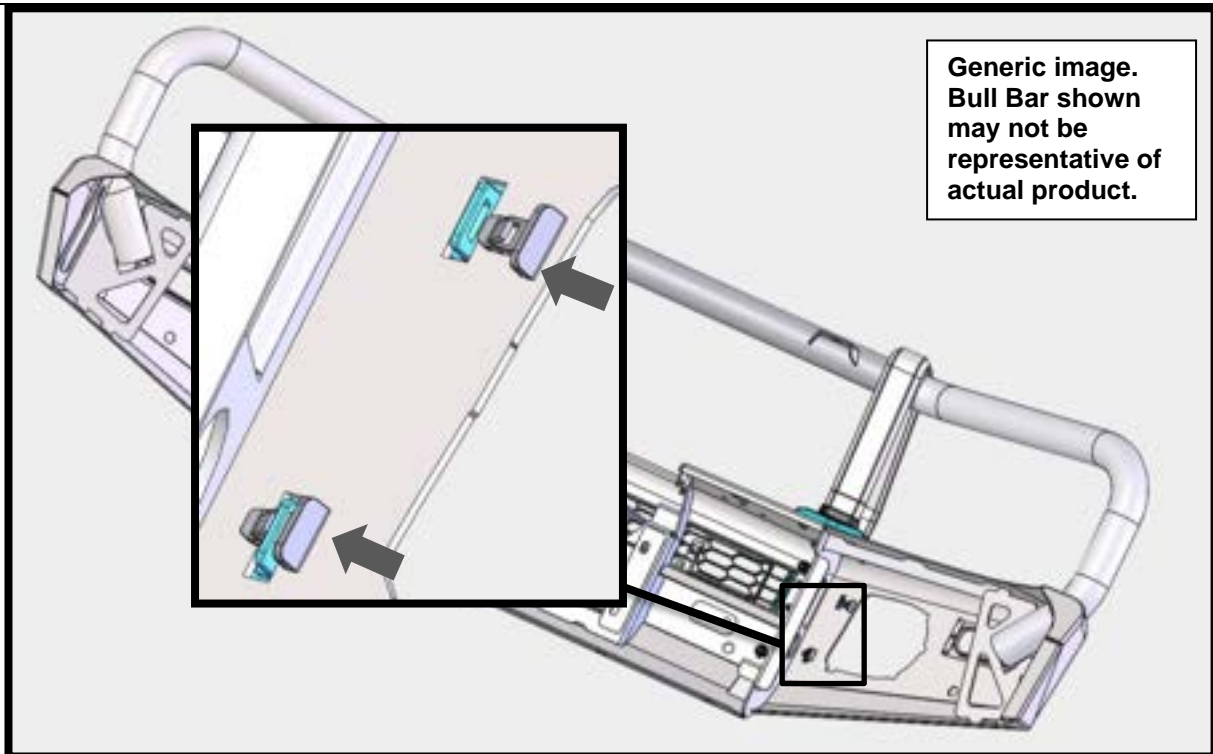
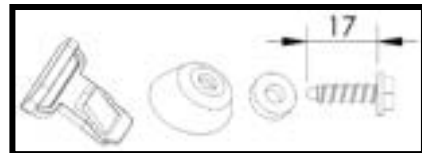
The widest point of the cup washers goes to the top of the bar.



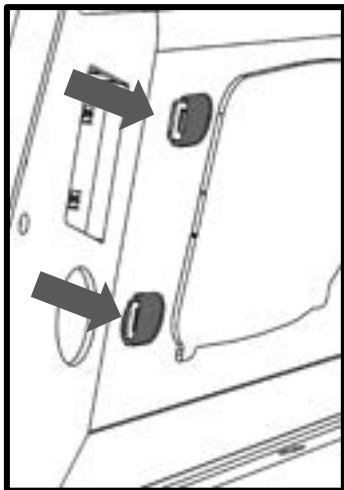
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may not be
representative of
actual product.



Fit washers under screw heads.

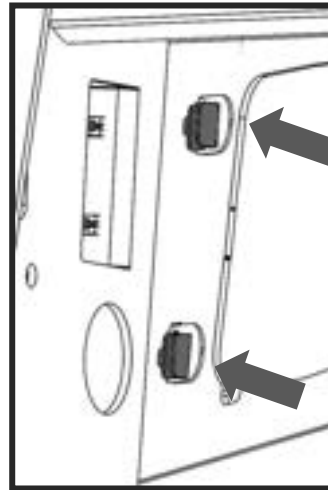


Generic image.
Bull Bar shown
may not be
representative of
actual product.

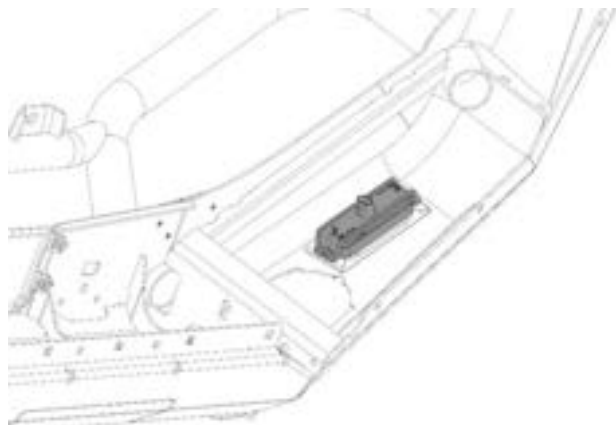


Fit 5848428 shims over tabs.

Note: If clips are too tight to engage, shims may be removed to reduce tension



Slide retaining clips through tabs to lock buffer in place



119. Fit the small plastic grommets to the bar and attach the combination LED lamps to the bar using the screws provided with the lamp kit.
120. Wire the combination lamp (kit: 6821287) to the vehicle's indicator and clearance lamp wiring.
Caution: *Cable tie all cables together and keep all cables clear of sharp edges and moving parts.*

Wiring:

Red wire is Turn signal + (pos)

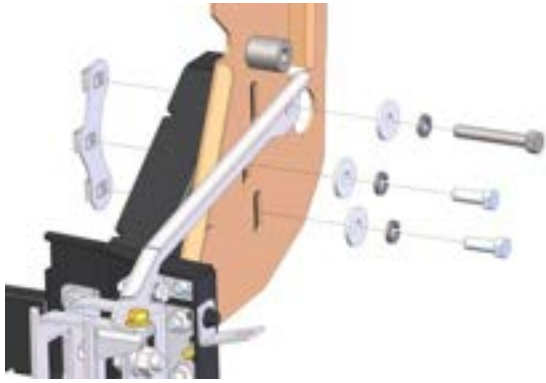
Black is – (neg)



121. With the assistance of another person, place the bar on the mount brackets.

Warning: *Due to the weight of the bar and winch if fitted, it is advised that you use some form of mechanical assistance when lifting the bar onto the vehicle such as an elevating trolley.*

FITTING PROCEDURE



122. Attach the bar to the mount bracket using 2x M12 x 35 bolts, 1x M12 x 80 bolt, 1x spacer 35mm long, 3x M12 spring washers and 3 large diameter M12 flat washers, into the nut plates which are placed inside the box upright sections of the mount bracket. Leave loose at this stage.


123. Repeat on the LH side.



124. Position the bar so that it is level to the vehicle's side steps and there is a gap between the top face of the wings and the bottom edge of the guards of 18-22mm and the wing tips are aligned with the edge of the wheel arch.

125. Centralise the bar and tighten all mounting bracket related fasteners to the specified torque.

126. Tighten the bar to mount fasteners to the specified torque.

 M12 - 77 Nm.



127. Double check the position of the bar.

128. If happy with the position of the bar drill 4x Ø10mm pinning holes using the pre-cut holes in the bar uprights as guides.


129. Use paint or rust protection on the drilled holes.



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

130. Pin the holes using 4 M10 SEMS bolts and 4x M10 flange nuts.

131. Tighten the fasteners to the specified torque.

 M10 - 44 Nm.

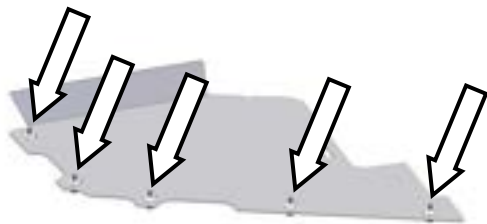
FITTING PROCEDURE



132. Assemble and install combination light surrounds (p/n 3163082) as per instructions no. 3789190 supplied with surround kit. Note: Optional fog lamps can be installed at this point as per fitting instruction no. 3783315 supplied with fog lamp kit no. 6821201.

CAUTION: Cable-tie all cables together and keep all cables clear of sharp edges and all moving parts.

133. Check the operation of all lights wired during bar fitment



134. Fit 5 x M6 cage nuts to each of the under wing panels as shown.



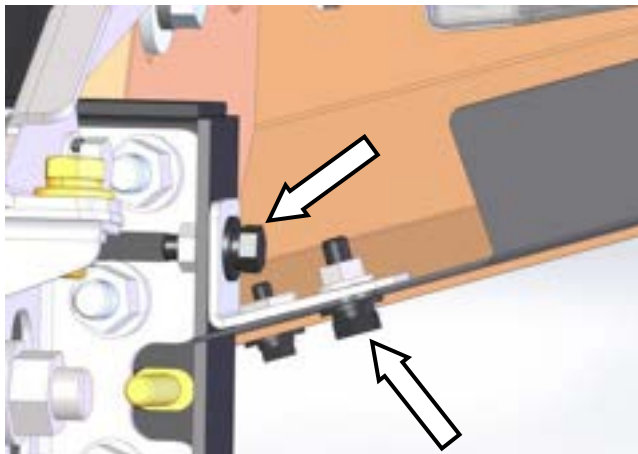
135. Fit the RH under wing panel to the RH wing as shown and attach using 5 x M6 x 20 hex bolts, 5 x M6 spring washers and 5 x M6 flat washers.

136. Repeat on the LH side.



M6 - 9 Nm.

FITTING PROCEDURE



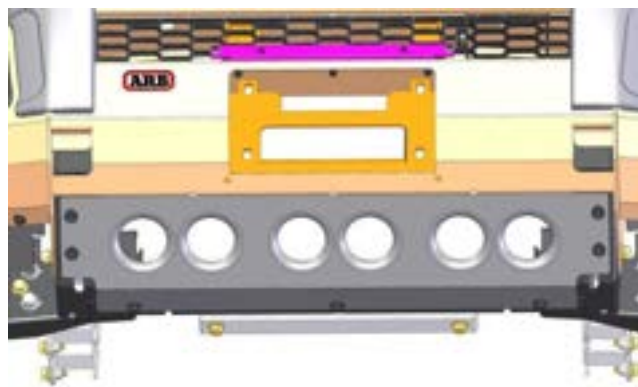
137. On each side of the bar attach the under wing panel to the mount bracket with the wing panel bracket using 2 x M8 x 25 hex bolts, 2 x M8 spring washers, 2 x M8 flat washers and 2 x M8 flange nuts.



M8 - 22 Nm.



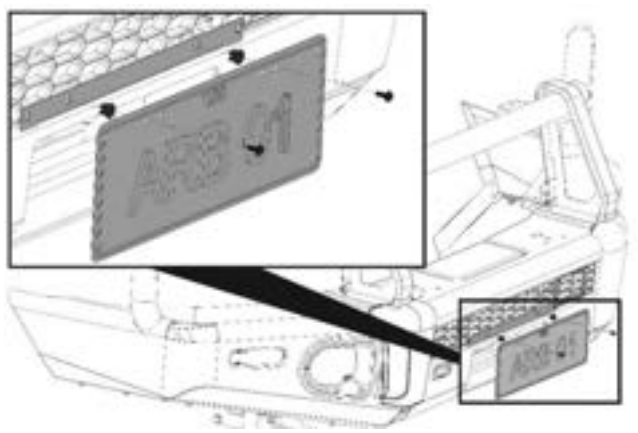
138. On the plastic OE inner guards, mark lines from the bottom corners of the bar wing tips down lower corner of the inner sheet metal as shown. Continue the line along the horizontal corner.
139. Using Multitool carefully cut along the marked line and discard the bottom section.
140. Tuck the remaining inner guards into the under wing panels.



141. Attach the centre stone shield to the mount bracket using 7 x M8 x 25 hex bolts, 7 x M8 spring washers and 7 x M8 flat washers into the cage nuts.



M8 - 22 Nm.



142. Fit the plastic grommets into the square holes in the licence plate bracket. Fit the number plate to the bull bar using the black self-tapping screws.
143. Discard of all remaining fasteners left over.

ONCE 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, sensors, headlamp washers etc. are functioning correctly.

FITTED PRODUCT

