



FITTING INSTRUCTIONS

Part Number: 3440200 **F/KIT:** 6172485 **BOLT PACK** 6172486

Product Description: COMBINATION BULL BAR FLARED

Suited to vehicle/s: FORD RANGER 2006 ON

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

ARB 4x4 ACCESSORIES

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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.

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

BASIC TOOL KIT

JIG SAW OR KEY HOLE SAW

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 lbft
M6	9Nm	4lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

Up to IPF 900 SERIES FOG OR DRIVING LIGHT SETS

USE	PART No	QTY	DESCRIPTION
IMPACT ABSORBER AND BRACES	3756996L	1	BRKT IMPACT ABSORBER LHS
	3756996R	1	BRKT IMPACT ABSORBER RHS
	3758235	1	RANGER BT50 TIE DOWN POINT
	4681382	1	BRACE ASSEMBLY LHS
	4681233	1	BRACE ASSEMBLY RHS
	4681234	2	BRACE TENSION STRAP
	6151304	10	NUT M10 CAGED
	6151148	4	BOLT M12 X 50
	4581049	4	WASHER FLAT M12
4581050	4	WASHER SPRING M12	
BULL BAR TO IMPACT ABSORBERS	6151357	14	BOLT M10 x 30mm SEMS ASSY
	6151321	2	NUT M10 FLANGE
	6151304	2	NUT M10 CAGED
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	6151180	4	BOLT M6 x 20mm (BRACKET TO BAR)
	6151046	4	WASHER FLAT M6 x 13mm
	6151128	4	NUT FLANGE M6
	3751789	1	NUMBER PLATE BRACKET
	6151384	2	SCREW PAN HD (NON WINCH BAR)
	6821189	2	GROMMET RND FL 1500 080 090
FOG LIGHT PARTS	3163015	1	LIGHT INSERT KIT
	6821151L	1	OS LIGHT INDICATOR LHS
	6821151R	1	OS LIGHT INDICATOR RHS
	6821152	2	TURN SIGNAL / CLEARANCE LIGHT LOOM
	180701	6	SCOTCH LOCK
BUFFERS	3162470 L/R	2	BUFFERS 260 X 230 UPRIGHT B/BAR
	6151128	12	NUT FLANGE M6
AIR DEFLECTOR	6522672	1	AIR DEFLECTOR
	6151213	10	BOLT M6 X 20MM BLACK
	4581082	10	WASHER FLAT M6 BLACK
	4581287	10	WASHER SPRING M6 BLACK
	6151300	10	NUT CAGED M6
MISCELLANEOUS	6191015	1	TRIM FLARE 450MM
	180701	6	SCOTCH LOK
	BLB 600	1	BATTERY LEAD 600MM BLACK
WINCH FITMENT	180302	8	CABLE TIES
	6151073	2	BOLT 3/8" X 1 1/2"
	6151074	2	BOLT 3/8" X 1 3/4"
	4581040	4	WASHER FLAT M10
	EG50	2	GROMMET RUBBER
BUMPER BRACKETS	3757004L	1	BUMPER BRACKETS LHS
	3757004R	1	BUMPER BRACKETS LHS
	6151213	8	BOLT M6 X 20 BLACK
	4581082	8	WASHER FLAT M6 BLACK
	6151128	8	NUT M6 FLANGE BLACK
GRILLE FITTMENT	6151180	2	BOLT M6 X 20MM
	4581084	2	WASHER PANEL M6
	4581036	2	WASHER SPRING M6

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

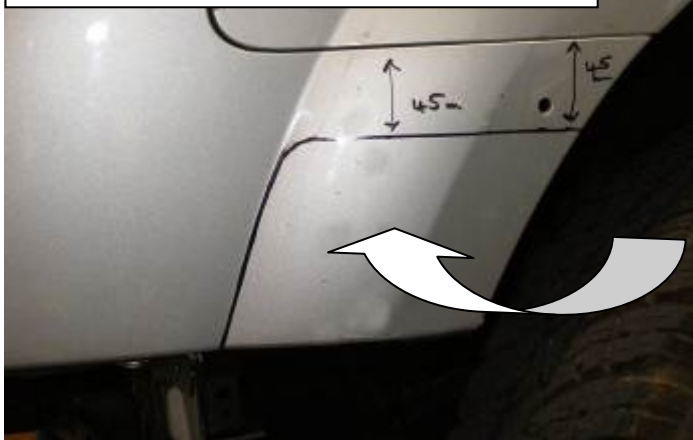


- 1. To fit a bar to vehicle, the plastic bumper, grill panel has to be cut. Remove tie downs and tow hook from under vehicle.**



- 2. Remove grill and plastic bumper panel from front of vehicle.**
- 3. Disassembly bumper/grille assembly.**
- 4. With the bumper removed, you must remove lower section and fog lights if fitted.**

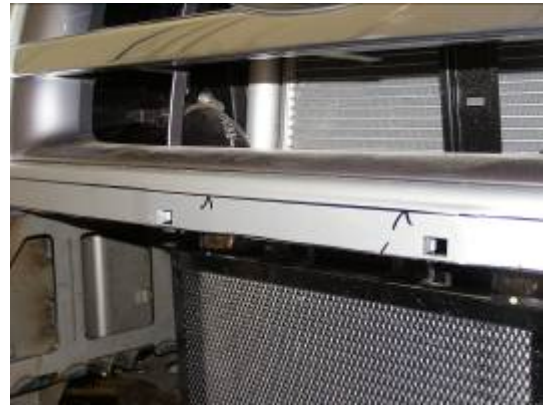
**SEE PHOTO FOR MEASUREMENTS
ARROW INDICATES AREA TO BE
REMOVED.**



- 5. Refit top section of grill / bumper back to vehicle and mark out side section to be cut.**



6. Mark out front section to be cut as per photo.



7. The next step is to remove grill panel from vehicle and cut out marked out sections.





8. These photos show final cut back.
9. When all cutting is finished dress up with a file.



10. Refit grille panel back to vehicle.



11. At this stage the flare has to be cut. Firstly the front of the inner guard must be temporarily unclipped so the flare clips can be pressed together using pliers, to be able to removed the front of the flares off the side of the vehicle. **Do not try to pull the flares off the vehicle without firstly pressing the clips together from under vehicle.**



12. When the flare is free to move, pack a piece of cloth in between vehicle and flare. This is to give clearance so the flare can be cut.



13. Mark out flare 40 mm up to zero as per photo.



14. Using a small panel saw, cut off lower section of flare and dress up with a file. Refit flare and plastic inner guard back into position.

Place a block of wood between body and flare to protect body of vehicle.

15. This point is just under flare mounting clip, so the 40mm measurement is **critical**.

PHOTO IS OF LHS OF VEHICLE.



16. Using 6mm hardware, bolt bumper bracket to plastic bumper panel. Using rear holes in bracket as a template, drill 6mm holes in body panel and secure using 6mm hardware.



17. The next step is to cut lower panel in photo. This is to give ground clearance and aesthetics to the vehicle with mounted bull bar. (This step is up to the owner of the vehicle)



18. Use tin snips to remove this section of metal.

PHOTO IS OF RHS OF VEHICLE





19. This is how cut out looks after removing the metal. Dress up cut edges with a file



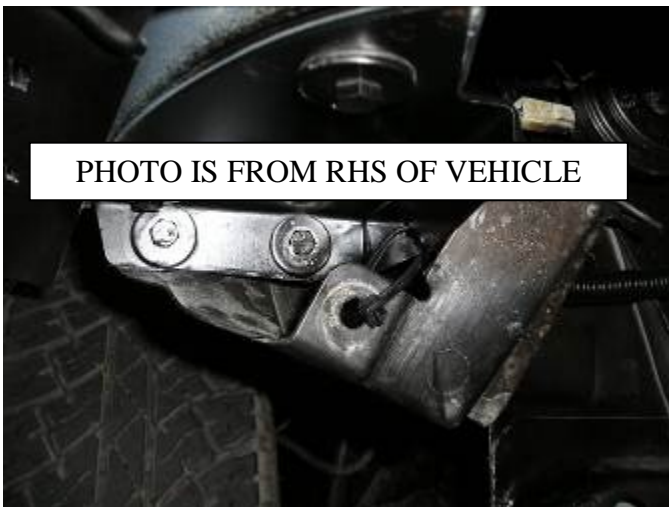
PHOTO IS OF LHS OF VEHICLE



20. Paint cut edges to protect metal from rust

(This step is up to the owner of the vehicle)

PHOTO IS FROM RHS OF VEHICLE



21. Lastly while preparing vehicle for bar fitment, cable tie inner plastic guards to bumper brackets previously fitted.

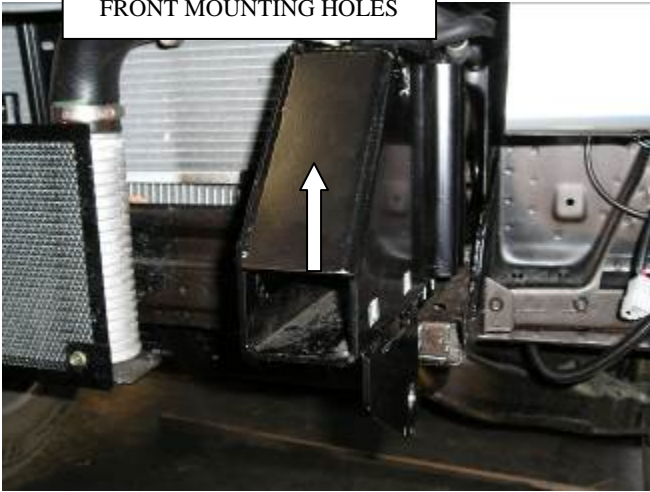
PHOTO IS OF LHS IMPACT ABSORBER



22. The next step is to fit impact absorbers to vehicle.

23. Firstly, fit M10 caged nuts into impact absorbers. (5 in total per side)

FRONT MOUNTING HOLES



24. Secure impact absorbers to vehicle chassis using the same original 12mm bolts used to secure bumper to vehicle

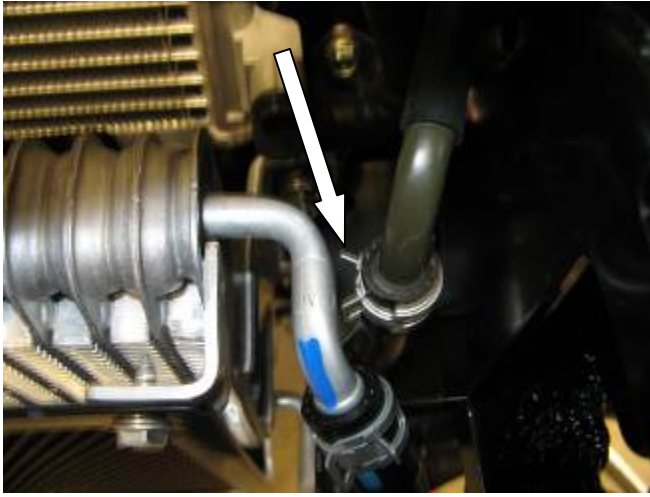


LHS OF VEHICLE

25. With both impact absorbers fitted to vehicle, adjust width so the outside measurement is 815mm, then tighten all four bolts securely.

REFER TO TORQUE SETTINGS.

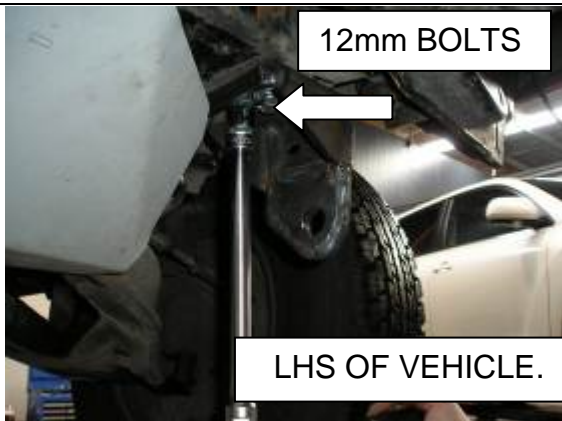




26. If vehicle is fitted with automatic transmission the cooler lines must be moved slightly. When doing so make sure factory metal clamp does not touch solid lines. Refer photo.



27. Secure transmission line to inside of chassis bracket using a cable tie supplied in kit. Photo is looking from top down.

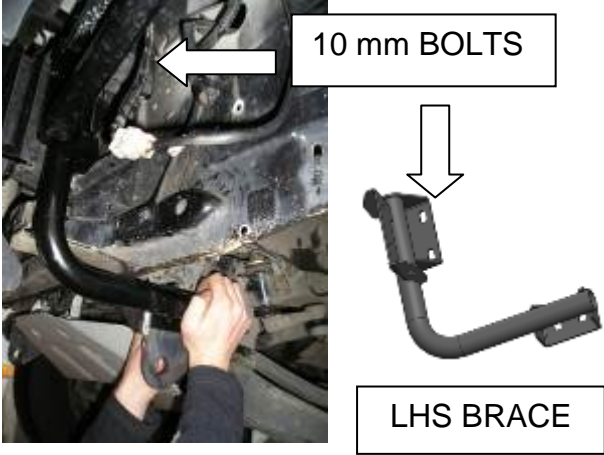

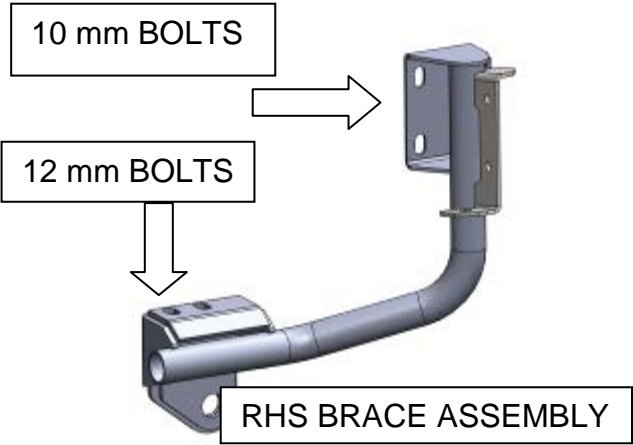


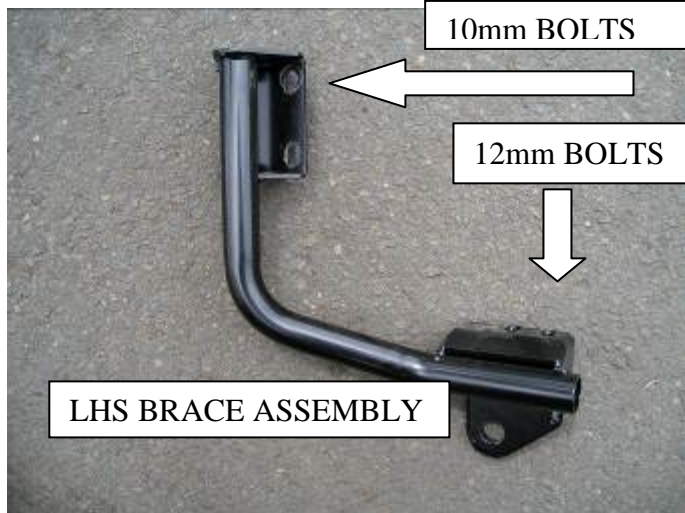
28. After fitting impact absorbers to vehicle, the brace assembly is next to be fitted.

NOTE: If ARB Recovery Point (2840010) is fitted, go to step 33.

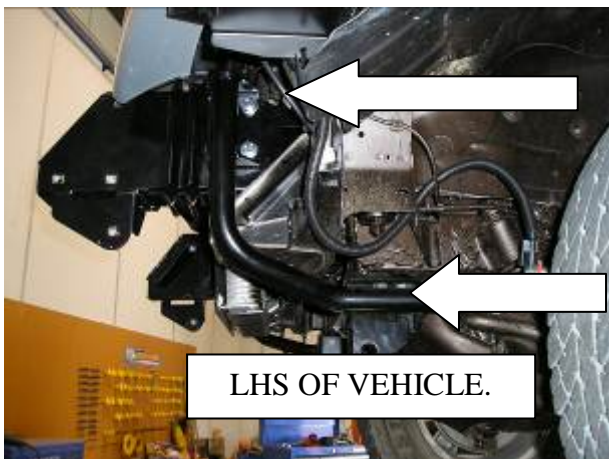
29. Fit lower LHS mounting bracket to tow hook bolt holes using M12 X 1.5P X 50 Bolt and washer sets.

NOTE: Fit all bolts loosely first, then tighten all bolts.

 <p>10 mm BOLTS</p> <p>LHS BRACE</p>	<p>30. Fit M10 cage nuts to LHS bracket and fit upper mounting bracket to impact absorber using 10 mm hardware.</p>
	<p>31. Attach lower mounting bracket to LHS brace / recovery point using 10 mm hardware.</p>
 <p>10 mm BOLTS</p> <p>12 mm BOLTS</p> <p>RHS BRACE ASSEMBLY</p>	<p>32. Fit lower RHS mounting bracket to tow hook bolt holes using M12 X 1.5P X 50 Bolt and washer sets.</p> <p>33. Fit upper mounting bracket to impact absorber using 10 mm hardware.</p> <p>NOTE: Fit all bolts loosely first, then tighten all bolts.</p>



34. After fitting impact absorbers to vehicle, the brace assembly is next to be fitted.



35. Fit lower mounting bracket to tow hook bolt holes using 12mm hardware. Fit upper mounting bracket to impact absorber using 10mm hardware.

NB. Fit all bolts loosely first, then tighten all bolts.



36. Before fitting bar, it is advisable to modify vehicle wiring looms for indicators/clearance lights and fog lights if fitted to vehicle.

37. To modify vehicle indicator/clearance loom, remove insulation tape from loom and scotch loks indicator/clearance loom from bar bolt kit to vehicle loom.



Summary of Wire Connections

FUNCTION
TURN SIGNAL HARNESS
VEHICLE PARK LAMP

RIGHT
LEFT

PARK LAMP
RED

RED
RED

VEHICLE INDICATOR

RIGHT
LEFT

EARTH
BLACK
BLACK
BLACK

INDICATOR
GREEN
GREEN
GREEN

38. Cover all wiring with insulation tape



39. If vehicle comes fitted with fog lights, you must cut loom and extend loom.

40. Using the red wire in bolt kit, cut into four equal lengths. It is recommended that you solder and tape the red wire in between the cut fog light loom. When joining wires match black to black and blue/white to blue/white.



**41. Fit light insert into rear of bar using 4 screws, rubber washers and retainer clips.
(Do not over tighten)**



ARROWS INDICATES POSITION OF SCREWS



42. Install the turn signal into the rear of light insert using 2 self tapping screws 6 x 25mm pan head) supplied with the light insert fitting kit.

**NOTE: The indicators should be installed with the drain holes at the bottom and are marked LH & RH .
(Clearance lights outboard)**



43. If optional fog lights are going to be fitted to bar , follow fitting instructions from fog light kit part no. 6821201 and wiring harness part.no.MD02

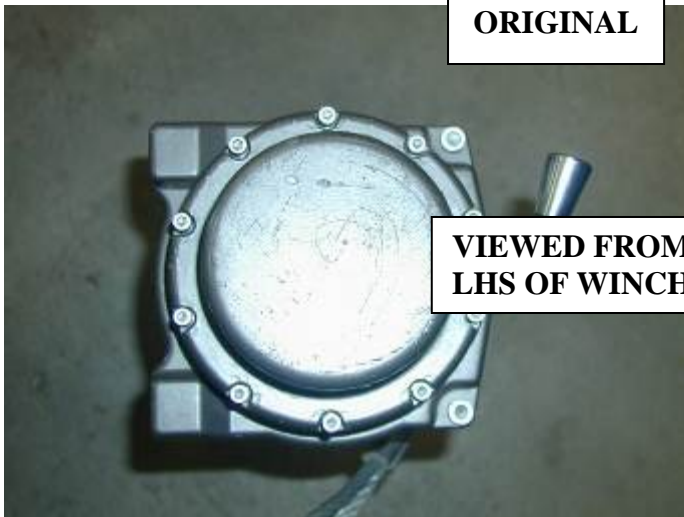
PHOTO IS FOG LIGHTS FITTED TO BAR

IN BOTH CASES USE BRIGHT ZINC PLATED HARDWARE.



44. If you are not going to fit a winch to the bar, go to step 50.
45. Firstly if a winch is going to be fitted to the bar, fit control box bracket to bar using 8mm hardware. Next fit number plate bracket to bar using 6mm hardware.

ORIGINAL

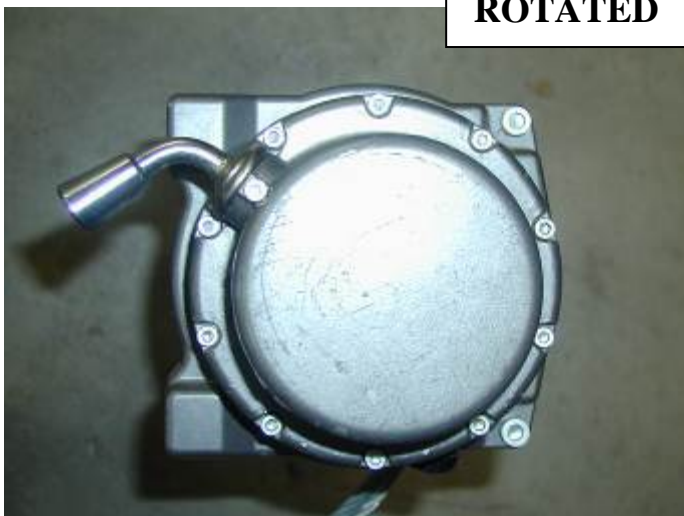


VIEWED FROM LHS OF WINCH

- TO FIT A WINCH BAR**
46. To fit an 8/9/9.5/000lb winch, rotate gearbox 144° counterclockwise.
- 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 gearbox more than a couple of millimetres.

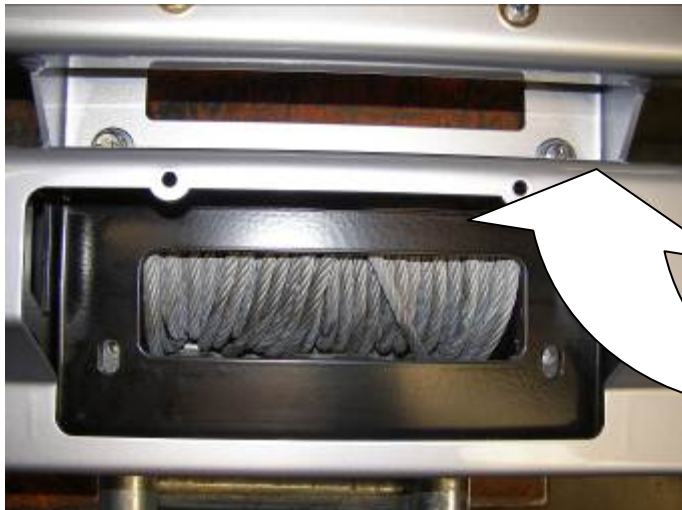
ROTATED



47. This is how the winch looks after rotation of handle.

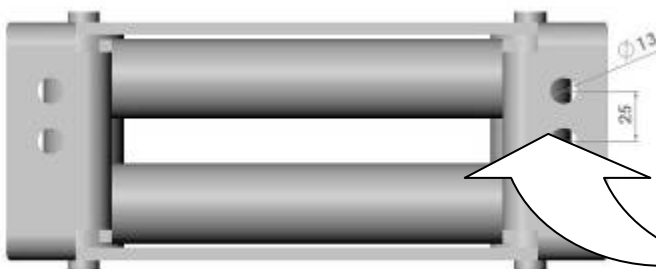


48. To fit winch into bar you must pack winch up on a bench to enable you to lower bar down on winch, then fit four 3/8" square nuts into winch lugs.



49. Lower bar down over winch, line up top holes first and secure using 3/8" hardware (1 1/2" x 3/8" bolts) flat and spring washers. (finger tighten only)

Use new drill holes to bolt to bar.



50. Drill two new 13mm holes 25mm down in the roller fairlead, as shown on the adjacent picture.



51. Place roller fairlead over lower holes and again secure using 3/8" hardware (1 3/4"x 3/8" bolts) flat and spring washers.
52. Using circlip pliers, remove lower circlips and push shaft upwards to be able to move rollers sideways.



53. Using screwdriver move vertical rollers sideways and tighten all bolts using socket and extension.
54. Refit rollers and circlips.

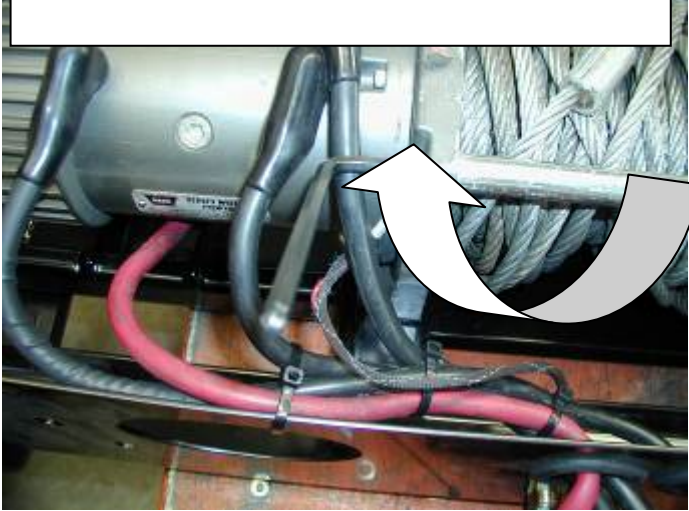


ARROW INDICATES RUBBER GROMMETS.



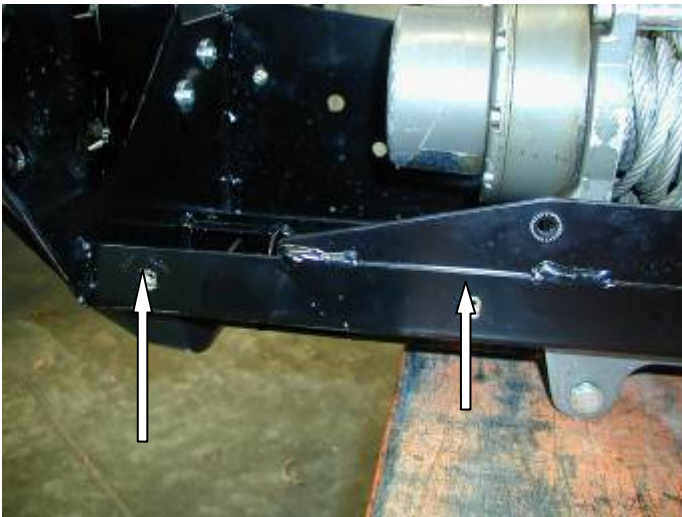
55. Fit black rubber grommets into round holes in top of bar.
47. Fit winch control box to control box bracket on bar and remove plastic cover. The black ARMATURE lead must be removed from control box and replaced with a longer lead supplied in bar bolt kit. When fitted, refit plastic cover back to control box.

ARROW INDICATES GROUND WIRE



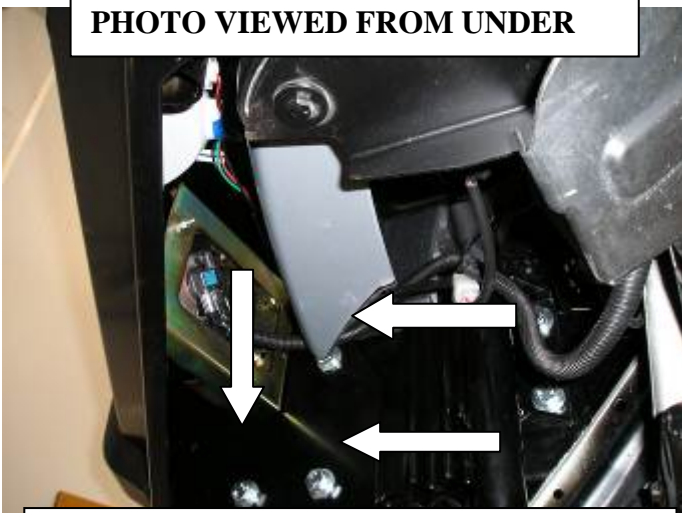
56. Pass cables through rubber grommets and connect as per warn installation instructions. Fit plastic boots over terminals. Cable tie cables to bar as per photo to clear all moving parts.

57. Fit ground wire under tie rod.



58. Fit M6 caged nuts into lower section of bar. (4 in total) These are to fit air deflector to bar at a later time.

PHOTO VIEWED FROM UNDER



ARROWS INDICATE 3 BOLTS PER SIDE

59. With the help of a friend, lift bar in between impact mounting bracket and align slots on bar to caged nuts on impact absorbers Secure using M10 SEMS bolts.(finger tighten only)





60. Adjust bar to vehicle so there is a 20mm gap around the periphery of vehicle. When bar is in correct position, tighten all six bolts firmly.

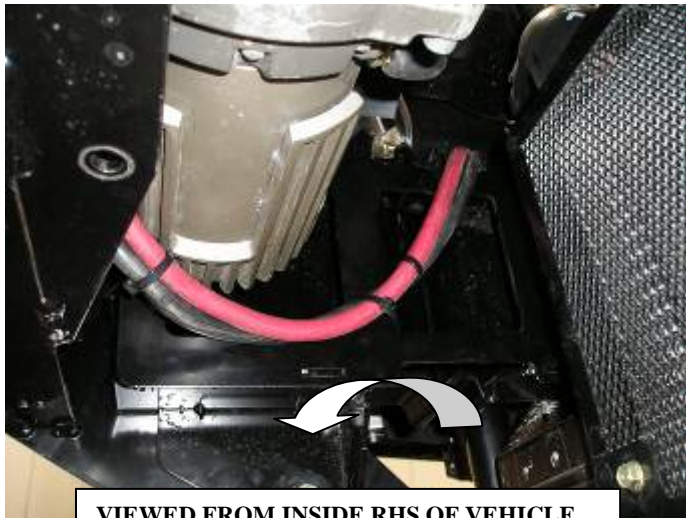


61. Using 10mm holes in pinning brackets as a template, drill through bar as per photo using a 10mm drill bit.

Secure using a M10 SEMS bolt (Shown below), and an M10 Flange Lock nut.

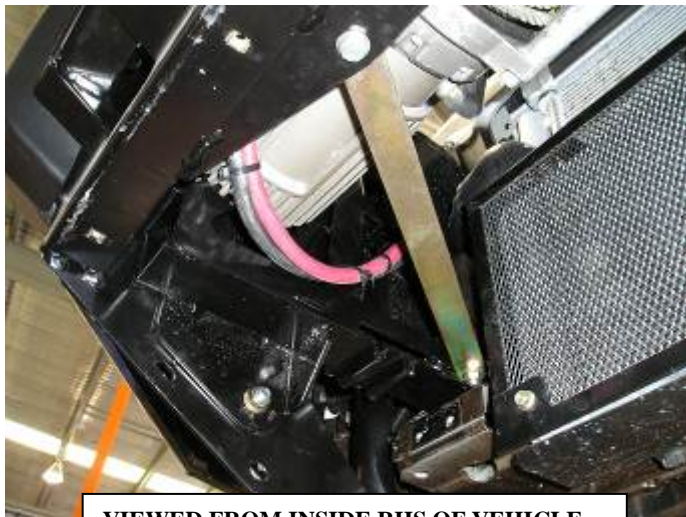


62. Using body moulding strip, fix to lower section of cut flare and trim to fit.



VIEWED FROM INSIDE RHS OF VEHICLE

63. When bar is secured to mounting bracket, connect winch cables to battery and cable tie cables together clear of all moving parts, sharp edges and hot parts.

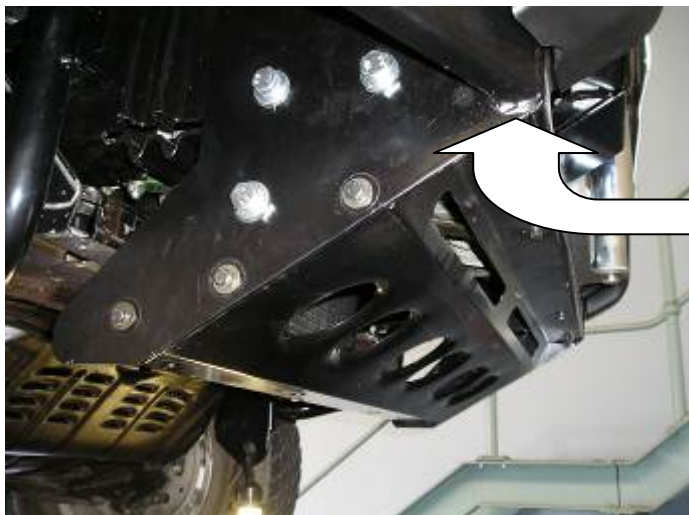


VIEWED FROM INSIDE RHS OF VEHICLE

64. Fit diagonal braces from impact absorbers to lower brace on bar, securing using 8mm hardware.
65. Diagonal braces must be fitted to winch and non winch bars.



66. Remove plastic clips from vehicle grill, and replace using 6mm hardware including large body washers.



67. Fit M6 caged nuts to air deflector and fit in between lower section of bar and secure using M6 hardware.

These bolts fit to caged nuts which were fitted in paragraph 50.

(All M6 hardware is black in colour)



67. Fit number plate to number plate bracket using M6 hardware.

68. Finally when everything is fitted, connect all lighting loom plugs to lights.



69. If the bar is going to be a non winch bar fitment, the number plate is fitted to bar as per photo using press in plastic plugs and 2 screws. This is to cover over roller fairlead cutout.