



FITTING INSTRUCTIONS

Part Number: **3438360 F/Kit 6173464**

Product **Deluxe Combination Winch and Non Winch Bull Bar**

Description:

Suited to **Nissan D40 Navara DC STX /R51 Pathfinder May 2010 ON (Spanish origin)**
vehicle/s:

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

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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	3 & 10mm DRILL BITS
SHARP KNIFE	PHILLIPS AND FLAT SCREW DRIVER SET
FELT TIP PEN	HACKSAW BLADE OR SMALL HAND SAW
FINE FILE OR SAND PAPER	ELECTRIC JIG SAW
METRIC TAPE MEASURE	ROLLS OF 25 mm & 50 mm WIDE MASKING TAPE

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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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 P#3400440 LOOM KIT, P#180209 SWITCH AND P#180215 SWITCH CAP FOR FOGS
- ◆ UP TO 900 SERIES ROUND OR 800 RECTANGULAR DRIVING OR FOG LAMPS SUIT THIS PRODUCT

PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
MOUNT BRACKET (IMPACT ABSORBER) TO CHASSIS	3758053R&L	1 PR	BRACKET ASSY IMP ABS RH & LH
	6151095	8	BOLT M12 X 1.25 X 35 (FINE PITCH)
	4581049	8	WASHER FLAT M12
	4581050	8	WASHER SPRING M12
BULL BAR TO MOUNT BRACKETS	6151324	6	BOLT M12 X 1.75 X 45 (COARSE PITCH)
	4581007	6	WASHER FLAT M12 X 37 X 4
	4581050	6	WASHER SPRING M12
	6151428	6	NUT FLANGED M12
BUFFERS TO BULL BAR	3162470R&L	1 PR	BUFFER SLOTTED RH & LH
	6151128	12	NUT FLANGED M6
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
	6821283	1	LOOM IND RELAY D40S
WINCH TO BULL BAR	3756499	1	CONTROL BOX MOUNT
	EG50	2	RUBBER GROMMET
	6151074	2	BOLT 3/8" x 1 3/4" HEX HEAD
	6151073	2	BOLT 3/8" x 1 1/2" HEX HEAD
	4581040	4	WASHER FLAT M10
	4581048	4	WASHER SPRING M10
	6151022	2	BOLT M8 x 25mm
	6151132	2	NUT FLANGE M8
	4581044	2	WASHER FLAT M8
180302	6	CABLE TIES	
WINCH COVER (NOT FITTING WINCH)	6522720	1	PANEL WINCH COVER
	6151256	2	SCREW M6 X 16MM BUTTON HEAD S/S
	6151128	2	NUT FLANGE M6
	6191006	1	EXTRUSION WINCH COVER
STONE TRAY BRACE TO IMPACT ABSORBERS	4681350	1	BRACE STONE TRAY
	6151022	2	BOLT M8 x 25 mm LONG
	4581044	2	WASHER FLAT M8
	4581046	2	WASHER SPRING M8
	6151132	2	NUT FLANGE M8
	6151300	2	CAGE NUT M6 (LONG LEG)
STONE TRAY TO BULL BAR	6522800	1	STONE TRAY
	6151300	4	CAGE NUT M6 (LONG LEG)
	6151228	2	BOLT M6 x 30 BZ
	6151213	4	BOLT M6 x 20 BZ
	4581082	6	WASHER FLAT M6 x 20 BZ
	4581287	6	WASHER SPRING M6 BZ
	6250003	2	SPACER 8mm
PINNING BOLT HARDWARE	6151303	4	BOLT SEMS M10 x 40 mm LONG
	6151321	4	NUT FLANGE M10
MISCELLANEOUS	180302	12	CABLE TIES
	6191020	2	PINCH WELD 400mm NARROW LONG
	3787023	1	TEMPLATE BUMPER CUT
	3194410	4	PLATE PACKER

PREPARATION TO VEHICLE



1. Remove licence plate from the vehicle and set aside
2. Remove the three plastic scrivenets securing the bumper in the intake area behind the licence plate location
3. Remove the bolts from the spoiler between the lower bumper and sump guard
4. Remove the bolts and screws that attach the lower bumper tabs to the vehicle (refer to attached photo).

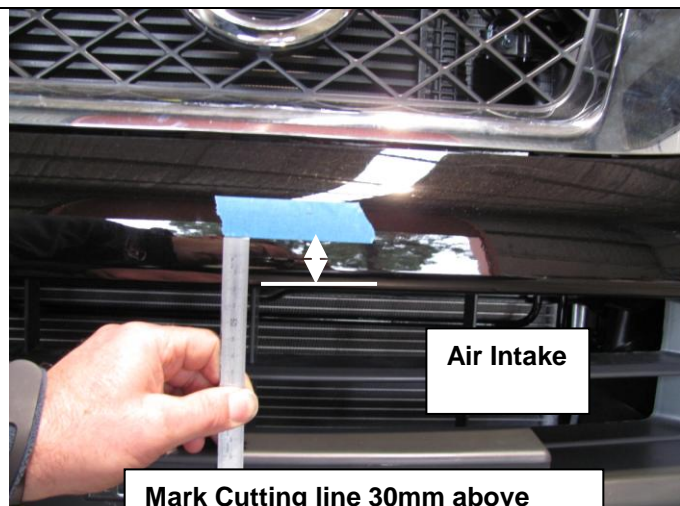


5. Remove the bolts and plastic rivets from the mud guard opening area each side that attaches the bumper bar to the plastic inner guard liner as shown.



6. Cut out the supplied paper template
7. Fit the cutting template as shown, aligning the key reference points with the bumper then tape in position

PREPARATION TO VEHICLE

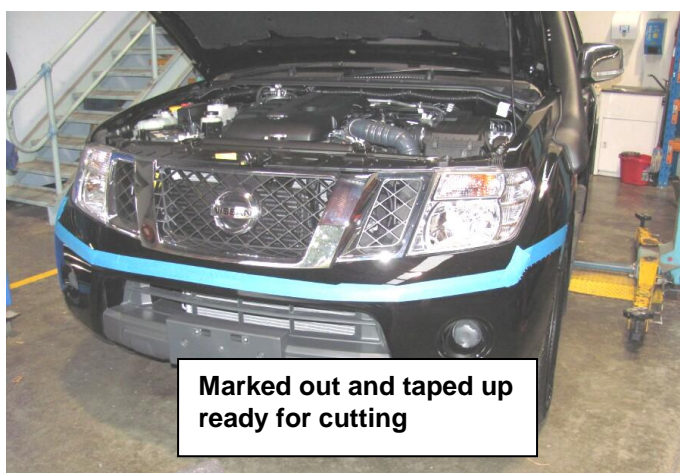


Mark Cutting line 30mm above atop of air intake

8. Mark the cutting line at 30mm above the air intake slot as shown using a marking pen or strip of tape, in a total of three places, at the middle of the opening and at the outer corners. This line is basically horizontal.



9. Mark the cutting line all along the contour edge of the template with a marking pen
10. Remove and reverse then fit the template to the LHS, mark the cutting line once again.



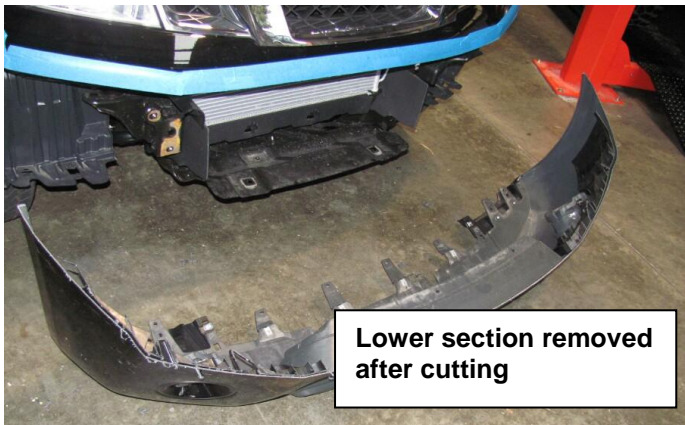
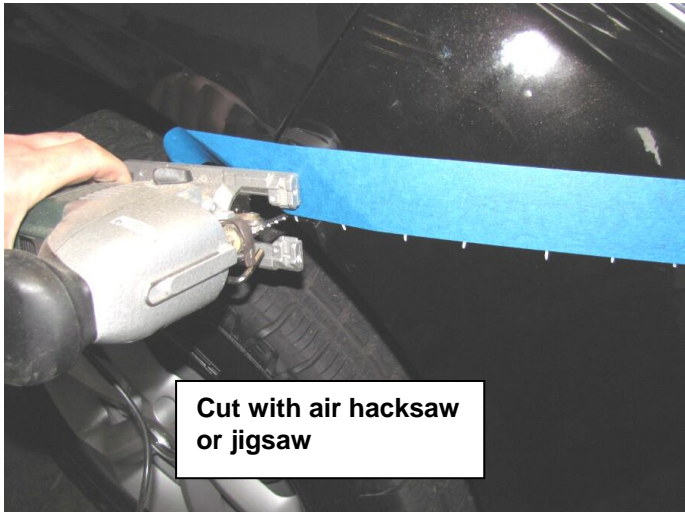
Marked out and taped up ready for cutting

11. Remove the template then mask along the area to be cut using 50 mm masking tape, with the lower edge on the cutting line and the tape as shown to protect the kept surrounding surfaces.



Side on view

PREPARATION TO VEHICLE



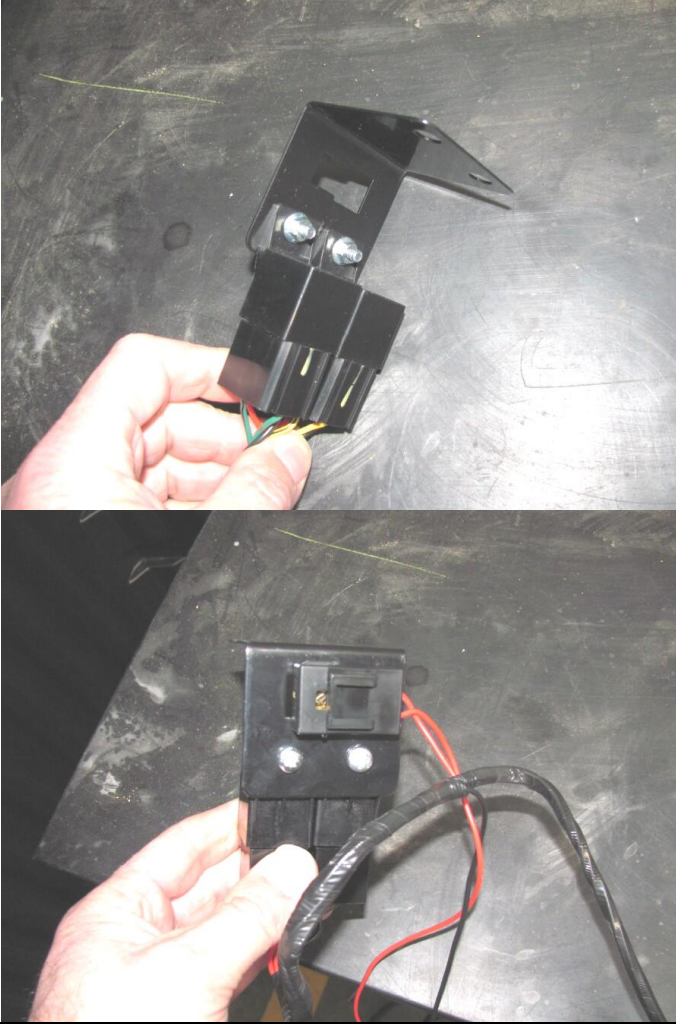
12. Cut from wheel arch area first on each side with the electric jig saw, a second cut may be necessary to fully cut the support structure that sits behind the bumper bar.
13. With the aid of a helper, cut across the front of the bumper, with your helper supporting the lower cut away section and disconnecting the fog lamps as you cut and remove it
14. Clean up the cut edges of the bumper bar with a file or fine sand paper.

15. Starting at the wheel opening end pull the outer bumper outward slightly and slip the trim over the cut edge and work the trim forward.

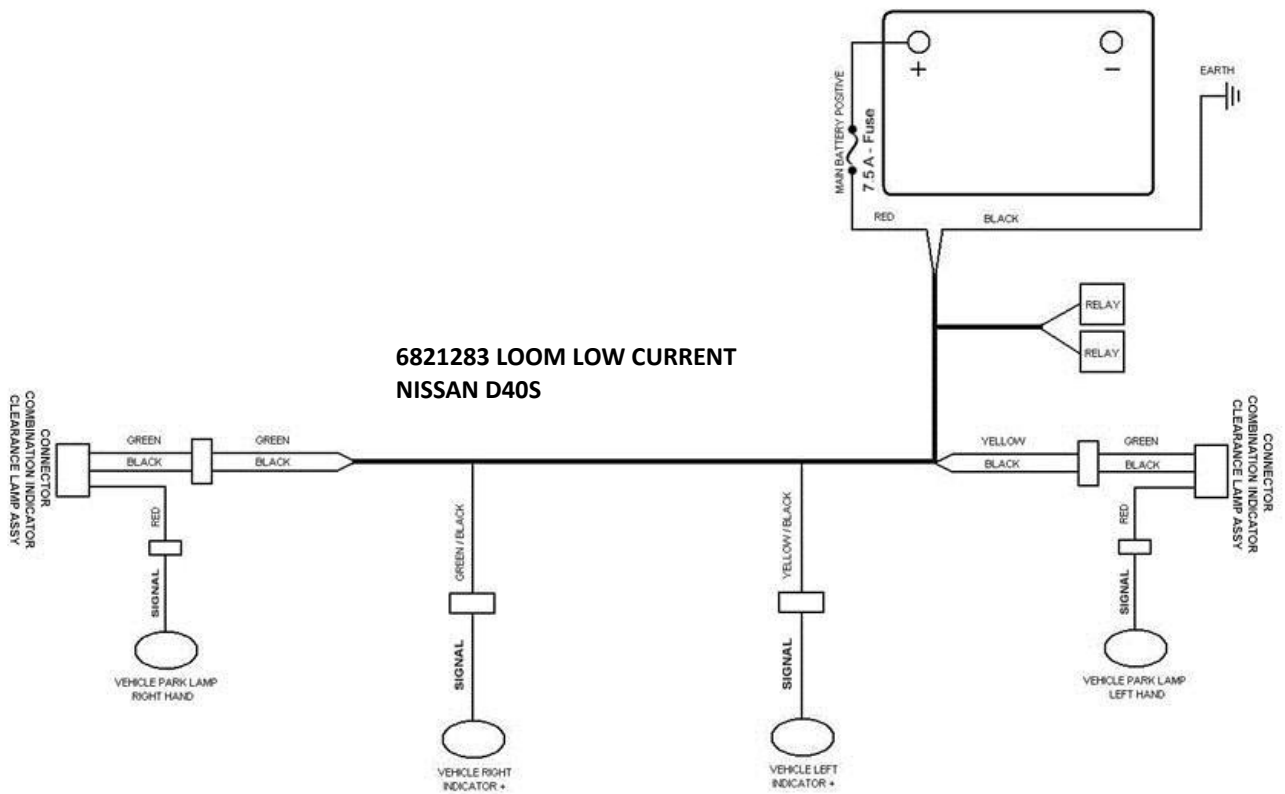
HINT: You can use a flat blade screwdriver to prise the bumper away from the reinforcing structure behind so the trim can be inserted

PREPARATION TO VEHICLE

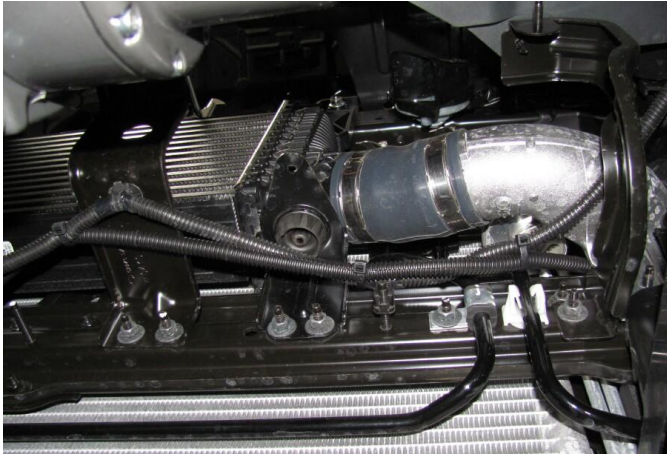
WIRING FOR INDICATORS AND CLEARANCE LAMPS



16. Take the 6821283 supplementary loom and fit the supplied relays in the kit to the supplied bracket in loom fitting kit as shown using the supplied M5 fasteners
17. Then fit the fuse to the front of the bracket using one of the same screws to secure relay



PREPARATION TO VEHICLE



18. Familiarise yourself with the supplied wiring diagram P7
19. Take the relay loom and roughly position in the engine bay, with the loom routed along the cross member in front of the radiator to the LH side of the vehicle and check that all wires will reach the appropriate connections on the vehicles indicator lamp wiring.



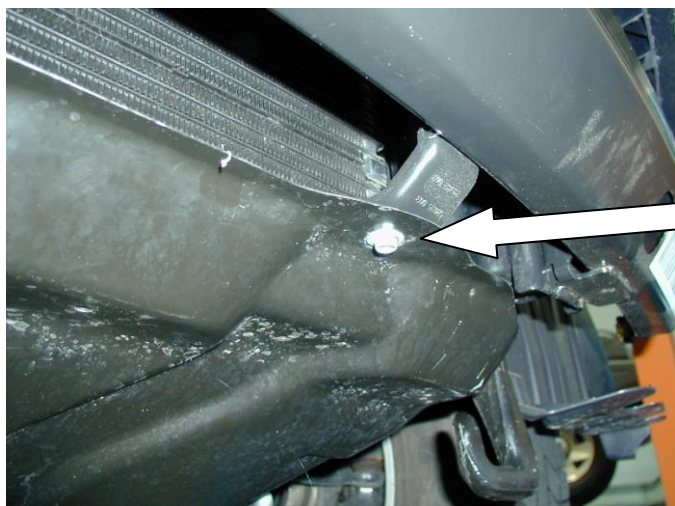
20. Starting with the LH or passenger side of the vehicle, disconnect the indicator and clearance lamps
21. Connect the loom plugs then continue on the RH of vehicle
22. Mount the relay bracket to the RH side of the hood opening as shown.

NOTE: Always mount the relay upright to help prevent water ingress.



23. Run the main black wire to a suitable earth.
24. Connect the main power wire (red) to the positive terminal of the battery. (Main battery if a dual battery system is installed)
25. Using the cable ties supplied, secure the loom each 200mm keeping clear of any hot, sharp or moving surfaces.

PREPARATION TO VEHICLE

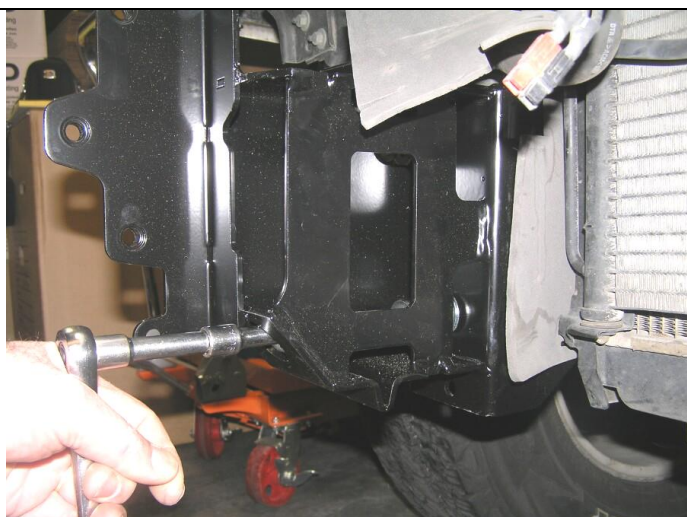


CONTINUE WITH MECHANICAL PREPARATION OF VEHICLE

26. Remove the bolts that hold the factory steel sump guard to the crash beam and loosen the bolts at the rear of the guard



27. The four bolts that hold the bumper reinforcement beam can now be removed and set aside.
28. Remove tow hook and set aside. *Hook will be reused as well as bolt set*



29. Install the impact absorber set (RHS SHOWN)
30. Fasten using 4 x M12 x1.25P(FINE) X 35 bolt, washer and flange nut sets per mount – **LEAVE LOOSE – MOUNT MUST BE ABLE TO MOVE ON ADJUSTMENT SLOTS**
31. If tow bracket is refitted then use original long bolts in place of the supplied M12 x 1.25P(FINE) X 35 long bolts.
32. Fit original tow hook now using original bolts (this side only) – **LEAVE LOOSE**

BULL BAR PREPARATION



33. Fit the buffers to either side of the bull bar using 6 x M6 flange nuts. Do not over tighten.
34. ***Fit M6 cage nuts to four holes in lower pan flange. The nut bodies are inside the bull bar***



IF NOT FITTING A WINCH

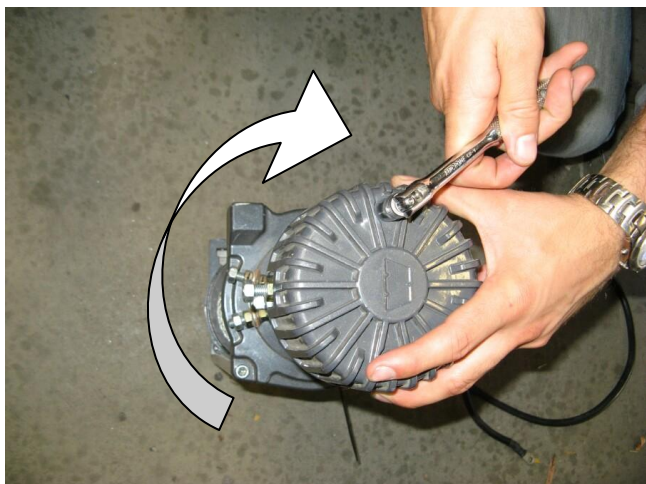
35. Apply rubber mould to edge of winch hole cover panel and trim off excess.



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

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.

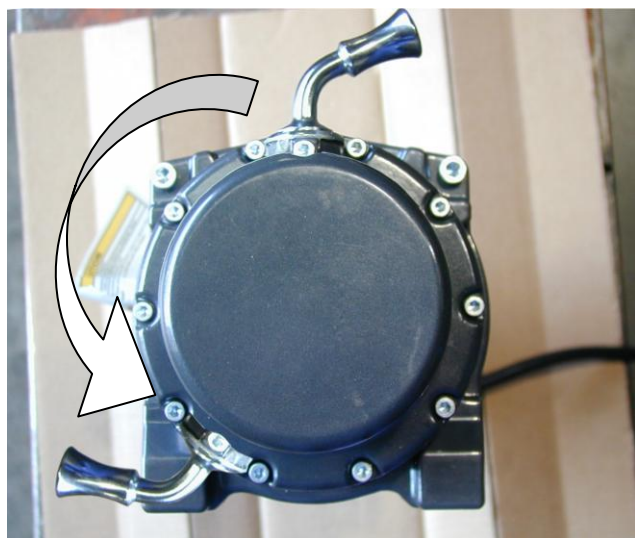
WINCH FITMENT ONLY



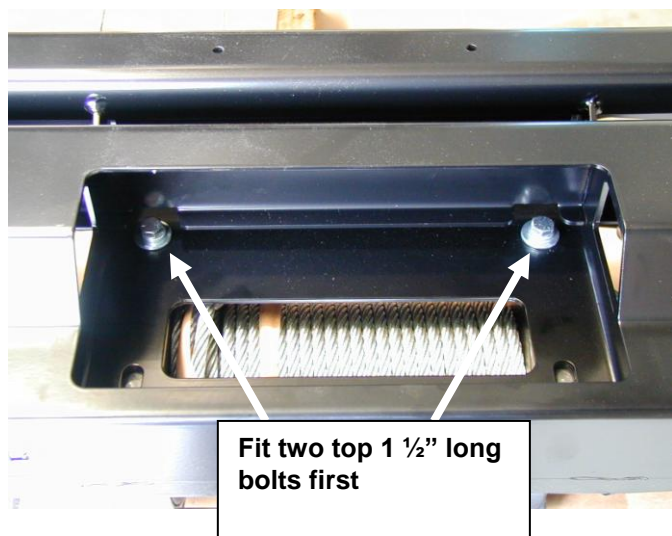
IF FITTING A WINCH

37. Rotate the winch motor 90 degrees as shown, so that the terminals are facing upwards once winch is fitted to bull bar

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



38. Remove the cap head screws retaining the gearbox to the winch drum. Carefully lift the gearbox a small amount (5 mm) and rotate 144 degrees counter clockwise (four hole spacings) and re-fit the cap screws . This places the winch handle in the correct orientation.



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

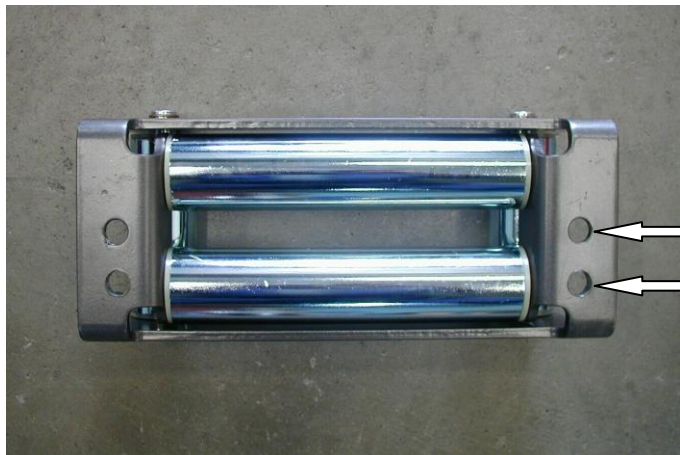
40. Using the two 3/8" x 1 1/2" long bolts, M10 flat and spring washers, attach the bull bar to the winch through the top two bolt holes as shown.



3/8UNC to 44 Nm.

Note: Check rotation of winch handle clears pan, adjust winch height as required

WINCH FITMENT ONLY



41. Using a 12mm drill bit, mark & drill two new holes in the roller fairlead 25mm below the original holes.

Drill the new hole 25mm below



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

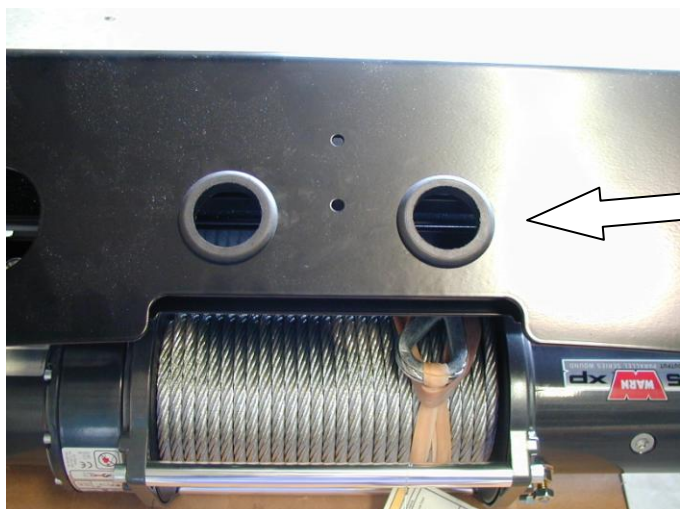


42. Remove the cir clips from the bottom of the vertical rollers of the fairlead and push the pin upwards. Push the vertical rollers inwards on the lower edges as shown and using two 3/8" x 1 3/4" bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and winch.

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



3/8UNC to 44 Nm.



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

WINCH FITMENT ONLY



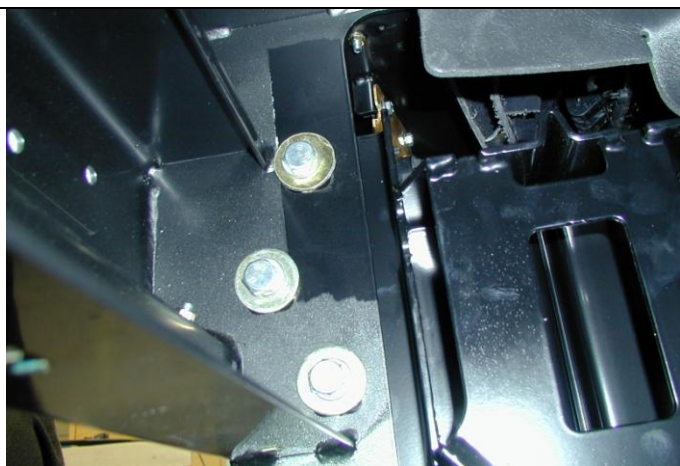
45. Attach the control box to the control box bracket as shown.
46. Fit the control box to the bull bar with two M8 x 25mm bolts, M8 flat washers and M8 flange nuts.

 **M8 to 22 Nm.**



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

BULL BAR FITMENT TO VEHICLE



49. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit inside the impact absorber blades.
50. Adjust the mounts to suit the width of the bar.
51. If there is excessive gapping due to vehicle chassis width use the optional packer plates maximum 2 each side
52. Bolt the bull bar into position using the M12 x 1.75P x 45 bolts, spring washer, large body washer from the inside and flange nuts 3 places outside for each side of bull bar as shown. Nip up the bolts – but allowing for the bull bar to be final adjusted
53. Nip up the bolts to the chassis

BULL BAR FITMENT TO VEHICLE



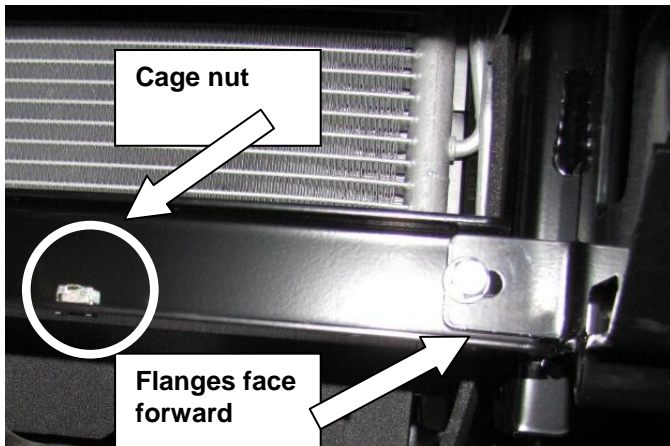
54. Ensure the bull is sitting on the vehicle level and the gap between the bumper bar and the bull bar wing is parallel.

**15 / 18 mm (5/8") GAP
REQUIRED**

55. If the bar is not centred on the vehicle, tap the mount brackets sideways with a soft hammer until the bar is central
56. Once happy with the position of the bull bar and the clearance gap is between 15mm – 18 mm ***tighten all the mount bolts to specified torque***

 **M10 to 44 Nm.**

 **M12 to 77 Nm.**



57. The stone shield cross brace can now be fitted to the flange attached to the impact absorber using an M8 bolt, spring washer, flat washer and M8 flange nut set per side.

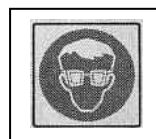
58. Centralise then tighten both sides.

59. Install the two M6 cage nuts (long leg) with the body of the nut facing upward.

 **M8 to 22Nm.**

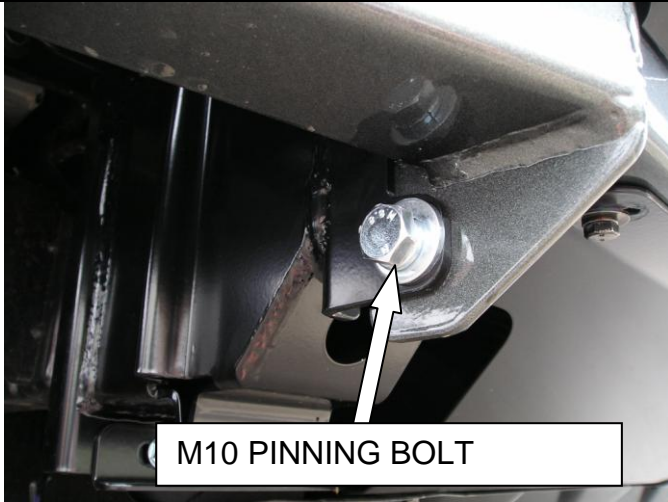


60. Using an electric drill and a 10.0 mm drill bit, drill two pinning bolt holes through the bull bar upright each side using the holes in the mount bracket flanges as a guide. One hole is located in the lower lug of the mount face and one up above the welded nuts. Use access through the light surround opening for the top hole.



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

BULL BAR FITMENT TO VEHICLE



61. Fit the pinning bolts to the bull bar in the drilled positions using 4 x M10 x 1.5P x 40 SEMS bolt and washer sets and M10 flange nuts.

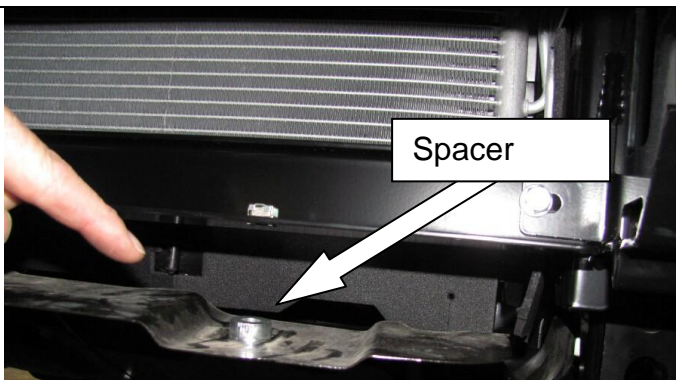
 M10 to 44 Nm.



62. 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.

63. Connect the lamp loom to the small extension loom.

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



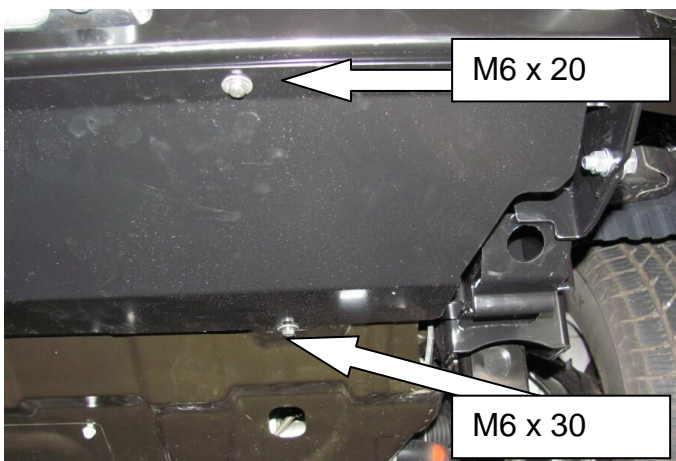
64. Check and adjust the sump guard front mount holes so they line up with the cage nuts

65. Place an 8mm spacer above each of the two front sump guard mount holes as shown

66. Attach the stone tray to the under side of the bull bar with the black M6 x 20 bolts, flat washers & spring washers.

67. Attach the rear of the stone tray with 2 x M6 x 30 bolts and washer sets

 M6 to 7Nm.



BULL BAR FITMENT TO VEHICLE



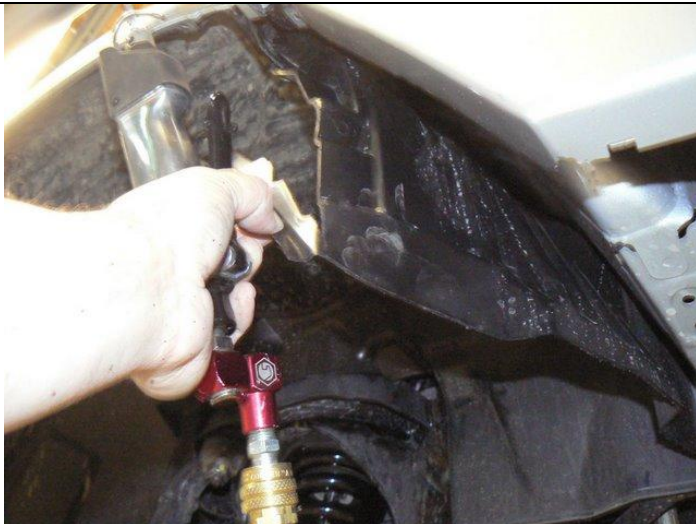
68. The licence plate can now be attached to the bull bar. Insert the two plastic square plugs supplied into the two square holes in the face of the bull bar. The grommets must be oriented so they will engage correctly when the screw is inserted (slits horizontal).

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

70. Using the two pan head screws supplied screw into position firmly.



71. Trim the fender liner horizontally level with the bottom edge of the bull bar wing



72. Trim the fender liner vertical edge so that it has about 20mm (3/4") overlap to clip in behind wing return

BULL BAR FITMENT TO VEHICLE



73. Push the outer edge of the liner forward past the wing return edge so that it snaps in against the wing brace as shown.

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 turn signal lamps are functioning correctly

FITTED PRODUCT

