



FITTING INSTRUCTIONS

Part Number: **3426050 F/Kit 6172687**

Product **Deluxe Combination Winch and Non Winch Bull Bar**

Description:

Suited to **SUZUKI GRAND VITARA SEP 08 ON**

vehicle/s: ***** DOES NOT SUIT HEADLAMP WASHERS ON PRESTIGE MODELS**

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. This service can be performed by your local authorized ARB Stockist.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

METRIC SOCKET SET	METRIC RING AND OPEN ENDED SPANNER SET
ELECTRIC DRILL	3 & 10mm DRILL BITS
SHARP KNIFE	PHILLIPS AND FLAT SCREW DRIVER SET
FELT TIP PEN	HACKSAW BLADE OR SMALL HAND SAW
FINE FILE OR SAND PAPER	ELECTRIC JIG SAW
METRIC TAPE MEASURE	ROLLS OF 12 mm & 50 mm WIDE MASKING TAPE
TOUCH UP PAINT	DIE GRINDER AND CUTTING BIT
Loktite© 24240 Thread Locker	SCISSORS

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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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	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

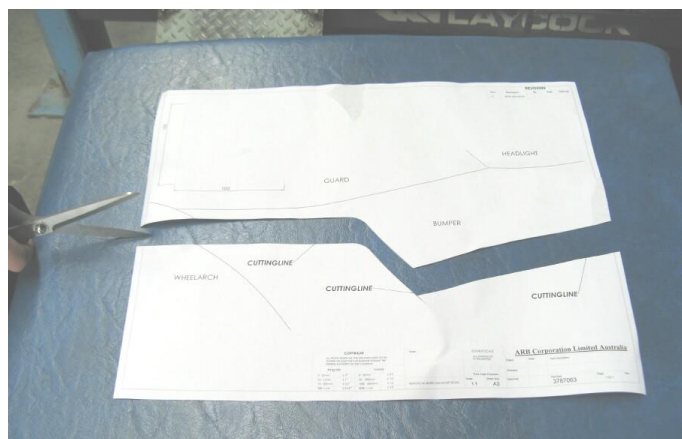
NOTE:

- ◆ 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

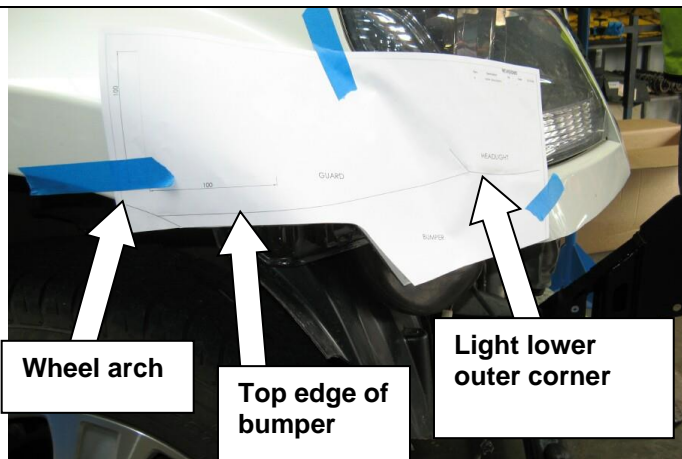
PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
MOUNT BRACKET (IMPACT ABSORBER) TO CHASSIS	3757981R&L	1 PR	BRACKET ASSY IMP ABS RH & LH
	6151132	8	NUT FLANGED M8
	6151022	4	BOLT M8 x 25 mm LONG
	4581044	4	WASHER FLAT M8
	4581046	4	WASHER SPRING M8
	6151301	2	CAGE NUT M8
	3199943	2	PLATE CAGE NUT EXTENSION
BULL BAR TO MOUNT BRACKETS	6151360	6	BOLT M12 X 1.75 X 35 (COARSE PITCH)
	4581007	6	WASHER FLAT M12 X 37 X 4
	4581050	6	WASHER SPRING M12
	6151428	6	NUT FLANGED M12
BUFFERS TO BULL BAR	3162470R&L	1 PR	BUFFER SLOTTED RH & LH
	6151128	12	NUT FLANGED M6
LICENCE PLATE TO BULL BAR	6151384	2	SCREW PAN HD
	6821189	2	GROMMET RND HD
LIGHT INSERT AND INDICATORS	3163015	1	COMBINATION LIGHT SURROUND KIT
	6821151R&L	1 PR	INDICATOR/CLEARANCE LAMP RH/ LH
	6821152	2	LOOM INDICATORS
	180701	6	SCOTCH LOKS
WINCH TO BULL BAR	3756499	1	CONTROL BOX MOUNT
	EG50	2	RUBBER GROMMET
	6151074	2	BOLT 3/8" x 1 3/4" HEX HEAD
	6151073	2	BOLT 3/8" x 1 1/2" 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	
WINCH COVER (NOT FITTING WINCH)	6522749	1	PANEL WINCH COVER
	6151256	2	SCREW M6 X 16MM BUTTON HEAD S/S
	6151128	2	NUT FLANGE M6
	6191006	1	EXTRUSION WINCH COVER
	4581304	2	WASHER FLAT M6 S/S
STONE TRAY BRACE TO IMPACT ABSORBERS	3757959	1	BRACKET STONE TRAY
	6151022	2	BOLT M8 x 25 mm LONG
	4581044	2	WASHER FLAT M8
	4581046	2	WASHER SPRING M8
	6151301	2	CAGE NUT M8
INTERCOOLER SUPPORT BRACKETS (DIESEL ONLY)	3757958R&L	1PR	BRACKET INTERCOOLER SUPP. LWR
	3758029R&L	1PR	BRACKET INTERCOOLER SUPP. UPPR
	6151022	4	BOLT M8 x 25 mm LONG
	4581044	4	WASHER FLAT M8
	4581046	4	WASHER SPRING M8
	6151132	4	NUT FLANGED M8
BRACE LOWER STRAP	4681331	2	STRAP BRACE LOWER
	6151022	4	BOLT M8 x 25 mm LONG
	4581044	4	WASHER FLAT M8
	4581046	4	WASHER SPRING M8
	6151132	4	NUT FLANGED M8
STONE TRAY TO BULL BAR	6522750	1	STONE TRAY
	6151300	7	CAGE NUT M6
	6151213	7	BOLT M6 x 20 BZ
	4581082	7	WASHER FLAT M6 x 20 BZ
	4581287	7	WASHER SPRING M6 BZ

WING UNDER PANELS TO BULL BAR	6522751L&R	1	PANEL WING UNDER SIDE
	6151300	6	CAGE NUT M6
	6151213	6	BOLT M6 x 20 BZ
	4581082	6	WASHER FLAT M6 x 20 BZ
	4581287	6	WASHER SPRING M6 BZ
	6151022	2	BOLT M8 x 25 mm LONG
	4581044	2	WASHER FLAT M8
4581046	2	WASHER SPRING M8	
6151301	2	CAGE NUT M8	
180302	8	CABLE TIES	
PINNING BOLT HARDWARE	6151357	4	BOLT SEMS M10 x 25 mm LONG
	6151321	4	NUT FLANGE M10
MISCELLANEOUS	180302	6	CABLE TIES
	6191020	2	PINCH WELD NARROW 400mm LONG
	3787063	1	TEMPLATE BUMPER CUT

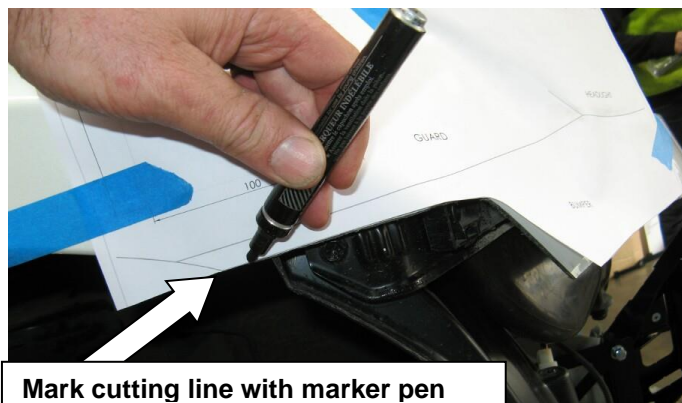
PREPARATION TO VEHICLE



1. Remove licence plate from the vehicle and set aside
2. With scissors cut out the bumper cutting template along designated cutting line as shown



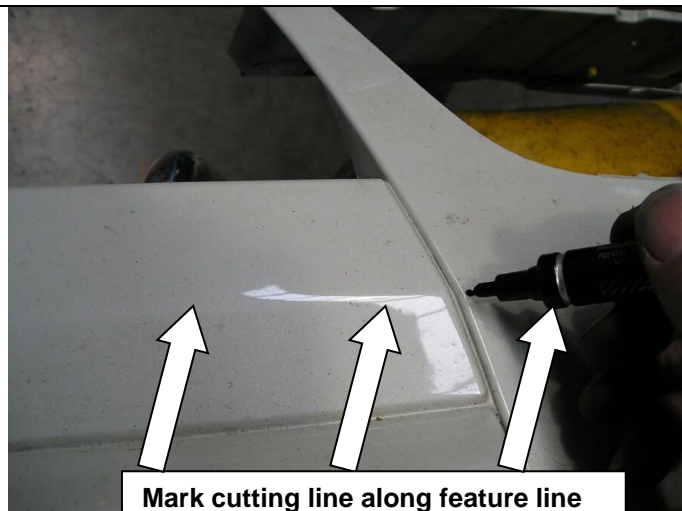
3. Fit the template to the RHS of the bumper aligning with the wheel arch, top edge of the bumper and the head lamp lower corner and tape in position
NOTE: View shows already cut bumper



4. Mark the cutting line around to the front face of the bumper
5. Remove the cutting template from the RHS, reverse it and reposition it on the LHS, tape in position and mark cutting line.

NOTE: View shows already cut bumper

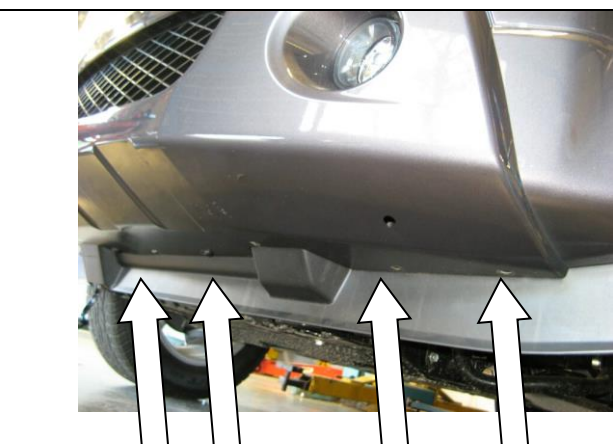
PREPARATION TO VEHICLE



6. Mark the cutting line across the front of the bumper in line with the feature line and lower edges from the template.



7. Apply masking tape with the bottom edge on the marked cutting line.



8. Remove the three plastic clips securing the bumper in the intake area behind the licence plate location
9. Remove the bolts between the lower bumper and sump guard
10. Remove the four lower bolts and plastic clips 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.

PREPARATION TO VEHICLE



11. Remove the two bolts and screw or plastic clip from the fender opening area each side that attaches the bumper bar to the plastic inner guard liner as shown.
12. Remove the screws securing the fender liners to bumper in the forward wheel arch areas



13. Remove the top panel and grille – prise out plastic clips along the top first, then pull outwards and upwards to release lower clip points along the lower section of grille attaching to top flange of the bumper



14. Remove bolts and plastic clips securing bumper to cross member.

PREPARATION TO VEHICLE



15. Remove bumper, also removing air temperature sensor if fitted

16. Disconnect fog lamps if fitted

NOTE: *The outer end of the bumper where it clips into the fender, is released by pulling out and forward as shown*



17. **DIESEL ONLY:** Remove intercooler support brackets top and bottom

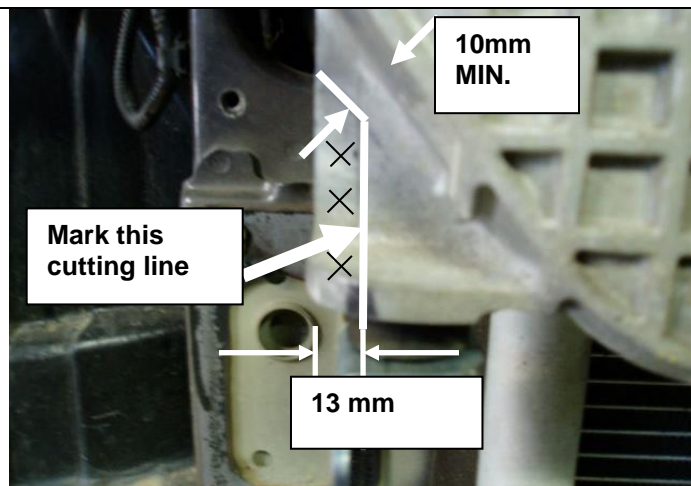
18. **ALL VEHICLES:** Remove reinforcing beam by undoing 3 x fastening nuts per side. Set beam aside, it will not be reused



19. Remove LHS headlamp

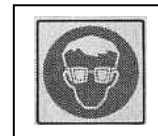
20. Undo washer bottle fasteners and remove washer bottle

PREPARATION TO VEHICLE

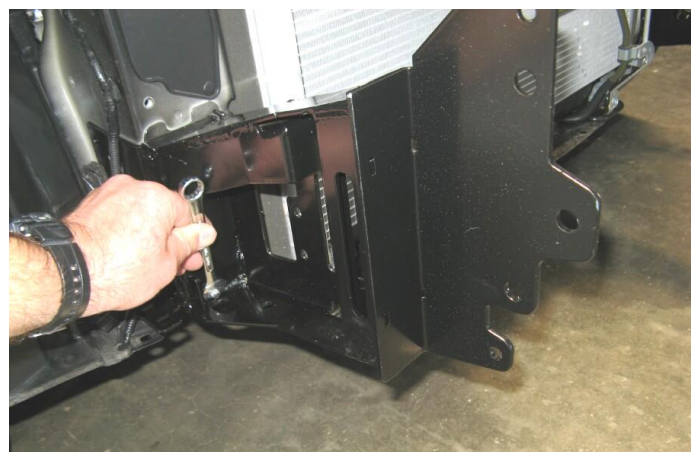


21. **DIESEL ONLY:** Mark out and carefully notch out side of **lower** mount position **both** sides to clear mount brackets by 13mm as shown using an air hack saw or similar.

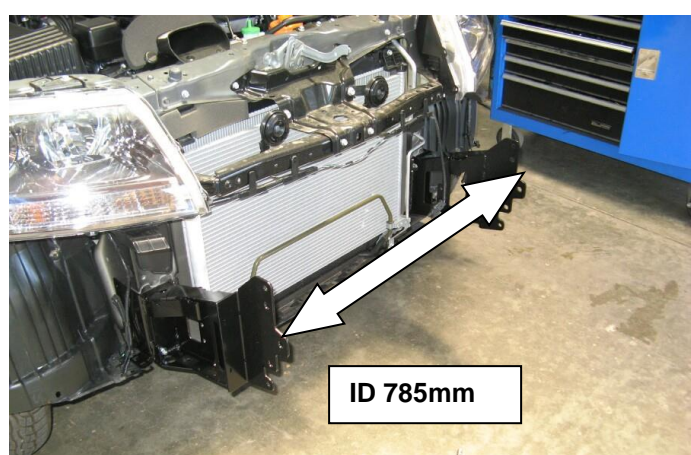
Warning: Cutting operations can result in flying metal debris, safety glasses should be worn.



22. Remove air intake on the RHS of vehicle



23. Fit mounting brackets using supplied brackets and nut and washer kits



24. Measure inside dimension across mount flanges and adjust bracket side ways position so that there will be a slight amount of clearance to the bull bar uprights, (785mm) when bull bar is fitted later on. **Once in position tension to specified torque**

NOTE: The mount bracket flanges fit outside the bull bar uprights

PREPARATION TO VEHICLE

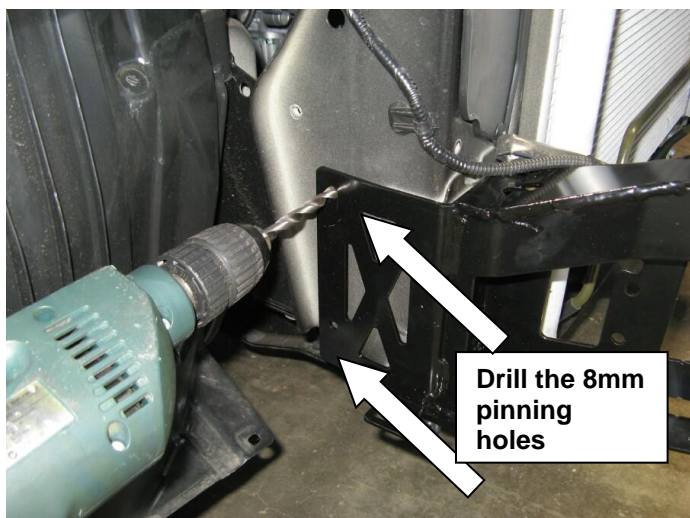


25. Grind out access hole in lower chassis as shown, both sides of vehicle, just enough so the cage nut on access plate can be inserted for top pinning hole on brace

26. Paint around the bared edges to prevent corrosion



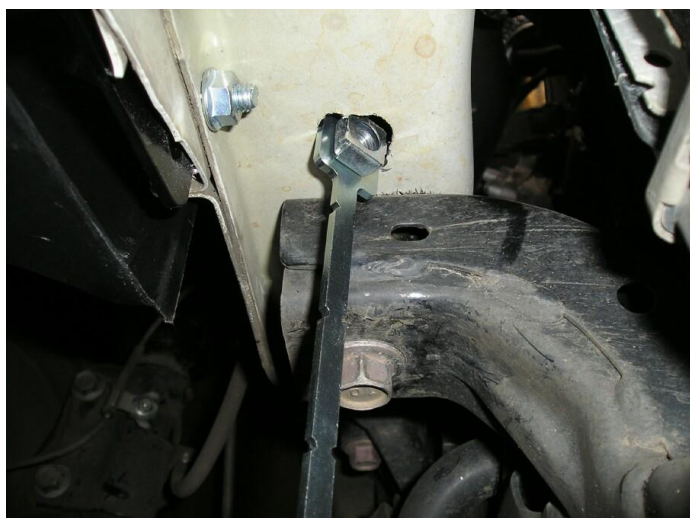
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27. Using an 8mm drill bit, drill holes through the side of vehicle chassis using the top and lower rearmost holes in brace as a guide.



Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.



28. Fit M8 cage nut to extension plate, insert through hole in chassis and secure top pinning position with M8 bolt and washer set

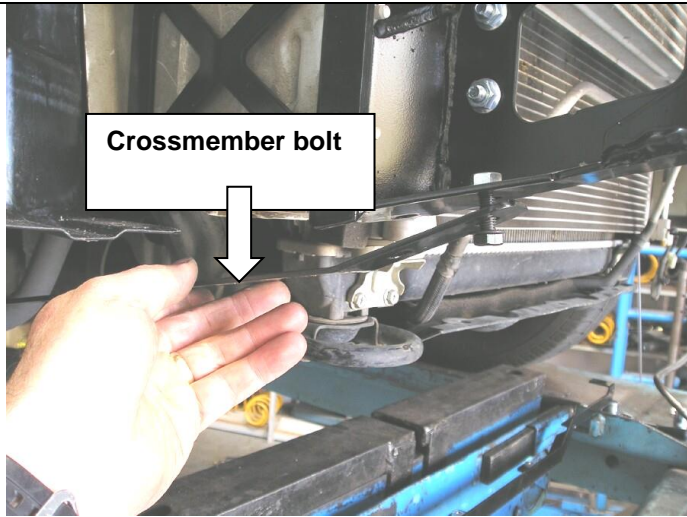
29. Bend the protruding extension plate until it breaks off

30. Fit M8 fastener set to lower bolt pinning position

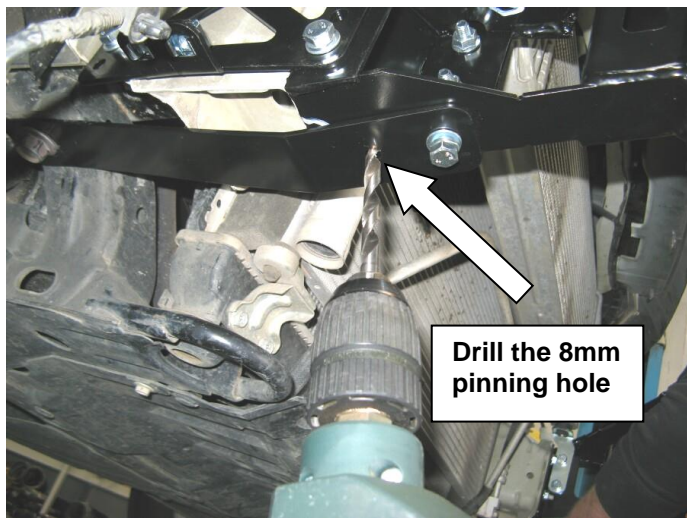
31. Repeat for other side of vehicle ***Tension to specified torque***

HINT: Apply a couple of bends to the plate so that once the nut plate is inserted into the access hole, the cage nut will then sit nicely against the side of the chassis wall for easy insertion of the M8 bolt thread.

PREPARATION TO VEHICLE



32. Undo lower crossmember bolt and fit tension strap.
33. Apply Loktite© 24240 to thread of crossmember bolt before refitting then nip up bolt only.
34. Fit M8 bolt set to front position and nip up



35. Using an 8mm drill bit, drill pinning hole through the rear 8mm hole in strap.
36. Fit M8 bolt set, do all bolts in strap up to correct torque

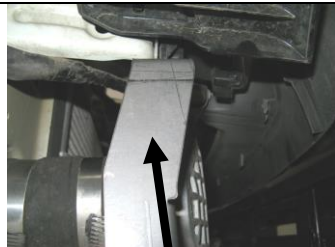


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37. Fit M8 cage nuts to two lower positions as shown below

PREPARATION TO VEHICLE



RHS Bracket shown— note top section offsets towards front of vehicle

38. **DIESEL ONLY:** Fit grommets to new supplied top mount brackets then loose fit brackets to intercooler upper location pin (note these brackets are handed specific)

NOTE: You may need to undo the intercooler pipe clamp bolts to allow the intercooler to drop enough to get the bracket and grommet over the top pin.



39. **DIESEL ONLY:** Fit grommets to new intercooler lower support brackets then fit over lower pins and to inner faces of main mount brackets as shown.

40. Use M8 fastener sets to secure both the lower and upper intercooler brackets at the same time. As shown the lower brackets are to the inboard side of the mount bracket the upper brackets are to the outboard side of the mount bracket.



41. Reinstall washer bottle and connect plumbing and electrical connections.

42. Petrol vehicles, reinstall air intake on RHS of vehicle

43. Fit and connect indicator harness, refer step 79



44. Remove plastic bumper clip both sides of vehicle

PREPARATION TO VEHICLE



45. Trim **tapered** end off bumper clip as shown

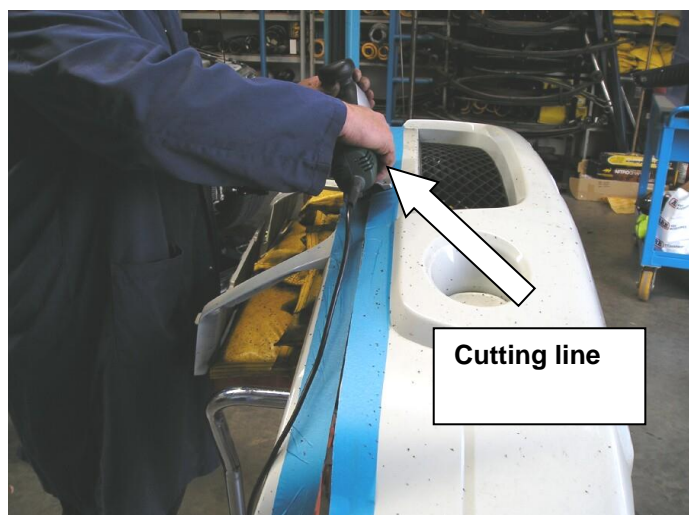


Warning: Cutting operations can result in flying debris, safety glasses should be worn.



46. Spray paint black the front face of the plastic clip as well as any lower sheet metal exposed once bull bar is fitted

47. Refit clips to vehicle



48. Lay bumper face up on a table for cutting process

49. Apply 50mm wide masking tape across the bumper with lowest edge of tape on the cutting line

50. Using a jigsaw or pneumatic cutting saw cut along the cutting line



Warning: Cutting operations can result in flying metal debris, safety glasses should be worn.



51. Remove tape, deburr cut edges with a file then apply pinch weld to side cut edges as shown and then trim off excess

PREPARATION TO VEHICLE



52. Fit bumper back onto vehicle



BULL BAR PREPARATION



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

54. Fit M6 cage nuts to four holes in lower pan flange. The nut bodies are inside the bull bar



IF NOT FITTING A WINCH

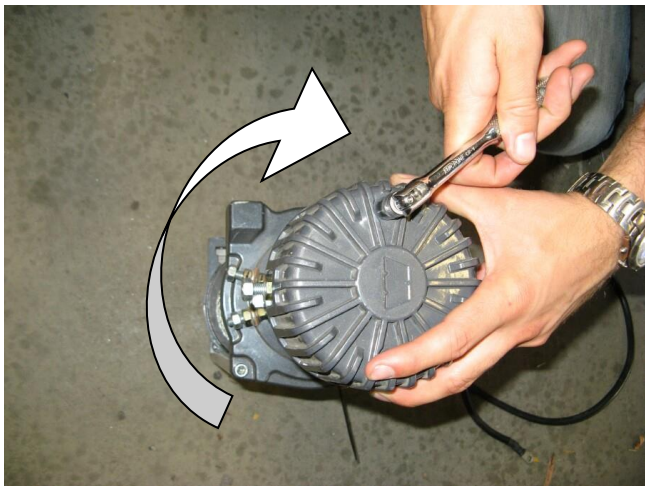
55. Apply rubber mould to edge of winch hole cover panel and trim off excess.



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

NOTE: The stainless steel 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.

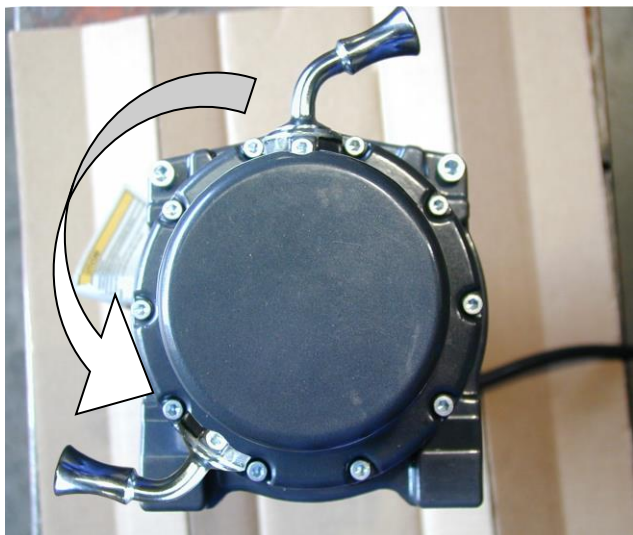
WINCH FITMENT ONLY



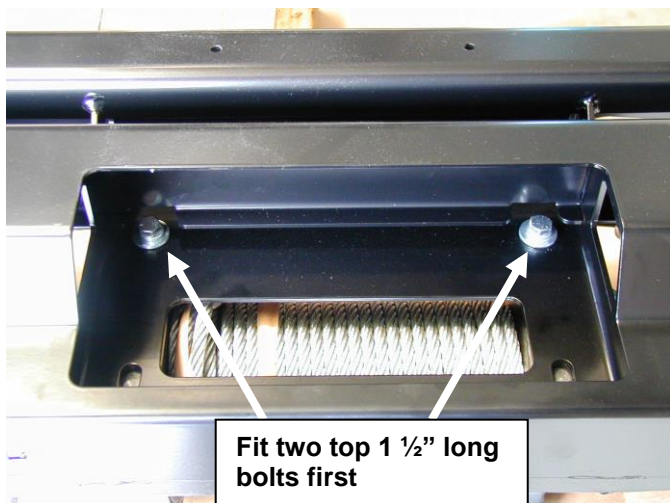
IF FITTING A WINCH

57. Rotate the winch motor 90 degrees as shown

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



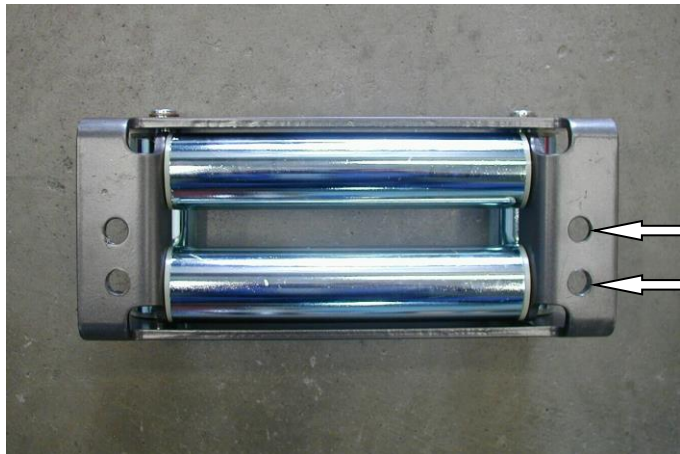
58. Remove the cap head screws retaining the gearbox to the winch drum. Carefully lift the gearbox a small amount (5 mm) and rotate 144 degrees counter clockwise (four hole spacings) and re-fit the cap screws . This places the winch handle in the correct orientation.



59. 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.

60. 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



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

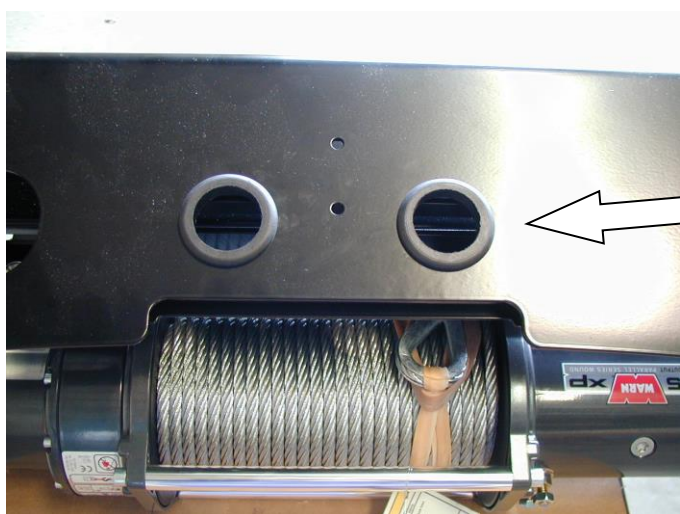
Drill the new hole 25mm below



Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.

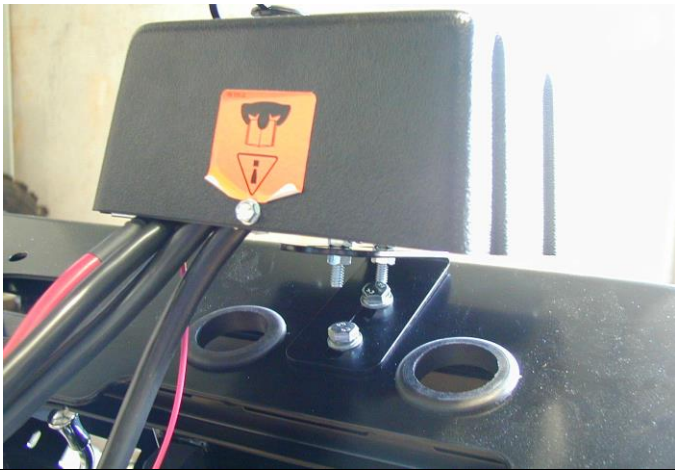


62. Remove the cir clips from the bottom of the vertical rollers of the fairlead and push the pin upwards. Push the vertical rollers inwards on the lower edges as shown and using two 3/8" x 1 3/4" bolts M10 flat and spring washers, attach the lower section of the roller fairlead to the bull bar and winch.
63. Replace the cir clips on the vertical rollers on both sides.

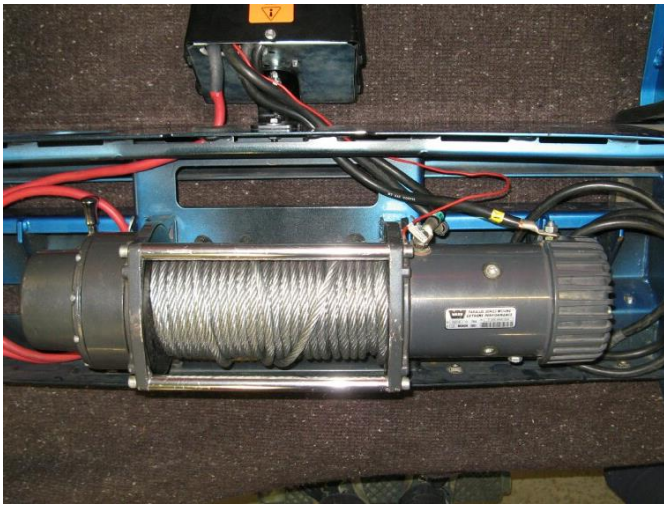


64. Insert the two rubber grommets into the top face of bull bar.

WINCH FITMENT ONLY



65. Attach the control box to the control box bracket as shown.
66. Fit the control box to the bull bar with two M8 x 25mm bolts, M8 flat washers and M8 flange nuts.



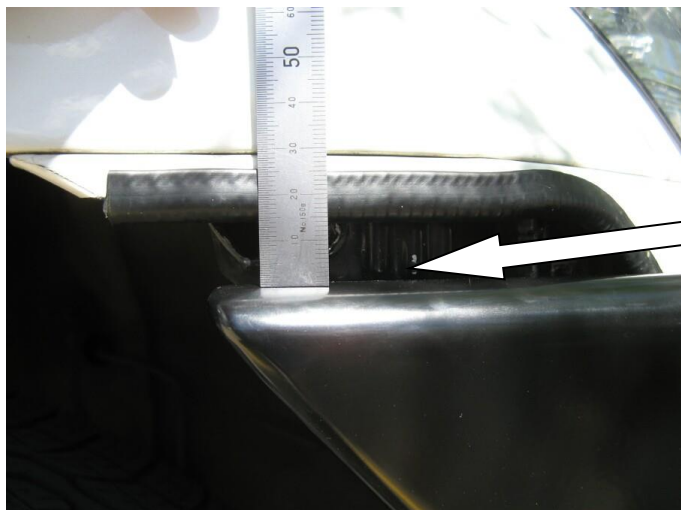
67. Run the cables through the rubber grommets and connect to the winch as per the wiring diagram supplied with the winch.
68. Using cable ties fix the cables securely and ensure they are well away from any moving, sharp or hot surfaces.

BULL BAR FITMENT TO VEHICLE



69. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit inside the impact absorber blades.
70. Bolt the bull bar into position using the M12 bolts, spring washer, large body washer and flange nuts 3 places each side as shown. Tighten the bolts firmly – but allow enough movement for the bull bar to be adjusted
71. If winch fitted route cables up into the engine bay and secure.

BULL BAR FITMENT TO VEHICLE



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

15 mm (5/8") GAP REQUIRED

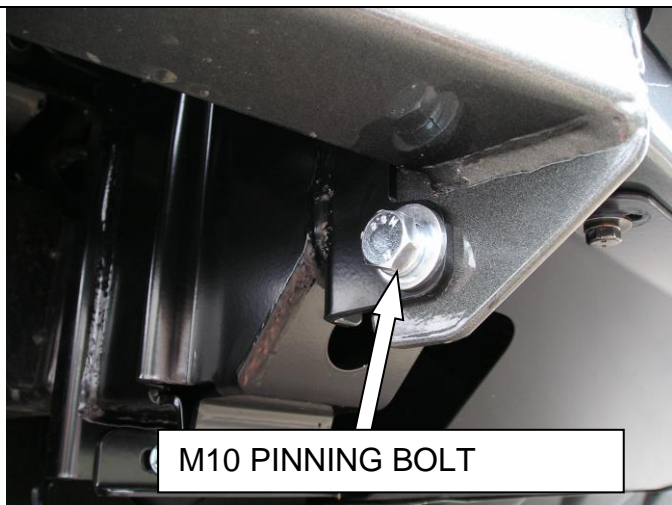
73. If the bull bar is not centred on the vehicle, tap the mount brackets sideways with a soft hammer until the bar is central
74. Once happy with the position of the bull bar and the clearance gap is 15mm, tighten all the mount bolts to specified torque



75. Using an electric drill and a 10.0 mm drill bit, drill two pinning bolt holes through the bull bar upright each side using the holes in the mount bracket flanges as a guide. One hole is located in the lower lug of the mount face and one up above the welded nuts. Use access through the light surround opening for the top hole.



Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.



M10 PINNING BOLT

76. Fit the pinning bolts to the bull bar in the drilled positions using 4 x M10 SEMS bolt and washer sets and M10 flange nuts.
77. If fitted with air temperature sensor refit in suitable location and cable tie in position

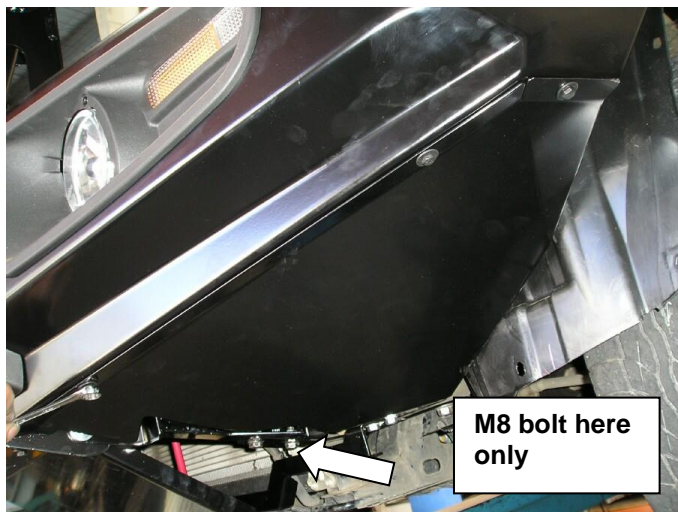
BULL BAR FITMENT TO VEHICLE



78. 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.

79. Wire the combination lamp to the vehicles indicator and clearance lamp wiring.
Caution: Cable tie all cables together and keep all cables clear of sharp edges and moving parts.

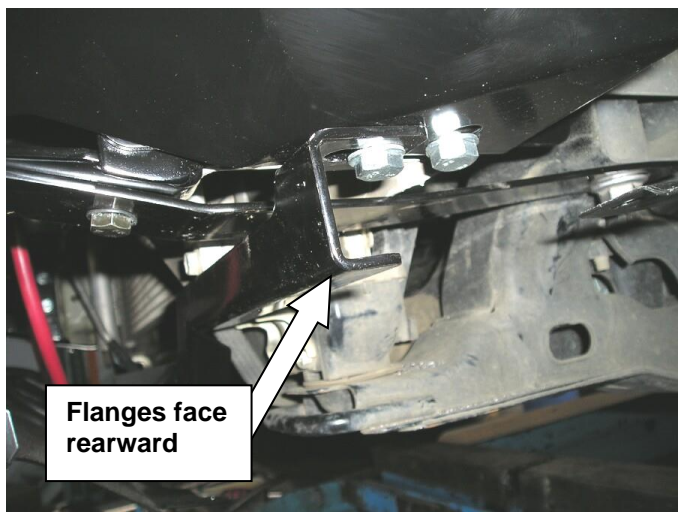
Wiring:
Green wire is Turn signal + (pos)
Red is running lamp + (pos)
Black is – (neg)



80. The wing under panels can now be fitted.

81. Fit M6 cage nuts to the inside of the wings lower flanges, 3 places per wing, also to the lower inside of the pan.

82. Fit the wing panels as shown and secure with M6 bolt and washer sets and M8 bolt and washer set to position on side brace to chassis

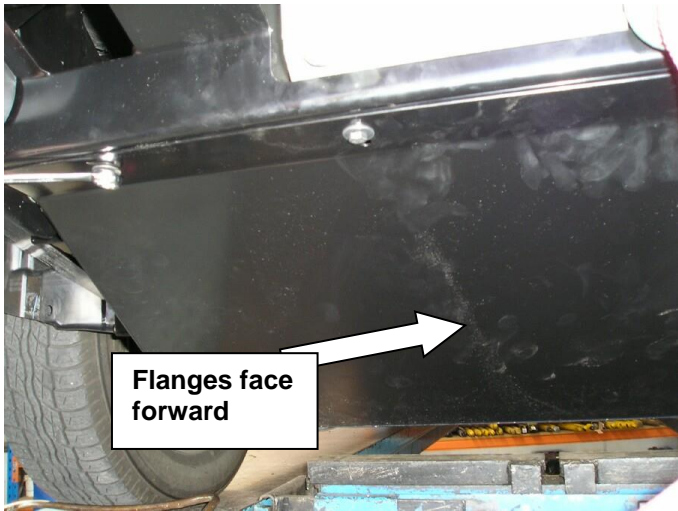


83. Fit M6 cage nuts to the top side of the rear flange on the stone shield bracket

84. The stone shield cross brace can now be fitted using an M8 bolt and washer set to the vacant position in front of the wing panel M8 fixing bolt.

85. Nip up only both sides.

BULL BAR FITMENT TO VEHICLE



86. The stone shield can now be fitted using M6 bolt and washer sets

87. Once fitted tighten all M6 and M8 fasteners on the bracket and stone shield.



88. The licence plate can now be attached to the bull bar. Insert the two plastic square plugs supplied into the two square holes in the face of the bull bar.

89. If winch fitted, position the licence plate as shown fastening top picture using lower holes. If winch not fitted use the top row of holes, licence plate is positioned lower and covers RFL opening in front of bull bar, lower picture.

90. Using the two dome head screws supplied screw into position firmly.



91. Trim the outer edge of the fender liner as shown so that it will clip in behind the wing, then trim off the bottom of the liner flush with the lower face of the wing panel



BULL BAR FITMENT TO VEHICLE



92. Push the outer edge of the liner forward past the wing return edge so that it snaps in place

93. Drill Dia 7 holes in fender liner to fasten with cable ties to holes in flanges of wing under panes then fasten with cable ties and cut off cable tie excess.

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

FITTED PRODUCT

