

Part Number: 3438320 F/Kit 6172684

Product Deluxe Combination Winch and Non Winch Bull Bar

Description:

Suited to Nissan D40 Frontier 09 ON USA Only

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

# **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** 



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

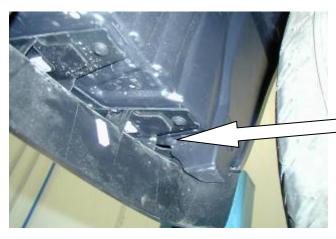
#### NOTE:

- ♦ OPTIONAL FOG LAMPS TO SUIT THIS PRODUCT ARE P#6821201. IF LOOM AND SWITCH REQUIRED USE P#MD02 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	3757756R&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	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		
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		
	3163015	1	COMBINATION LIGHT SURROUND KIT		
	6821151R&L	1 PR	INDICATOR/CLEARANCE LAMP RH/ LH		
LIGHT INSERT AND INDICATORS	6821152	1	LOOM INDICATORS		
	180701	6	SCOTCH LOKS		
	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 ½" HEX HEAD		
	4581040	4	WASHER FLAT M10		
WINCH TO BULL BAR	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		
	6522720	1	PANEL WINCH COVER		
WINCH COVER	6151256	2	SCREW M6 X 16MM BUTTON HEAD S/S		
(NOT FITTING WINCH)	6151128	2	NUT FLANGE M6		
	6191006	1	BRACE STONE TRAY		
STONE TRAY BRACE TO IMPACT ABSORBERS	4681302 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	6522721 6151300	1 4	STONE TRAY CAGE NUT M6 ( LONG LEG )		
	6151213	6	BOLT M6 x 20 BZ		
	4581082	6	WASHER FLAT M6 x 20 BZ		
	4581287	6	WASHER SPRING M6 BZ		
PINNING BOLT HARDWARE	6151357	4	BOLT SEMS M10 x 25 mm LONG		
	6151321 180302	6	NUT FLANGE M10 CABLE TIES		
MISCELLANEOUS	6191020	2	PINCH WELD 400mm NARROW LONG		
	3787023	1	TEMPLATE BUMPER CUT		



- 1. Remove licence plate from the vehicle and set aside
- 2. Remove the three plastic scrivets 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
- Remove the four lower bolts that attach the lower bumper tabs to the vehicle (refer to attached photo). There are also another two self tapping screws in each side, located in a recess in the lower bumper face – these need to be removed.



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



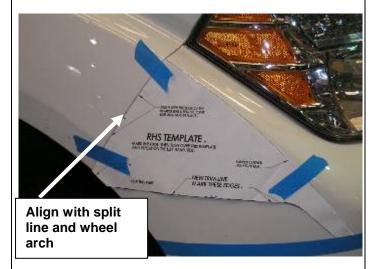
6. Remove the screws securing the fender liners to bumper in the forward wheel arch areas



7. Remove the screws and speed nuts from the bumper on each side in the wheel arch area located vertically above wheel and tire.



- 8. Remove the grille
- 9. Remove the bumper (disconnect fog lamps if fitted)
- 10. With the bumper on a soft non abrasive surface, undo the bolts securing the upper and lower halves then split the bumper and refit only the top section to the vehicle



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



- 13. Mark the cutting line with a marking pen
- 14. Remove and reverse then fit the template to the LHS, mark the cutting line once again.





- 15. Remove the template then mask the area to be cut with 50 mm masking tape to protect the surrounding surfaces.
- 16. 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.
- 17. Clean up the cut edges of the bumper bar with a file or fine sand paper.



18. 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



19. If fitted trim air deflectors both sides as shown at horizontal line with a hacksaw blade or sharp cutting blade and discard the lower section as shown



20. Only if fitted and interfering with mount bracket, remove the bracket holding the power steering pipe



- 21. Mark out a hole 20mm (3/4") up from the original upper hole
- 22. Drill out to same diameter as upper hole as shown
- 23. Then flatten tab.
- 24. Touch up bare surfaces with rust preventing paint.





25. Pull up pipe and refit bracket as shown



- 26. The bumper reinforcement beam is now visible.
- 27. Remove the four bolts that hold the factory steel sump guard, set aside to be fitted once bull bar is fitted.



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



- 30. Install the impact absorber set as shown
- 31. Secure hand tight only, using M12 x1.25 X 35 bolt, washer and flange nut sets.
- 32. Use the original bolts to secure the tow hook if it is to be refitted



- 33. Check the overall width of the mount brackets by measuring the distance inside the faces as shown. The two inside vertical faces should be parallel to each other.
- 34. For reference, the ideal width is 910mm. If the width is over this or well under, adjust the brackets to achieve approximately this width leaving the bolts snugged up, not finish torqued.

# **BULL BAR PREPARATION**



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



# **IF NOT FITTING A WINCH**

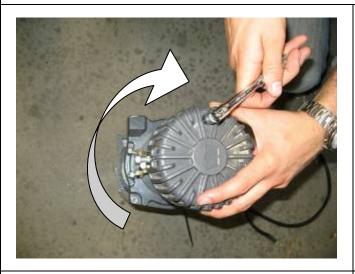
37. Apply rubber mould to edge of winch hole cover panel and trim off excess.



38. 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



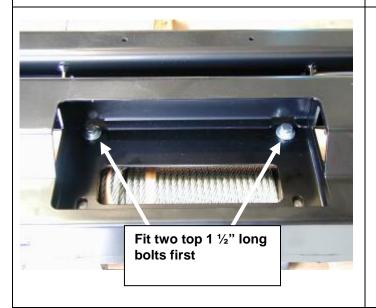
## **IF FITTING A WINCH**

39. 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



40. 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.



- 41. 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.
- 42. 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.

# **WINCH FITMENT ONLY**



43. 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

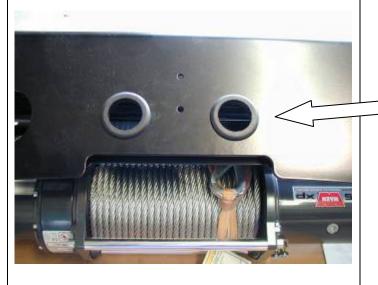




Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

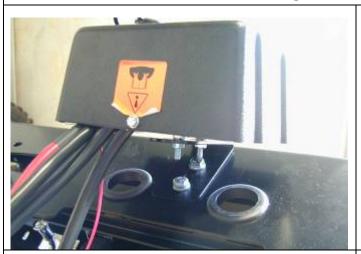


- 44. Remove the cir clips from the bottom of the vertical rollers of the fairlead and push the pin upwards. Push the vertical rollers inwards on the lower edges as shown and using two 3/8" x 1 3/4" bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and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



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

### WINCH FITMENT ONLY

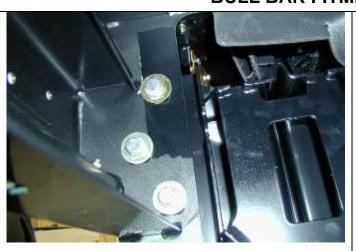


- 47. Attach the control box to the control box bracket as shown.
- 48. Fit the control box to the bull bar with two M8 x 25mm bolts, M8 flat washers and M8 flange nuts.



- 49. Run the cables through the rubber grommets and connect to the winch as per the wiring diagram supplied with the winch.
- 50. 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**



- 51. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit inside the impact absorber blades.
- 52. Bolt the bull bar into position using the M12 bolts, spring washer, large body washer and flange nuts 3 places each side as shown.

  Tighten the bolts firmly but allow enough movement for the bull bar to be adjusted



53. 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

- 54. If the bar is not centred on the vehicle, tap the mount brackets sideways with a soft hammer until the bar is central
- 55. 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



- 56. 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.
- 57. Tighten both sides.
- 58. Install the two M6 cage nuts (long leg) with the body of the nut facing upward.



59. 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.



60. 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.



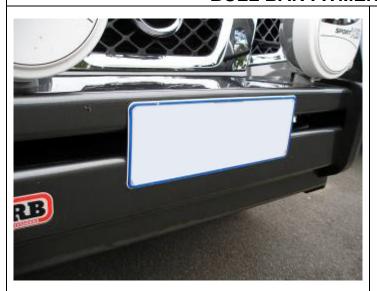
- 61. Assemble and install combination light surrounds (p/n 3163015) as per instructions no. 3786421 supplied with surround kit. Note: Optional fog lamps can be installed at this point as per fitting instruction no. 3783315 supplied with fog lamp kit no. 6821201.
- 62. Wire the combination lamp to the vehicles indicator and clearance lamp wiring.
  Caution: Cable tie all cables together and keep all cables clear of sharp edges and moving parts.

Wiring ARB supplied turn signal: Green wire is Turn signal + (pos) Red is running lamp + (pos) Black is – (neg)

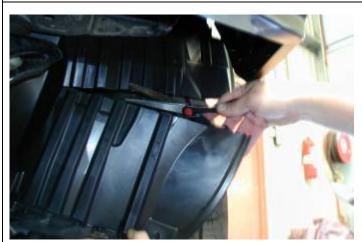


63. Attach the stone tray to the under side of the bull bar with the black M6 bolts, flat washers & spring washers.

There are four bolts in the front edge and two in the back edge.



- 64. 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.
- 65. If winch fitted, position the licence plate as shown fastening 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
- 66. Using the two dome head screws supplied screw into position firmly.



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



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



69. 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

