

Part Number: Product Description:	3448500 DELUXE BULL BAR
Suited to vehicle/s:	ISUZU MU-X
Optional	3540050 Winch Install Kit
Fitting Kit:	3500600 Hawse Fairlead Spacer Kit
	3500610 Zeon Wire Rope Fit Kit
	3500620 Zeon Synthetic Rope Fit Kit
	W89965 Zeon Control Relocate Kit Short Wiring Kit No Bracket
	3500640 ARB AUX Fog Light Adaptor
	3500530 ARB AUX Fog Light Loom (non-factory fog lamp vehicles)
	3500680 Fog Lamp Housing Clear Lens Kit
	3500590 Fog Light Kit (LH&RH Lights)

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 Australian enquiries North & South American enquiries Other international enquiries Tel: +61 (3) 9761 6622 Fax: +61 (3) 9761 6807

> 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 Carnauba 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.

Important electrical system information

If the vehicle is fitted with factory fog lights check that the fog lamps are rated at or above 55 watts. If rated below 55 watts to prevent overloading the harness the fog lights must be activated through relays. Relay looms are not provided within this kit to wire these lights. Use 3500530 ARB AUX Fog Light Loom if relays are required.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC TOOL KIT	ELECTRIC DRILL & Ø4, Ø10, Ø10.5 & Ø13mm BITS
JIG SAW WITH BLADE SUITABLE FOR PLASTIC	RIGHT ANGLE DRILL or 90° FITTING TO CONVERT A STANDARD DRILL
FILE OR SAND PAPER	LOW TACK MASKING TAPE
TAPE MEAURE	UTILITY KNIFE
STEEL RULER	CLAMP
HACK SAW	WHITE FELT MARKER
TOUCH UP PAINT ANTI CORROSION	TORQUE WRENCH

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Last Rev Date: 22/10/2014

Page 2 of 24

Fitting instructions# 3789317





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 I I TURQUE SETTINGS.			
SIZE	Torque Nm	Torque Ibft	
M6	9Nm	7lbft	
M8	22Nm	16lbft	
M10	44Nm	32lbft	
M12	77Nm	57lbft	

FASTENER TORQUE SETTINGS:

NOTE:

- REFER FOG LAMP KIT (p/n: 3163082) FOR FOG LAMP PARTS AND FITTING INSTRUCTIONS.
- ARB INTENSITY LIGHTS, UP TO 900 SERIES ROUND OR 800 RECTANGULAR DRIVING OR FOG LAMPS SUIT THIS PRODUCT.

PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
PREPARE VEHICLE	3788096	1	TEMPLATE INNER RAIL
	3788097	1	TEMPLATE OUTER RAIL
	3789320	1	TEMPLATE BUMPER CUT
	6191014	2	PINCH WELD 330mm LONG
MOUNT TO VEHICLE	3759054R	1	BRACKET ASSY RH MOUNT COLORADO
	3759054L	1	BRACKET ASSY LH MOUNT COLORADO
	6821279	2	WIRE 1.25mm GALVANISED 500mm LONG
	3194385	2	PLATE TAPPED COLORADO
	4581083	8	WASHER FLAT, M10 x 21 x 2 ZP
	4581048	4	WASHER SPRING M10 x 1/8 x 1/8
	6151555	4	BOLT M10 x 1.5 x 30 SEMS BLACK
	6151381	4	BOLT M10 x 1.5 x 80 Gd 8.8 ZP
	4721558	4	TUBE CRUSH HILUX B/BAR
	3194384	2	PLATE RECT WASHER COLORADO
	6151026	4	NUT M10 x 1.5
	5848393	8	PACKER UPRIGHT COLORADO
	6151207	4	BOLT M6 x 1.0 x 25 Gd 8.8 ZP
	6151128	4	NUT FLANGE M6 x 1.0 ZP
	4581082	4	WASHER FLAT M6 BZ
BUFFERS, INDICATORS	3162470R	1	BUFFER RH
AND FOG LIGHTS TO BAR			
	3162470L	1	BUFFER LH
	6151128	12	FLANGE NUTS M6
	6821287	1	LAMP KIT LED INDICATOR CLEARANCE
Last Rev Date: 22/10/2014	Pag	e 3 of 24	Fitting instructions# 3789317

	6001116	4	NYLON PLUG
	6821116 3163082	4	
BAR TO VEHICLE	4581011	8	WASHER FLAT, M12 x 27 x 4
	6151340	4	BOLT M12 x 1.75 x 50 Gd 8.8 ZP
	4581050	4	WASHER SPRING 1/2 x 3/16 x 3/16 ZP
	6151189	4	NUT M12 x 1.75 ZP
	4581083	4	WASHER FLAT, M10 x 21 x 2 ZP
	6151456	4	BOLT M10 x 1.5 x 45 Gd 8.8 ZP
	6151321	4	NUT FLANGE M10 x 1.5 ZP
APPLICATION.	PART NO.	QTY	DESCRIPTION
MOUNT BRACE &	3759055	1	BRACKET BAR BRACE
LOWER STONE GUARD	4581291	4	WASHER FLAT, M10 BLK ZN
	6151320	4	BOLT M10 x 1.5 x 25 Gd 8.8 BZ
	6151321	4	NUT FLANGE M10 x 1.5 ZP
	6522900	1	PANEL LOWER PAN DMAX 12 ON
	6151315	3	NUT CAGED M6 0.7-1.6
	4581082	3	WASHER FLAT, M6 x 19 x 1.6 BZ
	4581287	3	WASHER SPRING M6 x 2.5 x 1.6 BLK ZN
	6151213	3	BOLT M6 x 1.0 x 20 Gd 8.8 ZP
	6151302	5	NUT CAGED M10 1.8-3.2
	6151555	5	BOLT M10 x 1.5 x 30 SEMS BLACK
WING STONE GUARDS	05000045		
	6522901R	1	PANEL RH WING DMAX
	6522901L	1	PANEL LH WING DMAX
	3759106	2	BRACKET PANEL WING DMAX
	4581082	12	WASHER FLAT, M6 x 19 x 1.6 BZ
	4581287	8	WASHER SPRING M6 x 2.5 x 1.6 BLK ZN
	6151213	12	BOLT M6 x 1.0 x 20 Gd 8.8 ZP
	6151128 6151315	<u>4</u> 8	NUT FLANGE M6 x 1.0 BZ
	6151315	õ	NUT CAGED M6 0.7-1.6
WINCH COVER PANEL	6522984	1	PANEL WINCH COVER
(Non-winch bars)	6151256	2	SCREW BTN HD M6 x 16 SS
	4581304	2	WASHER FLAT, M6 SS
	6151128	2	NUT FLANGE M6 x 1.0 ZP
	6191006	1	EXTRUSION COVER 1.5m
NUMBER PLATE TO BAR	6821189	2	PLASTIC PLUGS
	6151384	2	SELF TAPPING SCREWS
(NO WINCH FITTED)	0101084	۷	SELF TAFFING SUREWS
WINCH TO BAR	3540050	1	OPTIONAL WINCH INSTALL KIT
	EG50	2	RUBBER GROMMET

FITTING PF	ROC	EDURE
	1. 2.	Read these instructions thoroughly before starting. Remove 2 bumper retaining screws at the wheel liner (1 per side).
	3.	Remove the bumper retaining dome nuts and scrivets from underneath the bumper.
	4.	Remove and retain the top four scrivets holding the bumper grill.
	5.	Remove and retain the front screw holding the bumper grill in place.

Page 5 of 24

Fitting instructions# 3789317

FITTING PROCEDURE		
	6.	Use a flat head screw driver to unclip the vehicle grill from the bumper (4 places). Remove and retain the vehicle grill.
	7.	Remove and retain the four upper bumper scrivets.
	8.	Remove and retain the upper rear bumper scrivets (1 per side).
	9.	Remove and retain the number plate from the bumper.
	10.	If the vehicle has fog lights fitted disconnect the right and left hand fog light looms.

Page 6 of 24

Fitting instructions# 3789317

FITTING PROCEDURE		
	11.	Carefully remove the bumper from the vehicle by pulling it away from the retaining clips located near the fenders and head lights.
35mm	12.	Cover the vehicle bumper bar with protective low tack tape in the regions where it is to be trimmed.
		Mark up the first cut line, all the way around the bumper, 35mm above the upper external bumper corner as shown on the adjacent image.
	13.	Cut the A3 paper template along identified cutting line (Part Number 3789320).
		Fasten the template to the RH rear corner of the bumper with tape. Ensure the template is accurately positioned and flush with the upper rear edge of the bumper.
		Use a black marker and mark up the second bumper cut line.
		Use the same template and mark up the bumper cut lines on the LH rear corner of the bumper.
	14.	With the aid of an assistant, holding the bumper, trim and remove the lower portion of the bumper with an electric jigsaw.

Page 7 of 24

Fitting instructions# 3789317

FITTING PROCEDURE



Last Rev Date: 22/10/2014

Page 8 of 24

Fitting instructions# 3789317

FITTING PROCEDURE





25. Loosely refit the LH and RH bumper retaining brackets. It is not necessary to screw them in place yet.

NOTE: The adjacent image displays the LH bumper retaining bracket clipped into the LH vehicle fender.

FITTING PROCEDURE



Last Rev Date: 22/10/2014

Page 10 of 24

	 28. Use a hack saw to cut the RH and LH bumper retaining brackets. Once these cuts have been completed the parts should look like the adjacent images. NOTE: The LH part is shown here.
FITTING	PROCEDURE
	29. Use a white marker to mark the upper wheel liner rectangular cut-outs approximately 60mm high x 20mm deep as shown. Next, use a sharp utility knife to cut out these rectangles from the RH and LH wheel liners.
	30. Remove the bumper and mask the vehicle fenders and headlights. Use a spray can to paint the region immediately below the RH & LH vehicle fenders black.

Page 11 of 24

Fitting instructions# 3789317





31. Refit the RH & LH bumper retaining brackets and secure them properly with the screws previously removed.

Fix the bumper to the vehicle refitting the previously removed fasteners.

Refit the vehicle grill and secure it using the original fasteners.

32. Fit the pinch weld, 2 off supplied with the bull-bar fitting kit, to the trimmed bumper as shown. Use side cutters to trim any excess pinch weld.

FITTING PROCEDURE





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

 Clamp the inner chassis drilling template, identifiable with an "I" cut through the centre of this part, to the inside face of the RH chassis rail.

ENSURE THE LOCATING DATUMS CONTACT THE FRONT CHASSIS FLANGE. ENSURE THE TEMPLATE IS SITTING CENTRALLY ON THE CHASSIS RAIL, IN THE VERTICAL DIRECTION, BY CHECKING THE CLEARANCE BETWEEN THE UPPER AND LOWER LOCATING TABS AND THE CHASSIS RAIL.

Once the template is positioned accurately on the chassis rail use a right angle drill to drill two Ø4mm pilot holes through the inner wall of the chassis rail.

DO NOT DRILL STRAIGHT THROUGH THE OUTER WALL OF THE CHASSIS RAIL NOW.

NOTE: If you do not have a right angle drill a right angle drill attachment can be bought from a hardware store.

Last Rev Date: 22/10/2014

Page 12 of 24

Fitting instructions# 3789317





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

 Clamp the outer chassis drilling template, identifiable with an "O" cut through the centre of this part, to the outside face of the RH chassis rail.

ENSURE THE LOCATING DATUMS CONTACT THE FRONT CHASSIS FLANGE. ENSURE THE TEMPLATE IS SITTING CENTRALLY ON THE CHASSIS RAIL, IN THE VERTICAL DIRECTION, BY CHECKING THE CLEARANCE BETWEEN THE UPPER AND LOWER LOCATING TABS AND THE CHASSIS RAIL.

Once the template is positioned accurately on the chassis rail drill the two Ø4mm pilot holes through the outer wall of the chassis rail.

FITTING PROCEDURE



35. Drill two Ø13mm holes through the outer wall of the chassis rail only.

DO NOT DRILL STRAIGHT THROUGH THE INNER WALL OF THE CHASSIS RAIL NOW.





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

Last Rev Date: 22/10/2014

Page 13 of 24

Fitting instructions# 3789317



Page 14 of 24



Last Rev Date: 22/10/2014

Page 15 of 24

Fitting instructions# 3789317

	Note: DO NOT REMOVE THE WIRE USED TO POSITION THE NUT PLATE AS IT MAY BE REQUIRED IN THE FUTURE IF THESE MOUNTS ARE REMOVED. Repeat steps 33 to 42 for the left hand
	chassis mount.
	 43. Use a tape to measure the distance between the two outer faces of the bullbar mounts. The nominal design dimension is 722mm. This may differ, however, due to vehicle chassis variation.
	44. Measure the distance between the bull- bar mounting faces.The nominal design dimension is 736mm.
	45. Fit an equal number of 2.5mm packers to the RH and LH mounts as required with the M6 x 25 bolts (2 per mount), flat washers and flange nuts.
	The total clearance between the bull-bar mounting faces and the mounts should be roughly 1-2mm per side.
	 Assuming the nominal dimensions of 722mm and 736mm were measured at steps 43 & 44, four 2.5mm packers would be used (i.e. 2 per mount)
FITTING	PROCEDURE

Page 16 of 24

	 46. Attach the buffers to the bar as shown using twelve M6 flange nuts. Warning: Do not over tighten these nuts or you risk pulling the studs from the buffers.
	 47. Assemble and install fog lights (p/n 3163082) as per instructions no 3789190 supplied with fitment kit. 48. Assemble and install LED indicators (p/n 6821287) as per instructions supplied with fitment kit. Fit nylon plug to indicator surround in the bar prior to installing indicators. Connect the RH and LH indicator looms, to the indicators. CAUTION: Cable-tie all cables together and keep all cables clear of sharp edges and all moving parts.
	 49. If fitting a winch: install the two rubber grommets, supplied in the bull-bar fitting kit, into the bull-bar winch cradle as shown follow the fitting instructions 3787989 supplied with 3540050 winch install kit If not fitting a winch proceed to step 50.
FITTING F	PROCEDURE

Page 17 of 24

Fitting instructions# 3789317

	50. Re-install the cut bumper and grill, refit the scrivits and screw that hold the bumper and grill removed in steps 4 through 8.
	51. With the assistance of another person, place the bar on the mount brackets. <i>Warning: Due to the weight of the bar</i> <i>and winch if fitted, it is advised that</i> <i>you use some form of mechanical</i> <i>assistance when lifting the bar onto</i> <i>the vehicle such as an elevating</i> <i>trolley.</i>
	52. Use the M12 x 50 hex bolts (2 per mount), flat washers (4 per mount), spring washers (2 per mount) and hex nuts (2 per mount) to secure the bar.
	 53. Position the bar so that the rear of the wing is parallel with the vehicle fender and lines up with the wheel arch. The nominal distance between the vehicle fender and the bull-bar is 48mm. Once happy with the position of the bar tighten the M12 mounting bolts.
48	
	PROCEDURE
Last Rev Date: 22/10/2014 Page	18 of 24 Fitting instructions# 3789317

	 54. Once satisfied with the position of the bar on the vehicle drill the four Ø10mm pinning bolt holes (2 per mount). Image: Drilling operations can result in flying metal debris, safety glasses should be worn.
	 55. Measure the distance from the RH vehicle fender to the outer face of the RH bull-bar wing. Repeat on the LH side to confirm the bar is sitting centrally on the vehicle. 56. If not, remove the bar from its mounts and shift the required number of 2.5mm packers installed on the bull-bar mounts, fit at step 45, from one mount to the other. Next re-fit the bar on the mounts lining up the Ø10mm holes drilled at step 52.
	 57. Once satisfied with the fitment of the bar to the vehicle, fit the M10 x 45 hex bolts to the RH & LH mounts (4 off - 2 per mount), flat washers (4 off) and flange nuts (4 off). Tighten the four M10 x 45 hex bolts. M10 - 44 Nm. Tighten the four M12 x 50 hex bolts. M12 - 77 Nm.
FITTING PROCEDURE	

Page 19 of 24

Fitting instructions# 3789317

	58. If fitting driving lights it is advisable to fit them now.	
ARBODY	 59. IF NOT FITTING A WINCH Insert the two plastic plugs into the square holes in the front of the bar. Next, screw the number plate to these grommets. If fitting a winch, follow the fitting instructions 3787989 supplied with 3540050 winch install kit regarding number plate fitment. 	
	 60. IF NOT FITTING A WINCH Wrap the rubber extrusion around winch cover Place the winch cover on top of the bar and align the panel bolts holes with mating holes located on the top middle face of the bull-bar. Bolt winch cover to the bull-bar using the two M6 button head stainless steel screws, stainless steel flat washers and M6 flange nuts. 	
	61. Fit three M6 cage nuts to the centre stone guard as shown.	
FITTING PROCEDURE		
Last Rev Date: 22/10/2014 Page 20 of 24 Fitting instructions# 3789317		

Page 20 of 24

Fitting instructions# 3789317



Page 21 of 24

Fitting instructions# 3789317

66. Fit the M6 cage nuts to the two wing stone guards (4 per stone guard).
67. Fit the 2 wing stone retaining brackets to the vehicle chassis using the outer bolts holding the vehicle recovery points.
68. Loosely fit the RH and LH wing stone guards to the bull-bar. As shown on the adjacent photo, use a white marker to draw a line on the wheel liner at the lower rear edges of the stone guards.
 69. Remove the two wing stone guards and mark a second line 5mm above the first line on the RH and LH wheel liners. Cut off the lower portion of the wheel liners at the upper line with a utility knife or heavy duty scissors.
 70. Fit the RH wing stone guard with: four M6 x 20 black hex bolts, four spring washers and four flat washers through the wing two M6 x 20 black hex bolt, two flat washers and two flanges nuts at the bullbar mount and the stone guard retaining bracket 71. Fit the RH wheel liner over the rear lip of the stone guard so it is securely held. 72. Repeat steps 68 to 71 for the LH wing stone guard. <i>W</i>6 - 9 Nm.

Page 22 of 24

Fitting instructions# 3789317

FINAL CHECKS:

- Check wiring connections to fitted lights and winch.
- Check operation of winch and all lights.
- IMPORTANT: Check that all piping and wiring is clear of sharp edges and pinch points. Adjust any piping to clear the bull bar or mounts by a minimum of 15mm.



Page 23 of 24