



FITTING INSTRUCTIONS

**ARB DELUXE BULL BAR TO SUIT
LAND ROVER DISCOVERY 1999 On**

No 32/3432060

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.

BULL BAR FITTING KIT No 6171306/07

USE	PART No	QTY	DESCRIPTION
IMPACT ABSORBER TO BULL BAR	3751759	1	IMPACT ABSORBER LHS
	3751761	1	IMPACT ABSORBER RHS
	6151045	8	M10 25mm BOLT
	4581048	8	M10 SPRING WASHER
	4581041	8	7/16" FLAT WASHER
IMPACT ABSORBERS TO CHASSIS	6151243	2	M10 X 130mm BOLT
	6151026	2	M10 NUT
	4581048	2	M10 SPRING WASHER
	6151081	4	7/16 X 4.5" BOLT
	6151124	4	7/16" NUT
	4581042	4	7/16" SPRING WASHER
	4581041	12	7/16" FLAT WASHER
NUMBER PLATE TO BULL BAR	6151017	2	M6 x 16mm BOLT
	6151046	2	M6 FLAT WASHER
	6151128	2	M6 FLANGE NUT
WING RETURN TO UNDER-GUARD PLASTIC TRIM	6151180	2	M6 x 20mm BOLT
	6151046	2	M6 FLAT WASHER
	6151128	2	M6 FLANGE NUT
	3500200	1	BUFFER KIT
	3500080	1	ARB INDICATOR KIT (CONTAINS LEFT AND RIGHT)
	180302	8	CABLE TIE

FOR THE WINCH BULL BARS ONLY

USE	PART No	QTY	DESCRIPTION
8-9000lb WINCH 10-12,000lb WINCH	4581041	8	7/16" FLAT WASHER
CONTROL BOX BRACKET TO BULL BAR	3751694	1	CONTROL BOX BRACKET
	6151021	2	M8 X 20mm BOLT
	6151132	2	M8 FLANGE NUT
	4581044	2	M8 FLAT WASHER
CONTROL BOX BRACKET TO BULL BAR FOR THE 10,000 AND 12,000 LB WINCH	6151068	2	1/4" X 1" BOLT
	6151118	4	1/4" NUT
	4581035	4	M6 FLAT WASHER
	BLB560	2	BATTERY LEAD BLACK
	BLR560	1	BATTERY LEAD RED
LOCKING BOLT HARDWARE	6151045	2	M10 25mm BOLT
	4581048	2	M10 SPRING WASHER
	4581041	4	7/16" FLAT WASHER
	6151026	2	M10 NUT

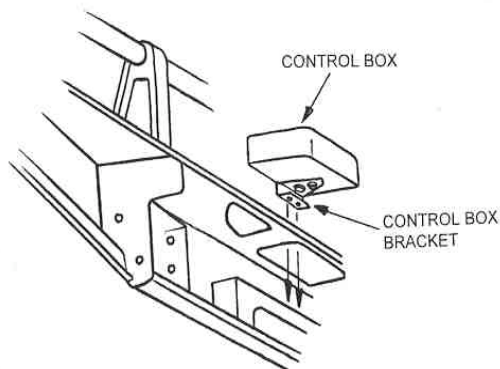
TOOLS REQUIRED

Basic tool kit, level, tape measure, drill, 6mm and 10mm drill bits.

FITTING PROCEDURE

1. Undo the fasteners retaining the bumper bar and aluminum chassis extensions and slide forward sufficient to disconnect the headlight washer hose at the washer bottle, then remove the bumper bar.
2. Remove the headlight washers and hose from the bumper bar and fit to the bull bar. Make sure the tubing is fed through the bull bar then cable tie in place.
3. Fit the turn signal indicators supplied into the bull bar. NOTE: Refer to the instructions supplied with the turn signal indicator kit.
4. **WINCH BARS: FITTING THE 8 OR 9,000lb WINCH**
 - A. Fit the control box to the control box bracket using the two 1/4" nuts, washers and spring washers. Bolt the control box bracket to the bull bar using the M8 x 20mm bolts, flat washers and flange nuts supplied. Refer to Diagram 1.

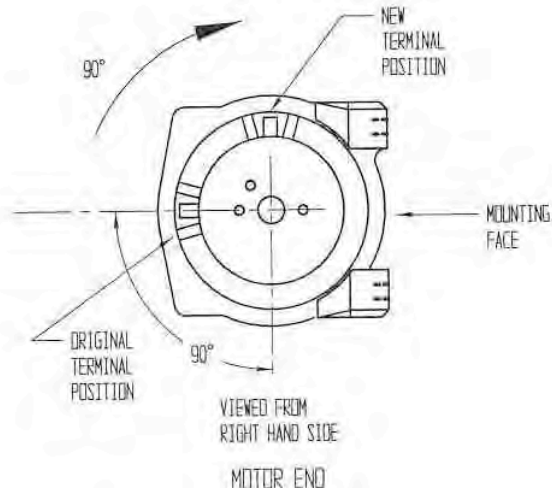
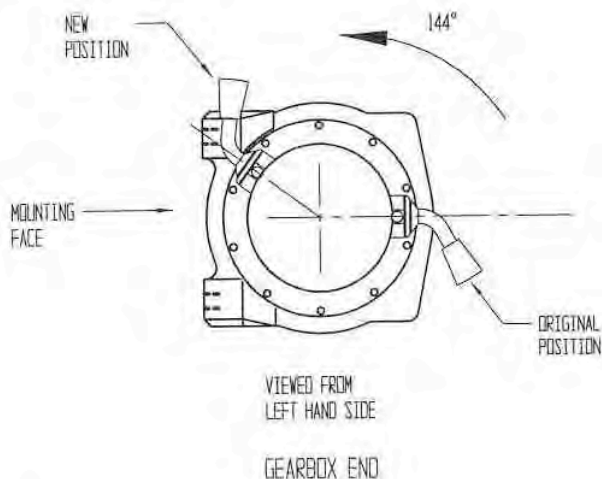
DIAGRAM 1



- B. To place the winch clutch handle in a convenient location, the winch gearbox must be rotated 2 hole spacings, 144 degrees, in an anti clockwise direction when viewed from the gearbox end. Place the winch on its end and remove all gearbox bolts. Gently raise the gearbox just enough to rotate it. Do not completely remove the gearbox and avoid damaging the gasket. Refit all bolts and tighten. Refer to Diagram 2A.

DIAGRAM 2A

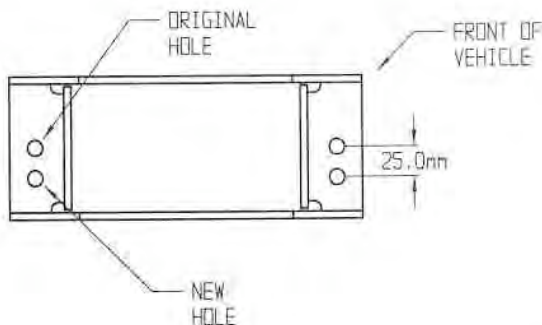
DIAGRAM 2B



- C. To place the winch motor in the correct location, the winch motor must be rotated 90 degrees, in a clockwise direction when viewed from the motor end. Place the winch on its end and remove the 2 motor retaining bolts. Gently raise the motor just enough to rotate it. Do not completely remove the motor and avoid damaging the gasket. Refit all bolts and tighten. Refer to Diagram 2B.

- D. Drill the roller fairlead as shown in Diagram 3 then assemble into the front of the bull bar. Lift the winch into place and using the 3/8" washers supplied in the fitting kit and the bolts and spring washers supplied with the winch, bolt securely into position. NOTE: The gearbox is on the LHS. The winch cable spools from the bottom.

DIAGRAM 3



5. WINCH BARS: FITTING THE 10,000lb WINCH

- A. Remove the cover of the control box, disconnect the two heavy short black cables and the heavy short red cable and replace with the corresponding cables supplied. Insert the two 1/4" x 1" bolts into the base of the control box and fix in place with 1/4" nuts, flat washers and spring washers. Replace the cover, then fit the control box to the control box bracket using the two 1/4" nuts, washers and spring washers. Then bolt the control box bracket to the bull bar using the M8 x 20mm bolts, flat washers and flange nuts supplied. Refer to Diagram 1.
- B. To place the winch clutch handle in a convenient location, the winch gearbox must be rotated 1 hole spacing, 72 degrees, in a clockwise direction when viewed from the gearbox end. Place the winch on its end and remove all gearbox bolts. Gently raise the gearbox just enough to rotate it. Do not completely remove the gearbox and avoid damaging the gasket. Refit all bolts and tighten. Refer to Diagram 2C.
- C. To place the winch motor in the correct location, the winch motor must be rotated 180 degrees. Place the winch on its end and remove the 2 motor retaining bolts. Gently raise the motor just enough to rotate it. Do not completely remove the motor and avoid damaging the gasket. Refit all bolts and tighten. Refer to Diagram 2D.

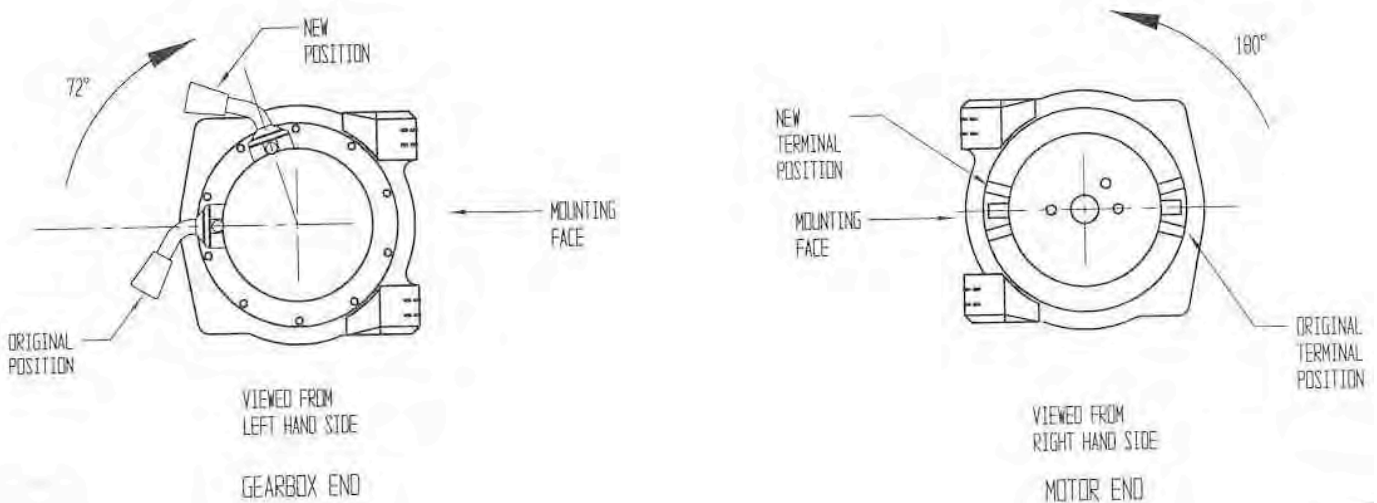
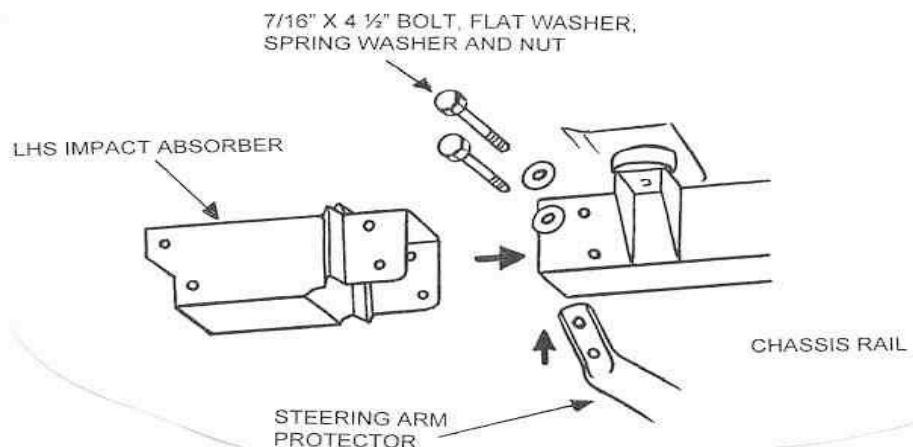


DIAGRAM 2D

- D. Drill the roller fairlead as shown in Diagram 3 then assemble into the front of the bull bar.(When fitting 10.000 lb winch to bar, fit chassis brackets to bar first and finger tighten.) Lift the winch into place and using the 7/16" washers supplied in the fitting kit and the bolts and spring washers supplied with the winch, bolt securely into position. NOTE: The gearbox is on the RHS. The winch cable spools from the bottom.

6. Attach the number plate to the front of the bull bar using the two M6 x 16mm bolts, flat washers and flange nuts supplied.
7. Fit the rubber buffers supplied to the bull bar using the M8 flange nuts supplied in the fitting kit.
8. Slide the two Impact Absorbers over the chassis rails making sure the LH Impact Absorber is fitted to the LH side and the RH Impact Absorber is fitted to the RH side. Position the original recovery hook and steering arm protector and loosely bolt in place using the four 7/16" x 4 1/2" bolts, flat washers, spring washers and nuts. Level the impact absorbers and securely tighten the bolts. Refer to Diagram 4.

DIAGRAM 4



9. Using a 10mm drill and working from underneath the car drill a hole through the underside and top of the chassis as shown in Diagram 5. Fit the M10 x 130mm bolt, flat washers, spring washer and nut and securely fasten.
10. **WINCH BARS ONLY:** Wire the winch in accordance with the Warn fitting instructions, taking care not to route the cables over sharp edges. Tie the cables from the control box to the channel winch mount assembly using the cable tie supplied.

BULL BAR TO VEHICLE FITMENT:

11. Lift the bull bar into place and loosely bolt to the two Impact Absorbers using the M10 x 25mm bolts, (4 per side) washers and spring washers. Refer to Diagram 5.

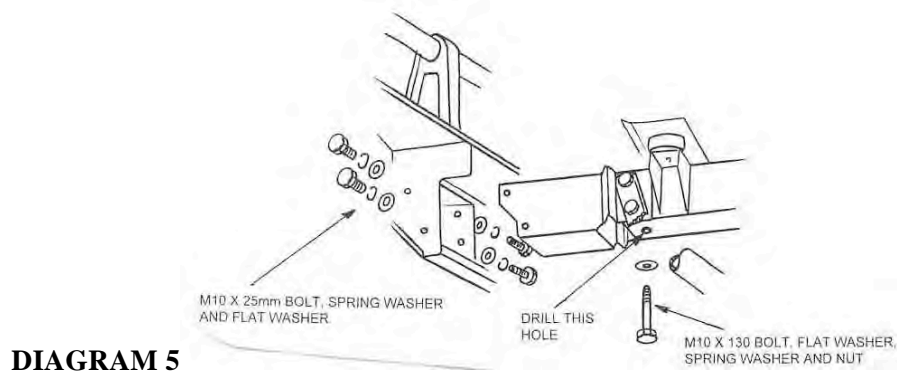


DIAGRAM 5

12. Adjust the bull bar until a uniform gap is achieved to the mud guards and grill. Securely tighten all bolts.
13. Using 10mm hole on rear of upright as template, drill 10mm hole through chassis bracket and secure with 10mm hardware. This locks bull bar to chassis bracket.
14. Connect the windscreen washer hose to the washer bottle.
15. Connect the bull bar turn signal indicator looms to the existing turn signal indicator loom with the Scotchlocks supplied and test to ensure they function correctly.
16. Trim the plastic inner guard to align with the bull bar and using the hole in the bull bar wing as a guide, drill a 6mm hole in the plastic inner guard and secure with an M6 x 16 bolt and flange nut.