

# **ARB WINCH/NONWINCH BULLBAR TO SUIT HJ100 LIVE AXLE (suits October 2002 on)**

**PRODUCT No. 32 / 3413110**

## **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.**
- **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.**

USE	PART No	QTY	DESCRIPTION
MOUNT BRACKETS TO VEHICLE	6151094	4	BOLT M12 X 30mm
	6151097	4	BOLT M12 X 50mm
	4581049	8	WASHER FLAT M12
	4581050	8	WASHER SPRING M12
	5846222	2	PACKER
	3756541	1 PAIR	BRACKETS IMPACT ABSORBER L/RHS
	6151087	4	BOLT M10 X 25mm
	4581040	4	WASHER FLAT M10
	4581048	4	WASHER SPRING M10
BULLBAR TO MOUNT ASSY	6151232	8	BOLT M10 X 30X 1.5
	4581288	6	WASHER FLAT M10 LARGE
	4581040	4	WASHER M10 FLAT
	4581048	8	WASHER M10 SPRING
	6151026	2	NUT M10
	6151304	6	NUT M10 CAGED
WINCH 8/9000/10,000 LB	4581040	4	WASHER FLAT 3/8"
	6151074	2	BOLT 3/8" X 1 3/4"
	4581041	4	WASHER FLAT 7/16"
NUMBER PLATE	6151180	2	BOLT M6 X 20
	6151046	2	WASHER FLAT M6
	6151128	2	NUT FLANGE M6
CONTROL BOX	3751564	1	CONTROL BOX BRACKET
	6151021	2	BOLT M8 X 20MM
	6151132	2	NUT FLANGE M8
	4581044	2	WASHER M8
INDICATOR	3500080	1	ARB INDICATOR KIT
WINCH CABLES	BLB560	2	BLACK CABLE
	BLR 560	1	RED CABLE
CABLE TIES	180302	8	CABLE TIES
AIR DEFLECTOR	3314518	1	AIR DEFLECTOR
	6151300	4	NUT M6 CAGED
	6151180	4	BOLT M6 X 20
	6151046	4	WASHER FLAT
	4581036	4	WASHER SPRING
	6151021	2	BOLT M8 X 20MM
	6151132	2	NUT FLANGE M8
	4581044	2	WASHER M8
TURBO DIESEL MODEL FIT KIT 6171795	3314506	1	PAN COVER INTERCOOLER
	6151128	3	NUT FLANGE M6
	6151180	3	BOLT M6 X 20
	6151046	3	WASHER FLAT M6

### **Tools Required**

**10mm, 14mm, 13mm 18mm, 19mm, 22mm Spanners and Sockets. Phillips head screwdriver, drill & 10mm drill bit and a hacksaw or angle grinder and 50mm, 100m 1/2" socket extension.**

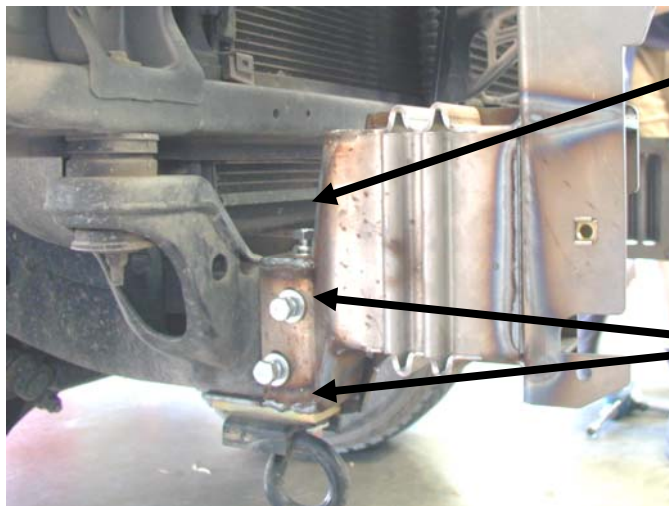


1. Remove the bumper bar and grille from vehicle.
2. Remove the cross member bracket and tow brackets and tie downs.



3. Fit chassis brackets to vehicle and secure as follows.
4. On RHS and LHS of vehicle, refit original tow hooks to vehicle fitting spacer in between chassis brackets and tow hooks, secure using 50mm x 12mm bolts, spring and flat washers.

RHS SHOWN



5. Fit M12 x 30mm bolt and 12 mm hardware to top of bracket.
6. Fit M10 x 25mm x 1.25mm to side of bracket. (Fine Thread bolts)







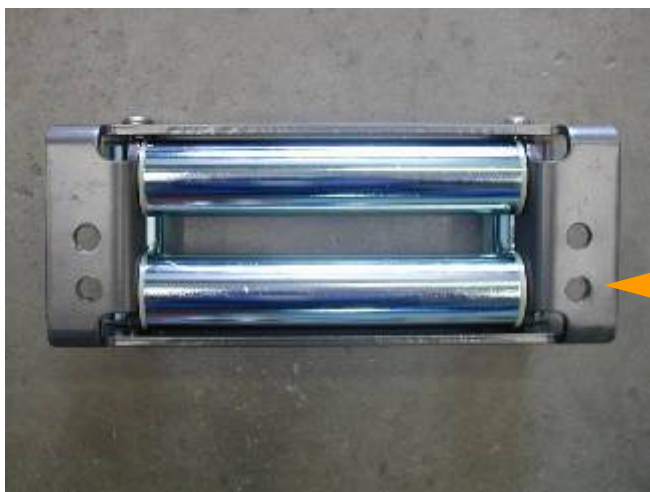
**7. Fit M12 x 30mm bolt and 12mm hardware to inside of chassis bracket.**



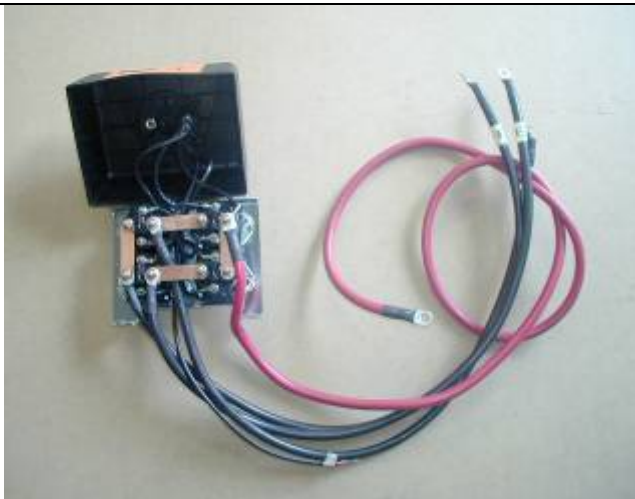
**8. Before tightening, position the chassis brackets to achieve outside measurement of 845mm,  $\pm 1$ mm.**



**9. Fit M10mm caged nuts into inside face of chassis brackets. (3 per side)**

 	<div>ORIGINAL</div> <div>VIEWS FROM LHS OF VEHICLE</div> <div>ROTATED</div>	<p><b>TO FIT A WINCH BAR.</b></p> <p><b>10.</b>To fit a 8/9/9.5/000lb winch, rotate gearbox 144° counterclockwise.</p> <p><b>11.</b>Stand winch upright and undo the capped head screws and by lifting the gearbox only a couple of millimeters, rotate the gearbox. Once in position, refit all screws and tighten firmly.</p> <p><b>WARNING</b> Do not lift gear box more than a couple of millimeters.</p>
 	<div>ORIGINAL</div> <div>VIEWS FROM RHS OF VEHICLE</div> <div>ROTATED</div>	<p><b>12.</b> To fit a 10/12000 winch, rotate gearbox 72° clockwise. Both winches are viewed from gearbox end and cable spools from the bottom of both winches.</p>
		<p><b>13.</b> Drill out roller fairlead 25mm lower than original hole using a 12mm drill bit.</p> <p><b>14.</b> 8/9000lb winches use top holes when fitted to bar</p> <div><div>New holes</div></div> <p><b>15.</b> 10/12000lb winches use lower holes when fitted to bar</p>

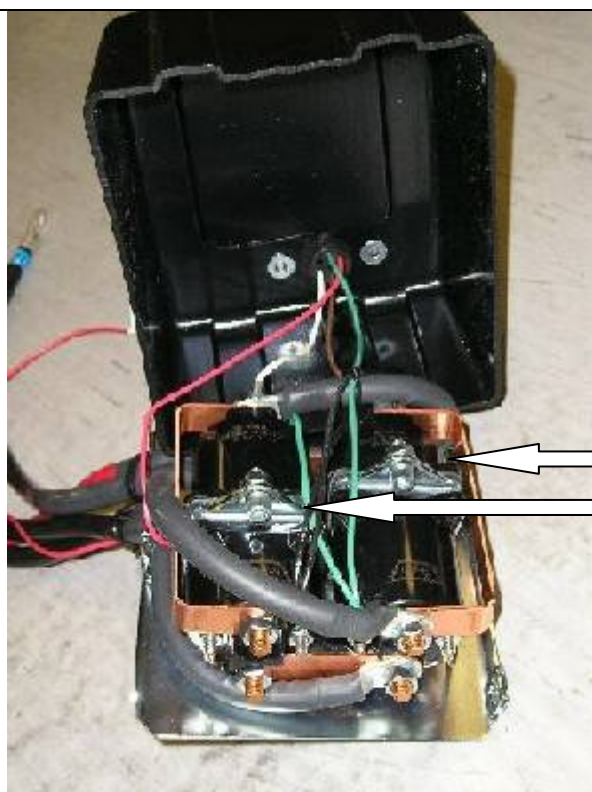




**16. Remove the cover from the control box.**

**17. The three main power cables that go from winch to control box, must be changed over using longer cables from bolt kit. Make sure that you identify the colour codes on the new cables before closing control box cover.**

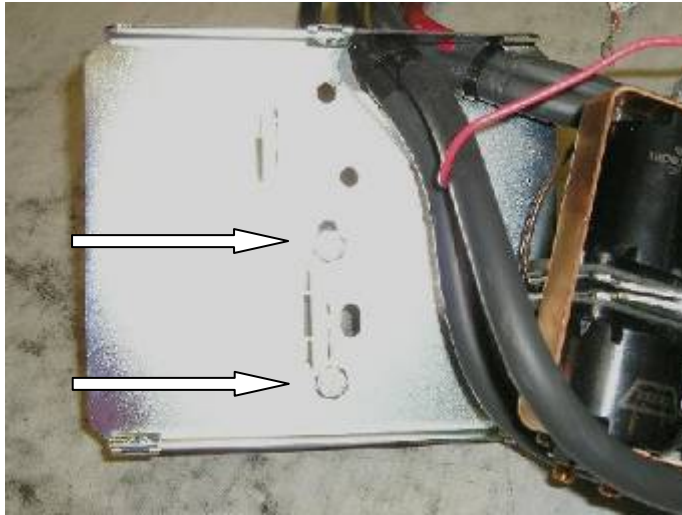
**If fitting XP 9.5 winch, then continue to step 18, otherwise, jump to step 24.**



**18. For XP 9.5 winch, remove the two cap screws, nuts and spacer washers that hold the four solenoids in place.**

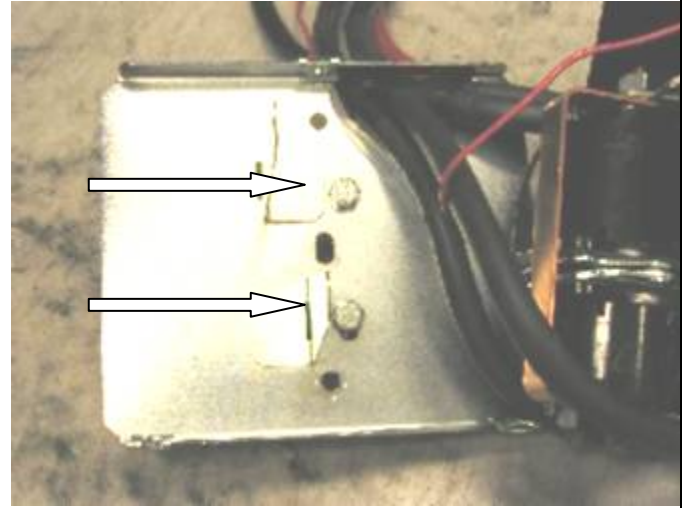


**19. Remove the four solenoids from the base of the control box using the copper bus bar as an aid and hold to one side.**



**Before**

**20. Remove the two bolts in the base of the control box and reposition them into the more centralised holes**



**After**



**21. Place the 4 solenoids over the 2 metal stands that are facing upwards. Make sure they line up with the holes in the base.**



**22. Replace the 2 cap screws, washers and nuts removed in step 18 above into original holes.**  
**23. Replace the black cover and refit the three cover screws (DO NOT OVER TIGHTEN)**





- 24. Fit number plate to bar using 6mm hardware. (See step 44.)**
- 25. Fit control box bracket to bar using 8mm hardware.**



- 26. Fit control box to control box bracket and pull wires through top cutouts.**
- 27. Fit 8/9000lb winch to top hole pattern in rear of bar. Secure top holes of winch using 1 1/2" x 3/8" bolts, spring and flat washers, and lower holes with 1 3/4" x 3/8" bolts through roller fairlead original top holes. When all bolts are fitted, tighten firmly.**
- 28. Connect power wires to winch motor as per Warn instruction manual (clutch handle on LHS of vehicle)**



- 29. Fit 10/12000lb winch to lower hole pattern in rear of bar. Secure top and lower holes of winch using 1 1/2" x 7/6" bolts, spring and flat washers, through roller fairlead drilled lower holes. When all bolts are fitted, tighten firmly.**
- 30. Connect power wires to winch motor as per Warn instruction manual. (clutch handle on RHS of vehicle)**





**31. When fitting roller fairlead to bar, remove circlips and push vertical pins upward so you can push vertical rollers sideways to enable you to place a socket to the bolt**



**32. When all bolts are tighten, replace pins and circlips.**



**33. Before fitting bar to chassis brackets on vehicle, cable tie all winch power cables well clear of all moving parts. When bar is fitted to vehicle, fit leads to battery and cable tie clear of all moving parts.**



**34. Fit 6mm caged nuts (x4) into square holes in lower section of bar.**



**35. With the help of a friend, lift bar in over the chassis brackets and secure to caged nuts using 10mm x 30mm bolt, large HD washer and spring washer.**



**36. Adjust bar so there is a 15mm plus gap around the periphery of the front of the vehicle.**

**37. Tighten all 6 bolts until the washer starts to concave.**



**38. Using lower hole in bar as a template, drill a 10mm and secure using 10mm hardware. Tighten firmly.**

**SEE PHOTO**



**39. When bar is secured to vehicle, fit front of air deflector to 6mm caged nuts in front of bar, secure rear of air deflector to rear of chassis brackets using 8mm bolts and 8mm hardware.**



**40. Assemble and fit indicator light to bar and scotch lok loom to vehicle loom.**





**FIT GUARD WITH BULL BAR ON VEHICLE**

- 41. If fitting bar to turbo diesel model, a cover shield for intercooler pipes must be fitted.**
- 42. Remove bolts and tow hook from under chassis and refit once cover shield is fitted to bar.**
- 43. Cover shield fits to chassis bracket, lower lip of bar and to tag on inside of bar.**



- 44. Fitting of number plates to a winch bar or non winch bar.**

