FITTING INSTRUCTIONS

Part Number:	**3470030 F/Kits 6173530**
Product Description:	**Deluxe Combination Winch Bull Bar**
Suited to vehicle/s:	**VW AMAROK 2010 ON FLARED AND NON FLARED W/PARKING SENSORS**

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 you're 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 Canuba 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 RING AND OPEN ENDED SPANNER SET**
ELECTRIC DRILL 13MM CAPACITY	**3, 7, 8.5, 10 & 13mm DRILL BITS**
SHARP KNIFE	**PHILLIPS AND FLAT BLAD SCREW DRIVER SETS**
FELT TIP MARKER PEN	**HACKSAW BLADE**
FINE FILE OR SAND PAPER	**ELECTRIC JIG SAW**
METRIC TAPE MEASURE	**ROLLS OF 25 mm & 50 mm WIDE MASKING TAPE**
TOUCH UP PAINT – BLACK FAST DRYING ENAMEL	**SCISSORS**
SMALL EXT CIR CLIP PLIERS	**COLD CHIZEL**
ADHESIVE (SIKAFLEX)	

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

NOTE:

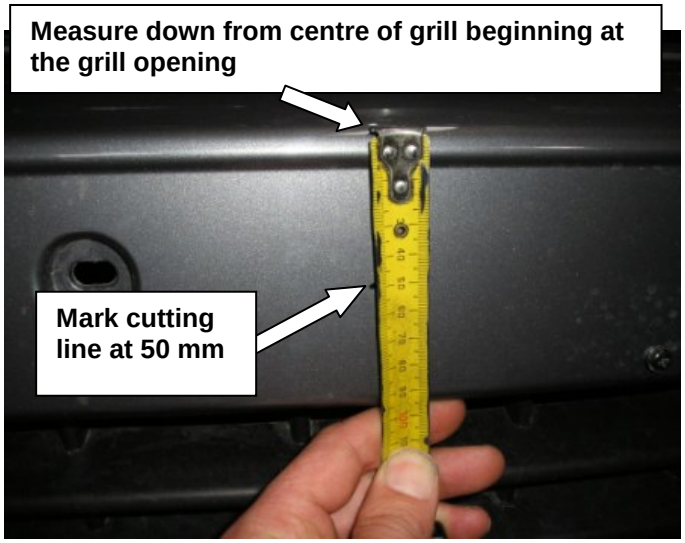
- **OPTIONAL FOG LAMPS TO SUIT THIS PRODUCT ARE P#6821201. IF LOOM AND SWITCH REQUIRED USE 3500440 AUXILARY LIGHT WIRING LOOM**
- **UP TO 900 SERIES ROUND OR 800 RECTANGULAR DRIVING OR FOG LAMPS SUIT THIS PRODUCT**

PARTS LISTING			
APPLICATION.	**PART NO.**	**QTY**	**DESCRIPTION**
MOUNT BRACKET TO CHASSIS	3758099R&L	1 PR	BRACKET ASSY IMP ABS RH & LH
	4581007	4	WASHER FLAT M12 X 37 X 4
	6151428	4	NUT FLANGED M12
	6151360	4	BOLT M12 X 1.75 X 35 (COARSE PITCH)
	4581050	4	WASHER SPRING M12
	3194199	6	PACKER
	4681367	2	BRACE MOUNT TO CHASSIS
	3199944	3	PLATE CAGE NUT
	6151302	3	CAGE NUT M10
	6151357	7	BOLT SEMS M10 X 30 LONG
	6151321	4	NUT FLANGED M10
	6151234	4	BOLT M8 X 25mm
	4581307	4	WASHER FLAT M8
	4581046	4	WASHER SPRING M8
	6151132	4	NUT FLANGE M8
BULL BAR TO MOUNT BRACKETS	6151360	6	BOLT M12 X 1.75 X 35 (COARSE PITCH)
	4581007	6	WASHER FLAT M12 X 37 X 4
	4581050	6	WASHER SPRING M12
	6151428	6	NUT FLANGED M12
	6151357	4	BOLT SEMS M10 X 30 LONG
	6151321	4	NUT FLANGE M10
	6781408	1	TAPE DOUBLE SIDED 15mm X 300mm
LICENCE PLATE TO BULL BAR	6151384	2	SCREW PAN HD
	6821189	2	GROMMET RND HD
LIGHT INSERT AND INDICATORS	3163015	1	COMBINATION LIGHT SURROUND KIT
	6821151R&L	1 PR	INDICATOR/CLEARANCE LAMP RH/ LH
	6821152	2	LOOM INDICATORS
	180701	8	SCOTCH LOKS
	6821198	1	RELAY WIRE HARNESS
WINCH COVER *(NOT FITTING WINCH)*	6522794	1	PANEL WINCH COVER
	6151256	2	SCREW M6 X 16MM BUTTON HEAD S/S
	6151128	2	NUT FLANGE M6
	6191006	1	EXTRUSION WINCH COVER
	4581304	4	WASHER FLAT M6 S/S
WINCH TO BULL BAR	3756499	1	CONTROL BOX MOUNT
	6151234	2	BOLT M8 X 25mm
	4581307	2	WASHER FLAT M8
	4581046	2	WASHER SPRING M8
	6151132	2	NUT FLANGE M8
	EG50	2	RUBBER GROMMET
	6151074	2	BOLT 3/8" x 1 ¾" HEX HEAD
	6151073	2	BOLT 3/8" x 1 ½" HEX HEAD
BRACE STRAPS	3194198	2	STRAP BRACE LOWER
	6151357	6	BOLT SEMS M10 X 30 LONG
	6151321	6	NUT FLANGE M10
STONE TRAY TO BULL BAR	6522804	1	STONE TRAY
	6151300	4	CAGE NUT M6
	6151213	4	BOLT M6 x 20 BZ
	4581082	4	WASHER FLAT M6 x 20 BZ
	4581287	4	WASHER SPRING M6 BZ
	3758097	1	BRACKET STONE TRAY
	3194202	1	PLATE CAGE NUT
	6151301	5	CAGE NUT M8
	6151234	5	BOLT M8 X 25
	4581307	5	WASHER FLAT M8
	4581046	5	WASHER SPRING M8

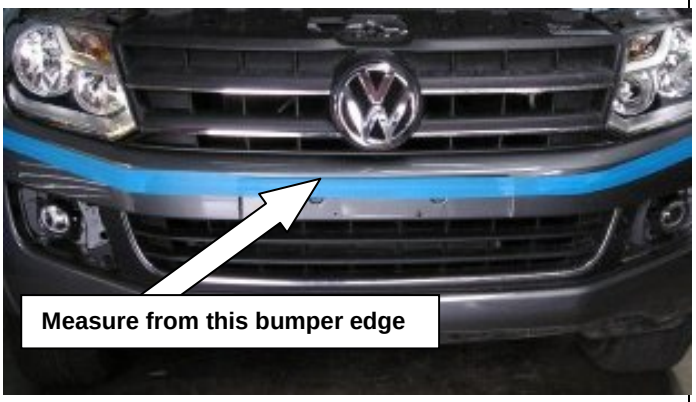
WING UNDER PANELS TO BULL BAR	**6522803** **6522807** **6151300** **6151213** **4581082** **4581287**	**1** **1** **16** **16** **16** **16**	**PANEL WING UNDER SIDE LEFT** **PANEL WING UNDER SIDE RIGHT** **CAGE NUT M6** **BOLT M6 x 20 BZ** **WASHER FLAT M6 x 20 BZ** **WASHER SPRING M6 BZ**
BUFFERS TO BULL BAR	**3162470R&L** **6151128**	**1 PR** **12**	**BUFFER SLOTTED RH & LH** **NUT FLANGED M6**
MISCELLANEOUS	**180302** **6191025** **665044** **6781427** **6821242** **3163091**	**22** **1** **1** **8** **4** **4**	**CABLE TIES** **PINCH WELD NARROW 480mm LONG** **3M PRIMER PENCIL** **ADHESIVE STRIP BUTYL 20mm X 25mm** **CABLE TIE HOLDER 19mm X 19mm** **BLANKING PLUG (FOR NON SENSOR VEHICLES)**

PREPARATION TO VEHICLE

1. Remove number plate.

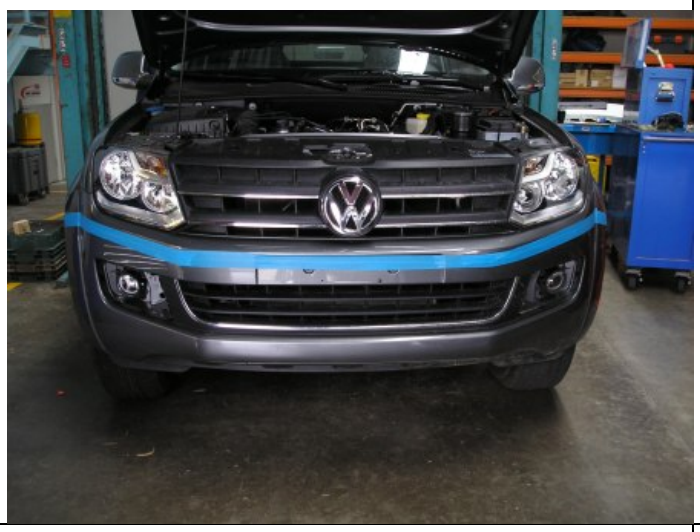


2. In order to fit the bar the existing bumper will be cut, this is performed in two separate operations one on the bumper itself and one on the flare.
3. Begin marking the bumper cut from the centre of the grill where the number plate is mounted, measure down from the bumper edge 50mm as shown and mark.

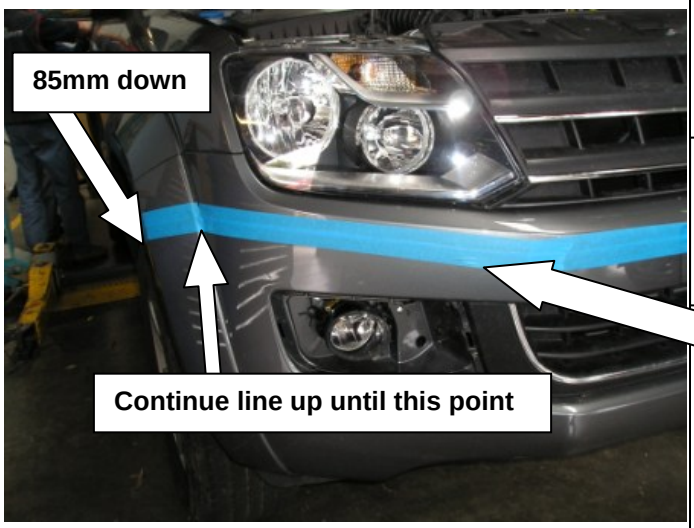


4. Continue to mark the bumper at small increments up until the corner of the light as shown at the same 50 mm measurement.

5. At this stage mark a point 85mm down from the panel edge on the flare.



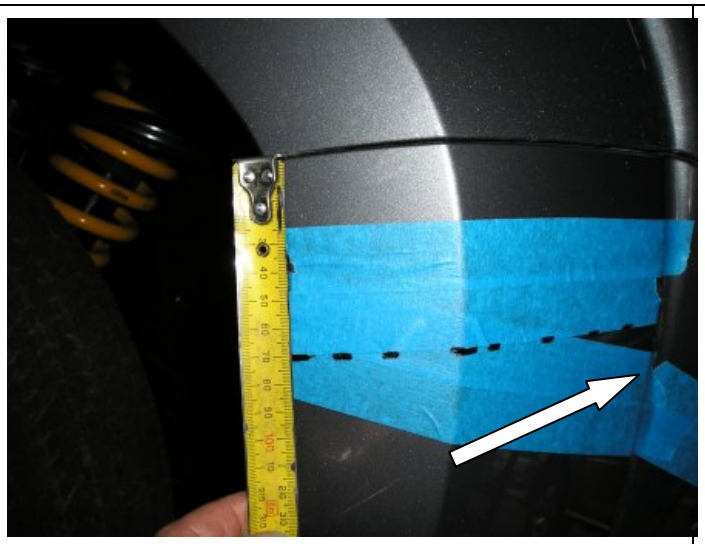
6. Apply some 25mm masking tape along the marked points joining the cutting line up to the flare.



7. When applying the tape line in between the last marked point under the headlight and the flare keep the line straight.
8. From the beginning of the flare join the tape from the existing tape line to the point marked 85mm down.

FIRST CUT WILL BE ON THIS LINE ON THE LOWER EDGE OF THE TAPE

PREPARATION TO VEHICLE



9. Now mark the flare for cutting, mark a line 70 mm down from the panel edge as shown in the figure, run a length of 25mm masking tape along the marked edge. **NOTE:** If fitting to vehicle without flares perform this same step to the bumper section. Join this line with the line marked on bumper following mould line as shown by arrow.

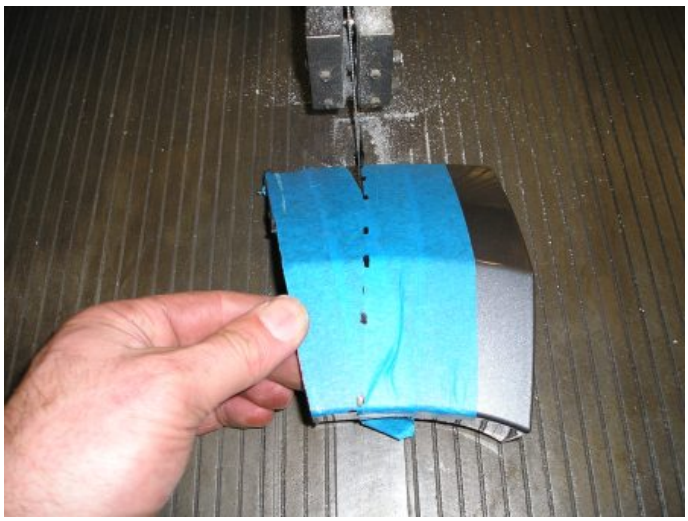
10. Remove the bumper from the vehicle by unclipping light covers to expose mounting bolts hidden behind, proceed to undo all required bolts.

11. Undo the under body protection plate as well as the retaining bolts located in the wheel arches and above the grill, disconnect fog lamps and parking sensors if fitted then remove the bumper.

PREPARATION TO VEHICLE

12. At this stage using an electric jig saw or a similar tool cut along the masked line which on the flare meets up with the 85 mm line (as indicated in step 7).

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



13. Also cut the flare along the marked line using a jigsaw or similar.

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

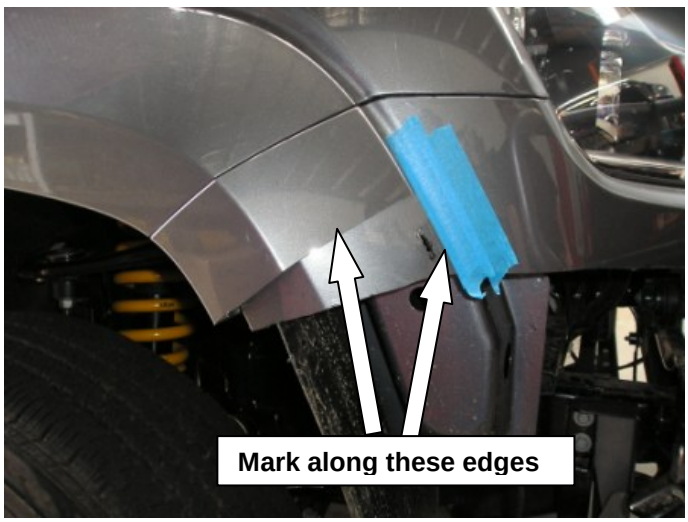
14. Cut cable ties holding the parking sensor loom to the bumper and remove loom and sensors.

NOTE: Take note of orentaition of brackets and sensors as these will be reused in the bar and will have to orientate the same way.

PREPARATION TO VEHICLE

15. Using a paint scraper or something similar carefully remove parking sensor mount bracket from bumper making sure not to damage the bracket in the process.

16. Using solvent and paint scraper remove adhesive from the front face of the sensor mount bracket.

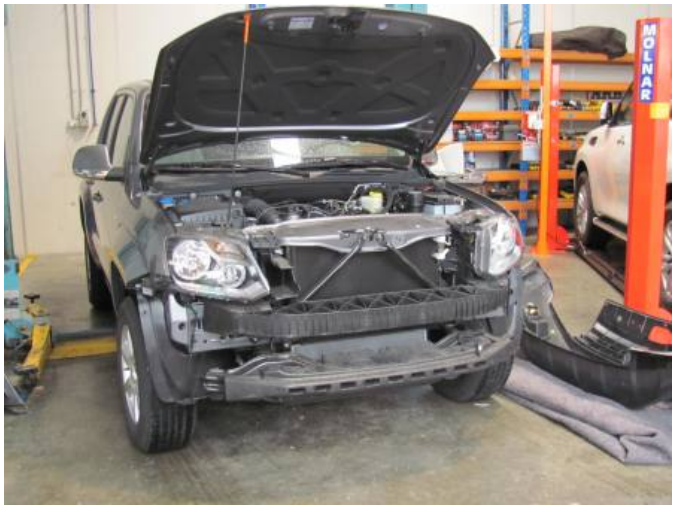


17. Reassemble the cut bumper and flare and place on vehicle.
18. **For flared models:** Once the bumper is refitted run a tape line following the line of the flare in both directions as shown in the figure, proceed to remove the bumper.
19. Remove the flare and using an electric jig saw or similar cut along the marked lines.

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

PREPARATION TO VEHICLE

20. Fit pinch weld to cut area as shown, and trim to length.



21. Remove the bumper reinforcing plastic and foam pads

22. Fit two M8 cage nuts to the supplied captive nut plate as shown below, then slot the assembly through the access hole in the chassis, once in place loosely fix with the M8 bolt and washer set.

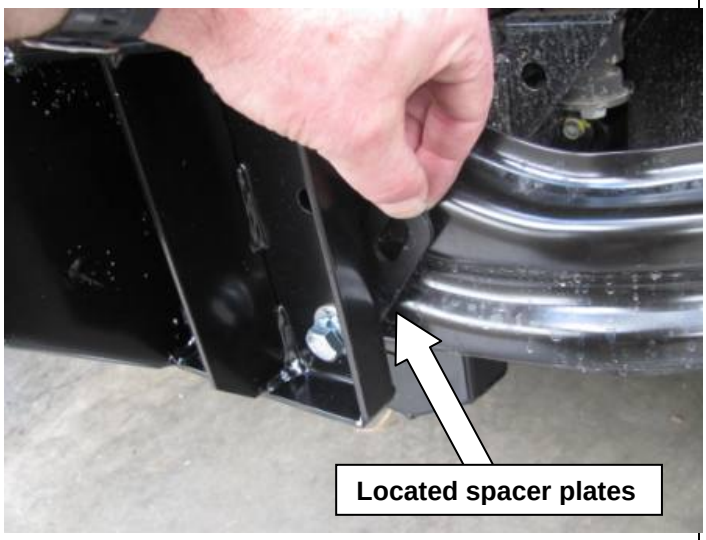
23. Place the stone tray bracket mount under the loose hardware.

24. On the opposite side there are existing bolts which hold the factory sump guard in place loosen the bolts and place the stone tray bracket behind the factory bracket then tighten both sides of the stone tray bracket to the specified torque.

M8-22Nm

25. Remove the screws located on the VW bumper mount as shown in the figure.

PREPARATION TO VEHICLE

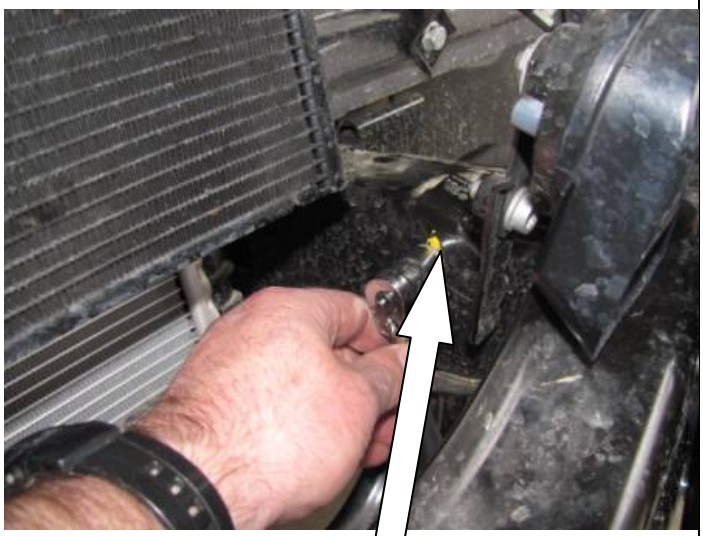


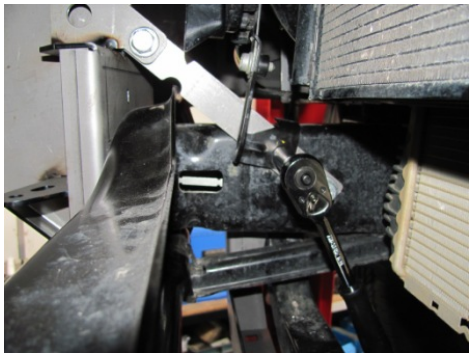
26. Then place the bull bar mount on the front of the bumper mount and locate the spacers in between the cars bumper mount and the bull bar mount as shown, placing one spacer on the inner side of the mount and two spacers on the outer mounting holes (ensure that the spacers are clear of the guide holes in the bumper mount for drilling) at this stage just nip up the mount with two M12 bolt and washer sets.
27. Proceed to trial fit the bull bar checking the side to side fitment, if the bar is biased to one side remove the bar and move the mounts to reposition the bar centrally.
28. Once happy with the side to side fitment proceed to pin the mounts (explained in next step).

29. Once in place drill the remaining two holes using the guide holes in the bull bar mount with a 10mm drill bit, now that the holes are drilled secure the M10 bolt and washer sets on the drilled holes. All of the bolts may now be tightened to their specified torque.

M10-44Nm
M12-77Nm

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

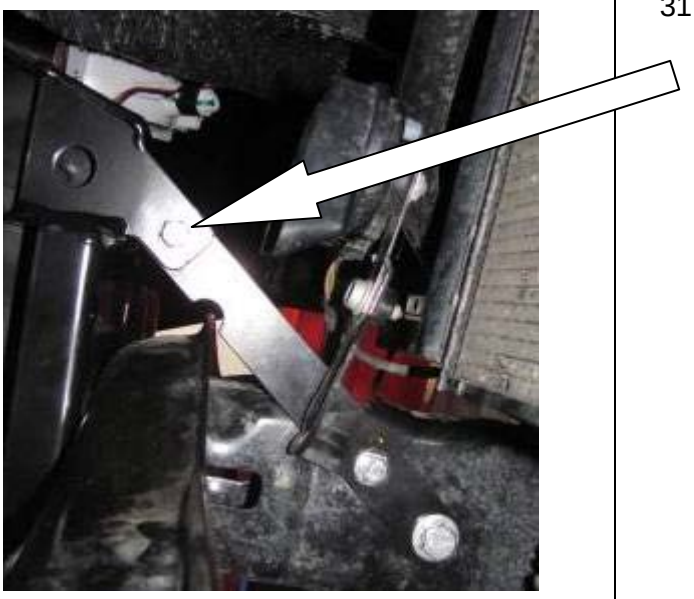




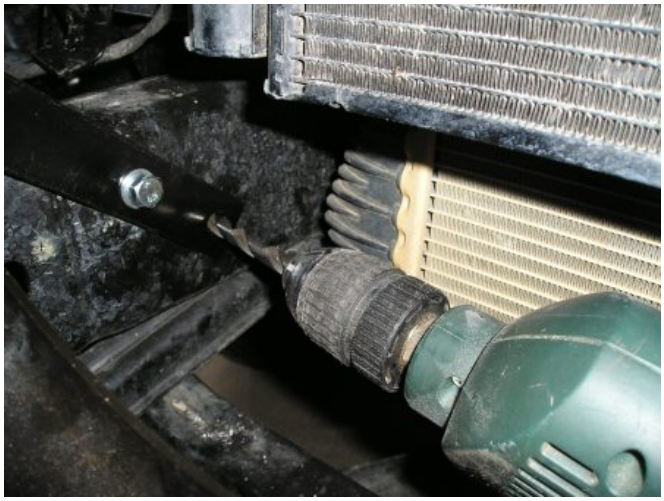
30. Remove the bolt retaining the VW horn bracket and place bull bar mount strap brace behind the bracket and secure using existing hardware

NOTE: On base model vehicles there is no LHS horn and no factory captive nut therefore using the supplied captive nut plate fit a M10 cage nut, using the access hole in the bull bar mount at the front of the chassis rail locate the cage nut behind the hole and fix using M10 sems bolt.

PREPARATION TO VEHICLE



31. Also bolt the bull bar mount brace to the bull bar mount as shown.



32. Now using the brace straps lower hole as a guide drill a 10 mm hole into the vehicles chassis rail

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

33. Using the supplied captive nut plate fit a M10 cage nut, using the access hole in the bull bar mount at the front of the chassis rail locate the cage nut behind the drilled hole and fix using M10 bolt and washer set.

M10-44Nm

34. Completed brace strap should appear as shown in the figure now tighten all bolts to specified torque.

M10-44Nm

35. Disconnect the vehicle head light plugs from the RH and LH head lights. Firstly remove the RH and LH head lights by undoing the four torx bolts per light.
36. Carefully read the wiring diagram located at the rear of these instructions.
37. Loosely position the relay loom (6821198) in front of the vehicle radiator and feed each end of the loom through to the RH and LH vehicle head lights.

NOTE: THE LOOM END WITH THE RELAYS SHOULD BE ON THE LH SIDE OF THE VEHICLE, ON THE SAME SIDE AS THE VEHICLE'S BATTERY

Loom installation

	6821198 LOOM (RELAY LOOM)	VEHICLE HEADLIGHT LOOM	6821152 LOOM (INDICATOR/ PARKING LIGHT LOOM)
LHS	YELLOW/BLACK	BLACK/WHITE	-
	YELLOW	-	GREEN
	BLACK	-	BLACK
	-	GREY/BLACK	RED
	6821198 LOOM (RELAY)	**VEHICLE HEADLIGHT LOOM**	**6821152 LOOM (INDICATOR)**
RHS	GREEN/BLACK	BLACK/GREEN	-
	GREEN	-	GREEN
	BLACK	-	BLACK
	-	GREY/RED	RED

Note: Wire colours may vary from model to model, if unsure use test light to determine correct wires.

Note: Picture for illustration purposes only

38. Starting on the driver's side of the vehicle, use scotch locks to connect the relay loom (6821198) to the vehicle lamp. As shown on the table above
39. Next, connect one of the indicator looms, supplied in the bull-bar fitting kit, to the right hand vehicle clearance lamp and the relay loom as described in the above table.
40. Similarly to steps 37 & 38 connect the relay loom and the second indicator loom to the left hand vehicle headlight as described in the table above.

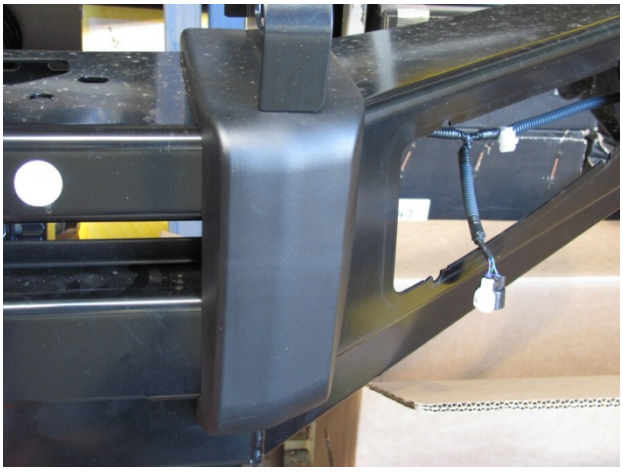
NOTE: Two extra scotch locks have been supplied in the bull-bar fitting kit as required.

Note: Picture for illustration purposes only

41. Ensure the LH & RH indicator looms hang freely below the head lights for easy access during bull-bar fitment.
42. Fasten the relay loom (6821198) to the vehicle with cable ties.
43. Reconnect the RH and LH vehicle head light plugs and reinstall the headlights into the vehicle using the four torx bolts per light.
44. Connect the main relay loom power wire (red) to the positive battery terminal. Fasten the relay loom earth to the earth point behind the RH headlight.

NOTE: USE THE MAIN BATTERY IF A DUAL BATTERY SYSTEM IS INSTALLED.

BULL BAR PREPARATION



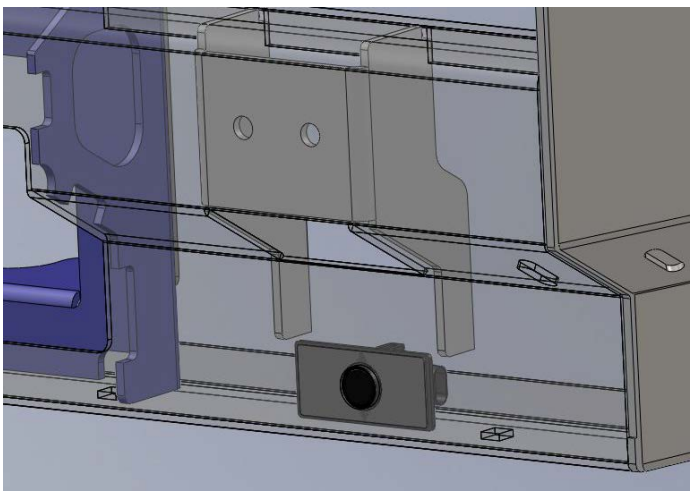
45. Fit the buffers to either side of the bull bar using 6 x M6 flange nuts. Do not over tighten.

M6-9Nm

46. Fit M6 cage nuts for stone tray fixing to lower pan to the four holes in underside of pan. ***NOTE: The nut bodies are inside the bull bar, MUST BE COMPLETED BEFORE WINCH RFL IS FITTED.***

If fitting sensors follow steps 47-51. If not fitting sensors fit blanking plgs into sensor holes and proceed to step 52.

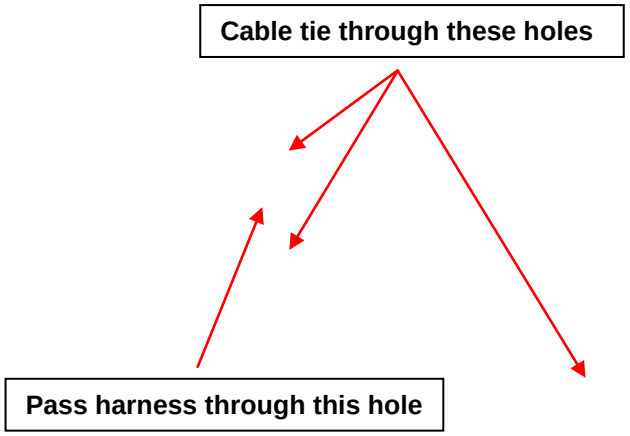
47. Remove protective layer from adhesive and attach to front face of sensor bracket in two places as shown.
48. Using supplied alcohol swab, clean inside face of the bar where the sensor and bracket will mount.
49. Following instructions on 3M primer pencil, activate it and apply primer to inside face of bar around sensor hole cut out where the adhesive will stick.



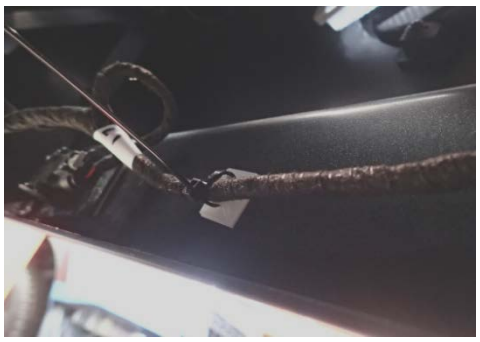
50. Place sensor in bracket. Remove outside protective layer from adhesive and carefully locate the sensor and bracket into the bar in the correct orientation (as noted in step 14).

Caution: Misalignment of sensor to hole in bull bar may cause malfunction.

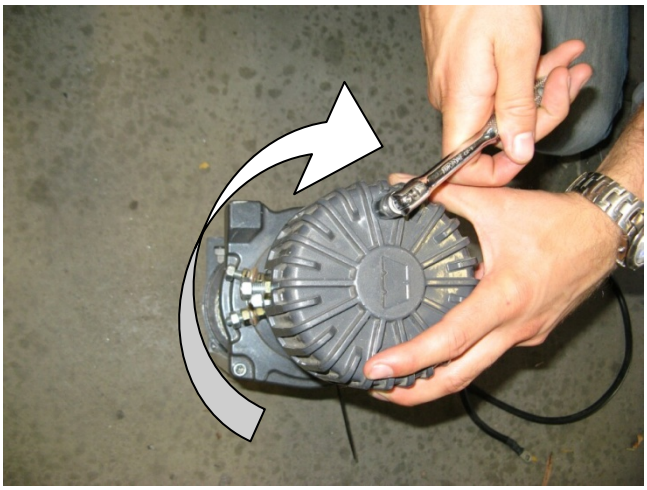
BULL BAR PREPARATION



51. Fit sensor wiring harness passing it through holes in upright, secure in place using cable ties. Using stick on cable tie holder (6821242) secure loom in place on the wing and inside the lip of the lower pan.



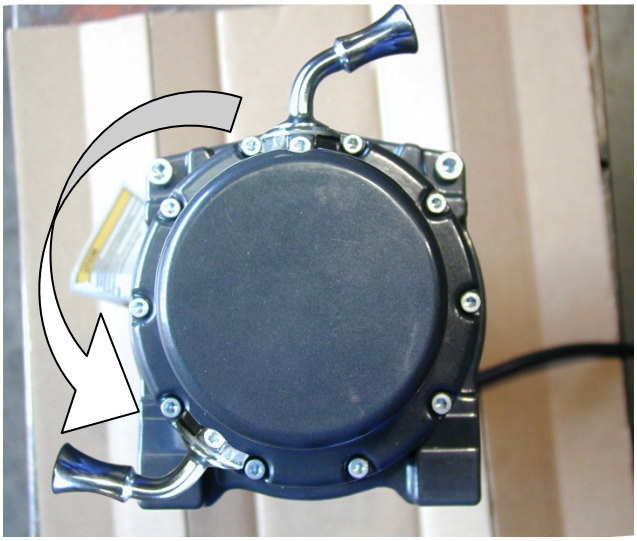
WINCH FIMENT ONLY



IF FITTING A WINCH

52. Rotate the winch motor 90 degrees as shown

NOTE: Follow the winch manufacturers instructions regards motor rotation and drainage requirements



53. Remove the cap head screws retaining the gearbox to the winch drum. Carefully lift the gearbox a small amount (5 mm) and rotate144 degrees counter clockwise (four hole spacings) and re-fit the cap screws. This places the winch handle in the correct orientation.

54. Lay the winch on a suitable flat surface and place the bull bar on top so that the wire rope will feed through from the bottom.

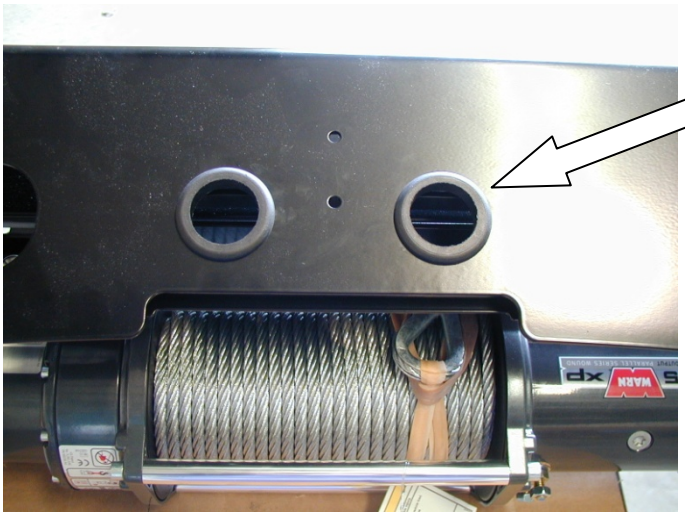
55. Using the two 3/8” x 1 1/2”long bolts, M10 flat and spring washers, attach the bull bar to the winch through the top two bolt holes

56. Remove the cir clips from the bottom of the vertical rollers of the fairlead and push the pin upwards. Push the vertical rollers inwards on the lower edges as shown and using two 3/8” x 1 ¾” bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and winch.

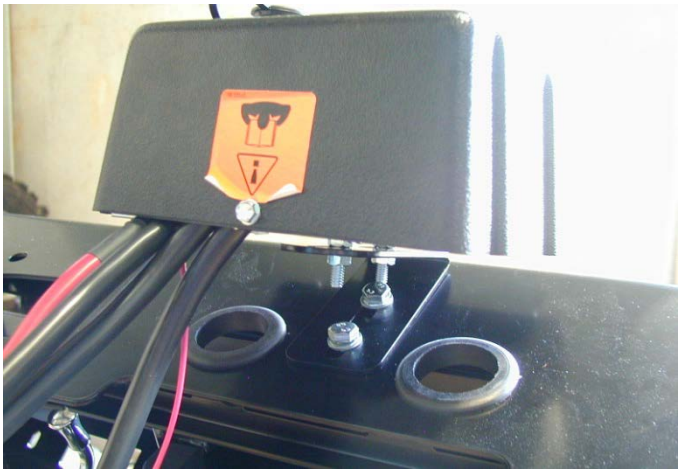
57. Replace the cir clips on the vertical rollers on both sides.

3/8 UNC-44Nm

WINCH FITMENT ONLY



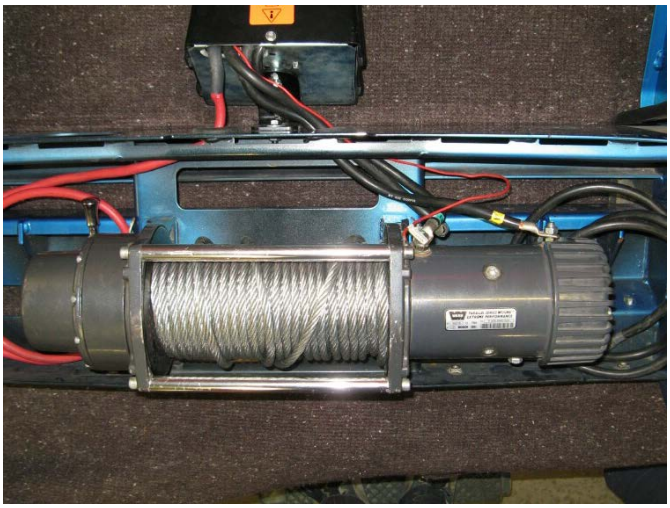
58. Insert the two rubber grommets into the top face of bull bar.



59. Attach the control box to the control box bracket as shown.

60. Fit the control box to the bull bar with two M8 x 25mm bolts, M8 flat washers and M8 flange nuts.

M8-22Nm

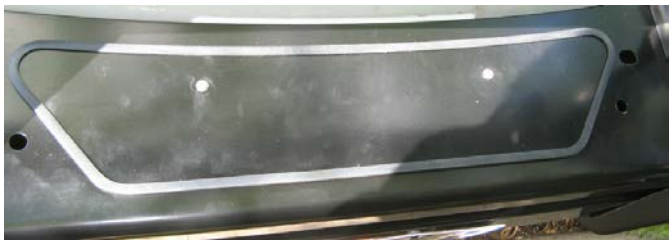


61. Run the cables through the rubber grommets and connect to the winch as per the wiring diagram supplied with the winch.

62. Using cable ties fix the cables securely and ensure they are well away from any moving, sharp or hot surfaces.

BULL BAR PREPARATION – IF NOT FITTING WINCH

63. Apply rubber mould to edge of winch hole cover panel and trim off excess.

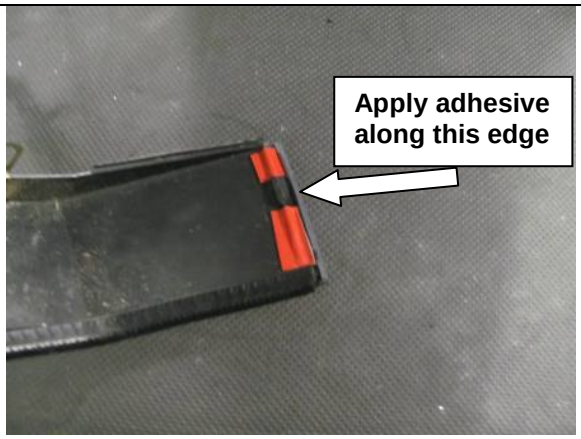


64. Fit panel to top face on bull bar using stainless steel 2 x M6 dome head screws and stainless steel flat washers and flange nuts.

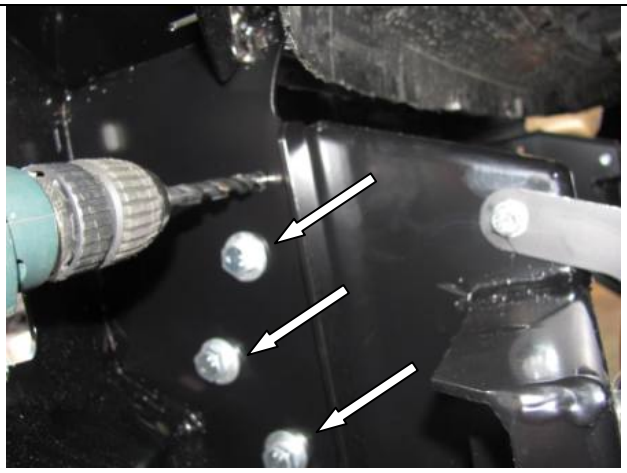
NOTE: The flat washers are to be sandwiched between panel and top face of bull bar to stop the panel pulling down to form depression around screw heads.

M6-9Nm

BULL BAR FITMENT TO VEHICLE

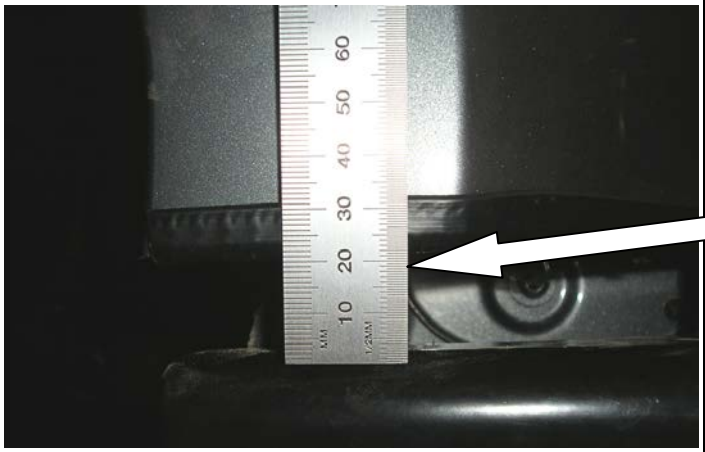


65. Fit cut bumper back onto vehicle.
66. Now refit the cut flare back onto the bumper, to add stability apply some adhesive (Sikaflex) to the edge of the flare as shown (Clean both the flare and the bumper with wax and grease remover where the adhesive adheres too)
67. Once flare is located press firmly to ensure sufficient contact has been made, clean any excess adhesive.



68. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit outside the impact absorber blades
69. Bolt the bull bar into position using the M12 bolts, spring washer, large body washer and flange nuts in 3 places per side of the bull bar as shown. Tighten the bolts firmly – but allow enough movement for the bull bar to be adjusted
70. If winch fitted route cables up into the engine bay and secure.

BULL BAR FITMENT TO VEHICLE



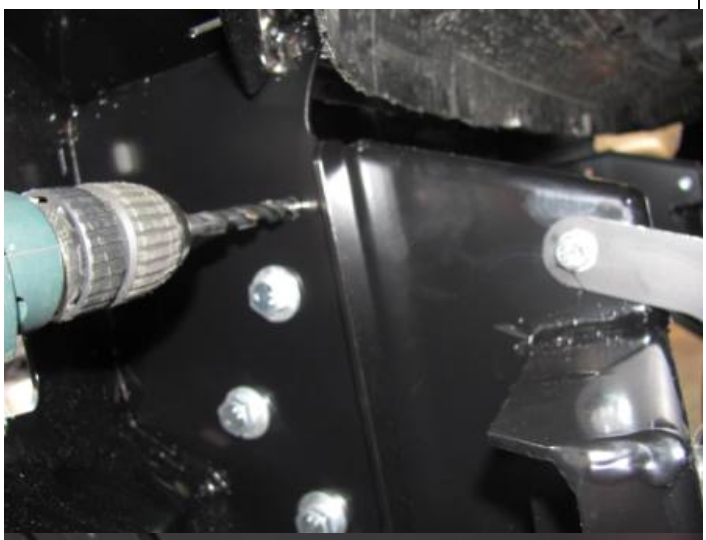
71. Ensure the bull bar is sitting on the vehicle level and the gap between the bumper bar cut and the bull bar wing is even.

20-25 mm (3/4-1”) GAP REQUIRED

72. If the bull bar is not centred on the vehicle, back off the mount bracket bolts to chassis, tap the mount brackets sideways with a soft hammer until the bar is central. Retention bolts to specified torque

Once happy with the position of the bull bar and the clearance gap is 20-25mm, tighten all the mount bolts to specified torque

M12-77Nm



73. Using an electric drill and a Dia10.0 mm drill bit, drill two pinning bolt holes through the bull bar uprights on each side using the holes in the mount bracket flanges as a guide. One hole is located in the lower lug of the mount face and one up above the welded nuts. Use access through the light surround opening for the top hole.

74. Fit the pinning bolts to the bull bar in the drilled positions using 4 x M10 SEMS bolt and washer sets and M10 flange nuts.

M10-44Nm

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

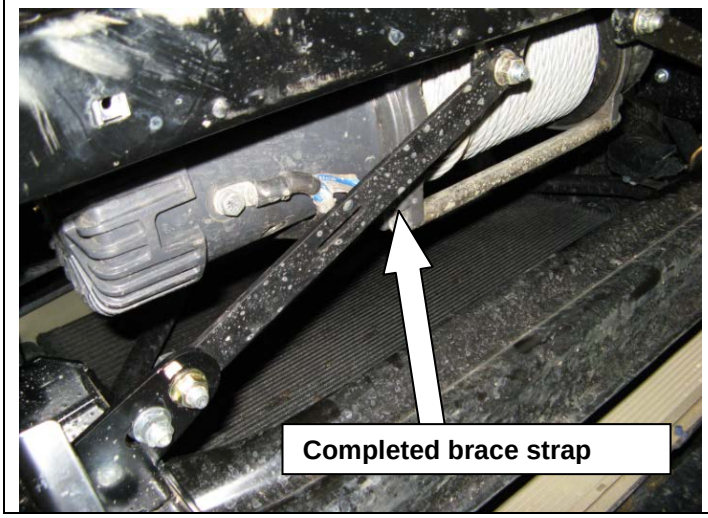
BULL BAR FITMENT TO VEHICLE

WINCH FITMENT ONLY

75. Fit the two bracing straps from the top face of the gusset on the mounting bracket to the bottom of the flange on the rear of the winch bracket on the bull bar, and fasten using M10 SEMS bolt and washer sets.
76. Using the hole located in the bull bar mount as a guide drill a 10mm hole into the bracing strap and fix with a M10 SEMS bolt and washer set

M10-44Nm

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



77. Completed brace strap should appear as shown in the figure.

M10-44Nm

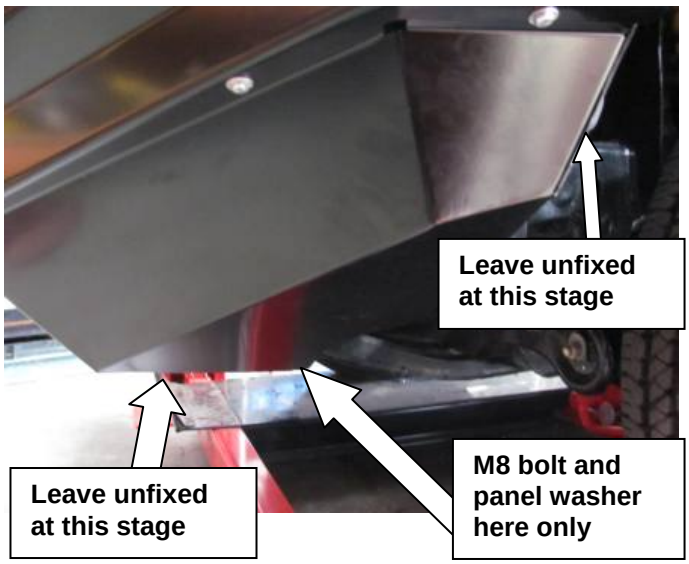
NOTE: The M10 bolts must have the nuts on the lower side

78. Assemble and install combination light surrounds (p/n 3163015) as per instructions no. 3786421 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.

79. Check that the lights clear the bumper cut line, if not trim the bumper edge to clear by at least 15mm

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

BULL BAR FITMENT TO VEHICLE



80. ***Check that all connections have been made, fog lights, indicators***

81. The wing under panels can now be fitted.

82. Fit the M6 cage nuts to the wing under panels, at this stage leave the wheel arch liner bolts, M8 bolt hole and the stone tray captive nut hole free.

83. Fit the wing panels as shown and secure with M6 bolt and washer sets.

M6-9Nm

84. The stone shield can now be fitted using 6 x M6 bolt and washer sets, the M6 stone tray to wing under panel can now be fixed.

85. Rear fixing position is to sump guard 5 x M8 captive nuts

M6-9Nm

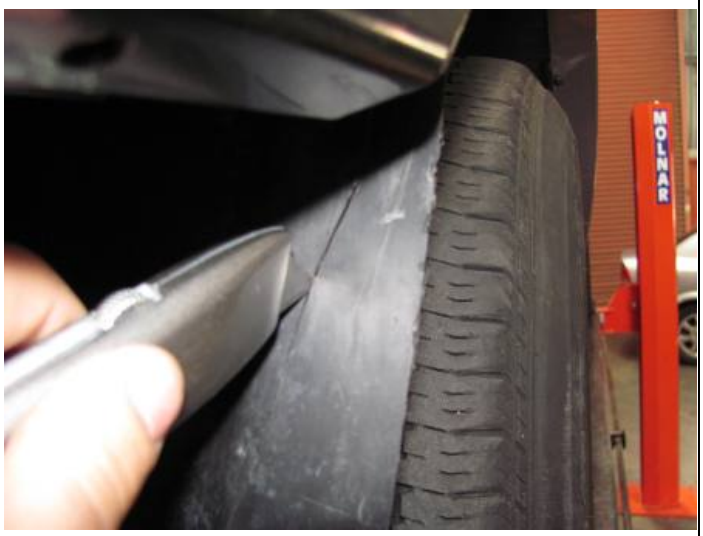
86. The licence plate can now be attached to the bull bar. Insert the two plastic square plugs supplied into the two square holes in the face of the bull bar (note slot allows for adjustable number plate hole pitch, ensure grommet flanges fit over the narrow width of the slot to engage correctly).

87. If winch fitted, position the licence plate as shown in the top picture and fasten using lower holes. If winch not fitted use the top row of holes, licence plate is positioned lower and covers RFL opening in front of bull bar, as shown in the lower picture.

88. Using the two dome head screws supplied screw into position firmly.

BULL BAR FITMENT TO VEHICLE

89. Push the outer edge of the liner forward and visually mark a line that will allow a 5mm overlap from the edge of the bull bar, now cut the liner so that a 5mm lip will fit behind the edge of the bull bar.
90. Push the outer edge of the liner forward past the lip of the bull bar.



91. Now push the liner up against the wing under panel and scribe a line along its edge, using a knife cut along the scribed line.
92. The final cut should appear as shown in the figure below.

93. Drill 7mm diameter holes in the fender liner coincident with holes in the return flange and captive nuts in the wing under panels.
94. Fix using M6 bolt and washer sets.

M6-9Nm

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**
- **Misalignment of sensor to hole in bull bar may cause malfunction.**

FITTED PRODUCT

WIRING DIAGRAM