

ARB FITTING INSTRUCTIONS

LANDROVER DISCOVERY 2003 ON

PRODUCT NUMBER **3932020 SAHARA BAR**
 3032020 SAHARA BUMPER

FITTING KIT NUMBER **6171788**

WARNING

FOR VEHICLES EQUIPPED WITH SRS AIRBAG
WHEN INSTALLED IN ACCORDANCE WITH THESE INSTRUCTIONS, THE FRONT PROTECTION BAR DOES NOT AFFECT OPERATION OF THE SRS AIRBAG.

TAKE NOTE OF THE FOLLOWING:

- **THIS PRODUCT MUST BE INSTALLED EXACTLY AS PER THESE INSTRUCTIONS USING ONLY THE HARDWARE SUPPLIED.**
- **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.**

If you have any queries regarding the installation of this product please contact the distributor from whom it was purchased, or alternatively the ARB office in your state.
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USE	PART No	QTY	DESCRIPTION
MOUNTING SYSTEM	3756531	1 PAIR	BRACKET MOUNT
	6151106	4	BOLT ½" x 5" UNC
	4581049	8	WASHER FLAT ½"
	4581050	4	WASHER SPRING ½"
	6151138	4	NUT ½" UNC
	6151243	4	BOLT M10 x 130 X X1.5
	4581040	8	WASHER M10 FLAT
	4581048	4	WASHER SPRING M10
	6151026	6	NUT M10 x 1.5
	5846402	1 PAIR	PACKERS L/RHS
BAR TO MOUNTING SYSTEM	6151232	10	BOLT M10 x 30 x 1.5mm
	4581048	10	WASHER SPRING M10
	4581040	12	WASHER FLAT M10
	6151026	2	NUT M10 x 1.5
NUMBER PLATE	6151017	4	BOLT M6 x 16mm
	37651313	1	BRACKET NUMBER PLATE
	6151046	4	WASHER FLAT M6
	6151128	4	NUT FLANGE M6
BUFFER KIT	3162469 L/R	1 PAIR	BUFFERS L/RHS SAHARA BAR
	316	1 PAIR	BUFFERS L/RHS SAHARA BUMPER
	4581072	12	WASHERS FLAT LARGE
	6151162	12	NUT NYLOC M6
INDICATOR & FOG LIGHT	6821151 L/R	1	ARB INDICATOR KIT
	3756563 L/R	1 PAIR	BRKT FOG LIGHT
	6151017	4	BOLT M6 x 16mm
	4581072	4	WASHER FLAT M6
	5848283	2	PACKERS PLASTIC FOG LIGHT SPACERS
	180302	12	BLACK CABLE TIES
	PT003-12B	6	SCREW COVER (FOG LAMP)
	6151308	10	SCREW SELF TAPPING (TURN & FOG)
	6821116	4	NYLON PLUG (TURN SIGNAL BRACKET)
	6821152	2	WIRING LOOM (TURN SIGNAL)
	6151309	6	CAPTIVE U TYPE - CLIP
	6151315	4	CAGE NUT M6
	4581036	4	WASHER SPRING M6
180701	6	SCOTCH LOKS	
MAIN CENTRE FRAME (SAHARA BAR ONLY)	6131174	1	FRAME CENTRE CHROME
	6151255	2	BOLT M12 x 40
	4581049	2	WASHER FLAT M12
	4581050	2	WASHER SPRING M12
COVER FOR NON WINCH BAR	6521031	1	PANEL WINCH COVER
	6151256	2	SCREW M6 S/STEEL BUTTON HEAD
	4581304	2	WASHER FLAT M6 S/S
	6151128	2	NUT FLANGE M6
	6191005	1	WINCH COVER EXTRUSION
UNDER GUARD TRIM TO BAR	6151180	2	BOLT M6 x 20
	4581084	2	WASHER BODY FLAT M6
	6151128	2	NUT FLANGE M6

PARTS BELOW TO BE USED IN A WINCH BAR

8-9000lb WINCH	4581040	4	WASHER FLAT M10
	6151074	2	BOLT 1 ¾" x 3/8" UNC
	180302	8	CABLE TIES
CONTROL BOX BRACKET	6151021	2	BOLT M8 x 20mm
	4581044	2	WASHER FLAT M8
	3756209	1	CONTROL BOX BRACKET
	6151132	2	NUT FLANGE M8

TOOLS REQUIRED.

BASIC TOOL KIT, DRILL, 10MM DRILL BIT (180mm long) STANLEY KNIFE AND A METRIC TAPE.

ASSEMBLY SEQUENCE .

PLEASE READ AND UNDERSTAND FITTING INSTRUCTIONS BEFORE ATTEMPTING TO FIT BAR TO VEHICLE



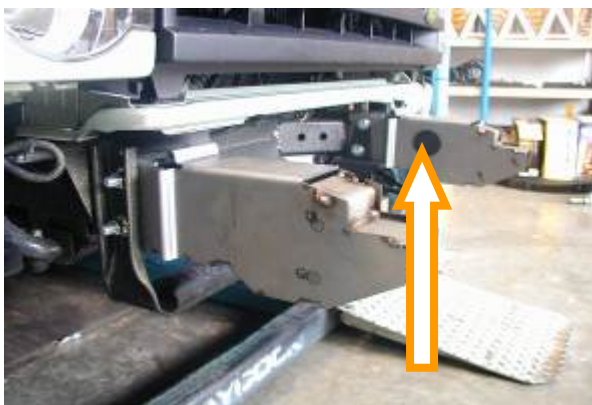
1. To remove the bumper bar from the vehicle undo the 7 screws that hold the plastic guard liner to the bumper bar on each side. Undo the four nuts that hold the bumper to the aluminum brackets and loosen the two nuts located on the inside out board face. Disconnect the fog lamp harness from both lamps and with assistance pull the bumper bar forward enough to disconnect the head lamp washers.



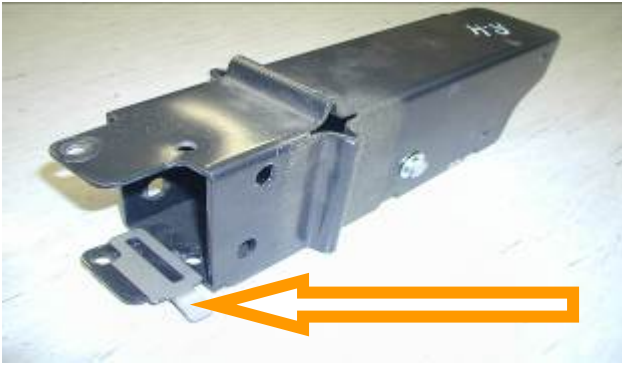
- 2 Remove the aluminum chassis extension brackets from both sides. Remove the tubular cross brace and the recovery bracket. Both are refitted at a later stage. Undo the 5 screws that hold the plastic air shield in place and with a small flat blade screw driver remove the two yellow plugs from the under side of the chassis rails.



3. Drill holes out to 1/2" through chassis rails and tow hook.
4. Fit the new impact absorbers to both the LH & RH chassis rails. Note that the smooth face faces outwards with hole on the inside. Using the 1/2" hardware supplied, bolt the RH impact absorber into position. At this stage only the two horizontal bolts are fitted, repeat this on the LH side using the 1/2" hardware supplied.



5. Once the impact absorbers are sitting horizontal and at the same height tighten both bolts. The holes in the impact absorber bottom bracket should line up with the square holes in the chassis. Before drilling the vertical pinning bolts measure the distance between the two out side edges of the impact absorber – making sure the measurement is no larger than 807 mm (loosen bolts and adjust if necessary).



6. When drilling the vertical pinning bolt **THE DRILL MUST BE STRAIGHT IN BOTH DIRECTIONS**. Failure to do so will result in damage to the radiator mounting system. Drill out both holes and assemble using the long M10 bolts and hardware supplied. From the out board side of the chassis insert the chassis packers between the under side of the chassis and the impact absorber with the finger tab facing downward. Repeat this on the LHS.

This picture shows how to fit chassis packer in between chassis bracket and chassis rail.

Picture is of RHS of vehicle

7. The plastic air shield needs to be trimmed before being replaced, cut the holes (located on the edge tabs) into an open ended slot. Place the shield back into its original position and screw across the back edge in 3 locations. The edge tabs are now pushed in on top of the spacer, the tabs are retained when the vertical bolts are done up between the chassis and the chassis spacer.

Re – confirm the measurement between the impact absorbers and tighten all of the vertical bolts.



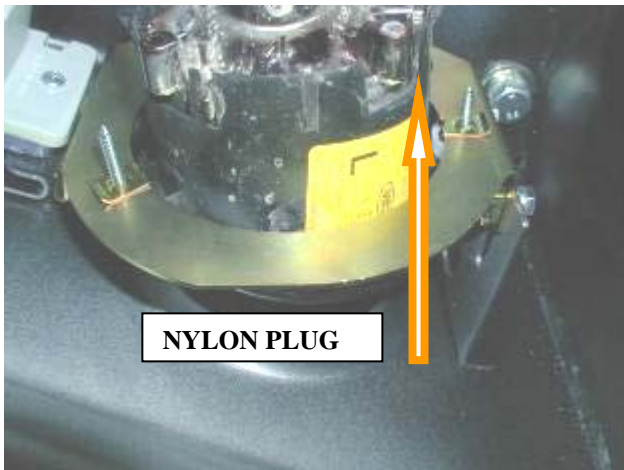
8. Remove the horizontal bolts only, as previously described in step 3. Re – assemble but this time the tubular cross brace and the original recovery point are attached.

Note: the recovery bracket is located to the left hand chassis rail.



9. Placing the original bumper bar face down on a blanket remove all of the screws that hold the painted outer section to the main bumper. Using pliers remove the clip that holds the washer nozzle in the bumper and take out the nozzle (both sides). These are re-fitted into the bar once the fog lamp and turn signal are installed.

Using a small flat bladed screw driver dis-engage the locking tabs on both sides and remove the cover, this will enable the fog lamp to be un-screwed in three places and removed.

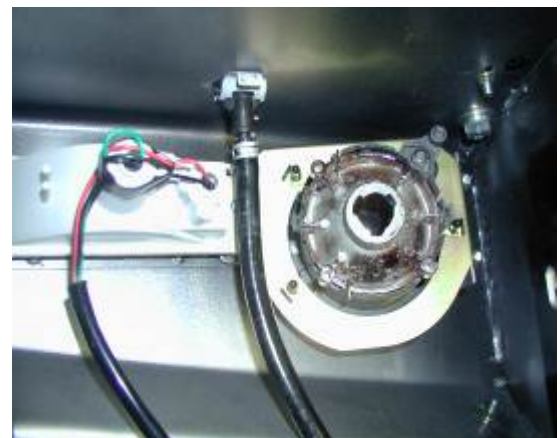


10. Fit the “u” nuts to the fog lamp bracket as shown, the nylon washer fits between the bracket and the lamp mounting foot (located on the adjustment side) fit the fog lamp with the screws provided.

Note:- The Left hand fog lamp is shown.

Insert the nylon plugs into the square holes in the turn signal aperture, located on the inside face of the bar. From the rear, screw the turn signal assembly to the bracket on the bar.

Re-fit the washer nozzle both sides once the fog lamp & turn signal are fitted. The washer retaining clip may need to be flattened slightly to fit.





IF NOT FITTING WINCH

11. Wrap rubber extrusion around winch cover.
12. Place stainless steel washers over the winch cover fixing holes located on the top middle face of the bar.
13. Place the winch cover on top of the bar inline with the mount holes.

Bolt together using the M6 button head stainless steel screws and M6 nuts.



14. Fit buffers to bar using 6mm hardware.

IMPORTANT

1. Sahara Bumper has no large top hole
2. If fitting Sahara Bumper go to step 16



15. Fit the chrome tube through the hole in the top of the buffer and secure from underneath using M12 x 40mm bolt, spring washer and flat washer.

NOTE This step for Sahara Bar only

NOTE:

Torque these M12 fasteners to 44Nm only (Critical)



TO FIT WINCH INTO BAR

16. If vehicle is to be fitted with a winch, follow the next steps.

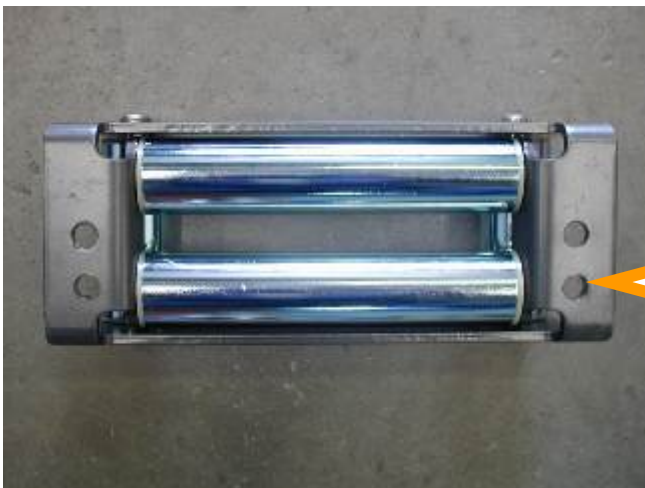
Handle is in normal position



17. Rotate handle 144° counter clockwise.
18. Stand winch upright and undo the capped head screws and by lifting the gearbox only a couple of millimetres, rotate the gearbox. Once in position, refit all screws and tighten firmly.

WARNING

Do not lift gear box more than a couple of millimetres.



19. Drill out roller fairlead 25mm lower than original hole using a 12mm drill bit.

NEW HOLES



20. Fit control box bracket to bar using 8mm hardware.



21. Fit winch into bar using 1 1/2" x 3/8" bolt on top holes and 1 3/4" x 3/8" bolt on the lower holes plus 25mm large flat washers and spring washers.



Cable spools from bottom of winch.

When fitting roller fairlead to bar, remove circlips and push vertical pins upward to move the vertical rollers sideways to enable you to place a socket to the bolt. When all bolts are fitted replace vertical pins and circlips.





- 22. Fit control box to bracket and connect all power cables to winch motor as per warn instructions.**
- 23. Connect ground wire to winch tension bar.**

- 24. Cable tie all cables together and keep clear of sharp edges and all moving parts.**

When bar is fitted to vehicle, fit both power cables to battery and cable tie to vehicle keeping clear of all moving parts.



- 25. With assistance lift the bar into position and slide it over the two impact absorbers. Once in position bolt up the bar in the 8 places using the M10 bolts & hardware supplied, finger tight only at this stage.**

Adjust the bar on the vehicle until a uniform gap is achieved to the grille & headlamp and guards. Once happy with the position of the bar tighten all of the bolts.

The bar is then drilled and pined in its final position using the M10 hardware supplied as shown in the attached photo.



- 26. Re-connect the fog lamp harness and the turn signal harness on both sides of the vehicle, cable tie the wiring where appropriate.**

Ensure the turn signal & fog lamps are working correctly.

Reconnect the head lamp washer tubes on both sides.





27. Trim the plastic inner guard liners by aligning with the bar and using the hole in the wing as a guide, drill a 6 mm hole and secure with the M6 hardware supplied



28. Fit number plate to number plate bracket using 6mm hardware in this position. Place double sided tape on rear of number Plate to stop any vibration.



29. Fit number plate to bar using 6mm hardware using the outer holes of number plate. Place double sided tape on rear of number Plate to stop any vibration.

