



FITTING INSTRUCTIONS

KJ JEEP COMBINATION BULL BAR

PRODUCT NUMBER

3450110

FITTING KIT NUMBER

6171745

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.**

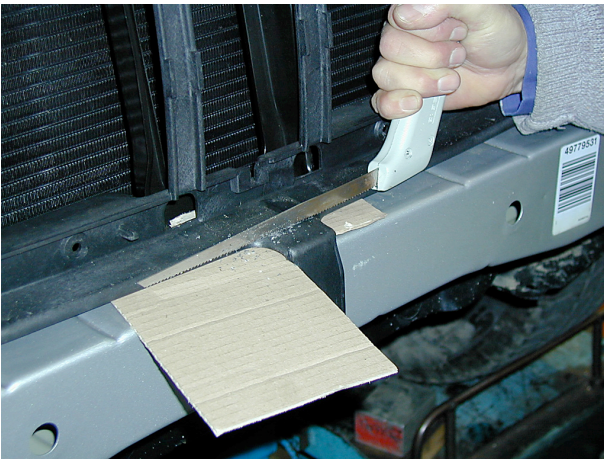
USE	PART No	QTY	DESCRIPTION
IMPACT ABSORBER MOUNTING SYSTEM	6151232	10	BOLT M10 x 30mm
	4581040	10	WASHER FLAT M10
	4581048	10	WASHER SPRING M10
	4601044	2	CHANNEL CAPTIVE NUT (INSIDE CHASSIS RAILS)
	4601045	2	CHANNEL CAPTIVE NUT (INSIDE CROSSMEMBER)
	3756449	1	MOUNTING SYSTEM
BULL BAR TO IMPACT ABSORBERS	6151232	6	BOLT M10 x 30mm
	4581048	6	WASHER SPRING M10
	4581040	8	WASHER FLAT M10
	6151026	2	NUT M10
CONTROL BOX BRACKET	6151021	2	BOLT M8 x 20mm
	4581044	2	WASHER FLAT M8
	3751564	1	CONTROL BOX BRACKET
	6151132	2	NUT FLANGE M8
NUMBER PLATE BRACKET	6151080	2	BOLT M6 x 20mm (BRACKET TO BAR)
	6151046	4	WASHER FLAT M6 x 13mm
	6151128	4	NUT FLANGE M6
	6151017	2	BOLT M6 x 16mm (NUMBER PLATE TO BRACKET)
	3751370	1	NUMBER PLATE BRACKET
TO BOLT INDICATORS TO BAR	6151126	2	BOLT M4 x 30mm
	4581037	2	WASHER FLAT M4
	5848283	2	WASHER PACKER NYLON
	6151127	2	NUT NYLOC M4
8-9000lb WINCH	4581040	4	WASHER FLAT 3/8" x 1"
	6151074	2	BOLT 1 3/4" x 3/8" UNC
	180302	10	CABLE TIES
WINCH PAN COVER	6191007	1	EXTRUSION RUBBER
	6521031	1	PANEL WINCH COVER
	6151256	2	SCREW BUTTON HEAD M6 x 16mm
	6151128	2	NUT FLANGE M6
AIR DEFLECTOR	3314463	1	AIR DEFLECTOR
	6151017	4	BOLT M6 X 16mm
	6151128	4	NUT M6 - FLANGE
	4581072	4	WASHER FLAT M6 x 20mm
WASHER BOTTLE COVER	3314462	1	WASHER BOTTLE COVER
	3756446	1	BRACKET COVER
	6151022	2	BOLT M8 x 25mm
	4581044	2	WASHER FLAT M8
	6151132	2	NUT FLANGE M8
	6151017	5	BOLT M6 x 16mm
	4581072	3	WASHER FLAT M6 x 20mm
	6151046	2	WASHER FLAT M6 x 13mm
	6151128	5	NUT FLANGE M6
FLARE MOULDING	6191009	1	FLARE MOULDING
FOG LIGHT HOUSING AND FITMENT	3162457	1	PLASTIC HOUSING RHS
	3162456	1	PLASTIC HOUSING LHS
	4581040	4	WASHER
INNER GUARD TO BAR	6151017	2	BOLT M6 x 16mm
	4581072	2	WASHER FLAT M6 x 20mm
	6151128	2	NUT FLANGE M6

TOOLS REQUIRED.
BASIC TOOL KIT, KEY HOLE SAW, TORX KEY T-15

**ASSEMBLY SEQUENCE FOR BULL BAR INSTALLATION.
PLEASE READ AND UNDERSTAND FITTING INSTRUCTIONS BEFORE
ATTEMPTING TO FIT BAR TO VEHICLE**

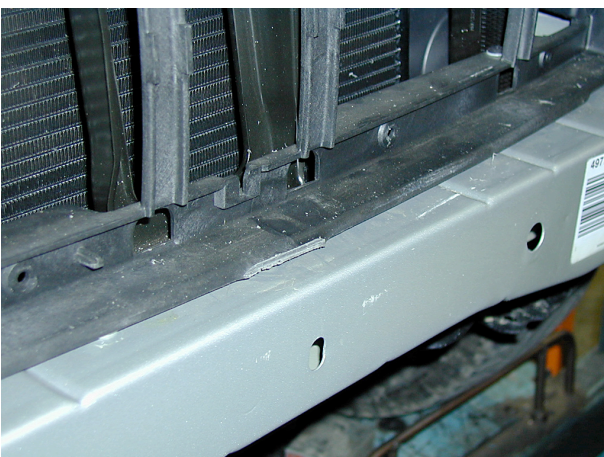


1. Remove grille from vehicle using torx keys.
2. Remove bumper from vehicle and remove all lights and the wiring loom from bumper.
3. Be careful when removing bumper from the flares as the plastic clips are awkward to undo.



4. When bumper is removed, cut the lower plastic lug from grille panel to enable bull bar mounting system to bolt up against vehicle crossmember. Place either thick cardboard or plywood either side of lug to prevent paint damage.

Remove tow hook and crush cans from vehicle



5. This is how it must look when it has been cut.



6. Cut the lower section off the vehicle flares.
7. Mark a datum point by drawing a horizontal line under the rivet inside the inner guard. (Photo shows RHS of vehicle)



8. Mark a second datum point where the pencil is pointing, then using masking tape join the two datum points together making sure you have a level line.



9. Using a key hole saw, carefully cut below the tape line.

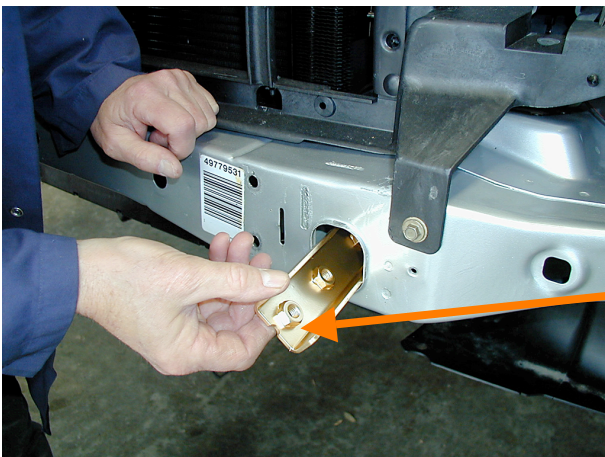


10. Photo shows a finished cut flare.



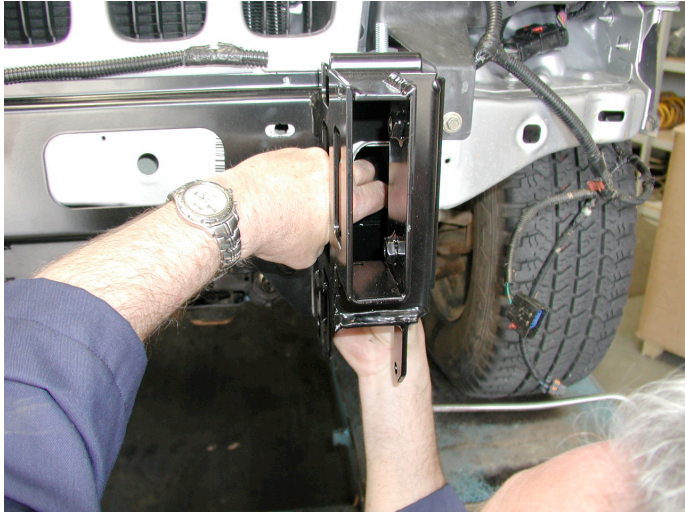
11. The vehicle is now ready to fit mounting system and bar.

(Grille and bumper removed, flares cut and grille lug cut.)



12. To fit mounting system to vehicle, fit captive nut channel in through front apertures in vehicle crossmember on both sides.

(Notch in channel must face front of vehicle)

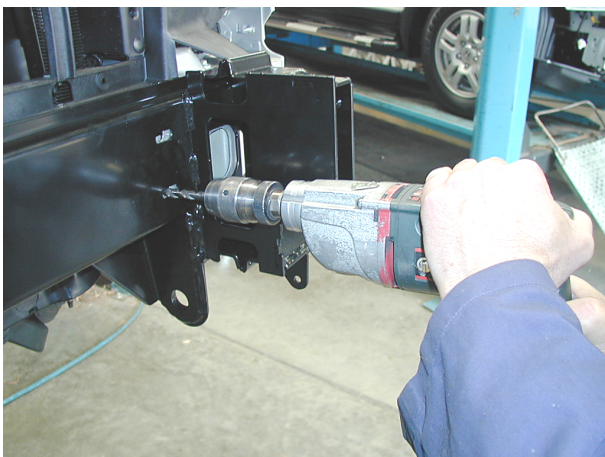


- 13. When both channels are inside of crossmember, using your finger, align with holes underneath of chassis rails.**
- 14. Fit mounting system to front crossmember of vehicle and centralized sideways.**

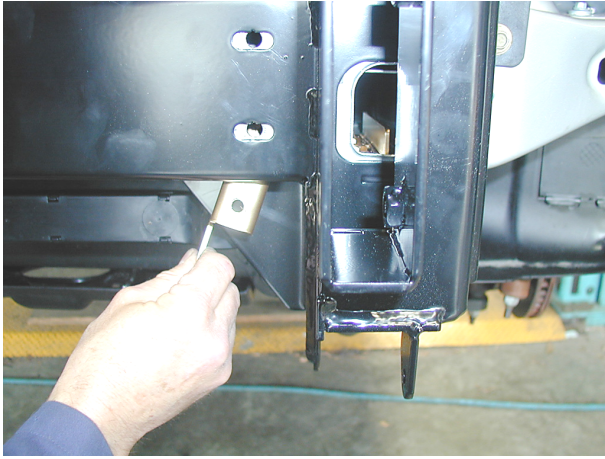


- 15. Fit 10mm hardware to the two most forward holes in lower brackets, to both sides of vehicle, making sure mounting system is hard up against vehicle crossmember, tighten firmly.**

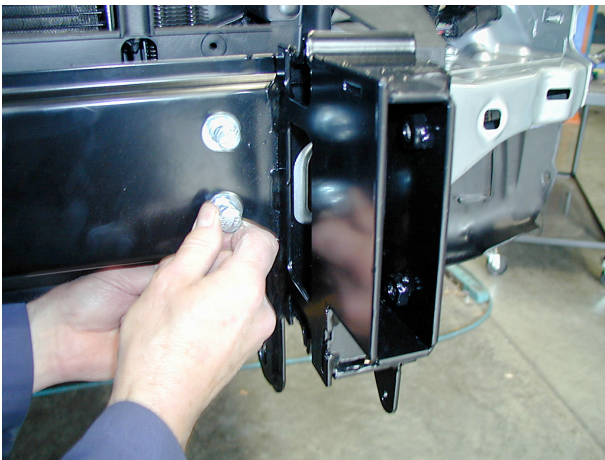
Photo shows underside of mounting system on LHS of vehicle.



- 16. Using 10mm drill bit, drill out holes in centre of slots in front of crossmember.**

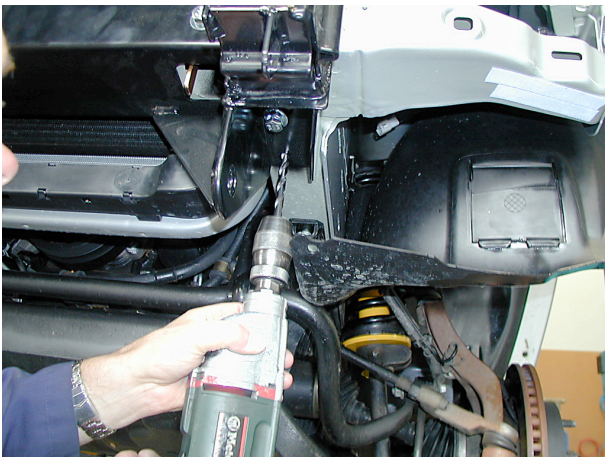


17. Once holes have been drilled, fit captive nut channels through lower aperture in vehicle crossmember.



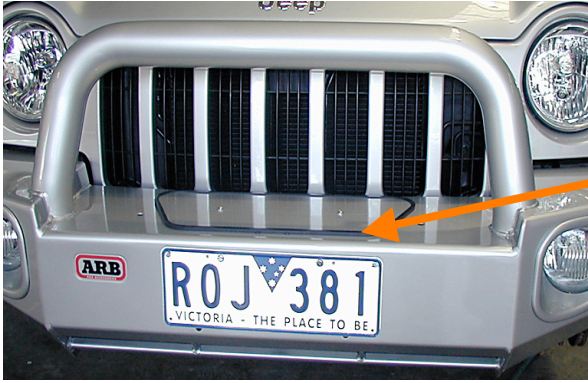
18. Secure using 10mm hardware and tighten firmly making sure mounting system is hard against vehicle crossmember.

NB. When step 19 is finished, slacken off bolt tension to enable sideways movement if needed when bar is fitted.



19. When front bolts are tighten, loosen off lower bolts in chassis brackets. Using a 10mm drill bit, drill out the most rearward hole in lower chassis bracket being careful not to drill too far into captive nut channel. When holes has been drilled, realigned the rear hole with rear nut in captive nut channel, and secure using 10mm hardware, then lightly tighten all bolts in lower chassis brackets.

MOUNTING SYSTEM MUST BE ABLE TO BE MOVED SIDWAYS.



20. If bar is going to be a non winch bar, fit number plate directly to front of bar using 6mm hardware.
21. To fit cover plate on top of bar winch cutout, fit rubber extrusion around top cover panel, trim to size and bolt to top of bar using M6 button head stainless steel screws and M6 flange nuts.



22. Indicator installation to bar , fit indicator tang into slot of fog light bracket and under outer bracket. Slide plastic packer between bracket and indicator and fasten using 4mm screw ,flat washer and 4mm nyloc nut.

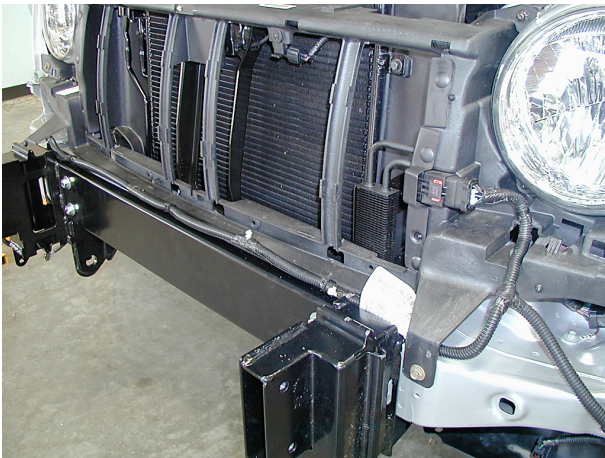
PHOTO VEIWED FROM INSIDE OF BAR LHS



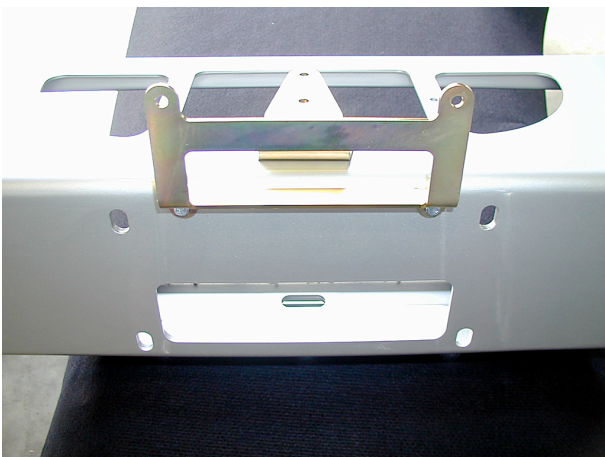


23. If bar is to have original fog lights fitted, position light into the two lower holes in light mounting bracket, place packer washer over light locating boss and refit light screws into all 3 holes, tighten firmly using torx key.

(If vehicle does not have fogs fitted, they can be purchased. Part no. 05083895 - 05083896 and screw kit to suit.)



24. Refit vehicle loom to mounting system using cable ties and plug back into connector body.



25. If bar is to have a winch fitted, follow the next steps.

26. Fit number plate bracket to bar using 6mm hardware.(20mm x 6mm bolts) Fit number plate to number plate bracket using 6mm hardware when bar is fitted to vehicle.

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

VIEW OF THE CENTRE OF BAR



28. Drill 12mm holes under existing holes 25mm lower down the same pitch as existing holes, these will be the holes used to bolt to bar.

NEW HOLES

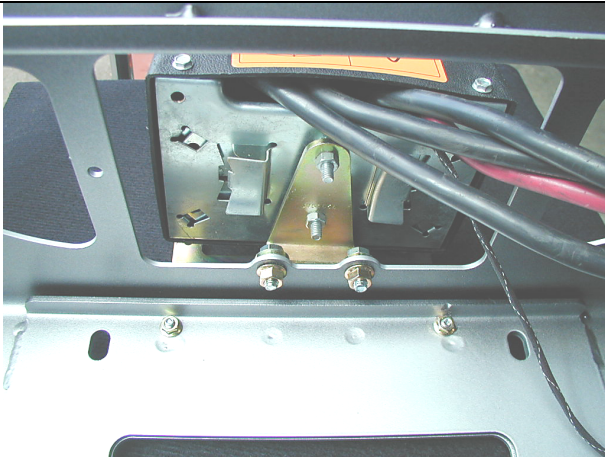


29. To fit winch into bar you must pack winch up on a bench to enable you to lower bar down on winch.

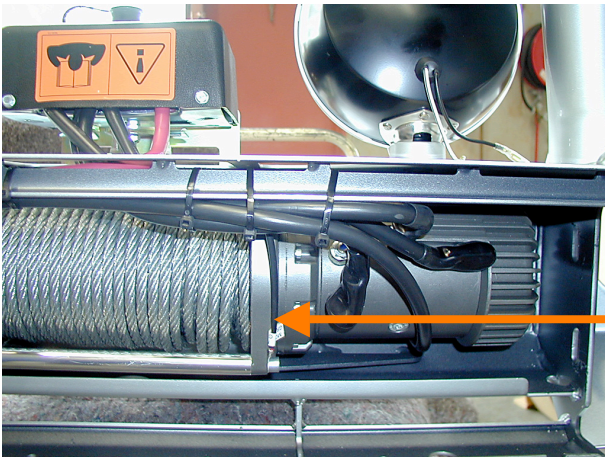
30. Line up top holes first and secure using 3/8" hardware (1 1/2" x 3/8" bolts) flat and spring washers.

31. Place roller fairlead over lower holes and again secure using 3/8" hardware (1 3/4" x 3/8" bolts) flat and spring washers. When all bolts are fitted tighten firmly.





32 . Fit control box to control box bracket using original 1/4" nuts from control box and connect power cables to winch motor as per winch instructions.

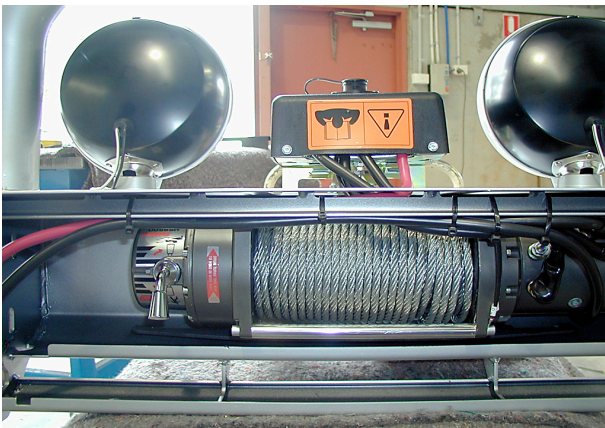


33. Cable tie power cables to bar keeping cables clear from all moving parts.

Optional driving light fitted.

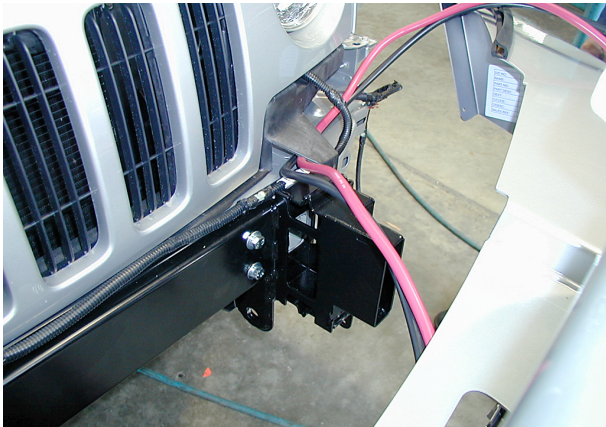
(Viewed from rear of bar)

Fasten control box earth to winch tie rods.



34. Cable tie power leads to battery, to the left side of the bar keeping clear of all moving parts.

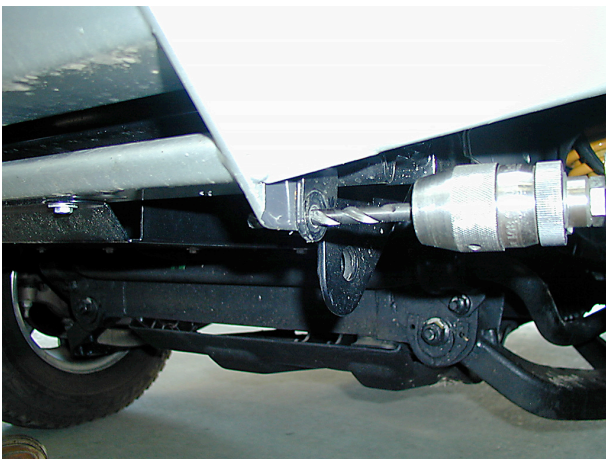
(Viewed from rear of bar)



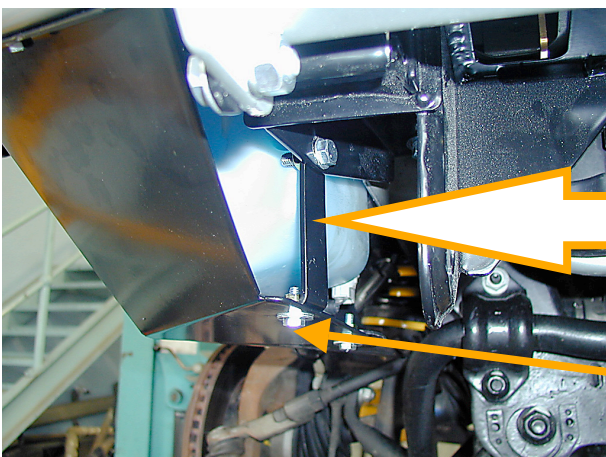
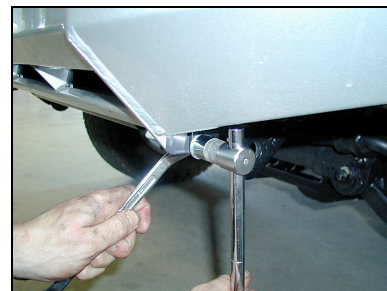
35. Position bar in front of vehicle and connect indicators, fog lights and fit winch cables under grille into engine bay close to battery.



36. Slide bar onto vehicle mounting system and secure using 10mm hardware. Align bar with vehicle grille and flares, and tighten bolts using socket, extension and uni joint through fog light aperture in bar. Lastly retighten mounting system bolts when bar has been centralized sideways.

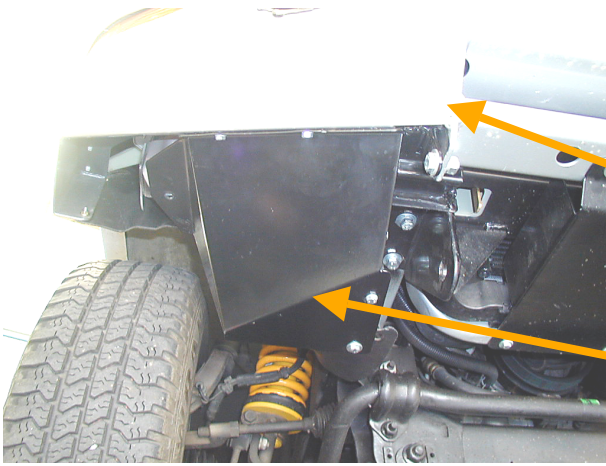


37. Once bar is secured to vehicle, using holes in locking plates as a template, drill 10mm holes through lower section of bar and bolt up using 10mm hardware.



38. Fit washer bottle guard bracket to bar mounting system using 8mm hardware.

**Fit 6mm hardware to bracket and guard
Finger tighten**



39. Bolt washer bottle guard to lower bar wing section using 6mm hardware. (finger tighten only)

Wing section

Viewed from under vehicle

Washer guard



40. On RHS of vehicle, using vice grips to hold in place, drill a 6mm hole through washer guard into under side of vehicle crossmember and secure using 6mm hardware. When all bolts are fitted, tighten firmly. Cut plastic upward so you can tuck plastic inner guard in behind washer bottle guard.



41. Next step is to trim the plastic inner guards that hang down passed the bar.
42. On the RHS of vehicle, tuck plastic inner guard in behind bar wing section and secure using 6mm hardware. Cut plastic level with the bottom of bar wing section to washer bottle guard.

Bar wing section



- 43. On the LHS of vehicle cut plastic inner guard as per photo, tuck in behind bar wing, secure to bar wing section using 6mm hardware.**

New cut line of plastic inner guard

Photo of inside of LHS guard



- 44. Fitting of AIR DEFLECTOR to underside of bar.**
- 45. Fit rear of air deflector to vehicle lower crossmember using original screws and front to bar using 6mm hardware. When all hardware is fitted, tighten firmly.**



- 46. When everything on bar is fitted and tighten, the last part to fit if so desired, is the stick on plastic molding that covers up where the vehicle flare has been cut.**
- 47. Molding in bolt kit is for both sides of vehicle.**
- 48. To fit molding to flare, cut molding on matching angle of where flare meets guard, remove backing tape and adhere to vehicle about 3mm above the wing section of bar.**
- 49. Cut off molding flush with wheel arch.**

Matching angle for molding

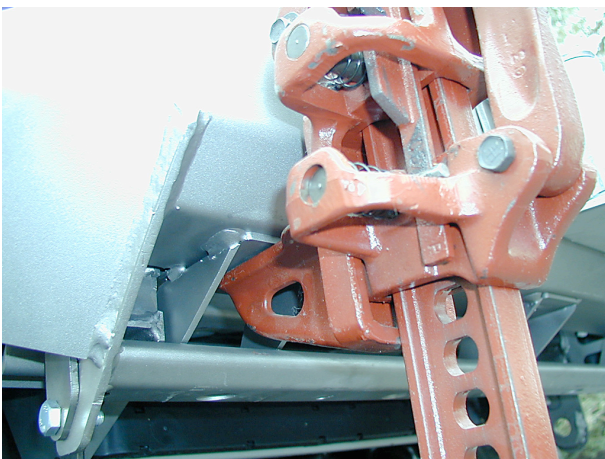
Photo of LHS of vehicle



50. If no fog lights are not going to be fitted, fit light surround to bar as is. If fog lights are going to be fitted, cut out rear of surround using a key hole saw and remove rough edges with a file.



51. Fitting of fog light surround housings.
52. Apply a bead of silicon around the fog light aperture, fit the surround into aperture and hold to bar using masking tape until silicon has set, then remove tape.



53. Position for Hi Lift jacking point.

PHOTO SHOWS COLOUR CODED BAR

