



FITTING INSTRUCTIONS

Part Number: 3440310 **F/KIT:** 6173136 BOLT PACK 6173137

Product Description: COMBINATION BULL BAR FLARED

Suited to vehicle/s: FORD RANGER 09 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

Corporate Head Office

42-44 Garden St
Kilsyth, Victoria
AUSTRALIA 3137

Tel: +61 (3) 9761 6622
Fax: +61 (3) 9761 6807

Australian enquiries
North & South American enquiries
Other international enquiries

sales@arb.com.au
sales@arbusa.com
exports@arb.com.au

www.arb.com.au

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.
- Please contact local Authorised ARB Stockist if you would like to have this service carried out on your behalf.

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

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.

TOOLS REQUIRED TO FIT THIS PRODUCT:

TAPE MEASURE	SOLDERING IRON AND SOLDER
ELECTRIC DRILL	Dia 7.0 and 10.5mm DRILL BITS
METRIC/ IMP. SOCKET & SPANNER SETS	JIG SAW OR KEY HOLE SAW
BLACK SPRAY PAINT	WHITE AND BLACK MARKER PENS
INSULATION TAPE OR HEAT SHRINK	CIRCLIP PLIERS (OUTER)

FASTENER TORQUE SETTINGS:

SIZE	Torque Nm	Torque lbft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

LARGEST LIGHTS WHICH CAN BE FITTED TO THIS PRODUCT:

- 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	BRKT CHASSIS TO BRACE LHS
	4681382	1	BRACE LHS
	4681233R	1	BRACE ASSEMBLY RHS
	4681234	2	BRACE TENSION STRAP
	6151304	12	NUT M10 CAGED
	6151098	4	BOLT M12 X1.5P X 40
	4581049	4	WASHER FLAT M12
	4581050	4	WASHER SPRING M12
	6151357	6	BOLT M10 SEMS
	6151022	4	BOLT M8 X 25
	6151132	4	NUT FLANGE M8
4581044	4	WASHER FLAT M8	
BULL BAR TO IMPACT ABSORBERS	6151204	6	BOLT M10 x 35mm
	4581048	6	WASHER SPRING M10
	4581288	6	WASHER FLAT LARGE M10
	6151357	4	BOLT M10 SEMS
	6151321	4	NUT M10 FLANGE
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
	3751313	1	NUMBER PLATE BRACKET
	6151384	2	SCREW PAN HD (NON WINCH BAR)
	6821189	2	GROMMET RND FL 1500 080 090
INDICATOR/FOG SURROUND	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 FASTENERS	3162470L	1	BUFFER LEFT HAND
	3162470R	1	BUFFER RIGHT HAND
	6151128	12	NUT FLANGE M6
AIR DEFLECTOR	6522672	1	AIR DEFLECTOR
	6151213	6	BOLT M6 X 20MM BLACK
	4581082	6	WASHER FLAT M6 BLACK
	4581287	6	WASHER SPRING M6 BLACK
	6151300	10	NUT CAGED M6
WING PANELS	6522689L	1	WING PANEL LHS
	6522689R	1	WING PANEL RHS
	6151300	6	NUT CAGED M6
	6151228	4	BOLT M6 X 30MM BLACK
	6151213	6	BOLT M6 X 20MM BLACK
	4581287	10	WASHER SPRING M6 BLACK
4581082	10	WASHER FLAT M6 BLACK	
MISCELLANEOUS	6191015	1	TRIM FLARE 450MM
	180302	4	CABLE TIES
WINCH FITMENT	BLB 600	1	BATTERY LEAD 600MM BLACK
	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
	4581048	4	WASHER SPRING M10
	EG50	2	GROMMET RUBBER

REMOVAL OF BUMPER



1. Remove screws and plastic scrivets holding lower bumper in place and set aside
2. Remove tie downs and tow hook from under vehicle (these will not be reused)



3. Undo fog light connections



4. Remove vertical screws in wheel arch area holding wings of bumper onto fenders and set aside



5. Remove number plate from bumper and set aside

REMOVAL OF BUMPER



6. Remove screws holding grille in place



7. Prise out bumper stops and scrivets then set aside

8. Remove scrivets located approximately 30mm rearward of bump stop shown from behind top grille cover

9. Remove centre scrivets from grille.



10. Pull outer wings of bumper as shown, when both sides are released carefully remove bumper and place on soft surface to prevent damage.



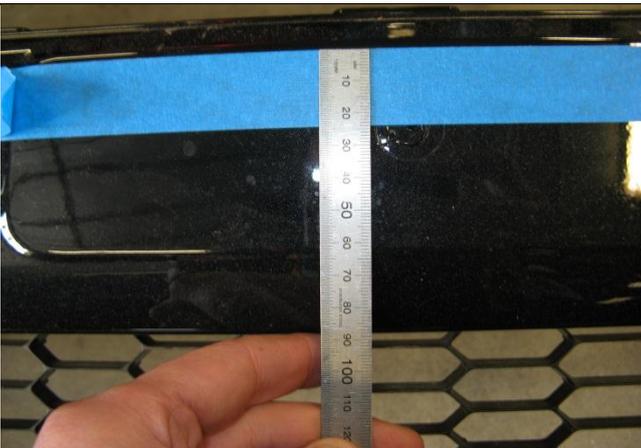
11. Remove flare extensions from bumper

REMOVAL OF BUMPER



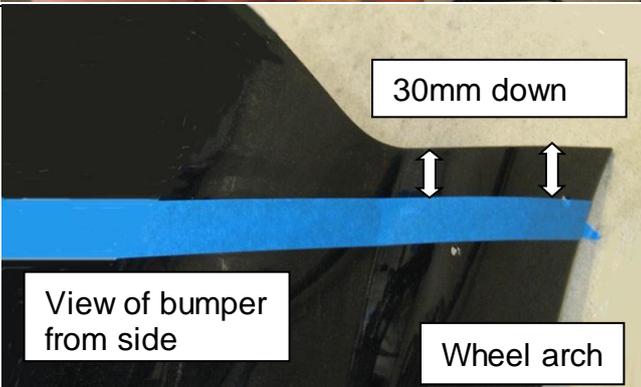
12. Remove fog lamps if fitted

CUTTING OF BUMPER

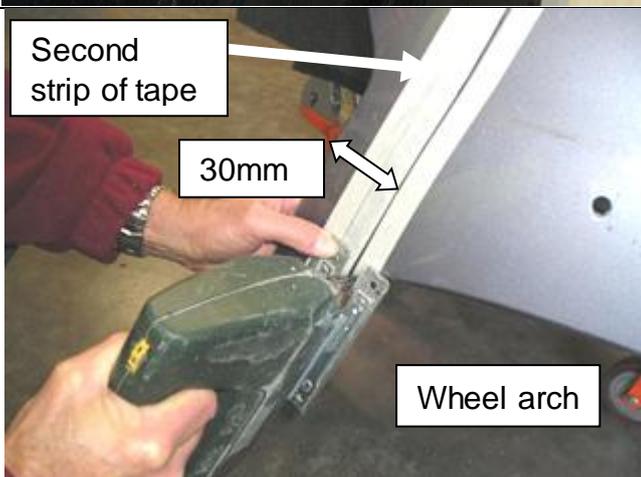


13. At the centre of the bumper, mark the cutting line 86mm up from the air intake opening upper edge as shown and apply masking tape along the line.

HINT: Place weights on the tabs on the bottom of the bumper to stop it tipping while you measure and mark cutting line.



14. Shown by the white arrows mark a line 30mm down from bumper lip. Once this is done apply masking tape and join masking tape from previous step to form a straight line across the front of bumper.



15. **Run tape above the first strip with a few mm gap on the cutting line to protect painted surface and reduce burring.**

16. Use a jigsaw or similar device and carefully cut along the line while bumper is supported on a narrow table or in similar manner.



CAUTION: Cutting operations can cause flying debris, safety glasses should be worn.

CUTTING OF BUMPER



17. Once cut is completed use a file to de-burr the cut edges.

18. Fit cut bumper back to vehicle as shown.

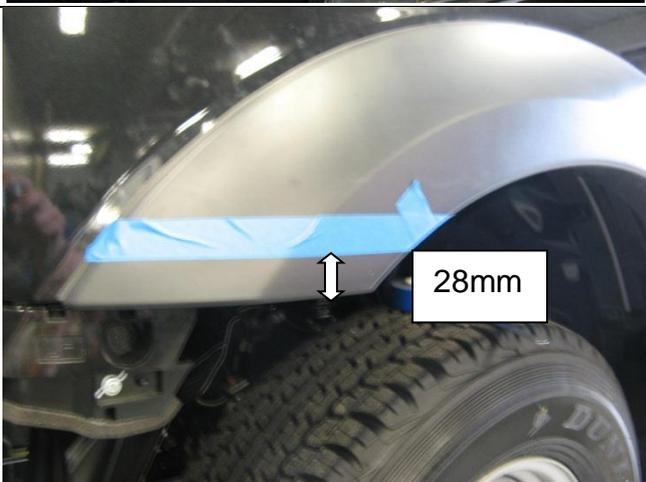
NOTE: The cut line is horizontal when bumper is fitted onto vehicle



19. As in photo, mark a line as shown on both sides of bumper and cut away. This is to gain clearance for the bar upright. De-burr all edges.



20. Refit scrivets and screws removed at stages 6 - 9.



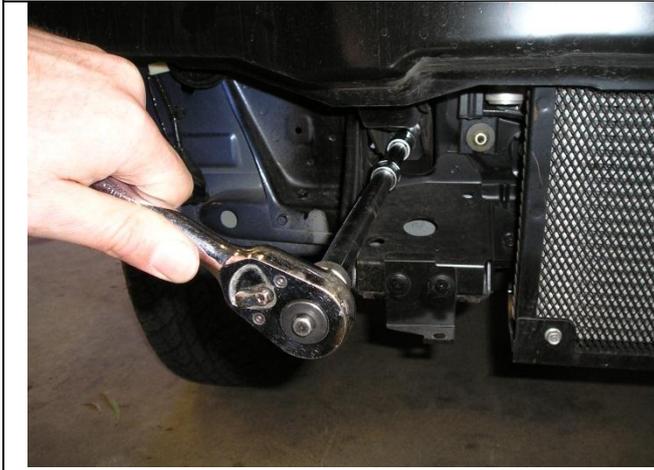
21. Mark a line 28mm up from bottom lip of flare. Un-clip front section and carefully cut along line. De-burr all edges. Secure flare back to vehicle.

HINT: Place a block of wood between flare and vehicle. This will hold it out while cutting and minimise potential damage to paintwork.

REMOVAL OF CRASH BAR



22. Using a long extension bar setup, undo vertical bolts holding crash bar from inside the engine bay, one is located next to battery the other on LHS as shown



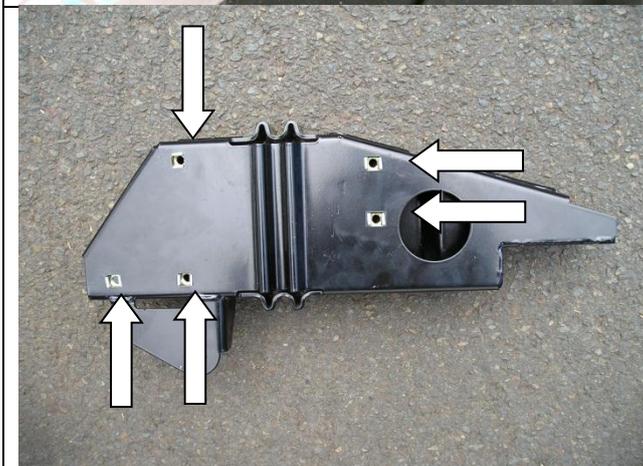
23. Undo horizontal bolts and remove crash bar from vehicle and set aside. Retain the 4 x bolts for reuse.

FIT IMPACT ABSORBERS



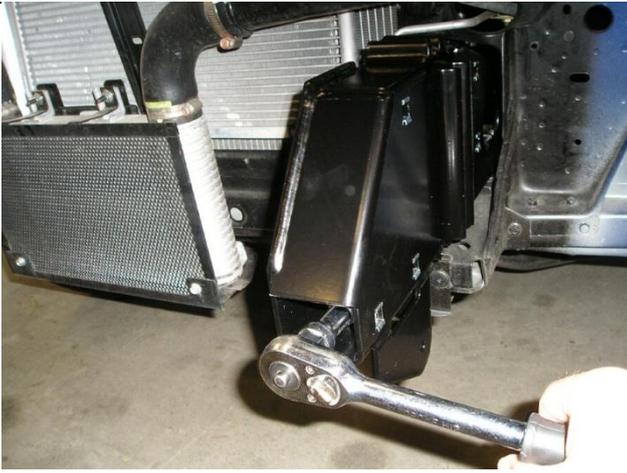
24. Fit M10 cage nuts to impact absorbers as shown, use a screwdriver to assist pushing in flange.

NOTE: All nut bodies to be inside the brackets



25. Locations of nuts (RHS shown)

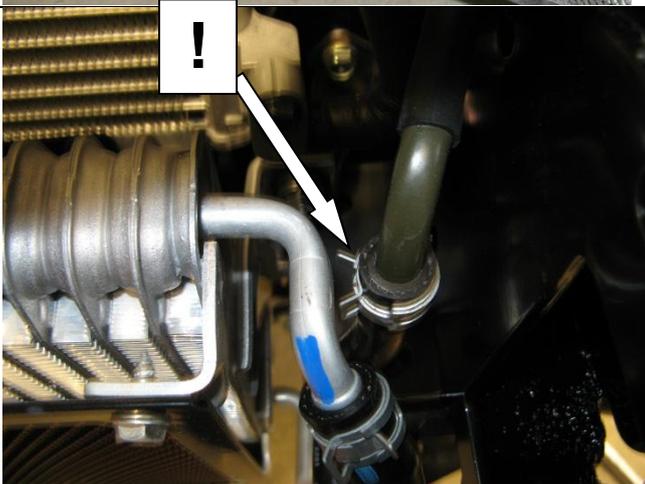
FIT IMPACT ABSORBERS



26. Fit impact absorbers as shown using existing horizontal and vertical bolts from crash bar first applying loctite thread locker, as in steps 21 & 22. LHS shown (note the RHS and LHS orientation)



27. RHS also shown for clarity

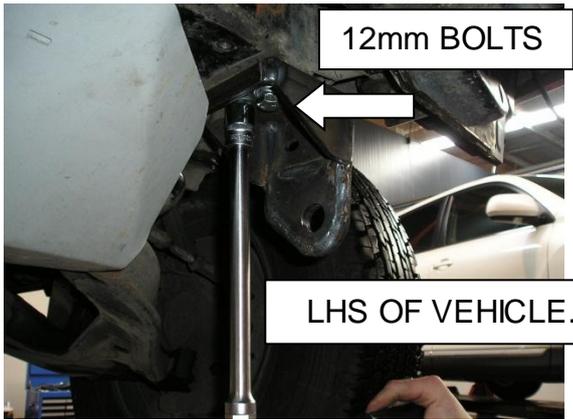


28. If vehicle is fitted with automatic transmission the cooler lines must be moved slightly. When doing so make sure factory metal clamp does not touch solid lines. Refer photo.



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

FIT IMPACT ABSORBERS

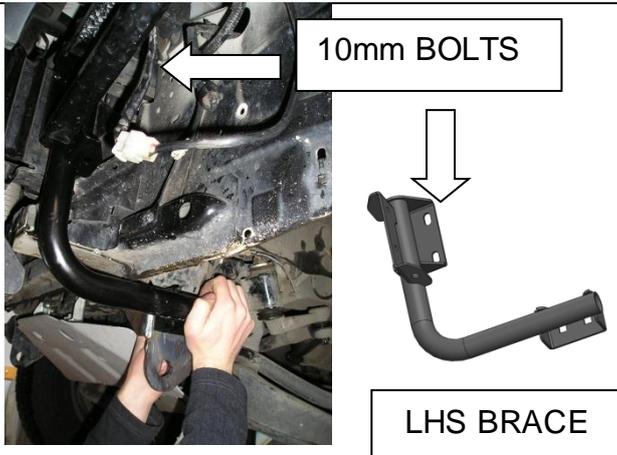


31. After fitting impact absorbers to vehicle, the brace assembly is next to be fitted.

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

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

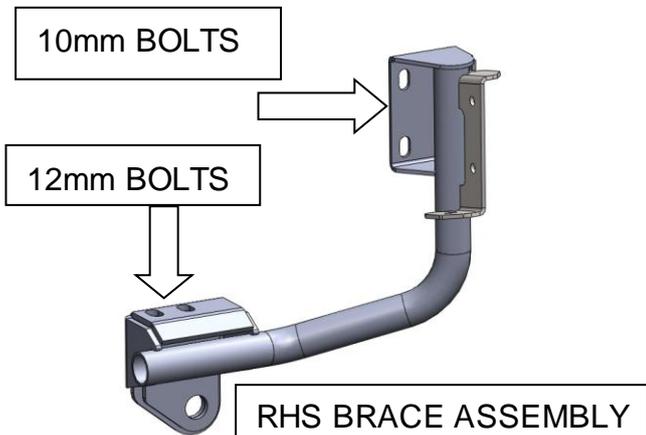
NOTE: Fit all bolts loosely first, then tighten all bolts.



33. Fit M10 cage nuts to LHS bracket and fit upper mounting bracket to impact absorber using 10mm hardware.



34. Attach lower mounting bracket to LHS brace / recovery point using 10mm hardware.



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

36. Fit upper mounting bracket to impact absorber using 10mm hardware.

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



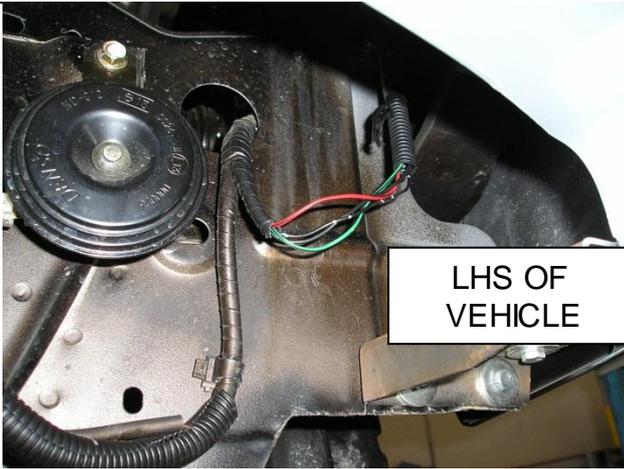
37. With impact absorbers fitted and tightened check that the inside measurement across the faces is 815mm

NOTE: Modified bumper not fitted for clarity.



38. Unbolt the lower edge of the inner guard from vehicle. As per photo cut the forward facing lip from inner guard. Place inner guard up against sheet metal and mark position of the original M6 stud. Drill a 7mm hole in the inner guard and secure using M6 x 20 black bolt, black M6 flat washer and original M6 flange nut.

BULL BAR PREPARATION



39. Before fitting bar, it is advisable to modify vehicle wiring looms for indicators /clearance lights and fog lights if fitted to vehicle.
40. To modify vehicle indicator/ clearance loom, remove insulation tape from loom and using scotch locks connect 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

41. After completing connections, cover all wiring with insulation tape



42. If vehicle comes fitted with fog lights, you must modify the O.E loom.
43. Cut the O.E plug from the very end. Locate and unclip the plastic clamp holding the loom to the inner guard as this will give you the extra length you need. Solder wires to the new fog light.

BULL BAR PREPARATION

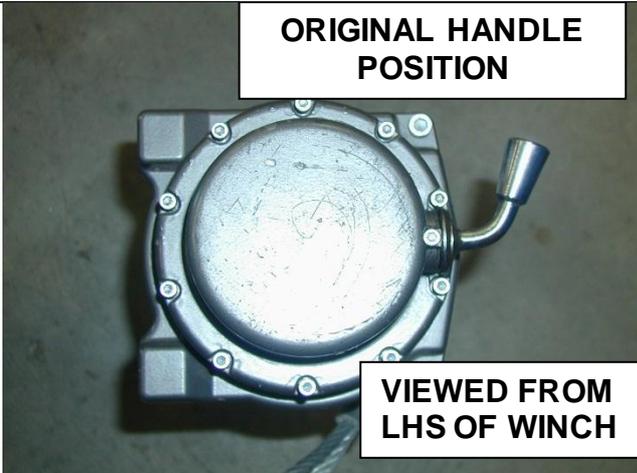


If you are not going to fit a winch to the bar, go to step 64. Non winch application number plate fitment is at step 86

44. If fitting a winch to bull bar, fit control box bracket to bar using 8mm hardware.
45. Next fit number plate bracket to bar using silver colored 6mm hardware as shown.

BULL BAR PREPARATION – FITTING A WINCH

ORIGINAL HANDLE POSITION



46. To fit an 8/9/9500lb winch, you will need to rotate gearbox 144° (4 x hole spaces) ***counter clockwise.***

ROTATED HANDLE POSITION



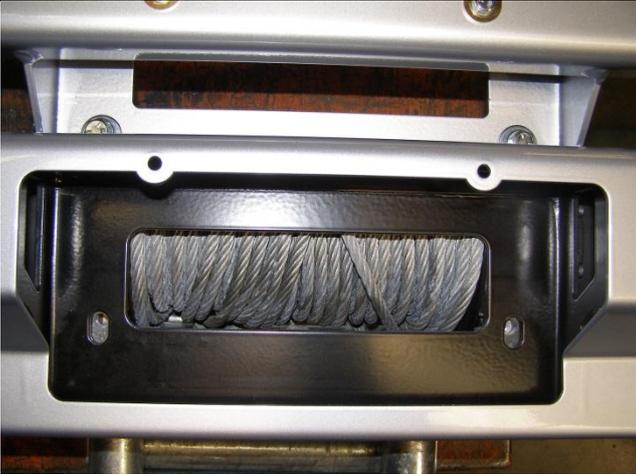
47. Stand winch upright and undo the cap screws and by lifting the gearbox only a couple of millimeters, rotate the gearbox. Once in position, refit all screws and tighten firmly.

WARNING: Do not lift gearbox more than a couple of millimeters.

BULL BAR PREPARATION – FITTING A WINCH



48. An ideal method to fit a winch into bar is to pack winch up on a bench to enable you to lower bar down on winch
49. Fit the four 3/8" square nuts into winch lugs before lowering bull bar onto winch.



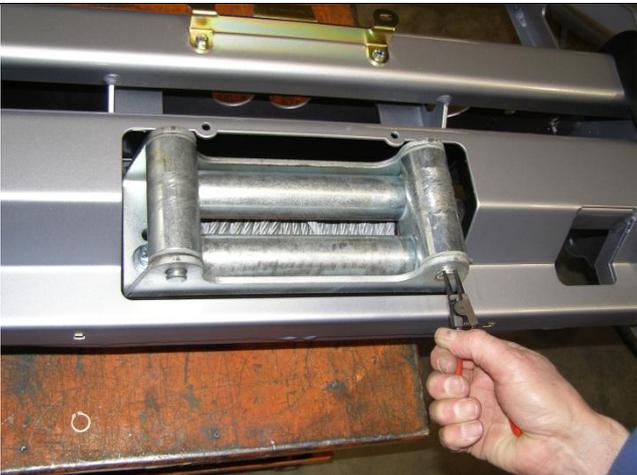
50. Lower bar down over winch, line up top holes first and secure these only using 3/8" hardware (1 1/2" x 3/8" bolts) with flat and spring washers (finger tighten only)



51. If necessary, mark out and drill two new 13mm holes in the roller fairlead, 25mm apart from the original holes, as shown on the adjacent picture.



CAUTION: *Drilling operations can cause flying metal debris, safety glasses should be worn.*



52. Place roller fairlead over lower holes and again secure using 3/8" hardware (1 3/4" x 3/8" bolts) flat and spring washers.

HINT: *Using circlip pliers, remove lower circlips and push shaft upwards to be able to move rollers sideways and enable sufficient access to bolt head.*

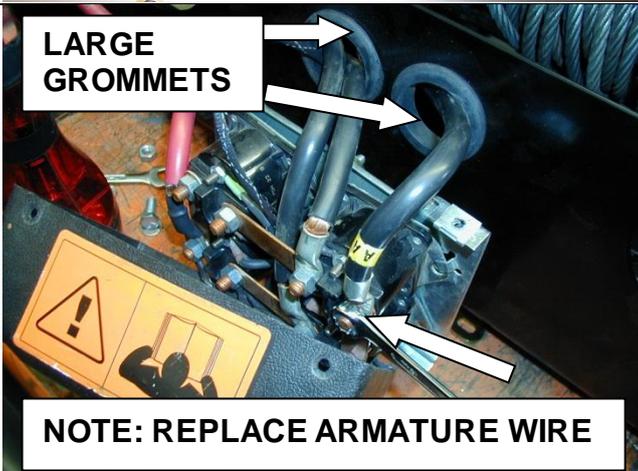
BULL BAR PREPARATION – FITTING A WINCH



53. Tighten all bolts using socket and extension.



54. If circlips were removed, refit rollers and circlips after tightening bolts.



55. Fit black rubber grommets into round holes in top of bar.

56. Fit winch control box to control box bracket on bar and remove plastic cover. The black ARMATURE ('A') lead must be removed from control box terminal and replaced with a longer lead supplied in fitting kit.

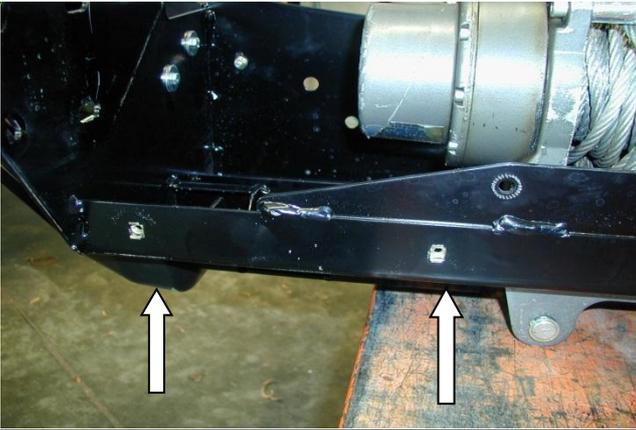
57. When new lead fitted, refit plastic cover back to control box.



58. 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.

59. Fit ground wire under tie rod.

BULL BAR PREPARATION

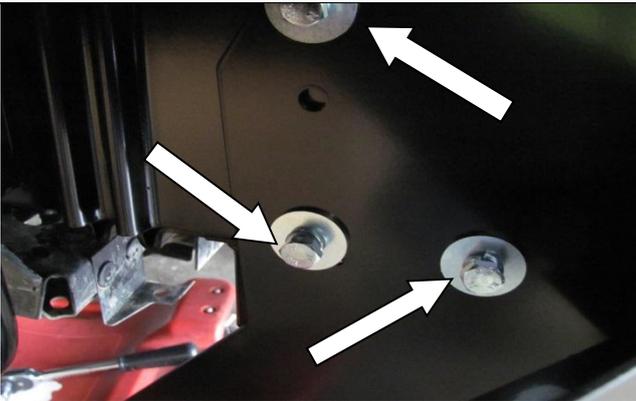


60. Fit M6 caged nuts into lower section of bar. (4 in total) These are to fit air deflector to bar at a later time.

NOTE: LHS only shown

NOTE: Fit fog light surrounds to bar after it has been fitted to vehicle.

FITTING BULL BAR



61. With the help of a friend, lift bar in between impact mounting bracket and align square slots on bar to caged nuts on impact absorbers. Secure using M10 x 35mm bolts, spring washers and large M10 flat washers. (finger tighten only)

NOTE: View from RHS fog light hole.



62. Check whether bar is centered to vehicle, if not central, take note of amount to move bar to centralize it. Remove bar. Loosen off mount bolts one bracket at a time and using soft hammer, tap across in direction of adjustment. Check that each bracket in turn has moved the correct distance, then tighten mounts and refit bull bar.

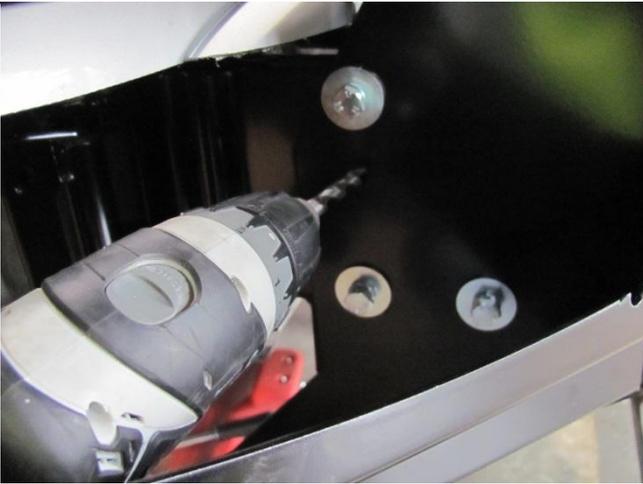
63. Adjust bar to vehicle so there is an even 15mm gap to flare on vehicle. When bar is in correct position, tighten all six bolts firmly.



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

65. Secure using a M10 x 30 bolts, M10 spring washers, large M10 flat washers and M10 flange nuts.

FITTING BULL BAR



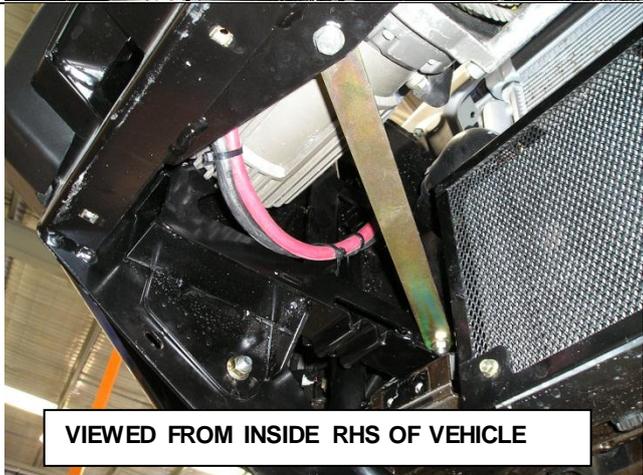
66. Drill upper pinning holes via access through the fog light cut out. Secure with same hardware as step 69.



CAUTION: *Drilling operations can cause flying metal debris, safety glasses should be worn.*



67. 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.



68. Fit diagonal braces from impact absorbers to lower brace on bar, securing using 8mm hardware. (M8 X 25mm log bolts, M8 flat washers and M8 flange nuts)

NOTE: *Diagonal braces must be fitted to winch and non winch bars.*

VIEWED FROM INSIDE RHS OF VEHICLE

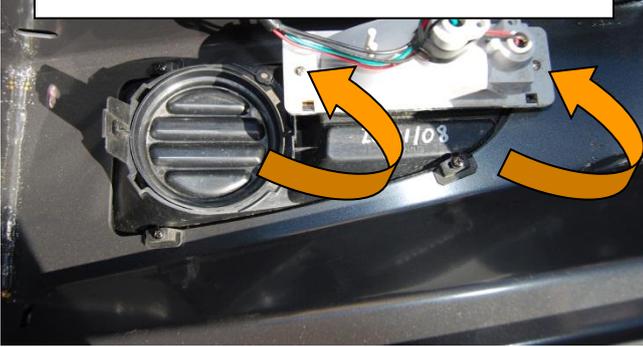


69. Fit light insert into bar. Secure using 4 screws, rubber washers and retainer clips from inside rear. (Do not over tighten)



FITTING BULL BAR

ARROWS INDICATES POSITION OF SCREW



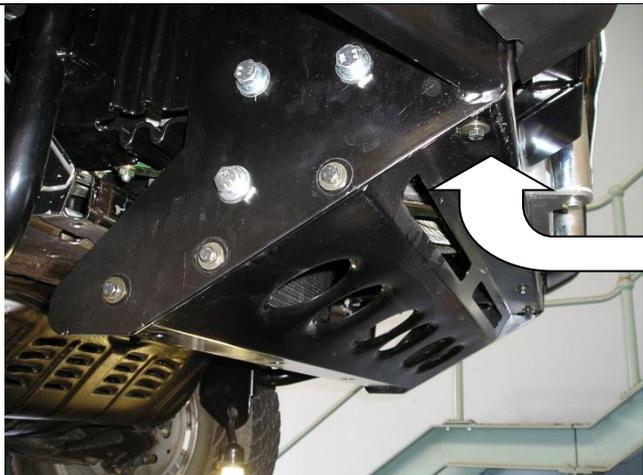
70. Install the turn signal into the rear of light insert using 2 self tapping screws (6 x 25mm pan head) supplied with the light insert fitting kit.

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



72. 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

NOTE: MD02 only needs to be ordered if vehicle does not have factory lights fitted.



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

NOTE: These bolts fit to caged nuts which were fitted in paragraph 72.

(NOTE: All M6 hardware is black in colour)

FITTING BULL BAR



74. Fit M6 caged nuts to top surface of wing panels. Place the wing panels on top of the bottom lip of bulbar wing and secure using 6 x M6 x 20mm black bolts, spring washers and flat washers. Leave finger tight.



75. Secure wing panel to centre air deflector using 4 x M6 x 30mm black bolts, spring washers and flat washers. When everything is in place tighten all bolts.



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

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



78. If the bar is a non winch bar setup, the number plate is fitted to front of bull bar directly as per photo using press in 2 x large round head plastic grommets and black Philips drive pan head screws. This position will cover the roller fairlead cutout in pan.

FITTING BULL BAR



75. Clean surface of flare and fit rubber edging as shown.

ONCE BAR IS FITTED:

- ◆ Ensure all bolts are tensioned correctly
- ◆ All wiring is clear of sharp edges or moving surfaces and secured properly
- ◆ Piping is secured well away from sharp or moving components
- ◆ Check operation of winch if fitted
- ◆ Check all wiring and turn signal lamps are functioning correctly

FINAL PRODUCT FITTED TO VEHICLE

