ARB FITTING INSTRUCTIONS

NISSAN PATHFINDER & NAVARA 2005
ARB COMBINATION WINCH / NON WINCH DELUXE BAR

- **PART No 3438220 COMBINATION D40M NAVARA & R51M PATHFINDER DELUXE BULL BAR**

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 YOU'RE 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 THE INSTALLATION, IT IS THE DUTY OF THE INSTALLER TO CHECK CORRECT OPERATION / CLEARANCES OF ALL COMPONENTS.**

TOOLS REQUIRED :- METRIC 3/8 DRIVE SOCKET SET, METRIC RING AND OPEN ENDED SPANNER SET , TORX BIT SET, PHILLIPS AND FLAT SCREW DRIVER SET, ELECTRIC DRILL AND 8mm ,10mm , 13.0 mm & 13.5 mm DRILL BITS , SHARP KNIFE , ELECTRIC JIG SAW , HACKSAW BLADE OR SMALL HAND SAW , FELT TIP PEN , METAL SCRIBE , CENTRE PUNCH , FINE FILE OR SAND PAPER , METRIC TAPE MEASURE AND A ROLL OF 12 mm & 50 mm WIDE MASKING TAPE.

If you have any queries regarding the installation of this product please contact the distributor from whom it was purchased, or alternatively the ARB office in your state.
Head Office – ARB Corporation Ltd VIC: 42-44 Garden Street, Kilsyth, Victoria, 3137 Tel: (03) 9761 6622 Fax: (03) 9761 6807
WA:(08) 9244 3553 **NSW:** (02) 9821 3633 **ACT:** (02) 6280 7475 **SA:** (08) 8244 5001 **QLD:** (07) 3872 3872 **NT:** (08) 8947 2262 **TAS:** (03) 6331 4190

NOTE:

- **OPTIONAL FOG LAMPS TO SUIT THIS PRODUCT ARE P#6821201. IF LOOM AND SWITCH REQUIRED USE P#MD02 LOOM KIT, P#180209 SWITCH AND P#180215 SWITCH CAP FOR FOGS**
- **UP TO 900 SERIES ROUND OR 800 RECTANGULAR DRIVING OR FOG LAMPS SUIT THIS PRODUCT**

USE	PART No	QTY	DESCRIPTION
IMPACT ABSORBER FITMENT TO CHASSIS **(FLANGE FACE)**	3757768L	1	IMPACT ABSORBER ASSEMBLY LH
	3757768R	1	IMPACT ABSORBER ASSEMBLY RH
	6151096	2	BOLT M12 x 1.25 P x 40 mm LONG
	6151360	4	BOLT M12 x 1.75 P x 35 mm LONG
	4581049	6	WASHER M12 FLAT
	4581064	6	WASHER M12 SPRING
	3199822	2	NUT PLATE ASSY
	5848319	4	PACKER IMPACT ABSORBER
IMPACT ABSORBER FITMENT TO CHASSIS **(PINNING HARDWARE)**	6151299	4	BOLT M10 x 1.5 P x 100 mm LONG
	4721551	4	TUBE – CRUSH
	4581040	8	WASHER 3/8” x 1”x 16 g
	615 1322	4	NUT- NYLOC M10 x 1.5 P
BULL BAR TO IMPACT ABSORBER	6151360	6	BOLT M12 x 35 mm LONG x 1.75 PITCH
	4581007	6	WASHER LARGE FLAT M12
	4581050	6	WASHER SPRING M12
	6151428	6	NUT FLANGED M12
BUFFERS TO BULL BAR	3162470L	1	BUFFER 260 x 230 STANDARD LH
	3162470R	1	BUFFER 260 x 230 STANDARD RH
	6151128	12	NUT FLANGE M6
LICENCE PLATE TO BULL BAR	6821189	2	GROMMET RND HD
	6151384	2	SCREW PAN HD
FOG LIGHTS AND INDICATORS TO BULL BAR	3163015	1	LIGHT SURROUND KIT
	6821151L	1	INDICATOR COMBINATION LAMP LH
	6821151R	1	INDICATOR COMBINATION LAMP RH
	6821191	1	ARB LOOM KIT

USE	PART No	QTY	DESCRIPTION
WINCH TO BULL BAR ***FITTING WINCH***	3756499	1	CONTROL BOX MOUNT
	EG50	2	RUBBER GROMMET
	6151074	2	BOLT 3/8" x 1 ¾" HEX HEAD
	6151073	2	BOLT 3/8" x 1 ½" HEX HEAD
	4581040	4	WASHER FLAT M10
	4581048	4	WASHER SPRING M10
	6151022	2	BOLT M8 x 25mm
	6151132	2	NUT FLANGE M8
	4581044	2	WASHER FLAT M8
	180302	6	CABLE TIES
PANEL COVER ***NOT FITTING WINCH***	6522720	1	PANEL WINCH COVER
	6151256	2	SCREW M6 X 16MM BUTTON HEAD S/S
	6151128	2	NUT FLANGE M6
	6191006	1	EXTRUSION WINCH COVER
STONE TRAY BRACE TO IMPACT ABSORBERS	4681198	1	BRACE STONE TRAY
	6151022	2	BOLT M8 x 25 mm LONG
	4581044	2	WASHER FLAT M8
	4581046	2	WASHER SPRING M8
	6151132	2	NUT FLANGE M8
	6151300	2	CAGE NUT M6 (LONG LEG)
STONE TRAY TO BULL BAR	6542066	1	STONE TRAY
	6151300	4	CAGE NUT M6 (LONG LEG)
	6151213	6	BOLT M6 x 20mm BLACK ZINC
	4581082	6	WASHER FLAT M6 x 20 BLACK ZINC
	4581287	6	WASHER SPRING M6 BLACK ZINC
PINNING HARDWARE	6151357	4	BOLT SEMS M10 x 30mm LONG
	6151321	4	NUT FLANGE M10
MISCELLANEOUS	180302	6	CABLE TIES
	6191014	2	PINCH WELD (BLACK) 330mm LONG

PREPARATION TO VEHICLE

1. Remove number plate from the vehicle.

2. Remove the four lower bolts that attach the lower bumper tabs to the vehicle (refer to attached photo). There are also another two self tapping screws in each side, located in a recess in the lower bumper face – these need to be removed.

3. Remove the two screws from the fender opening area each side that attaches the bumper bar to the plastic inner guard liner as shown.

4. Using the bumper bar “grooved highlight line” as a guide run the 12 mm wide masking tape from the fender opening from the left hand side across to the right hand side as shown. Align the lower edge of the tape with the groove in the bumper.

5. Ensure the area above the tape line is masked off to ensure the top surface is not scratched or damaged.

PREPARATION TO VEHICLE

6. Using an electric jig saw with a fine cutting blade - use the top of the 12mm tape as the cutting line. Start the cut in the wheel arch area as shown working from one side to the other. Cut thru both the back edge of the bumper and the plastic guard liner. **An assistant at this stage could hold the bumper cover in place to ensure a straight & level cut**. Ensure hearing and eye protection is used.

NOTE:- THE BUMPER IS CUT IN TWO STAGES , THE FIRST CUT AS DESCRIBED ABOVE ,CUTS THE OUTER BUMPER COVER . THE SECOND CUT AS DESCRIBED IN STEP 9. CUTS THE LOWER BUMPER SUPPORT STRUCTURE LOCATED BEHIND THE BUMPER COVER.

7. With the first cut completed on the outer bumper cover, the fog lamp loom (where fog lamps are fitted) can be accessed & dis-connected both sides. The lower bumper bar is now free and can be removed .Using a No 20 TORX bit remove the fog lamps from the lower bumper section.

   The fog lamps are re-fitted to the bull bar at a later stage.

8. The lower bumper can now be discarded.

9. The second cut is to the bumper support structure. Start in the centre of the vehicle and work towards the wheel arch area on each side as shown .While cutting the structure with one hand use your other hand to pull the structure forward to ensure the blade goes all the way through. **IMPORTANT:- KEEP YOUR FINGER CLEAR OF THE CUTTING BLADE . The cut structure that is not needed will fall clear of the vehicle and can be discarded.**

10. Clean up the cut edges of the bumper bar with a file or fine sand paper.

11. The side cut can now be done to the bumper bar. Mask the area to be cut with 50 mm masking tape to protect the surrounding surfaces. Starting on the RH side first, tape the template into position and mark with a felt tip pen.

12. Remove the template and cut out the area with the electric jig saw, a second cut may be necessary to fully cut the support structure that sits behind the bumper bar.

13. Clean up the cut edges of the bumper bar with a file or fine sand paper.

14. The pinch weld trim can now be attached to the cut area.

15. Starting at the wheel opening end pull the outer bumper outward slightly and slip the trim over the cut edge and work the trim forward.

IMPORTANT CUT FOR WINCH BAR ONLY

Shown above is the Navara bumper bar, This bumper when cut is 30 mm longer than the pathfinder bull bar Cut as shown.

Note: The bumper has been removed from the vehicle for clarity only! This cut is to be done with the upper portion of the bumper still on the vehicle.

16. **If the vehicle is fitted with a winch only**. The winch viewing slot will need to be cut out at this stage. **Cut this slot while the bumper is on the vehicle.**

Using the template as a guide, mask off the area to protect the top surface. Tape the template into position and mark with a felt tip pen. Using the electric jig saw carefully cut out the area shown on the template. Clean up the cut edges with a file or fine sand paper.

The cut edge on a colour coded bumper bar can be touched up with paint if desired – this is not supplied in the fitting kit.

PREPARATION TO VEHICLE

17. The bumper reinforcement beam is now visible. Remove the two bolts that hold the factory steel stone tray to the beam and lower the front edge of the stone tray down passed the recovery hook.

18. The two bolts in the rear of the stone tray remain in place.

19. The four bolts that hold the bumper reinforcement beam can now be removed; two of these bolts will be re-used in step 21**.**

20. There is one bolt in the top section of the beam each side and another bolt that is accessed thru the lower portion of the beam (four bolts in total).

21. With the bumper reinforcement beam removed, Re-Install the bolts to the lower attachment points in the chassis flange as shown.

Ensure the bolt is fully engaged into the thread prior to breaking the weld nut away from the flange plate.

22. Using a large hammer break out the lower weld nut in the chassis by striking the bolt several times on the head. Repeat this on the other side.

Remove and discard both of the bolts and weld nuts – these are not re - used.

PREPARATION TO VEHICLE

23. The extra pinning hole in the front face of impact absorber can now be marked for position on the chassis flange.

    Measure up a distance of 65 mm from the centre of the lower hole and in the centre of the chassis flange and mark the new pinning hole position with a centre punch.

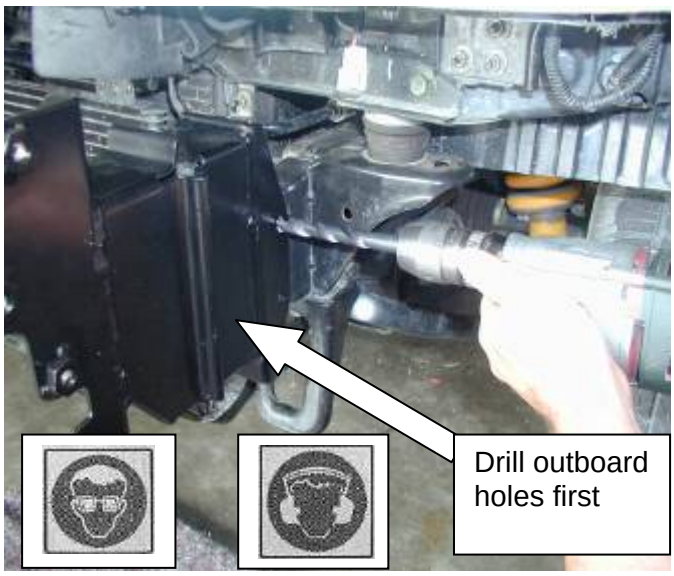
24. Using a 13 mm drill bit, drill the pinning hole in the front face of the chassis flange as shown. **Deburr both the holes in the front face of the chassis.**

    IMPORTANT: Ensure eye and hearing protection is used.

25. Fit the impact absorber as shown using M12 bolts, spring & flat washers. ***Starting with the top*** attachment, use the **M12 x 1.25 x 40 <u>fine</u> pitch** bolt to secure the impact absorber to the chassis flange. **TORQUE TO 77 Nm**

26. Insert the nut plate up inside the chassis (ensure the nuts face rearward) and bolt into position using the **M12 x 1.75P x 35 <u>coarse</u> pitch** bolts, spring & flat washers **TORQUE TO 77 Nm**

    IMPORTANT: Ensure each impact absorber is vertical and sitting flush with the chassis flange surface.



28. With the impact absorber securely bolted into position the side pinning bolts can be drilled.

29. Drill 2 x Dia 8.0mm holes per side thru the outside chassis walls using the pilot holes in the rear brackets as a guide ***NOTE: Don't drill the inboard chassis wall yet.***

30. Open these holes up by drilling with a Dia 13.5 mm drill bit.

31. Once the outer upper and lower holes are drilled repeat on the inboard side of the chassis ***(be careful not to damage the radiator during this operation).***

31. Insert the bolt & washer and crush tube into the side pinning hole and align it with hole on the inboard side and push it thru the entire width of the chassis.

    Attach the flat washer and nyloc nut to the pinning bolt.

    Repeat this on the lower pinning holes also**. Leave these bolts finger tight at this stage to enable the packers to be fitted.**

NOTE: BOLTS REMOVED FOR CLARITY.

32. Slide the packer into the space between the chassis and the impact absorber bracket as shown, (this is done on the inboard and out board sides on both the LH and RH brackets) and tighten the bolts.

BULL BAR PREPARATION

33. Fit the buffers to either side of the bull bar using 6 x M6 flange nuts. Do not over tighten.

34. Fit M6 cage nuts to four holes in lower Pan flange. The nut bodies are inside The bull bar.

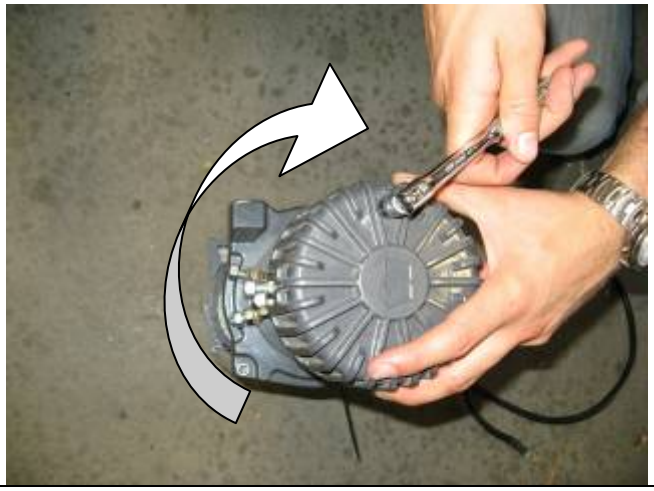
IF NOT FITTING A WINCH

35. Apply rubber mold to edge of winch hole cover panel and trim off excess.

36. Fit panel to top face on bull bar using 2 x M6 dome head stainless steel screws, flange nuts and flat washers.

NOTE: The flat washers are to be sandwiched between panel and top face of bull bar to stop the panel pulling down to form depression around screw heads.

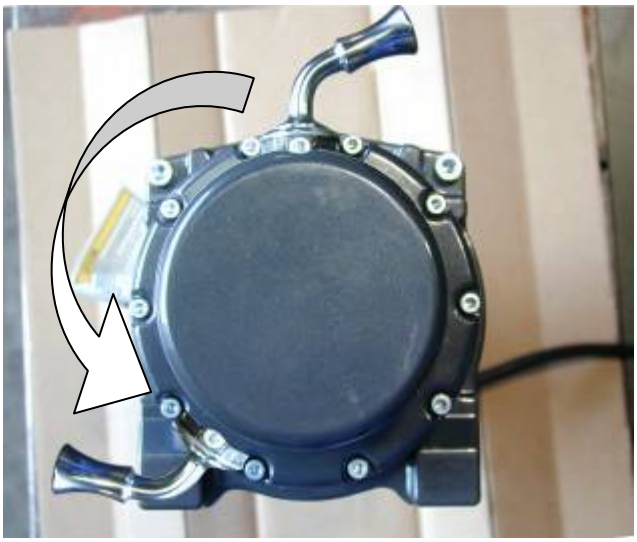
WINCH FITMENT ONLY



IF NOT FITTING A WINCH GO TO BULL BAR FITMENT ON VEHICLE SECTION

31. If fitting a winch, rotate the motor 90 degrees clock wise as shown (terminals will be facing up when fitted to bull bar)

NOTE: Follow the winch manufacturers instructions regards motor rotation and drainage requirements



32. Remove the cap head screws retaining the gearbox to the winch drum. Carefully lift the gearbox a small amount (5 mm) and rotate144 degrees counter clockwise (four hole spacings) and re-fit the cap screws. This places the winch handle in the correct orientation.

33. Lay the winch on a suitable flat surface and place the bull bar on top so that the wire rope will feed thru from the bottom.

34. Using the two 3/8” x 1 1/2”long bolts, M10 flat and spring washers, attach the bull bar to the winch through the top two bolt holes as shown.

WINCH FITMENT ONLY

35. Using a 12mm drill bit, mark & drill two new holes in the roller fairlead 25mm below the original holes.

IMPORTANT: Ensure eye and hearing protection is used.

36. Remove the cir clips from the bottom of the vertical rollers of the fairlead and push the pin upwards. Push the vertical rollers inwards on the lower edges as shown and using two 3/8" x 1 ¾" bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and winch.

37. Replace the cir clips on the vertical rollers on both sides.

38. Insert the two rubber grommets into the top face of bull bar.

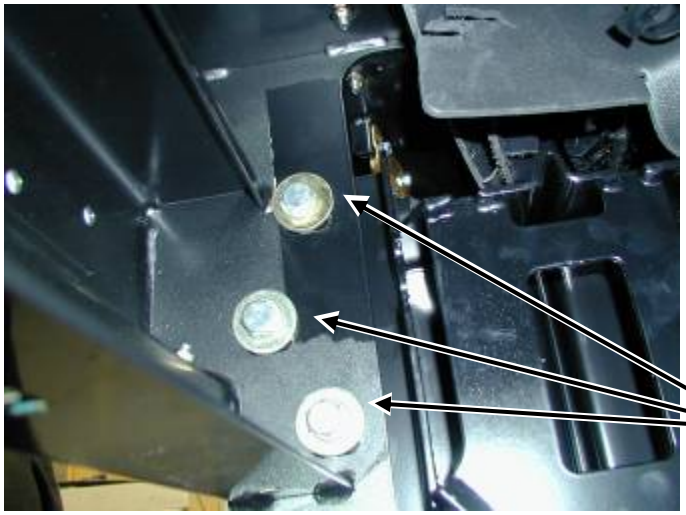
WINCH FITMENT ONLY

39. Attach the control box to the control box bracket as shown.

40. Fit the control box to the bull bar with two M8 x 25mm bolts, M8 flat washers and M8 flange nuts.

41. Run the cables through the rubber grommets and connect to the winch as per the wiring diagram supplied with the winch.

42. Using cable ties, fix the cables securely and ensure they are well away from any moving, sharp or hot surfaces.



43. With assistance guide the bull bar into position on the vehicle. Note as a reference - the top surface of the bull bar sits approx 10 mm below the bottom edge of the grille .**The uprights on the bull bar sit inside the impact absorber blades.**

44. Bolt the bull bar into position using the M12 bolts, spring washers, large body washers and flange nuts 3 places each side as shown. **Tighten the bolts firmly – but allow enough movement for the bull bar to be adjusted.**

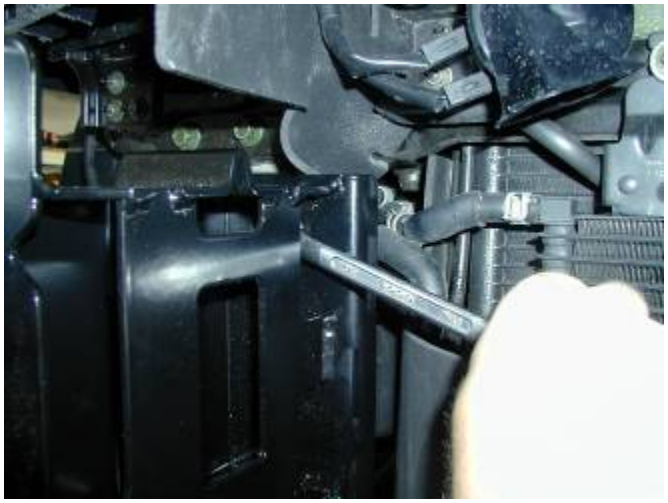
NOTE :- If the bull bar is not central to the vehicle it may be necessary to tighten the LH or RH bolts first to centralize the bull bar

BULL BAR FITMENT TO VEHICLE

45. Ensure the bull is sitting on the vehicle level and the gap between the bumper bar and the bull bar wing is parallel.

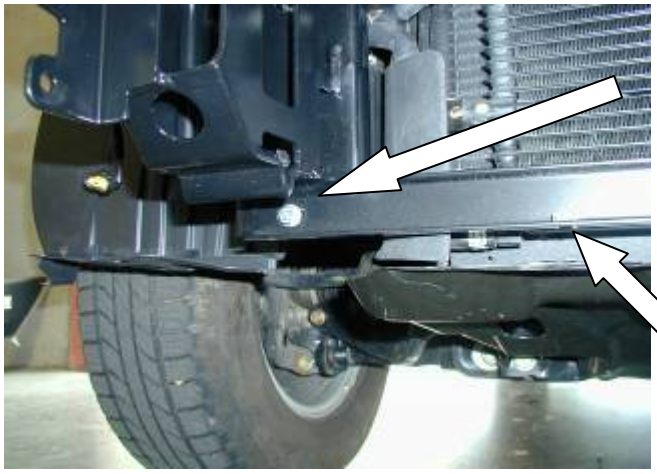
18 / 20 mm GAP REQUIRED

46. Once happy with the position of the bull bar and the Gap is between 18mm – 20 mm clearance proceed with the next step



47. Now the bull bar is in position, all of the bolts can be tightened firmly.

48. The chassis bolts that hold the impact absorber to the chassis can be tightened firmly. These can be accessed thru the side of the impact absorber as shown.

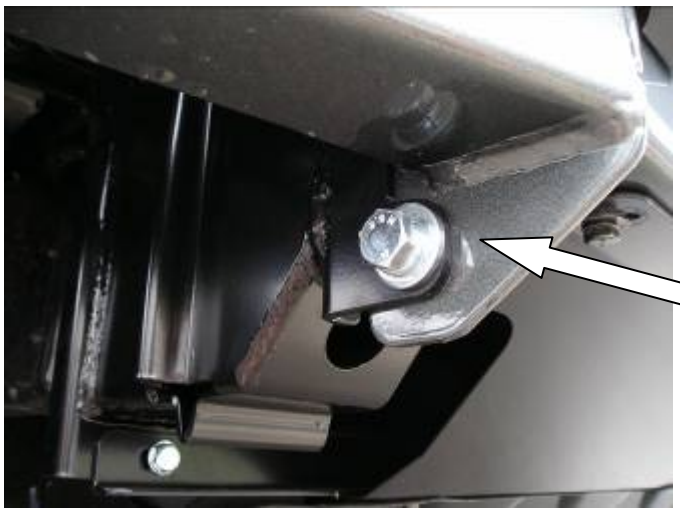


49. The stone shield cross brace can now be fitted to the lower hole in the impact absorber using the M8 bolt , spring washer, flat washer and M8 flange nut .Tighten both sides .

50. Install the two M6 cage nuts (Long leg) with the body of the nut facing upward as shown.

M6 cage nuts

BULL BAR FITMENT TO VEHICLE



51. Using an electric drill and a 10.0 mm drill bit , drill the pinning bolt holes, one in the lower position shown and the other at the top of the mount bracket. Use the holes in the mount bracket as a guide.

52. Bolt the bull bar to the impact absorber using two M10 SEMS bolts and M10 flange nuts.

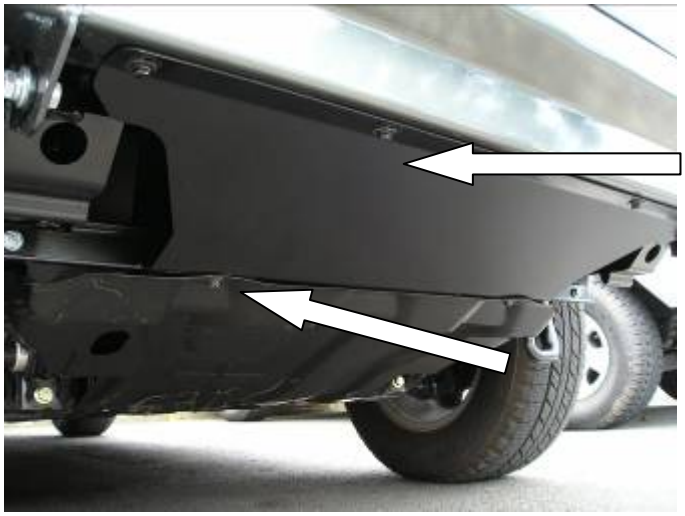
M10 PINNING BOLT.

IMPORTANT: Ensure eye and hearing protection is used .

53. Assemble and install combination light surrounds (p/n 3163015) as per instructions no. 3786421 supplied with surround kit. Note: Optional fog lamps can be installed at this point as per fitting instruction no. 3783315 supplied with fog lamp kit no. 6821201.

54. Wire the combination lamp to the vehicles indicator and clearance lamps using supplied ARB loom kit. Follow directions of loom kit fitting instructions

Caution: Cable tie all cables together and keep all cables clear of sharp edges and moving parts.



55. Attach the stone tray to the under side of the bull bar with the black M6 bolts, flat washers & spring washers.

There are four bolts in the front edge and two in the back edge.

BULL BAR FITMENT TO VEHICLE

56. Fit the two round head white plastic grommets to the two 8mm square holes in the front face of the lower pan

57. Position the number plate as shown - using the two lower outer holes. If no winch fitted use two top outer holes.

58. Using the two dome head Philips head screws, screw firmly into position

59. Using a hack saw blade or a sharp knife extend the top horizontal cut from the jig saw in towards the centre of the car.

60. Cut in approx 40/50 mm and do the same on the lower horizontal cut .

61. With the two horizontal cuts complete, cut down from the end of the top cut to the bottom cut vertically (the inner guard needs to have clearance to the bull bar wing return as shown).

62. With part of the inner guard now trimmed to clear the wing return the remaining part of the inner liner that hangs down below the bottom of the wing can be trimmed off horizontally.

63. Push the outer edge of the liner forward past the wing return edge so that it snaps in against the wing brace as shown.

ENSURE ALL BOLTS ARE TIGHT, AND ALL WIRING AND TURN SIGNAL LAMPS ARE FUNCTIONING CORRECTLY.

BULL BAR FITTED TO VEHICLE

WINCH BULL BAR VERSION SHOWN.