

VEHICLE: NISSAN PATROL Y62 2010/-

PART NUMBERS: 3227010 BULLBAR NON WINCH

3427010 BULLBAR WINCH BAR

## **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:

BASIC TOOL KIT	SAW OR JIG SAW SUITABLE TO CUT PLASTIC
DRILL AND DIA 10 MM DRILL BIT	SPIRIT LEVEL (optional)
TORQUE WRENCH 9-77Nm	SIKAFLEX OR SILICONE

#### 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.

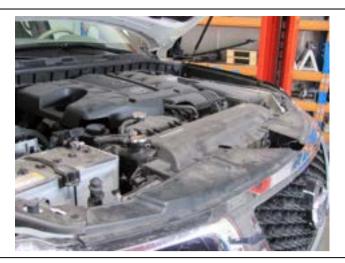
#### **FASTENER TORQUE SETTINGS:**

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

	PARTS LISTING				
APPLICATION	PART NO.	QTY.	DESCRIPTION		
	3758236R	1	CHASSIS MOUNT RH		
	3758236L	1	CHASSIS MOUNT LH		
	3758135R	1	HEAD LIGHT SUPPORT BRACKET RH		
	3758135L	1	HEAD LIGHT SUPPORT BRACKET LH		
	3758136	1	GRILLE SUPPORT BRACKET		
	6151095	4	BOLT HEX M12 X 1.25 X 35 G8.8		
	4581007	4	WASHER FLAT M12 (LARGE O.D.)		
	4581049	2	WASHER 1/2" X 1 1/8" X 12G (STD O.D.)		
	4581050	6	WASHER SPRING M12		
MOUNTS TO VEHICLE	6151502	8	NUT LOCKING M10 X 1.25		
	4581041	8	WASHER FLAT 7/16"		
	6151017	8	BOLT HEX M6 X 16 ZP		
	6151042	8	WASHER SPRING M6 ZP		
	6151046	8	WASHER FLAT M6 ZP		
	6151128	2	NUT FLANGED M6 ZP		
	2125471	1	STICKER Y62 GUARD COVER		
	6151512	2	CLEVIS NUT		
	6151249	2	BOLT HEX M12 X 140 G8.8 ZP		
	6151255	6	BOLT HEX M12 X 1.75 X 40		
	6151428	6	NUT FLANGE M12		
	4581050	6	WASHER SPRING M12		
DAD TO MOUNTO	4581007	4	WASHER FLAT M12 (LARGE O.D.)		
BAR TO MOUNTS	4581049	2	WASHER 1/2" X 1 1/8" X 12G (STD O.D.)		
AND CENTRE BRACE	6151357	11	BOLT M10 SEMS		
	6151321	11	NUT FLANGE M10		
	4681368	1	WINCH BRACE		
		•			
	3163048R	1	MOULDING WING TIP		
	3163048L	1	MOULDING WING TIP		
	3758119	2	WING TIP TRIM CLAMP		
BUFFERS AND TRIMS	6151384	2	SCREW PAN HEAD PH 5 X16MM BZ		
	6151128	16	NUT FLANGED M6 ZP		
	3163015	1	FOG LIGHT SURROUND KIT		
	3163018L&R	1	BUFFER KIT		

PARTS LISTING					
APPLICATION	PART NO.	QTY.	DESCRIPTION		
	6522086R	1	UNDER WING PANEL RH		
	6522086L	1	UNDER WING PANEL LH		
	6522805	1	UNDER PANEL		
LINDED DANIEL C	4581287	16	WASHER SPRING M6 BZ		
UNDER PANELS	6151213	16	BOLT HEX M6 X 20 BZ		
	4581082	16	WASHER M6 X 20 X 16G BZ		
	6151300	16	NUT CAGED M6 ZP		
	0101000	10	NOT GAGED INCE		
	3756499	1	CONTROL BOX BRACKET		
	4581044	2	WASHER FLAT M8		
MANDELL FITAFAIT	6151132	2	NUT FLANGED M8 ZP		
WINCH FITMENT	6151021	2	BOLT HEX M8 X 20 ZP		
(3427010 Only)	EG50	2	RUBBER GROMMET		
	6151074	2	BOLT UNC 3/8" x 1 3/4"		
	0.01011		2021 0110 010 11 1011		
	6522686	1	PANEL WINCH ACCESS COVER		
	3758170	1	<b>BRACKET ASSY Y62 WINCH COVER</b>		
	3194210	1	PLATE WINCH MOUNT COVER Y62		
	6191013	1	RUBBER EXTRUSION		
WINCH COVER PANEL FITMENT	6151357	2	BOLT M10 SEMS		
(IF NO WINCH IS FITTED)	6151304 4581081	2	NUT CAGED M10 WASHER FLAT M8 S/S		
(3427010 Only)	6151132	2	FLANGE NUT M8 ZP		
	6151295	2	SCREW BUTTON HEAD M8 X 20 S/S		
	6151256	2	SCREW BUTTON HEAD M6 X 16 S/S		
	6151128	2	NUT FLANGE M6		
	4581304	2	WASHER M6 SS		
	6151521	2	BOLT BTN HEAD M5 X 25 BZ		
	6250003	2	SPACER WING MOUNT		
CAMERA TO BAR (IF FITTED)					
	6151354	2	NUT NYLOC M5 ZP		
	EG50	2	RUBBER GROMMET		
	180302	16	CABLE TIES		
	180701	6	SCOTCH LOCK		
MISC	6821152	2	INDICATOR/CLEARANCE LOOM		
	6821151R	1	INDICATOR RIGHT HAND		
	6821151L	1	INDICATOR LEFT HAND		
	33211312				
	3751384	1	BRACKET NUMBER PLATE		
	6151017	2	BOLT HEX M6 X 16 ZP		
NUMBER PLATE TO BAR	6151046	2	WASHER FLAT M6 ZP		
	6151128	2	NUT FLANGED M6 ZP		
	6151042	2	WASHER SPRING M6 ZP		
	6821189	2	GROMMET ROUND FC		
	6151384	2	SCREW 5.2 X 16 BTZP480		

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PARTS LISTING					
APPLICATION	PART NO.	QTY.	DESCRIPTION		
RADAR SENSOR TO BAR (3227010 Only)	6151017	2	BOLT HEX M6 X 16 ZP		
	6151046	2	WASHER FLAT M6 ZP		
	6151128	2	NUT FLANGED M6 ZP		
	6151042	2	WASHER SPRING M6 ZP		
	6151354				
		6	NUT NYLOC M5 ZP		
	6151521	6	BOLT BTN HEAD M5 X 25 BZ		
	3163049	1	RADAR SENSOR SURROUND		
	2125476	1	RADAR INFORMATION CARD		
	3500690	1	Y62 HEADLIGHT WASHER KIT		
HEADLIGHT WASHER KIT (OPTIONAL FOR 3927010 ONLY)					
(OPTIONAL FOR 3927010 ONLT)					
	3163142	2	PARKING SENSOR ANGLED MOULDING		
PARKING SENSOR SHEILD KIT (3527040)	160352	2	ADAPTOR O-RING		
	100352		ADAPTOR O-RING		



1. Open bonnet and remove the grille by removing all the retaining clips on the top of the grille and releasing all the clips along the bottom inside of the grille.

Caution: If a front parking camera is fitted, carefully un-plug whilst removing the bumper.

2. Retain all clips removed



3. Remove the bumper bar from the vehicle by removing all screws and clips.

Caution: If fog lights / parking sensors / headlight washers are fitted, carefully un-plug whilst removing the bumper.

4. Discard all screws and clips.



5. Remove the plastic bumper retainer blocks from each side of the vehicle and discard



6. Remove the 2 plastic bumper retainer blocks from the underside of each of the head lights and discard.



- 7. Carefully un-plug and remove the parking sensor loom (if fitted) and set aside.
- 8. Carefully remove the parking sensors from the bumper bar by pushing them from the inside out through the front of the bumper and set aside.

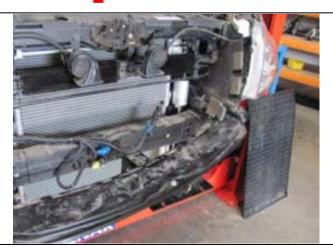
- 9. Un-screw the camera (if fitted) from the grille and set aside.
- 10. Discard screws.



11. If the vehicle has the IBA/ICC option, carefully un-plug the radar sensor and remove by undoing the 2 x bolts holding it to the front lower crash beam.

Note: If the bar being fitted is a winch compatible bar, the IBA/ICC radar cannot be utilised. Thus the radar can be discarded. Please see Radar Information Card P/N 2125476.

12. Cover the end of the radar loom with electrical tape.



- 13. Remove the front lower crash beam by undoing the 4 x M10 nuts on each side.
- 14. Discard beam and fasteners.
- 15. Remove the top grille support beam removing the centre angle bracket and leaving the 2 out board angle brackets attached to the vehicle.
- 16. Discard beam and fasteners.



- 17. Undo the headlight by undoing the screw and plastic clip from the top (behind the rubber trim) and the screw through the guard at the bottom of the headlight. Leaving the headlight connected to the wiring, move it forward so that it hangs down giving access to the turn signal and clearance light wires. Repeat both sides.
- 18. Using the scotch locks, connect a loom to each of the head lights connecting the black wires to earth, the green wires to the turn signals and the red wires to the clearance lamps.

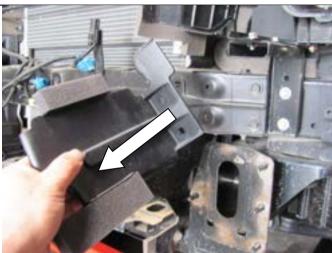
Note: Due to the distance between the clearance and turn signals it may be necessary to remove the black plastic sheath form the loom to allow the wires to reach both lights and still have enough length to reach the lights on the bar. When the looms have been connected all wires and joints should be covered in protective tape or conduit.

19. Replace the headlights ensuring that the newly installed looms hang down below the headlights.

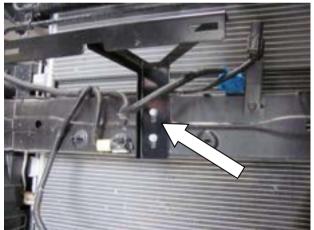
Note: Before continuing on, it is recommended that the newly installed looms are checked using either a multi meter, test light or by connecting the supplied combination lamps to the looms.



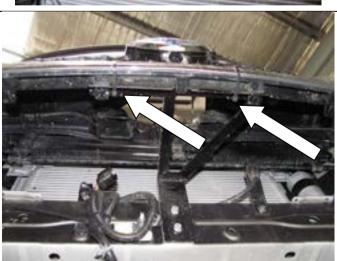
- Attach the RH Head Light Support Bracket to the outboard angle bracket mentioned above using 2 x M6 x 16 Hex Bolts, M6 Spring Washers and M6 Flat washers. Leave Loose.
- 21. Attach the lower inner corner of the head light to the bracket using an M6 x 16 Hex Bolt, M6 Flat washer, M6 Spring Washer and M6 flange Nut. Ensure head light is in its original position and tighten all fasteners. Repeat on the LH side.



22. Remove the mid-air deflector panels by removing the 2 plastic clips in each panel. Discard clips and panels.



23. Attach the Grille Support Bracket to the vehicle in place of the original centre angle bracket using 2 x M6 x 16 Hex Screws, M6 Spring Washers and M6 Flat Washers. Leave loose at this stage.



- 24. Re-fit the grille to the vehicle placing 2 of the lower grille clips through the Grille Support Bracket fitted above.
- 25. Re-fit all of the clips to the top of the grille removed in step 1.
- 26. Adjust the Grille Support Bracket so that the grille is sitting correctly and tighten the 2 x M6 bolts to the above specified torque.
- 27. Use 2 cable ties to hold the grille tight against the Grille Support Bracket.

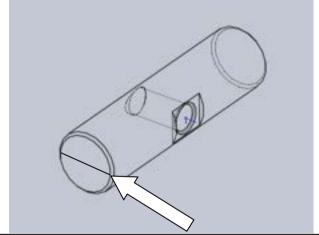


28. Place the guard cover sticker on the front lower section of each guard as shown.

Note: The area should be cleaned before applying the tape.



- 29. Fit the RH Chassis Mount to the vehicle as shown.
- 30. Loosely attach it using 4 x M10 Lock Nuts and 7/16" washers onto the original vehicle studs and 2 x M12 x 1.25 x 35 Bolts, M12 Spring Washers and M12 Flat washers (Large O.D.) through the bottom of the mounts into the captive threads in the vehicle.
- 31. Repeat on the LH side of the vehicle.



32. Mark a line on the end of the clevis nut in line with the threaded hole. This will aid alignment in the next step.



33. Place the Clevis Nuts into the holes in the side of the chassis as shown. Repeat both sides.

Note: Direction of line marked in previous step.



34. Place an M12 x 140 Hex Bolt, M12 Spring Washer and M12 Flat Washer (Std O.D.) through the hole in the centre of each of the Mounts into the threaded holes in the Clevis Nuts fitted in the previous step. Leave loose at this stage.



35. Place large grommets in the holes in the uprights.



- 36. Fit the parking sensors to the holes in the bar by feeding them in from the front with the plugs facing inboard. For fitment of inboard sensors please refer to supplied kit 3527040 and follow fitting instructions.
- 37. Route the OE parking sensor loom through along the bar through the holes in the upright and attach it to the sensors. Tidy and attach the loom to the bar with cable ties.

Note: The sensor wiring loom is a snug fit and caution should be used when inserting combination light surrounds.



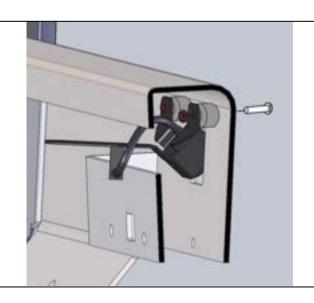
38. Fit the buffers to each side of the bar using M6 flange nuts. Torque to 4Nm max

Warning: Do not over tighten the flange nuts or you will risk pulling the studs out from the buffers.



- 39. Fit the LH Wing Trim to the LH wing using the Wing Trim Clamp Bracket and 2 of M6 flange nuts on the captive studs on the moulding and 1 Phillips pan head screw into the slot at the front of the moulding.
- 40. Repeat on the RH side of the vehicle.

Note: Do not over tighten the flange nuts as you will risk pulling the studs from the mouldings.



- 41. Attach the camera (If fitted) to the bar as shown using 2 M5 x 25 BZ Button head screws and M5 Nyloc nuts. Place a 10mm spacer in between the camera and the bar.
- 42. Make sure the camera is level and tighten fasteners.

Note: The next step is to fit a winch to 3427010. If a winch is not being installed to 3427010, refer to step 52. If you are fitting 3227010, proceed to step 57.

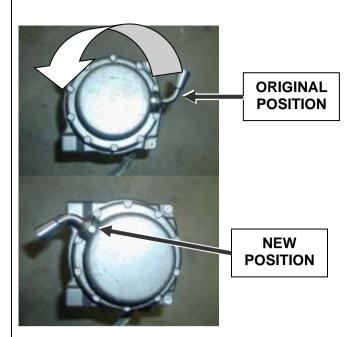


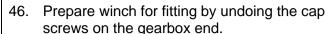
#### FITTING WINCH (3427010 Only)

- 43. Fit large grommets to holes in top pan.
- 44. Fit control box bracket to control box studs as shown. Picture also shows routing of leads through grommets in pan.



45. Using M8 fasteners fit control box mounting bracket to pan





- 47. Rotate the end cap and gearbox in a counter clockwise direction 144° (four hole pitches) while looking down at the gearbox, as shown (for 12/16000lb winches rotate clockwise 72°).
- 48. Tighten the cap screws ensuring the gearbox handle operates freely.
- 49. For 8-9500lb only rotate the motor end 90° clockwise (elec. terminals will be up, see step 50).

NOTE: 12/16000lb motor is in correct position as supplied.

NOTE: Be careful not to lift the gearbox more than a few millimetres. Before doing up cap screws, ensure that the flange faces engage properly and gaskets are not damaged.



50. Position the winch with the mount face facing upward on an adjustable table or similar and with the assistance of another person lower the bulbar over the winch. The winch handle should be in the LHS of the bull bar for all winches except 12000lb winch is on the opposite side. The cable must spool off the bottom of the winch.

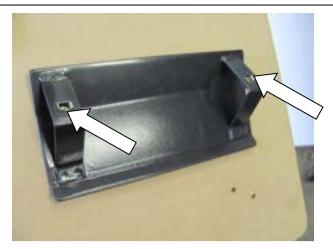
NOTE: The 12000lb winch will need to be at the bottom of the adjustment slots.

Also follow the installation instructions in the Warn winch handbook accompanying the winch.



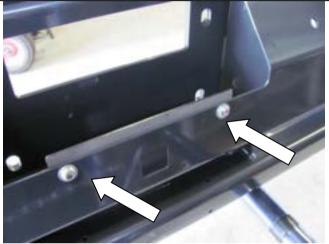
51. Fit the roller fair lead, pull only the end of the cable through and adjust the position of winch then bolt up securely. Use the 1 ½" long bolts in the top and 1 ¾"in the lower set through the RFL.

Hint: To increase access to mount bolts in front of roller fairlead, remove circlips from bottom of each vertical roller shaft, push shaft up so roller can be dislodged sideways. Do up bolts in fairlead and winch, then refit circlip.

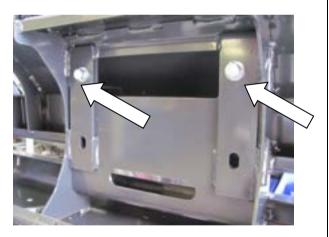


#### FITTING WINCH COVER PANEL

52. Fit 2 M10 cage nuts to the Cover Panel as shown.



53. Fit the Winch Cover Panel Plate to the bar as shown using 2 M8 x 20 SS Button Head Cap Screws, M8 SS Washers and M8 Flange Nuts.



54. Fit the panel to the front of the bar using 2 M10 SEMS bolts through the lower winch mount holes. Align and tighten fasteners.





Applying trim rubber, note the join is at middle of the rear of the plate or long side.

55. Fit rubber extrusion to cover panel as shown starting and finishing at the centre of the large radius side which is the back, then trim to length.



The narrower section of the plate is to front of bullbar.

56. Fit the panel to the top of the bull bar as shown using M6 pan head stainless steel screws, M6 flat stainless steel washers and M6 flange nuts.



57. Fit Headlight Washers to bar if required, refer to Washer Kit Fitting Instructions **#3789274** 



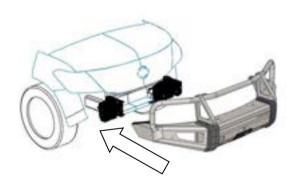
#### FITTING RADAR SENSOR (3227010 Only)

58. Attach the Radar Sensor Surround to the front of the bar using 6 M5 x 25 Dome Head Screws and M5 Nyloc Nuts.

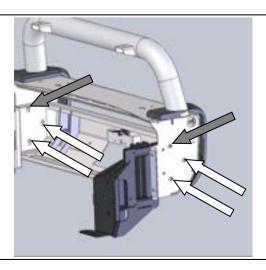
Be careful not to over tighten the screws as this will distort the Radar Sensor Surround.



59. Carefully fit the radar sensor removed in step 11 to the bar as shown using 2 x M6 x 16 hex bolts, M6 spring washers, M6 washers and M6 flange nuts. Ensure that the sensor is level to the bar and tighten fasteners.



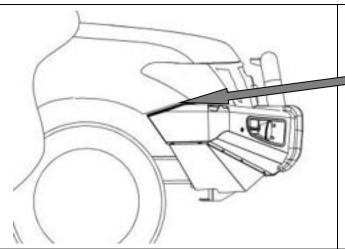
60. With the assistance of another person or a lift trolley, lift the bar onto the mounts.



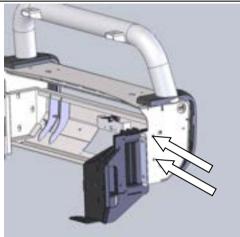
61. Secure the bar to the mounts using M12 x 40 Hex Bolts, 1/2" Spring Washers, ½" x 1 1/2" x 4 washers (bottom and middle holes only – light arrows), ½" x 1 1/8 x 12G Washers (top hole only – dark arrows) and M12 Flange nuts. Leave loose at this stage.

Note: The Bolts should be fed from the inside of the bar and the nuts on the out board side.

SAHARA BAR SHOWN - DELUXE BULLBAR IS THE SAME.



- 62. Position the bar so that is level, central and there is a minimum distance between the vehicles guard and the top of the wing trim of 15mm.
- 63. Tighten all fasteners starting with the mount to vehicle fasteners followed by the bar to mount fasteners.



Using a drill with a 10mm drill bit, drill through the 4 10mm holes and pin using M10 SEMS bolts and M10 flange nuts.

SAHARA BAR SHOWN – BULLBAR IS THE SAME.

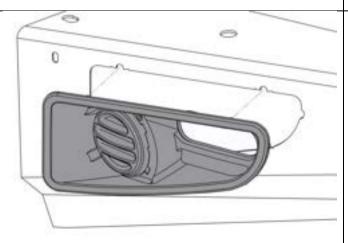




Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.



64. Remove indicators from cartons and then remove screws and speed nuts from each light. These fasteners are not to be reused – new screws are supplied in the fitting kit.



65. 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.

CAUTION: Cable-tie all cables together and keep all cables clear of sharp edges and all moving parts. Note location of parking sensor wiring loom and take care when inserting surrounds.



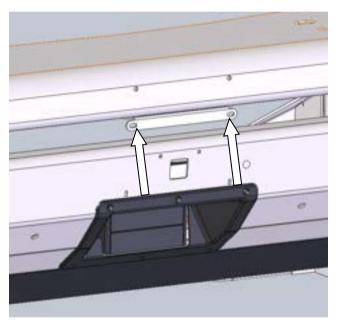
66. Number Plate Fitment

If fitting a number plate to a vehicle with a forward facing camera (fitted in step 41);

Fit the number plate directly to the top pan using 2 x M6 x 16 hex bolts, M6 spring washers, M6 flat washers and M6 flange nuts.

Warning: Number plate surrounds / covers may trigger the front parking sensors.

If a surround / cover is fitted, check parking sensor operation and remove if necessary.



If fitting a number plate to a vehicle without a forward facing camera;

Fit the number plate bracket to the holes on the upper edge, inside the gap between the top and bottom pans, using 2 plastic grommets 5.2 x 16 mm pan head screws. Attach the number plate to the bracket using 2 x M6 x 16 hex bolts, M6 spring washers, M6 flat washers and M6 flange nuts.

Warning: Number plate surrounds / covers may trigger the front parking sensors.

If a surround / cover is fitted, check parking sensor operation and remove if necessary.

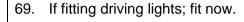




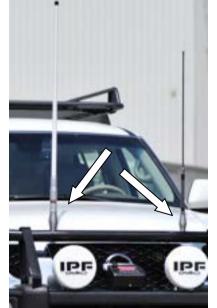
- 67. If fitted, re-connect the camera and radar plugs to the OE looms and tidy cables with cable ties.
- 68. Connect the parking sensor loom to the OE loom.

Note: Please see Radar Information Card P/N 2125476 for information for adjusting the radar sensor.

This card must be placed on the driver's seat prior to delivery to ensure it is read.







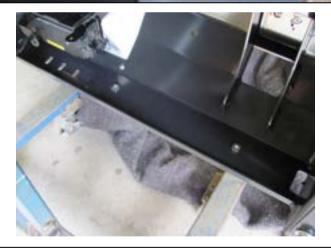
70. Up to 2 aerials can be fitted to the brackets on the top tube of the bar.



Attach the Winch Brace to both the bar and the mounts using 7 x M10 SEMS bolts and M10 flange nuts.

Push the brace as far backward as it will go and tighten all fasteners.

Fit M6 cage nuts to the Under Panel as shown.



Fit M6 cage nuts to the lower pan of the bar as shown.



74. Fit the under panel to the bar using M6 x 20 BZ Hex screws, M6 BZ Spring washers and M6 BZ Flat washers.



75. Fit M6 cage nuts to the under wing panels as shown.



76. Fit the under wing panels to the bar as shown and attach using M6 x 20 BZ Hex screws, M6 BZ Spring washers and M6 BZ Flat washers.

- 77. Mark the wheel arch inner guards as shown using the bottom edge of the under wing panels as an edge template. Repeat both sides.
- 78. Using a saw suitable for cutting plastic, cut and remove the areas marked above. Discard offcuts.
- 79. Tuck the inner guards inside the under wing panels.

#### Deluxe Bar with winch fitted to vehicle

