

Part Number: 3921800 F/Kit 6173692 3921810 F/Kit 6173693

Product

Sahara Bar.

Description: Suited to

Toyota Land cruiser Prado 150 Oct 13 On-

vehicle/s: 3921800: Suited GX and GLX

3921810: Suited to VX and Kakadu

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 RING AND OPEN ENDED SPANNER SET	
ELECTRIC DRILL 13 MM CAPACITY	3, 7, 8.5, 10 & 13 mm DRILL BITS	
SHARP KNIFE	PHILLIPS AND FLAT BLADE 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 CHISEL	
HEAT GUN	SOLDERING IRON	

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 Ibft
M6	9	7
M8	22	16
M10	44	32
M12	77	57

NOTE:

- **OPTIONAL SAHARA TOP TUBE KIT 5121020**
- REQUIRES BUFFERS 5100030 (NO SAHARA TOP TUBE) OR 5100020 (WITH SAHARA TOP TUBE)
- OPTIONAL FOG LAMPS AND LOOM TO SUIT THIS PRODUCT ARE P#6821201 AND P#3500440
- STANDARD VEHICLE FOG LIGHT LOOM IS ONLY 19W AND IS NOT SUITED TO ARB 55W FOG **LIGHTS**
- ARB INTENSITY LIGHTS, UP TO 900 SERIES ROUND OR 800 RECTANGULAR DRIVING OR FOG LAMPS SUIT THIS PRODUCT
- IF VEHICLE IS FITTED WITH RADAR, THE CONTROL BOX WILL NEED TO BE RELOCATED TO THE ENGINE BAY. DO NOT OBSCURE RADAR WITH ANY OTHER ACCESSORIES.

PARTS LISTING						
APPLICATION.	PART NO.	QTY	DESCRIPTION			
	4654024 R&L	1 PR	BRACKET ASSY IMP ABS RH & LH			
	3757995 R&L	1 PR	BRACE			
	6151040	8	BOLT M10X1.25P(FINE)X30			
	4581040 4581048	8 8	WASHER FLAT M10 X 25 X 3THICK WASHER SPRING M10			
	6151306	2	NUT CAGE M12 X 1.75P			
	3194155	2	PLATE EXTENSION CAGE NUT			
MOUNT BRACKET (IMPACT	6151094	2	BOLT M12 X 1.25P(FINE) X 30			
ABSORBER) TO CHASSIS	4581049	12	WASHER FLAT M12 X 25 X 3THICK			
·	4581050	8	WASHER SPRING M12			
	6151360	4	BOLT M12 X 1.75 X 35 (COARSE PITCH)			
	6151428	4	NUT FLANGED M12			
	6151234	2	BOLT M8 X 25 BZ			
	6151255	2	BOLT M12 X1.75 X40			
	4581307	2	WASHER FLAT M8			
	4581047	2	WASHER SPRING M8			
	6151360 4581007	6 6	BOLT M12 X 1.75 X 35 (COARSE PITCH) WASHER FLAT M12 X 37 X 4			
BULL BAR TO MOUNT	4581050 4581050	6	WASHER SPRING M12			
BRACKETS	6151428	6	NUT FLANGED M12			
5101011210	6151357	4	BOLT SEMS M10 x 30 LONG			
	6151321	4	NUT FLANGE M10			
BUFFERS TO BULL BAR	6151128	12	NUT FLANGED M6			
	6151258	2	BUTTON HEAD SCREW M6 x 16 SS			
LICENCE PLATE TO BULL BAR	6151128	2	FLANGE NUT M6			
(NO WINCH IS FITTED)	4581304	2	WASHER FLAT M6 SS			
LIGHT INSERT AND INDICATORS	3163015	1	COMBINATION LIGHT SURROUND KIT			
(GX AND GLX ONLY)	6821287	1 KIT	INDICATOR/CLEARANCE LED KIT			
LIGHT INSERT AND INDICATORS	3163015	1	COMBINATION LIGHT SURROUND KIT			
(VX AND KAKADU ONLY)	6821300	1 KIT	INDICATOR/CLEARANCE/DRL LED KIT			
-	3756499	1	CONTROL BOX MOUNT			
	EG50	2	RUBBER GROMMET			
	6151074	2	BOLT 3/8" x 1 3/4" HEX HEAD			
WINCH TO BULL BAR	6151073	2	BOLT 3/8" x 1 ½" HEX HEAD			
(WINCH IS FITTED)	4581047	2	WASHER SPRING M8			
(WINCH IS FITTED)	6151234	2	BOLT M8 x 25mm BZ			
	6151132	2	NUT FLANGE M8			
	4581307	2	WASHER FLAT M8 BZ			
	180302	6	CABLE TIES			
	3789189 3758963	1	FOLDING LICENSE PLATE INSTRUCTIONS PIVOT BRACKET			
	3758964	1	BASE BRACKET			
	6151223	2	NYLOCK NUT M6 BLACK			
LICENSE PLATE TO BULL BAR	6151128	6	FLANGE NUT M6			
(WINCH IS FITTED)	4584295	6	FLAT WASHER M6 BLACK			
(5848302	2	PLASTIC WASHER BLACK			
	6151213	4	HEX BOLT M6 x 20 BLACK			
	6151256	4	BUTTON HEAD SCREW M6 x 16 SS			
	4581304	4	WASHER FLAT M6 SS			
BRACE STRAPS	4681374 R&L	1 PR	STRAP BRACE LOWER			
BRACE STRAPS	6151357	6	BOLT SEMS M10 x 30 LONG			
	6151321	6	NUT FLANGE M10			
	6522779	1	STONE TRAY			
STONE TRAY TO DULL BAD	6151300	4	CAGE NUT M6			
STONE TRAY TO BULL BAR	6151213	6	BOLT M6 x 20 BZ			
	4581082	6	WASHER FLAT M6 x 20 BZ			
	4581287	6	WASHER SPRING M6 BZ			

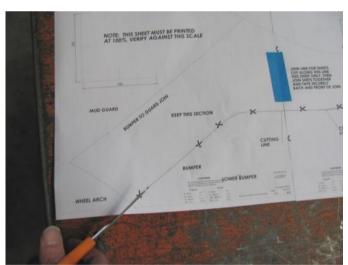
	6522910 R&L	1 PR	PANEL WING UNDER SIDE	
WING UNDER PANELS TO BULL	6151300	6	CAGE NUT M6	
	6151213	6	BOLT M6 x 20 BZ	
	4581082	6	WASHER FLAT M6 x 20 BZ	
BAR	4581287	6	WASHER SPRING M6 BZ	
DAIN	6151234	2	BOLT M8 x 25 LONG BZ	
	4581307	2	WASHER FLAT M8 BZ	
	4581047	2	WASHER SPRING M8 BZ	
	6151132	2	NUT FLANGE M8	
	6151340	2	BOLT M12 X 1.75 X50	
TOD TUDE TO DAD/ODTIONAL)	4581049	2	WASHER FLAT M12	
TOP TUBE TO BAR(OPTIONAL)	4581050	2	WASHER SPRING M12	
	6821294	1	WIRE 200MM X3MM QUAD	
	6821221	2	HEAT SHRINK TUBING 150MM	
	6821258	1	SPLIT CONDUIT 13MM X 44MM	
CAMERA TO BULLBAR	3759279	1	CAMERA RELOCATOIN BRACKET	
(VV AND KAKADII ONI V)	4581287	2	WASHER SPRING M6	
(VX AND KAKADU ONLY)	4584295	2	WASHER SPRING MO WASHER FLAT M6 X 12mm	
	6151128	2	NUT FLANGE M6	
	6151213	2	BOLT M6X20mm	
	180302	10	CABLE TIES	
	6191025	2	PINCH WELD NARROW 480 mm LONG	
	3789207	1	TEMPLATE BUMPER CUT A	
	3789208		TEMPLATE BUMPER CUT A	
	4581047	;	WASHER SPRING M8 BLK	
	4581307	;	WASHER FLAT M8 BZ	
	6151234		BOLT M8 X 25 BZ	
MISCELLANEOUS	6151132		NUT FLANGE M8	
	2125578		PAIR PARKER BLANK TAPE	
	6522973	1	WINCH COVER PANNEL	
	6151256	2	BUTTON HEAD M6X16mm	
	4581304	2	WASHER FLAT M6 STAINLESS	
	6151128	2	FLANGE NUT M6	
	6191006	1	WINCH COVER EXTRUSION	
	סטטופוס	'	WINCH COVER EXTRUSION	



1. Remove number plate



2. Carefully align and join cutting template sheets from fitting kit on the vertical aligning line as indicated on sheets as shown and tape together front and back



3. Using scissors accurately cut out the bumper cutting template along designated bumper cutting line as shown.



4. Remove radiator top cover by popping out the plugs as shown. Retain for reuse.



5. Remove the four bolts which retain the top of the grille as shown. Retain for reuse.



6. Remove grille by releasing the lower tabs connected to the bumper as shown.

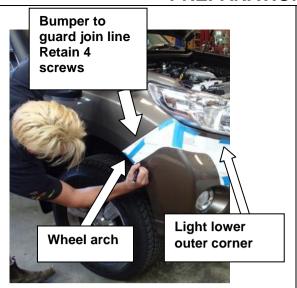
VX and Kakadu only: Unplug the camera as the grill is removed.

Unscrew the camera from the rear of the grill



7. VX and Kakadu only: Remove the bracket from the camera.

Retain the 4 screws for reuse. Discard the bracket



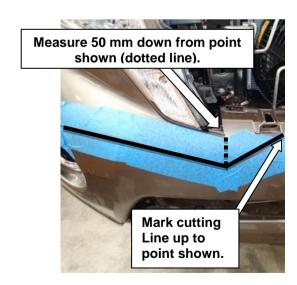
8. Carefully and accurately fit the template to the RHS of the bumper using the identified reference points aligning with the wheel arch, join of bumper and guard, the head lamp outer lower corner and tape in position. Make sure the template sits as flat as possible on the bumper as any misalignment could affect the final cut profile accuracy on the vehicle.



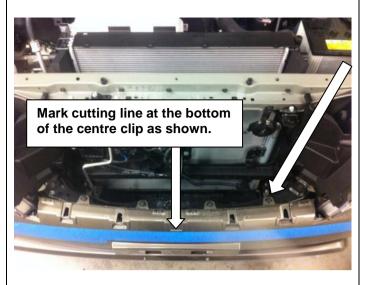
- 9. Mark the cutting line around to the front face of the bumper.
- 10. Remove the cutting template from the RHS, reverse it and reposition it on the LHS, tape in position and once again mark cutting line.



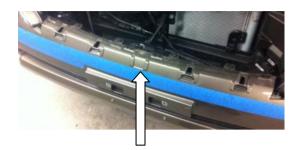
Finished bumper cut looks like this.



- 11. Measure down 50 mm from the point shown and mark a line to meet the template.
- 12. Mark from the point up to the inner edge of the outer grille clip housing as shown.



- 13. Continue to mark the cutting line position across the centre of the bumper as shown.
- 14. Remove the plastic rivets securing the top of the bumper.





- 15. Remove the screws securing the bumper to wheel arch area and across the lower section across the front so that there are no more fasteners securing the bumper.
- 16. Remove the lower joining panel from the bumper to the sump guard.
- 17. Work the inner guard liners away from the bumper and reaching in behind, undo the connections to the following if fitted: fog lamps, parking sensors (connection is on LHS of vehicle), headlamp washers (use a cable tie to crimp off the hose to prevent washer bottle leaking).



- 18. Carefully, and ideally with the aid of a friend, unclip each outer of the bumper at the guard as shown and remove bumper.
- 19. Place bumper face up on cutting table.



20. VX and Kakadu only: Mark each sensor and harness plug for identifying position in bumper, then carefully remove sensors, disconnecting from the harness first, then unclipping the sensor from the holding sleeve, finally remove the sleeves from the bumper holes



21. VX and Kakadu only: Remove headlight washers from bumper.

For clarity, pictures show washers already removed from bumper.

First remove the steel clip by sliding it in the direction shown.

Next slide the cream coloured plastic retainer down and off the body of the headlight washer

The headlight washer can now be removed out the front of the bumper.

22. With the bumper face up and on a suitable bench or the like, carefully cut the bumper along the cutting line with a jig saw or similar tool. Take care not to damage surface above cutting line.

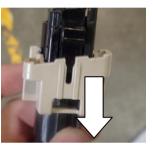
23. When finished, deburr cut edge with file, then remove protective tape.

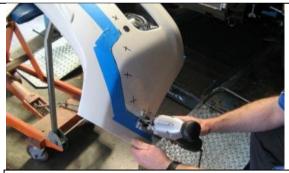












Warning: Cutting operations can result in flying debris, safety glasses should be worn.

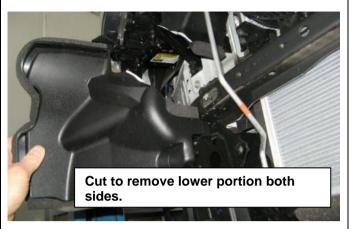


24. Remove reinforcing beam at mounts to chassis by undoing the M10 fine thread bolts. Recycle / discard beam, it will not be reused.



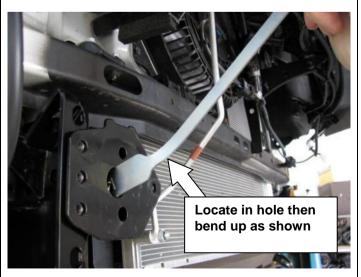


25. Mark a cutting line as shown then cut plastic air deflectors, both sides so lower portion is removed to clear bull bar mounts.

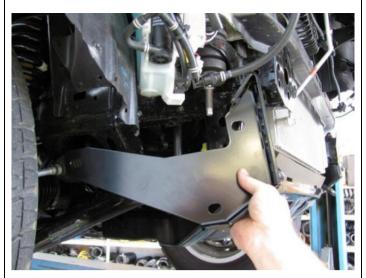




26. **PETROL MODELS ONLY:** Remove clamp from power steering pipes, by undoing the M10 bolt into the side of the chassis and the bolt holding the clamp plate. Set aside as this bracket will be reused.



- 27. Insert M12 cage nuts to nut plate extensions
- 28. Bend up the nut plate on the RHS only as shown, this is to clear cross tube in chassis.
- 29. Insert nut plates in chassis holes on both sides with approximately 40 mm still protruding.

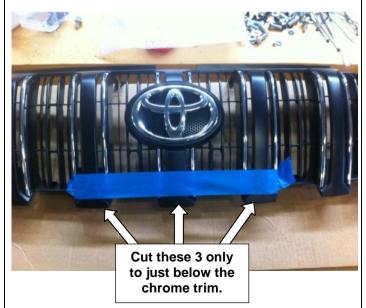


30. Fit handed specific side braces as shown, locating over the captive nuts at the rear of the chassis.



31. When side braces are fitted in position as shown, insert <u>fine thread M12 x1.25P x 30</u>
<u>bolt</u> and washer sets into lowest hole position to chassis. There is an existing captive nut in chassis, but do not do up tight.



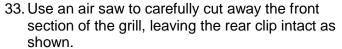


Winch bars only.

32. Apply masking tape along the bottom edge of the chrome part of the grille as shown.

IMPORTANT: See notes at steps 32 and 33 before cutting





34. **IMPORTANT:** Ensure clip at rear is not cut through as shown below.





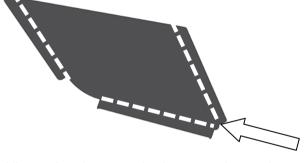


Warning: Cutting operations can result in flying debris, safety glasses should be worn.





35. Apply parker light covers as shown to blank off the lower section of the light area. Right hand light and cover shown.



36. Align point shown to the lowest point on the light.

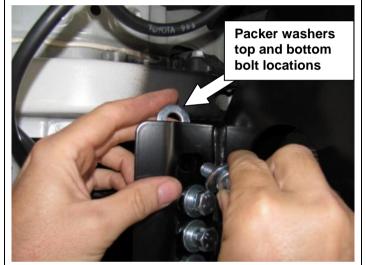
Align the dashed lines with the edges on the light. The excess material will fold around the edge of the light



- 37. Insert M8 x 35 coarse pitch bolt and washer set, *but do not do up tight*
- 38. Insert M12 x 35 coarse pitch bolt and washer set into rearmost hole into cage nut on extension plate, *but do not do up tight*.



39. Fit impact absorbers to chassis ends using fine thread M10 x 1.25P x 30 bolt and washer sets supplied, note that the brackets are handed. slide them towards the centre of the vehicle on the adjustment slots do not do up tight.



- 40. Fit M12 bolt, washer and flange nut sets to top and bottom positions as shown. Insert M12 flat packing washer between the rear face of the impact absorber flange and the front face of the side brace as shown, but do not do up tight.
- 41. Once all bolts are in place nip up the bolts in the side brace.
- 42. Then tighten to full torque the bolts of impact absorbers to chassis flange, starting with the two inner first then moving outboard to vertical rows of 5 bolts on outer flange position. Now, tension up side brace bolts to full torque



M12 - 96 **Nm**.



M10 - 44 **Nm**.

NOTE: When fitted, if bull bar requires sideways adjustment to align with vehicle, the bolts of the mount to chassis will need to be loosened, adjustment made then re-tensioned. This is best done before angular brace straps are fitted and pinned.



43. PETROL MODELS ONLY:

Modify the clamp plate by cutting off the flange as shown then drilling a Dia 8.5 hole, 8 mm from the bend as shown.







44. **PETROL MODELS ONLY:** Fit the clamp back into position, and bolt to the vertical flange on the bull bar mount bracket using an 8 mm bolt washer and nut set. If there is no hole in flange, drill a Dia 8.5 hole 70 mm down and 8 mm in from the edge of the flange.



45. **CRITICAL:** Adjust the piping so it clears all fixed objects and apply some conduit over the pipe where it runs above the mount bracket.



46. Fit bumper back onto vehicle

47. Fit pinch weld to cut area, starting at the wheel arch as shown, trim to length.

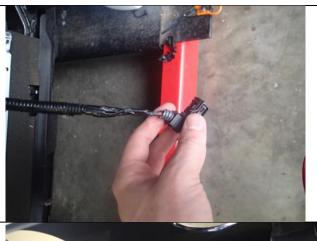




48. Fit camera to the mount bracket as shown using the 4 bolts removed in step 7



BULL BAR PREPARATION



49. Using the 400mm 4 core wire, cut and extend the Camera harness.

Insulate each individual wire using appropriate heat shrink.

Use the larger heat shrink and split conduit provided to cover and seal the whole join.



50. Fit the camera to the bar using M6x20mm bolts, flat washers and flange nuts.

The nuts are on the rear side of the bar.



51. Route the sensor loom through the Dia 38mm holes in the bull bar provided in the uprights top forward position, and the top holes in the side of the winch bracket.

Ensure that the harness is orientated in the same

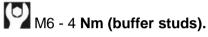
- 52. Fit the sensor sleeves, then fit sensors into original positions as marked
- 53. Connect the loom to the sensors and secure the loom with cable ties and secure with cable ties



- 54. Fit the sensor sleeves, then fit sensors into original positions as marked
- 55. Connect the loom to the sensors and secure the loom with cable ties and secure with cable



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



57. 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.

BULL BAR PREPARATION – IF NOT FITTING WINCH



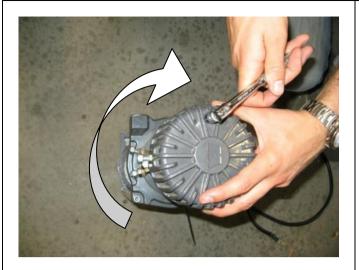
58. Apply rubber mould to edge of winch hole cover panel and trim off excess.



59. 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.

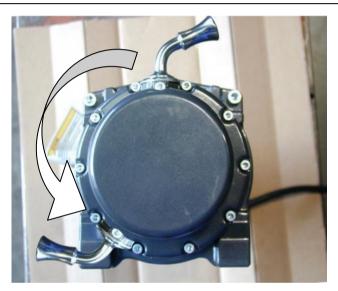
WINCH FITMENT ONLY



IF FITTING A WINCH

60. Rotate the winch motor 90 degrees as shown

NOTE: Follow the winch manufacturer's instructions regards motor rotation and drainage requirements.



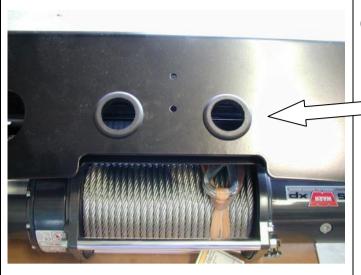
- 61. Remove the cap head screws retaining the gearbox to the winch drum. Carefully lift the gearbox a small amount (5 mm) and rotate144 degrees counter clockwise (four hole spacing's) and re-fit the cap screws. This places the winch handle in the correct orientation.
- 62. Lay the winch on a suitable flat surface and place the bull bar on top so that the wire rope will feed through from the bottom.
- 63. 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



64. 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 3/4" bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and winch.



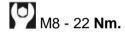
65. Replace the cir clips on the vertical rollers on both sides.



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



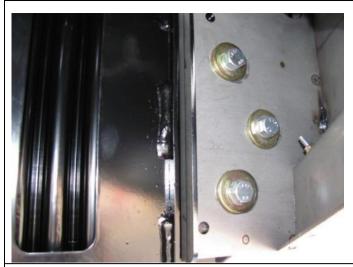
- 67. Attach the control box to the control box bracket as shown.
- 68. Fit the control box to the bull bar with two M8 x 25 mm bolts, M8 flat washers and M8 flange nuts.



Warning: Do not fit control box to bar if vehicle if fitted with radar. Control box will need to be relocated to the engine bay.



- 69. Run the cables through the rubber grommets and connect to the winch as per the wiring diagram supplied with the winch.
- 70. Using cable ties fix the cables securely and ensure they are well away from any moving, sharp or hot surfaces.



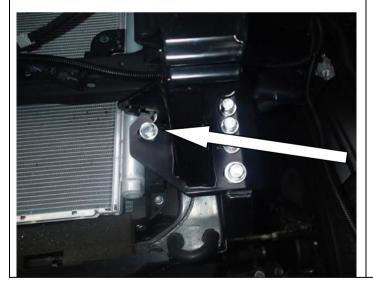
- 71. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit outside the impact absorber blades.
- 72. Bolt the bull bar into position using the M12 bolts, spring washer, large body washer and flange nuts 3 places per side of bull bar as shown. Tighten the bolts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



74. 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.

<u>20-25 mm (3/4-1") GAP</u> REQUIRED

75. 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.

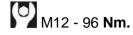


76. If the bull bar is not centred on the vehicle, loosen the mount bracket bolts to chassis, tap the mount brackets sideways with a soft hammer until the bar is central. Retention bolts to specified torque.

Tighten the inner bolt shown on **both** sides first. Only then move onto outside bolts. Failure to do so will skew the bar to one side of the vehicle.



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



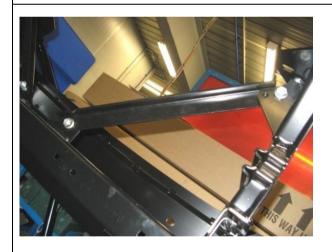
- 78. Using an electric drill and a Dia10.0 mm drill bit, drill two pinning bolt holes through the bull bar upright each side using the holes in the mount bracket flanges as a guide. One hole is located in the lower lug of the mount face and one up above the welded nuts. Use access through the light surround opening for the top hole.
- 79. 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.







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



80. The handed lower brace straps ensure the top face of the brace strap mates with the underside of the bull bar brace mount, and the underside of the brace strap mates with the top face of the impact absorber gusset as shown in the figure. Fix with two M10 SEMS bolts and flange nuts.

> Tighten the M10 bolts retaining the bull bar brace mount.

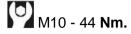


M10 - 44 **Nm.**

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



- 81. Using a Dia 10 mm drill bit, drill and pin the straps at the adjustment end using the pilot hole as a guide, as shown (note strap fits above the gusset as shown).
- 82. Fit and torque the M10 pinning bolts and flange nut sets to specifications







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- 83. 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.
- 84. Check that the lights clear the bumper cut line, if not trim the bumper edge to clear by at least 15mm
- 85. Wire the combination lamp to the vehicles indicator and clearance lamp

Locate the grey and black connectors shown behind each headlight.



Function	LED Wire	Vehicle Wire	Vehicle
			connector
Ground	Black	White/black	Grey 8 pin
Indicator	Green	Dark green	Grey 8 pin
Clearance	Red 1	Light green	Black 6 pin
Daytime Running	Red 2	Grey	Black 6 pin
(VX and Kakadu only)			

CONNECTING FOG LIGHTS

NOTE: The wiring in vehicles fitted with factory 19W fog lights is not suitable for running ARB fog lamps.

For vehicles without factory fog lamps:

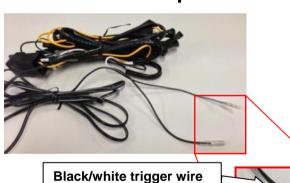
- 86. Install ARB wiring loom 3500440 and switch into vehicle. Refer to instructions supplied with loom. Place switch inside cabin in a suitable position.
- 87. Connect ARB fog lights (# 6821201) to wiring loom.

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

Keep these items

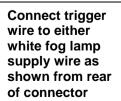
Discard these items





Cover black wire bullet

terminal with tape





For vehicles with factory fog lamps:

- 88. The factory fog light switch can be used in conjunction with the ARB loom 3500440 to power the ARB fog lights.
- 89. Discard loom switch and thin yellow wire from 3500440.
- 90. Install ARB wiring loom 3500440 into vehicle. Do not install switch or thin yellow wire.

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

- 91. Identify the black/white trigger wire from 3500440 as shown.
- 92. Connect the black/white trigger wire to the factory fog light wire using the supplied scotch lock or a female bullet connector. The factory fog light wire is white and can be found at the back of the harness connector as shown.
- 93. Tape the bullet terminal from the black wire from 3500440 to prevent short-circuits. Securely fasten it away from sharp, abrasive or hot surfaces.



94. Insert the headlight washers into the bar and connect hoses.

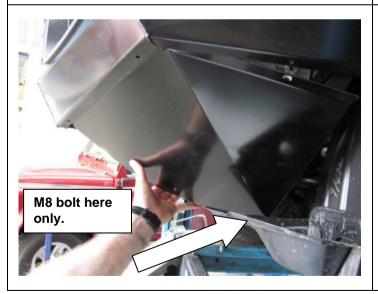
Installation is the opposite of removal. Insert the washer in from above, slide the cream coloured part on and secure with steel clip.

Connect hose

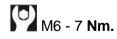
Check that washer clears fog lights

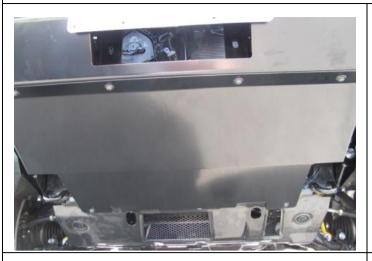


95. Carefully pull up the washer to access the alignment knobs. Re align the washer so it sprays on the centre of the light.

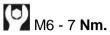


- 96. Check that all connections have been made, fog lights, indicators
- 97. The wing under panels can now be fitted.
- 98. Fit M6 cage nuts to the inside of the wings lower flanges, 3 places per wing.
- 99. Fit the wing panels as shown and secure with M6 bolt and washer sets and M8 bolt and washer set to position on side brace to chassis





- 100. The stone shield can now be fitted using 6 x M6 bolt and washer sets
- Rear fixing position is to sump guard 2 x M6 captive nuts.





WINCH FITMENT ONLY

If winch fitted, install folding license plate using instructions included (3789189).

NO WINCH FITTED

102. If no winch is fitted, the licence plate can now be attached directly to the bar using M6 stainless button head bolts, washers and flange nuts.





103. Trim the outer edge of the fender liner as shown so that it will clip in behind the wing



- 104. Push the outer edge of the liner forward past the wing return edge so that it snaps in place
- 105. Carefully trim off the bottom of the guard liner 10 mm up from the lower face of the wing under panel
- 106. Push up and tuck fender liner in behind the return flange on the wing under panel.
- 107. Drill Dia 7.0 mm hole through fender liner co-incident with the hole in the return flange of the wing. Loosely retain with cable tie.



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

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

