FITTING INSTRUCTIONS

Part Number:	**3438280 F/Kit 6172535**
Product Description:	**Deluxe Combination Winch and Non Winch Bull Bar**
Suited to vehicle/s:	**Suzuki Equator 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 sales@arb.com.au
North & South American enquiries sales@arbusa.com
Other international enquiries 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	**DRILL BITS 7.0mm (5/16") & 10mm (3/8")**
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	**ROLL OF 25mm (1") WIDE MASKING TAPE**

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.

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	3757756R&L	1 PR	BRACKET ASSY IMP ABS RH & LH
	6151095	8	BOLT M12 X 1.25 X 35 (FINE PITCH)
	4581049	8	WASHER FLAT M12
	4581050	8	WASHER SPRING M12
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 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
WINCH 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	4681302	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	6522721	1	STONE TRAY
	6151300	4	CAGE NUT M6 (LONG LEG)
	6151213	6	BOLT M6 x 20 BZ
	4581082	6	WASHER FLAT M6 x 20 BZ
	4581287	6	WASHER SPRING M6 BZ
PINNING BOLT HARDWARE	6151357	4	BOLT SEMS M10 x 25 mm LONG
	6151321	4	NUT FLANGE M10
MISCELLANEOUS	180302	6	CABLE TIES
	6191014	2	PINCH WELD (BLACK) 330mm LONG
	3787014	1	TEMPLATE BUMPER TRIM EQUATOR

PREPARATION TO VEHICLE

1. Remove licence plate from the vehicle and set aside

.

2. Remove the three plastic scrivets securing the bumper in the intake area behind the licence plate location

3. Remove the bolts from the spoiler panel between the lower bumper and sump guard and remove

4. Remove the four lower bolts that attach the lower bumper tabs to the vehicle

5. Two self tapping screws in each side, located in a recess in the lower bumper face also need to be removed.

6. Remove the two bolts and screw from the fender opening area each side that attaches the bumper bar to the plastic inner guard liner as shown.

7. Remove the screws securing the fender liners to bumper in the forward wheel arch areas

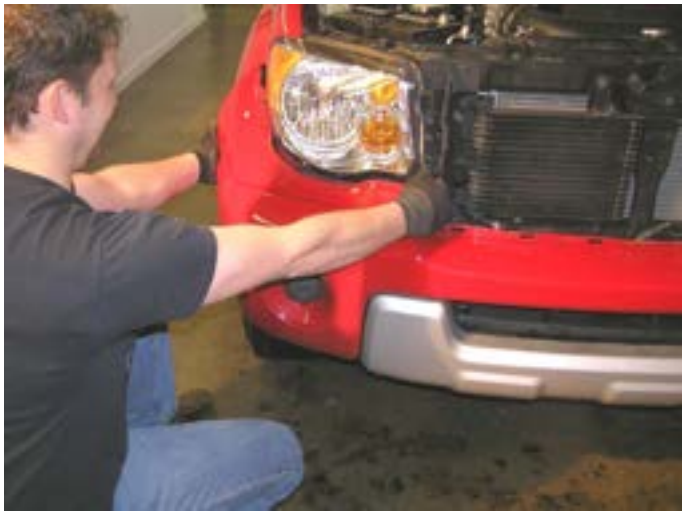
PREPARATION TO VEHICLE

8. Remove the screws and speed nuts from the bumper on each side in the wheel arch area

9. Remove grille by removing plastic clips in top flange, then releasing clips along lower back edge into bumper flange. Set aside.

10. On bumper, apply 25 mm tape strip along low side of groove and up to corner of grille connection flange as shown

PREPARATION TO VEHICLE



11. Each side, remove 2 x M8 fasteners securing bumper in the upper wheel arch section just rear of the headlamp

12. Remove bumper from vehicle, ideally with a friend to help, and place face up on a soft non abrasive surface with adequate support such as on a pair of saw stools

13. Undo fog lamp loom if fitted

14. The bumper reinforcement beam is now visible.

15. Remove the four bolts that hold the factory steel sump guard, set aside to be fitted once bull bar is fitted.

16. The four bolts that hold the bumper reinforcement beam can now be removed and the beam set aside.

17. Remove tow hook and set aside

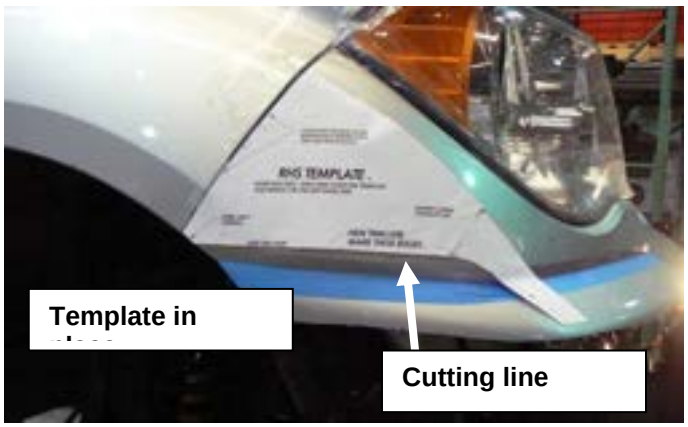
PREPARATION TO VEHICLE

18. Using an electric jig saw with a fine to medium cutting blade – cut along the lower/forward edge of the 25mm (1") tape strip. Start the cut in the wheel arch area working from one side to the edge of the centre section to be cut by hand. Cut through 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.

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

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

20. Refit the top section of the bumper



21. The side cut can now be done to the bumper bar. Starting on the RH side first, tape the template into position and mark with a felt tip pen.

22. Remove the template

23. Mask the area above the cut line with 50 mm of masking tape to protect the painted surface

24. Cut out the area with an electric jig saw, a second cut may be necessary to fully cut the support structure that sits behind the bumper bar.

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

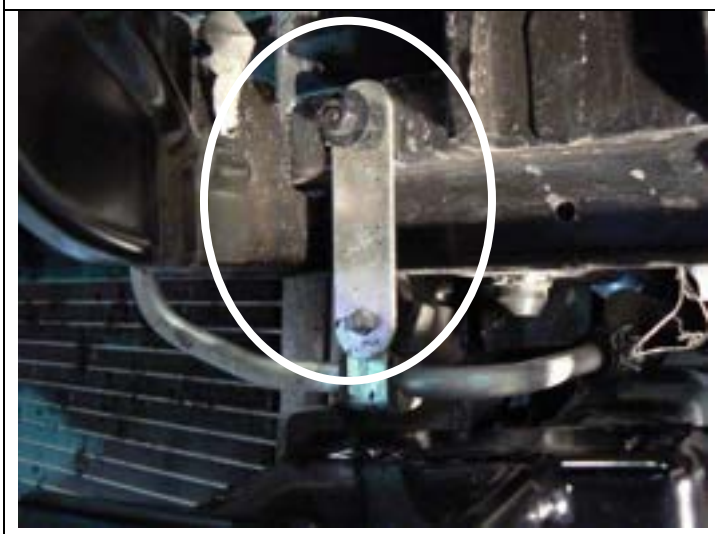
PREPARATION TO VEHICLE

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

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

HINT: If necessary use flat blade screwdriver to prise the bumper away from the support shell behind as shown

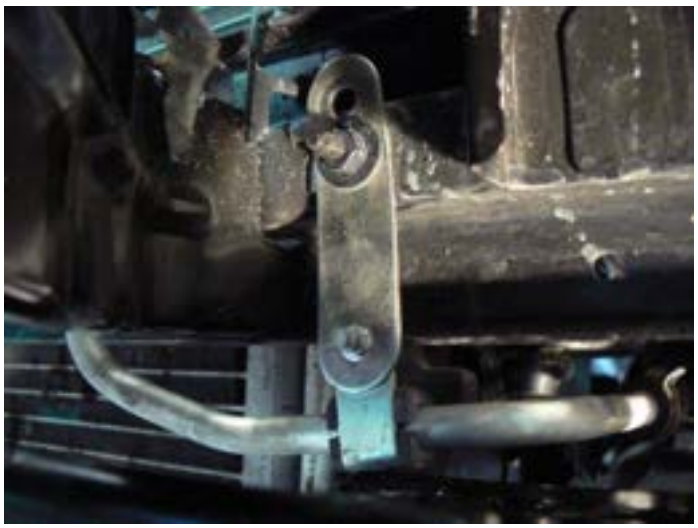
28. Trim air deflectors both sides as shown at horizontal line with a hacksaw blade or sharp cutting blade and discard the lower section as shown



29. Remove the hanging strap supporting the power steering pipe clamp

PREPARATION TO VEHICLE

30. Mark out a hole centre 20mm (3/4”) up from the original top hole
31. Drill out to Dia 7.0mm (5/16”)
32. Then flatten tab.
33. Touch up bare areas with rust preventing paint



34. Pull up pipe and refit strap as shown

35. Refit the grille

PREPARATION TO VEHICLE

36. Install the mount bracket set as shown

HINT: Tilt the mount brackets slightly to clear when fitting over frame horns

37. Secure ***hand tight only***, using M12 x1.25 X 35 bolts, washer to welded nuts in frame horns.

38. Refit tow hook back to RHS using original bolt set, (***hand tight only)*** and 2 x M12 x1.25 X 35 bolts, washer to welded nuts in chassis

39. Check the overall width of the mount brackets by measuring the distance inside the faces as shown. The ideal width is 910mm; adjust the brackets to achieve this width, but leave hand tight

40. Bend back and up, or cut off, the leading steel support tabs on the grille support beam. These tabs previously supported the lower bumper section now removed.

BULL BAR PREPARATION

41. Fit the buffers to either side of the bull bar using 6 x M6 flange nuts. Do not over tighten.
42. Fit M6 cage nuts to four holes in lower pan flange. The nut bodies are inside the bull bar

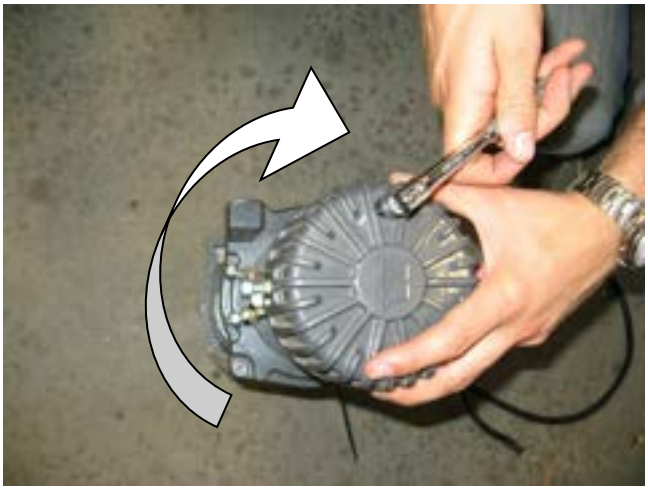
IF NOT FITTING A WINCH

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

44. 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

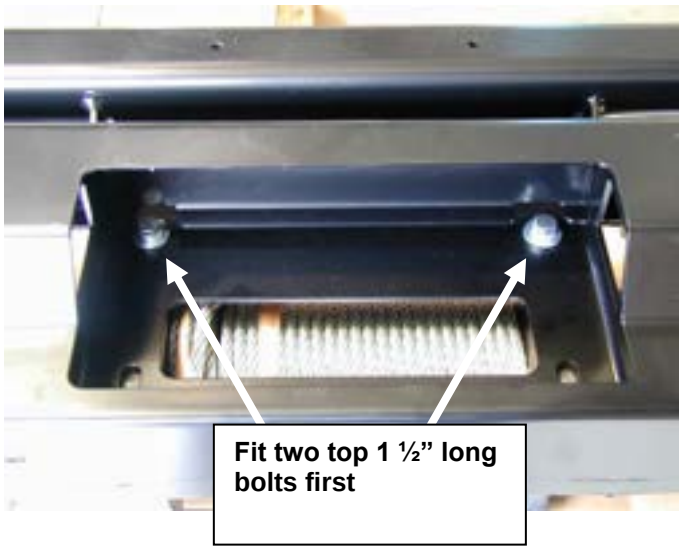


IF FITTING A WINCH

45. Rotate the winch motor 90 degrees as shown

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

46. 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.



47. 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.

48. 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.

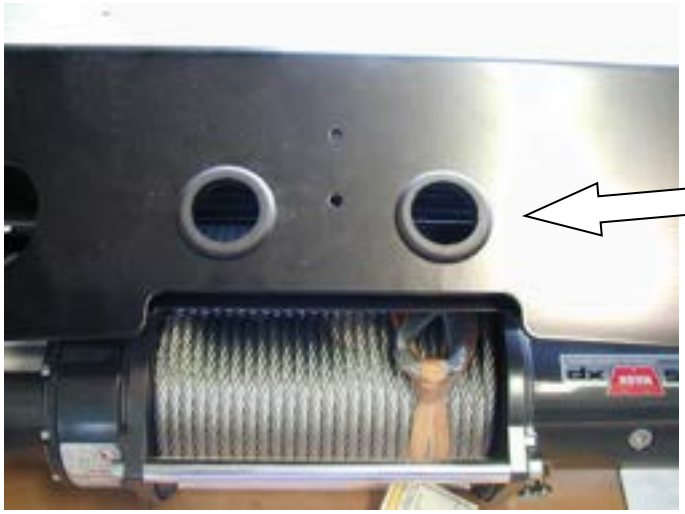
WINCH FITMENT ONLY

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

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

50. 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.

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



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

WINCH FITMENT ONLY

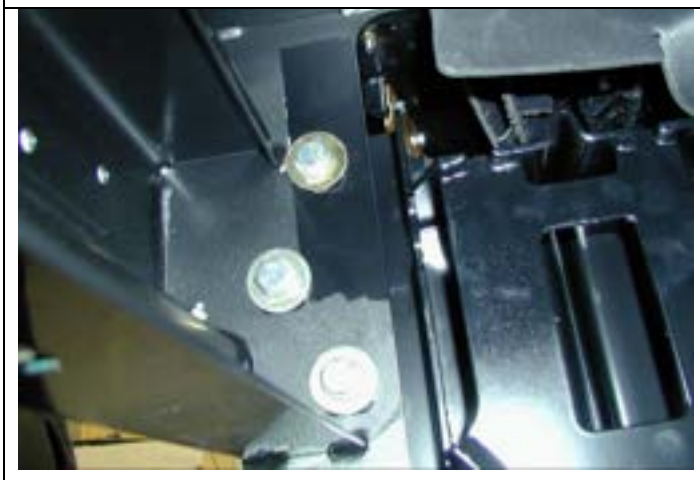
53. Attach the control box to the control box bracket as shown.

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

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

56. 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



57. With assistance guide the bull bar into position on the vehicle. The uprights on the bull bar sit inside the impact absorber blades.

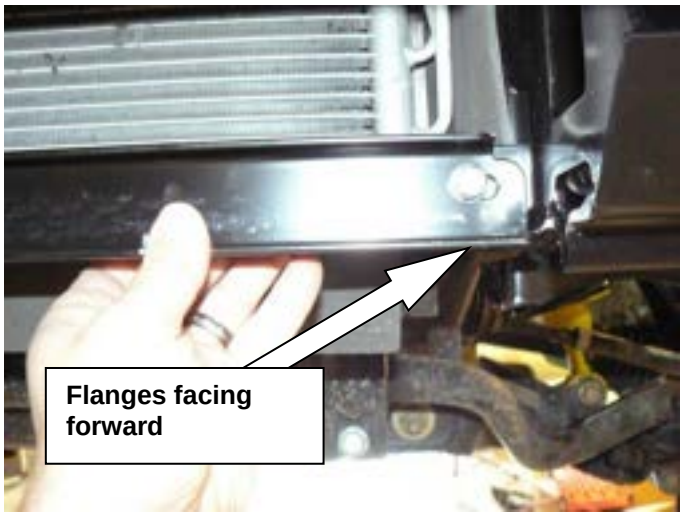
58. Bolt the bull bar into position using the M12 bolts, spring washer, large body washer and flange nuts 3 places each side as shown. Tighten the bolts firmly – but allow enough movement for the bull bar to be adjusted

BULL BAR FITMENT TO VEHICLE

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

60. If the bar is not centred on the vehicle, tap the mount brackets sideways with a soft hammer until the bar is central

61. Once happy with the position of the bull bar and the gap is between 15mm – 18 mm clearance, all of the bolts on the chassis mount can be tightened firmly to specified torque.



62. The stone shield cross brace can now be fitted to the flange attached to the impact absorber using an M8 bolt, spring washer, flat washer and M8 flange nut set per side

63. Tighten both sides.

64. Install the two M6 cage nuts (long leg) with the body of the nut facing upward.

65. 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.

BULL BAR FITMENT TO VEHICLE

66. 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.

67. 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.

68. Wire the combination lamp to the vehicles indicator and clearance lamps.
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)

69. 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

70. 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.

71. If winch fitted, position the licence plate as shown fastening 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

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

73. Trim the fender liner horizontally level with the bottom edge of the bull bar wing

74. Trim the fender liner vertical edge so that it has about 20mm (3/4”) overlap to clip in behind wing return

BULL BAR FITMENT TO VEHICLE

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

Final checks:

- **Test all lights for correct operation**
- **Check all bolts are tight**
- **Check wiring is secure and not rubbing on sharp or moving surfaces**
- **Check operation of winch if fitted**

FITTED PRODUCT