



FITTING INSTRUCTIONS

Part Number: **3915030 F/KIT 6172445**
Product **ARB SAHARA BAR**
Description:
Suited to **TOYOTA TUNDRA YEAR MODELS 07 ON**
vehicle/s:

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 authorised ARB Stockist.
- To maintain the polished alloy frame, wash and chamois dry regularly using car wash specific products
- Polish the alloy surfaces with Briteshine® or similar products
- Small scratches can be removed by using Autosol® metal polish or similar

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

Metric socket and spanner sets 8-25mm range	External Circlip pliers	
Screwdrivers, Philips and Flat blade	Dia 22.0 (7/8") holesaw	
Power Drill 13mm (1/2") capacity	Dia 7.0mm (5/16") and 10.0mm (25/64") drill bits	
Allen (Hex) Key Set		
Hacksaw	Scriber	Centre punch
Files, round, square and flat	Hammer	300mm Rule

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

OPTIONAL LIGHT SETS TO SUIT THIS PRODUCT:

- ◆ FOG LAMP SET P# 6821201, ADD FOR NON FACTORY FOG VEHICLES ONLY P#MD02 LOOM KIT, P#180209 SWITCH AND P#180215 SWITCH CAP FOR FOGS
- ◆ UP TO IPF 900 SERIES FOG OR DRIVING LIGHT SETS
- ◆ IPF 840 FYS FOG LIGHTS CAN BE FITTED TO LOWER PAN AREA

AVAILABLE BUFFER/FRAME SETS:

- ◆ BUFFER SET ONLY, BLANK BUFFERS P#5100150 **OR**
- ◆ FRAME, P#5115030 FRAME ASSEMBLY PLUS P#5100140 BUFFER SET WITH HOLES

PARTS LISTING			
APPLICATION.	PART NO.	QTY	DESCRIPTION
Mount Brackets To Chassis	3757559R	1	Bracket Mount RHS
	3757559L	1	Bracket Mount LHS
	6151428	2	Flange Nut M12
	6151429	2	Chassis Stud M12 x 265 x 1.75
	6151396	2	Nut Clevis
	5846400	2	Packer M12 x 8mm
Brace Assembly	4681264	1	Brace
	6151357	7	SEMS Bolt M10 x 1.5 x 30mm
	6151321	7	Nut Flanged M10 x 1.5
Bull Bar To Mount Bracket Assy	6151357	2	SEMS Bolt M10 x 1.5 x 30mm
	6151321	2	Nut Flanged M10 x 1.5
	6151255	6	Bolt M12 x 1.75 x 40mm
	6151189	6	Nut M12 x 1.75
	4581049	12	Washer Flat M12
	4581050	6	Washer Spring M12
Stone Tray to Bull Bar	6522677	1	Stone Tray
	6151303	6	Nut Cage 8mm
	6151234	6	Bolt M8 x 25mm BZ
	4581063	6	Washer Flat M8 x25.4 x 3
	4581047	6	Washer Spring M8
Light Surround To Bull Bar	3163015	1	Light Surround
	6821151R	1	Indicator Assembly RH
	6821151L	1	Indicator Assembly LH
	6821152	2	Loom
	180701	6	Scotch Locks
	180302	4	Cable Tie
Winch To Bull Bar	6821192	2	Bulb 12V 10W BA15S
	3756499	1	Bracket Control Box Univ.
	6151234	2	Bolt M8 x 25 BZ
	4581045	2	Washer Flat M8 BZ
	4581047	2	Washer Spring M8 BZ
	6151132	2	Nut M8 Flanged
	180302	10	Cable Tie
	EG50	2	Grommet Dia 50mm
Winch Hole Cover Fitment (If Not Fitting Winch)	6151074	2	Bolt 3/8 x 1 3/4
	6151128	2	Nut Flange M6
	6151256	2	Screw M6 St/Stl Button Head
	6191013	1	Extrusion Winch Cover
	6522695	1	Panel Winch Cover
Buffer fasteners	4581304	4	Washer M6 st stl
	6151128	12	Nut M6 Flanged
Number Plate To Bull Bar	6821189	2	Grommet round
	6151384	2	Screw self tapping pan head
	6781408	1	Tape double sided
Miscellaneous	3162152	2	Plug Blanking Dia 16

PARTS LISTING CONT.			
Opt: Blank Buffers Only Kit P#5100150	3163016R	1	Buffer Large Sahara
	3163016L	1	Buffer Large Sahara
Opt: Buffers Suit Frame P# 5100140	3163017R	1	Buffer Large with hole Sahara
	3163017L	1	Buffer Large with hole Sahara
Opt: Frame Assy Kit P#5115030	3757574R	1	Bracket Hinge
	3757574L	1	Bracket Hinge
	3757571	2	Bracket Wedge Pad Support
	3757692	1	Bracket Slam Latch Operation
	4581308	2	Washer Nylon 16.0 ID x 30 OD x 3
	4581309	1	Washer Nylon 8.0 ID
	6151046	2	Washer Flat M6
	4581072	4	Washer Flat M6 Large
	4581045	6	Washer Flat M8 BZ
	4581040	4	Washer Flat M10
	4581288	2	Washer Flat M10 Large
	6151042	2	Washer Spring M6
	4581047	5	Washer Spring M8 BZ
	4581048	6	Washer Spring M10
	6151068	2	Bolt ¼ UNC x 1"
	6151234	5	Bolt M8 x 25 BZ
	6151232	2	Bolt M10 x 30
	6151364	4	Screw Cap M10 x 30 ZP
	6151417	4	Screw M4 x 16 CSK HD ZP
	6151127	4	Nut M4 Nyloc
	6151162	4	Nut M6 Nyloc
	6151212	1	Nut M8 Nyloc
	6151122	1	Nut 5/16UNC
	6151132	4	Nut M8 Flanged
	6151321	2	Nut M10 Flanged
	4558427	1	Link Arm Slam Latch
	5670001	1	Striker
	5670002	1	Latch Slam
	5670003	2	Connector Clip 4mm Wire
	5670004	2	Wedge Pad Urethane
	5670005	1	Spring Lever Return
	6564507	2	Bush Pivot Bracket
2125214	1	Sticker Frame Tilt Operation	

NOTE:

- ◆ **WHEN FITTING FRAME ASSEMBLY ONLY, LABEL FOR FRAME TILT OPERATION FOR HOOD CLEARANCE MUST BE APPLIED TO TOP FACE OF SAHARA BUMPER IN THE POSITION IDENTIFIED IN THESE FITTING INSTRUCTIONS. FAILURE TO APPLY THIS PERMANENT LABEL AT SAHARA BUMPER FITMENT INDEMNIFIES ARB CORPORATION OF ANY LIABILITY ARISING FROM THE OPERATION OR USE OF THIS PRODUCT.**
- ◆ **KIT CONTAINS M6 FLANGE NUTS TO SUIT FITMENT OF BUFFERS. WHEN FITTING FRAME ASSEMBLY WITH BUFFERS, REQUIRED FITTING KIT COMPONENTS COME WITH FRAME.**
- ◆ **FACTORY FOGS CANNOT BE REUSED WITH THIS BAR, INSTEAD FIT ARB FOG LAMP KIT 6821201 (SEE NOTE P3).**

REMOVAL OF BUMPER



1. If fitted, remove factory bash plate



2. Remove tow hooks and bolts, set aside to be refitted.



3. Remove lower bumper retaining screws.



4. Remove all lower fender liner retaining screws to bumper.

REMOVAL OF BUMPER



5. Remove upper fender liner retaining scrivets.



6. Prise out lower fender liner plastic push in plugs. Remove lower fender liner completely, they will not be reused.

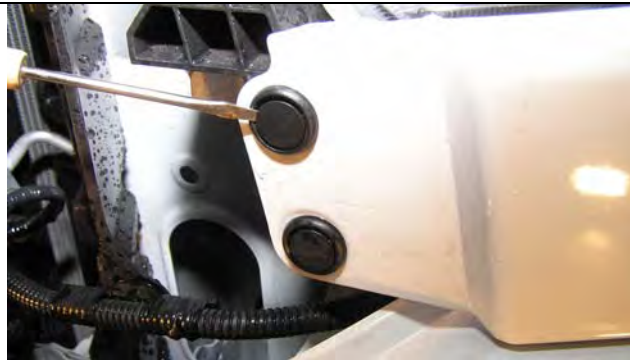


7. If OE fog lights and/or parking sensors fitted in bumper, undo electrical connections.



8. Remove bumper wing retaining screws in upper wheel arch area.

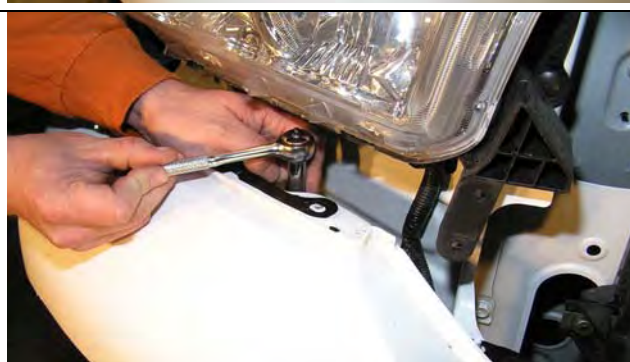
REMOVAL OF BUMPER



9. Remove push in plugs from trim piece under headlamp.



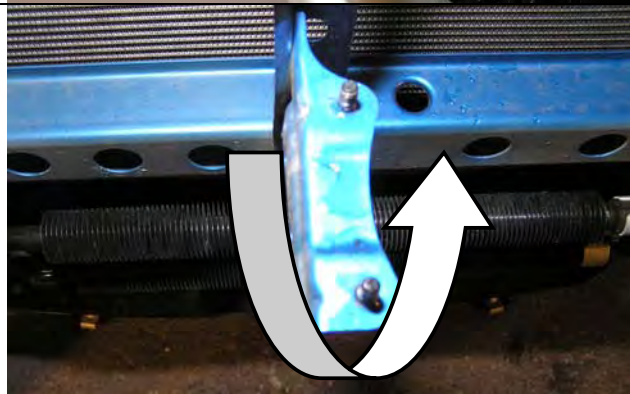
10. Carefully prise the trim pieces free by pulling them forward and twisting to release plugs out of retaining sockets.



11. Remove screws retaining bumper located under headlamp area.

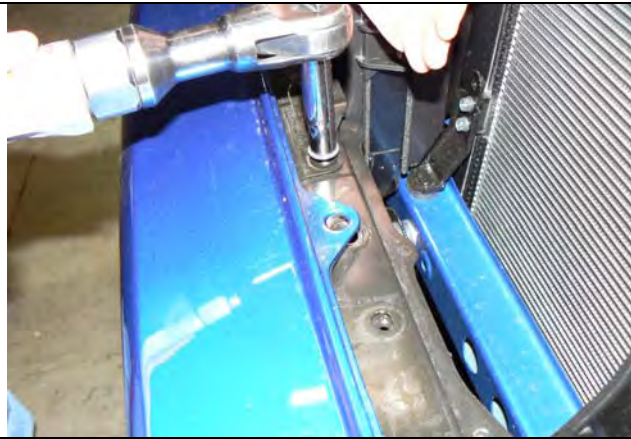


12. Remove plugs securing upper bumper tabs.



13. If winch is to be fitted to bull bar, bend the forward facing section of vertical brace around and rearwards to prevent interference from winch operation.

REMOVAL OF BUMPER



14. Remove screws located along top of cross member retaining upper bumper metal frame.



Removal of bumper.

15. Pull outward and slightly forward on bumper cover in upper wheel arch area to unclip tab on bumper cover from retaining bracket on fender. The bumper and cover should now be released. Carefully remove bumper and set aside.

Hint: This operation is best performed with two people, one on each end of the bumper.



16. Remove plastic plugs in cross member.



17. Remove cross member and set aside.

REMOVAL OF BUMPER



18. Undo crash bar mounts from chassis flange.



19. Remove crash bar and lower bumper assembly and set aside, retain flange nuts for reuse.



20. If parking sensors fitted and are to be reused, remove from bumper. Also retain loom tails and set aside.

Note: Remove parking sensor centre from sleeve first. Then remove sleeve from bumper.



21. Remove bumper cover retaining brackets from the fenders.



22. Mask up and spray paint the exposed metal trim area black satin, from the wheel arch right around to the inboard headlamp area as shown, both sides of the vehicle.

NOTE: This is in the area where the bumper cover retaining brackets were removed earlier. When the bull bar is fitted there will be 25mm of this sheet metal visible, the black painted finish masks the visible gap.

FIT MOUNTING BRACKETS



23. Insert clevis nut into rectangular hole in the inboard face of chassis, ensuring the threaded end is inserted first.

The nut when fitted correctly should fit square and locate into the chassis rail.



24. Install the chassis stud by fitting 2 nuts to the end of the stud and tightening until thread bottoms out.
25. Remove nuts and repeat for the LHS.



26. Loosely fit the mounting brackets to the chassis securing with the 8mm packers and flange nuts.
27. Secure using existing OE M10 flange nuts, **but do not do up tight.**



28. Fit the existing bolts back in tow hooks **but do not do up tight**

BAR PREPARATION: FITTING PROCEDURE WINCH

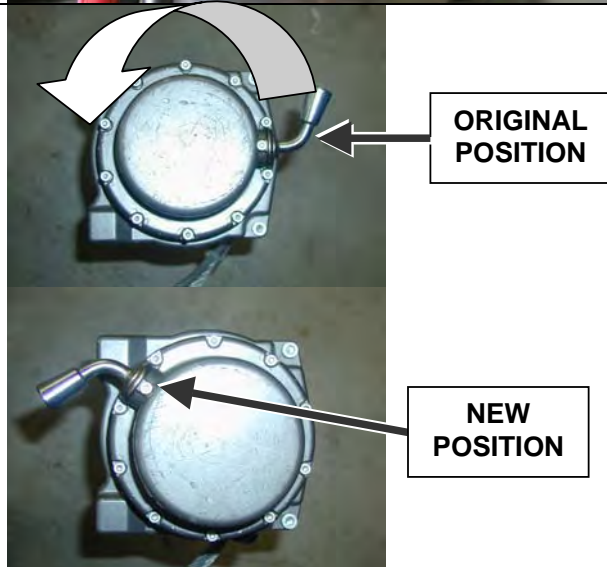


29. Fit large grommets to holes in top pan
30. Fit control box bracket to control box studs as shown. *Picture also shows routing of leads through grommets in pan.*

NOTE: If 12-15000lb winch is to be fitted, fit off Kit # 3500120 extra long leads, marking the end of each one for easy identification for connections to motor terminals

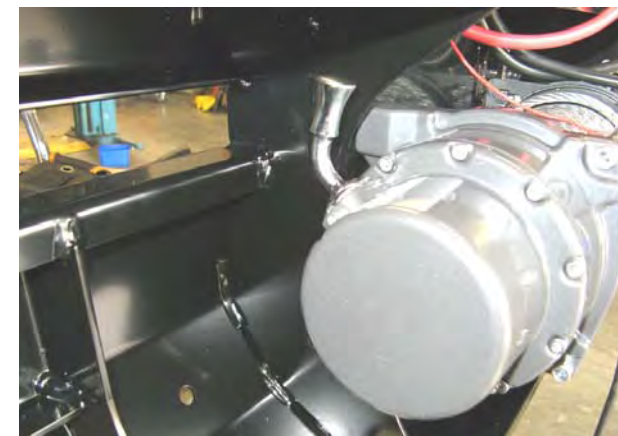


31. Using M8 fasteners fit control box mounting bracket to pan



32. Prepare winch for fitting by undoing the cap screws on the gearbox end.
33. Then rotate the end cap and gearbox in a counter clockwise direction 144° (four hole pitches) while looking down at the gearbox, as shown (for 12-15000lb winches rotate clockwise 72° , two hole pitches)
34. Tighten the cap screws ensuring the gearbox handle operates freely.
35. For 9500lb only rotate the motor end 90° clockwise (elec. terminals will be up)

NOTE: Be careful not to lift the gearbox more than a few millimetres. Before doing up cap screws, ensure that the flange faces engage properly and gaskets are not damaged.



36. Position the winch with the mount face facing upward on an adjustable table or similar and with the assistance of another person lower the bulbar over the winch. The winch handle should be in the LHS of the bull bar for smaller winches than 12-15000lb winches which are on the opposite side as they spool in the opposite direction. The cable must always spool off the bottom of the winch.

NOTE: Also follow the installation instructions in the Warn winch handbook accompanying the winch.

BAR PREPARATION: FITTING PROCEDURE WINCH



37. Fit the roller fair lead, pull only the end of the cable through and adjust the position of winch then bolt up securely. Use the 1 ½" long bolts in the top and 1 ¾" in the lower set through the RFL.

Hint: To increase access to mount bolts in front of roller fairlead, remove circlips from bottom of each vertical roller shaft, push shaft up so roller can be dislodged sideways. Do up bolts in fairlead and winch, then refit circlip.



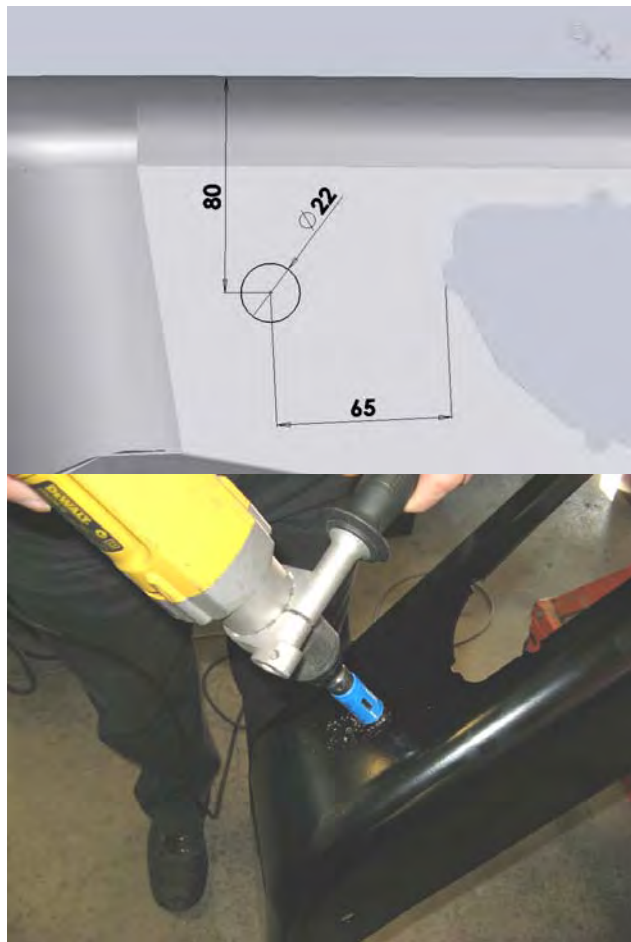
38. With the aid of another person, turn the bull bar over so that the back of the bar is accessible.

39. Connect up the wires to the winch per Warn handbook (9500lb motor shown top 15000lb lower views)

NOTE: Refer to the Warn winch handbook for wiring instructions to vehicle.



FITTING PROCEDURE BULL BAR PREPARATION



40. If sensors are to be refitted, position the bar face up and mark out the hole position as shown on both wings. Dimensioned 80mm from the top of the wing and 65mm from the most outboard edge of the light aperture. This position is optimal for sensor operation.

41. Carefully drill the hole with Dia 22.0mm (7/8") hole saw.

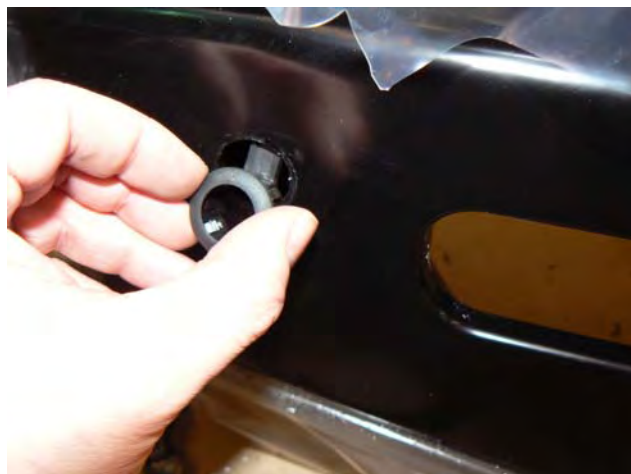
CAUTION: Do not make the hole smaller than shown, Dia 22.0 – 22.3 is ideal.

42. Deburr any sharp edges.

43. Test fit the sensor sleeve checking that it fits and is not too tight, the inner bore of the sleeve must not be reduced in diameter.



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



44. Once sensor hole is cut and sensor has been trial fitted, paint the raw metal edges to prevent corrosion.

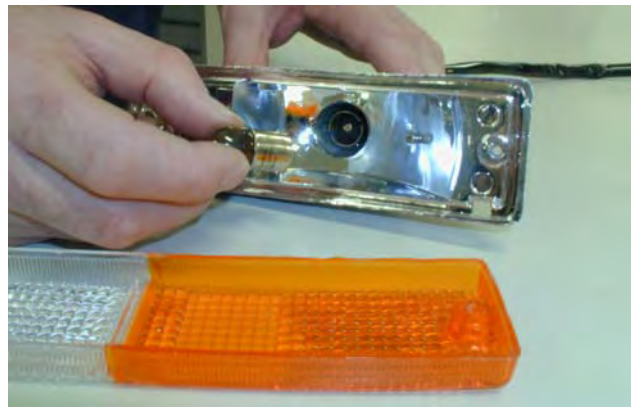
45. **Fit sensor sleeve into bar first as shown, noting that the tab at rear is up for RHS of bull bar and down for LHS (the same orientation as original OE). Then fit sensor into sleeve.**

46. Fit loom extensions and push anchor plug into slot in wing brace

Note: Connections are always inboard.

Hint: Take care not to damage sensor electrical connections when removing and refitting.

FITTING PROCEDURE BULL BAR PREPARATION



FITTING LIGHT SURROUND ASSEMBLY

Follow fitting instructions supplied with kit.

47. Prior to fitting the supplied indicators, with lenses temporarily removed, replace 21W indicator light bulbs (amber reflector side) with 10W bulbs supplied in fitting kit.

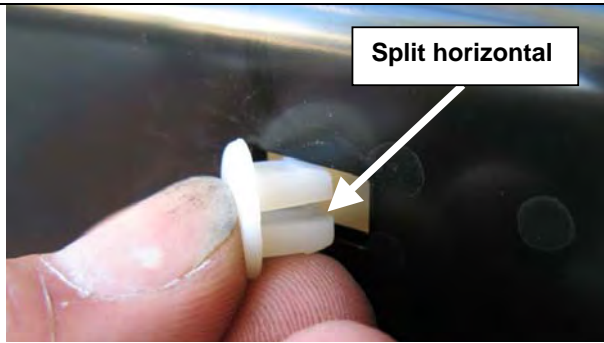


48. If fitting fog lamps, refer to instructions supplied with kit.



49. Fit the surrounds into the openings in the wings referring to the fitting instructions with surround kit.

FITTING PROCEDURE BULL BAR PREPARATION



FITTING NUMBER PLATE

50. If winch fitted, apply double sided tape strip to top back of number plate. If winch not fitted, no adhesive strip is required.
51. Fit grommets to slots, with split horizontal as shown
52. Fit number plate using supplied pan head screws into grommets.



WITH WINCH

45. Fix using the lower holes in number plate as shown

WITHOUT WINCH

46. Fix using upper holes in number plate as shown.



53. In lower inside face of pan, fit M8 cage nuts for stone tray in four positions as shown.
Hint: You can use a flat blade screwdriver to push the remaining cage nut leg into the hole



The narrower section of the plate is to front of bull bar

IF NOT FITTING WINCH

47. Wrap rubber extrusion around winch cover, trim to length.
48. Place M6 st stl flat washers over holes in the top face of the bull bar where the winch cover is fixed to the bull bar.

NOTE: The M6 washers support the cover and prevent dipping around the screw heads.

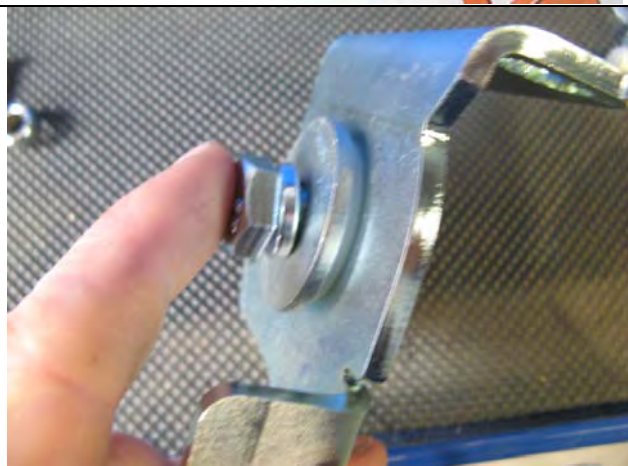
49. Place the winch cover in position as shown with screws aligning through the mount holes and leaving the washers in place.
50. Bolt together using the M6 button head stainless steel screws, washers and M6 nuts.

FITTING BUFFERS or BUFFERS WITH FRAME



BUFFERS ONLY

51. With sahara bar sitting as it would when fitted to vehicle, fit each buffer in turn and secure with M6 flange nuts on 6 x studs per side once buffers are carefully pushed home against the profile of the bull bar be careful not to over tighten the flange nuts as damage to buffer can result.

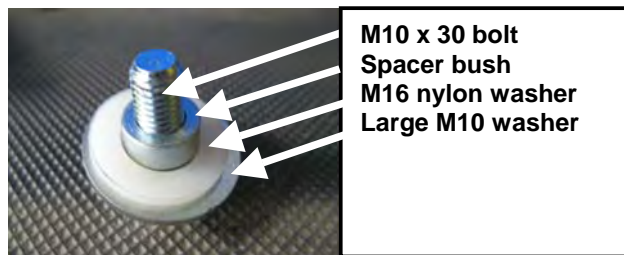


BUFFERS AND FRAME

52. Place the sahara bar face down on a soft surface
53. Fit the RH hinge bracket assembly to outboard side of upright as shown, with M10 bolt, large M10 washer, spring washer, flange nut, bush and 16mm ID nylon washer. Tighten to recommended torque.

NOTE: The top flange of hinge bracket must face inboard, ie top flanges are towards each other when fitted

54. Repeat for LHS.



NOTE: When the frame sits on the bumper, it is angled backward. Put it up against the bumper and determine which side is LH and RH. The buffers are handed RH and LH. Select the correctly handed buffer to fit over each end of the frame before proceeding.

55. Slide the buffers over the frame as shown

FITTING BUFFERS WITH FRAME

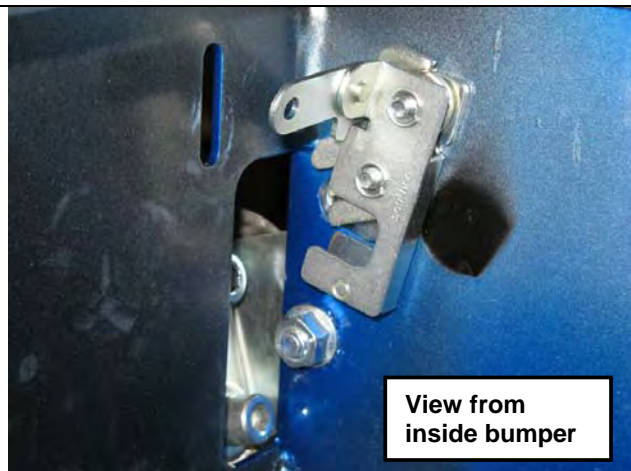


56. Fix the frame to the hinge brackets using 4 x sets M10 x 30 Cap Screws, flat and spring washers
57. Ensure that the frame is centred on the brackets and bar assembly
58. Tighten the cap screws to recommended torque



59. Slide the buffers down over the frame and secure using M6 flange nuts on the four lower buffer studs on each buffer and M6 nyloc nuts with large M6 flat washers on the two studs located on top face.

CAUTION: Do not over tighten nuts as damage to buffer can result



NOTE: The latching assembly is only fitted to RHS of the bumper

60. Fit the slam latch assembly to **RHS** (inboard side of upright) secure using ¼ UNC x 1" bolts, flat and spring washers. *Lever arm is to rear of bumper.*
61. **Tighten firmly, to 14Nm (11lbf).**

FITTING BUFFERS WITH FRAME



62. Fit the striker pin to the **RHS** hinge plate and secure with 5/16"UNC nut and spring washer as shown and tighten to 22Nm or 16lbf



63. Fit a urethane buffer pad to each of the right angle brackets using M4x16 csk head screws and M4 nyloc nuts, to create a pair of RH and LH assemblies as shown.
64. Tighten the screws until the heads are 1.5mm below the face of the urethane pad

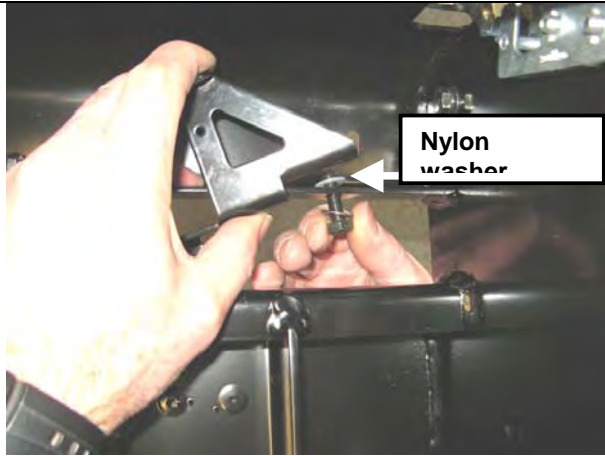


65. Fit the RHS buffer pad assembly as shown, wedge of pad up. Secure with 2 x M8 bolts, washers and flange nut sets. Load bolts from inboard side of upright, nuts are on bracket side.
66. With the striker pin engaged fully in the latch and a slight amount of pressure on the frame pushing it back against the slam latch, pull the pad hard against the hinge bracket flange as shown.
67. Tighten the M8 bolts to recommended torque.
68. Repeat for the LHS



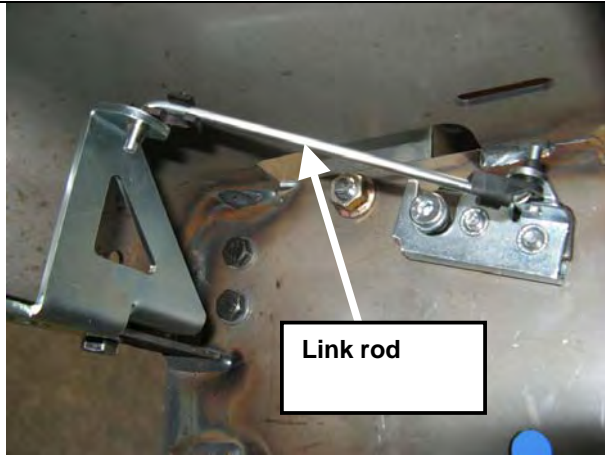
The intention once the assembly is complete is for the frame to feel solid without any play.

FITTING BUFFERS WITH FRAME



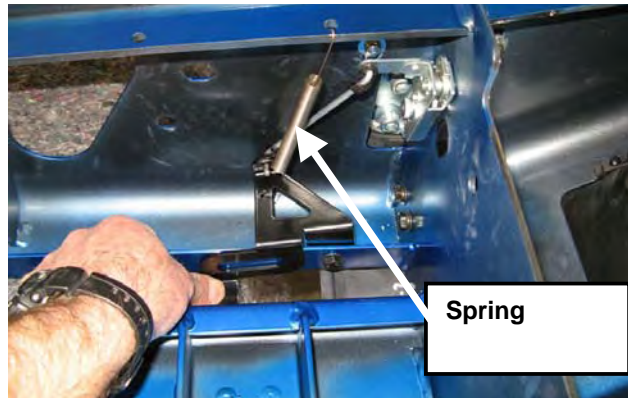
69. Fit the lever bracket for the slam latch operation using an M8 x 25 black bolt, nyloc nut, 2 x M8 flat washers and **nylon washer** which is *sandwiched between the pan flange and face of bracket at pivot point.*

70. Once M8 nyloc nut is tensioned, bracket must be able to pivot freely, without play and without rubbing contact with mounting flange, adjust accordingly.



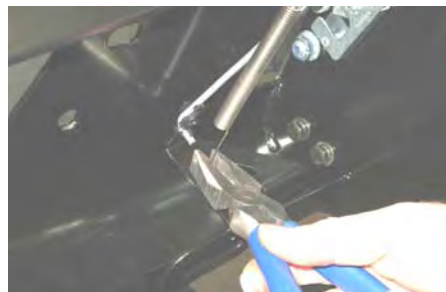
71. Fit the plastic rod connector fittings from underneath into the lever in the slam latch and from above into the operating bracket

72. Fit the 4mm link rod



73. Fit the spring as shown. It connects to the lever bracket through the hole in the side and to a hole in the pan brace at the rear of the top pan

74. Crimp over the end loops to secure the spring ends in position



FITTING PROCEDURE BAR ON VEHICLE



75. Using two people, three if winch fitted, position the bar assembly on the vehicle mounts.

Caution: This product is heavy, especially if a winch is fitted. Do not attempt to lift it and fit it by yourself. Have some assistants help you or use a mechanical aid such as a hydraulic lift table.



76. Bolt the bar to the mounts using M12 bolts. Large flat washers and spring washers. Centralise the bar to the front of the vehicle.

Do not tighten any bolts yet

77. Fit the cross brace to underside of lower pan and on top of gussets in mount brackets. Use M10 x 30mm SEMS bolt and washer sets, flange nuts but do not do up tight. If holes in pan do not line up, run a Dia 10.0 drill through any holes to enable bolt entry.



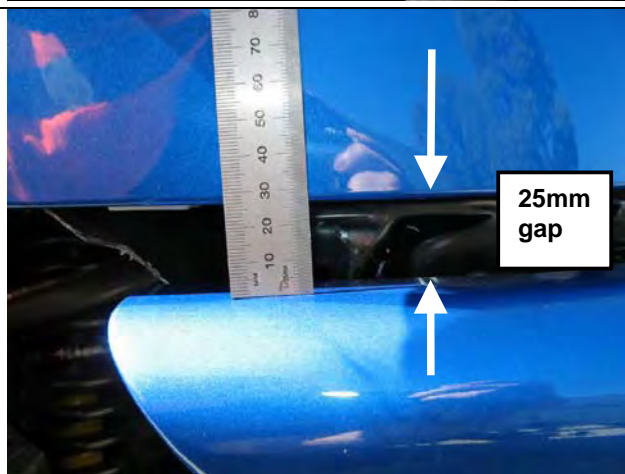
Warning: Drilling operations can result in flying metal debris, safety glasses should be



78. Tighten up the mount brackets fasteners. Start with the tow hook bolts, then M10 flange nuts to chassis studs.

79. Then tighten up the long M12 chassis studs, ensuring that the clevis nut is positioned correctly over the hole in the chassis.

NOTE: Protrusion as shown is approximately 7mm.



80. Adjust the bar height leaving approximately 25mm gap between top of wing to fender. Align the bar so the front face is vertical and the gap is even on both sides of the vehicle.

FITTING PROCEDURE BAR ON VEHICLE



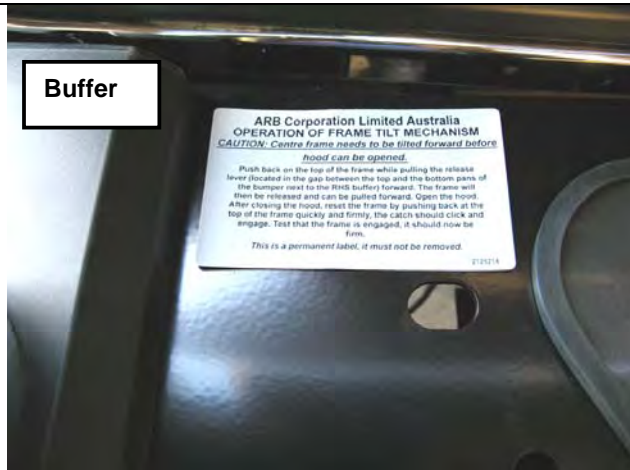
81. Tighten M12x 40mm mounting bolts to recommended torque
82. Tighten up the M10 brace bolts in 7 places to recommended torque



64. Using the M10 pilot hole in mount brackets, drill pinning hole through uprights of bull bar. Fit M10 SEMS bolt and flange nut, do up tight to recommended torque.



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



83. Apply the frame tilt operation label to the top face of the pan adjacent to the buffer as shown in diagram

WARNING: LABEL FOR FRAME TILT OPERATION FOR HOOD CLEARANCE MUST BE APPLIED TO TOP FACE OF SAHARA BUMPER IN THE POSITION IDENTIFIED IN THESE FITTING INSTRUCTIONS. FAILURE TO APPLY THIS PERMANENT LABEL AT SAHARA BUMPER FITMENT INDEMNIFIES ARB CORPORATION OF ANY LIABILITY ARISING FROM THE OPERATION OR USE OF THIS PRODUCT.



65. Test the operation of the frame tilt assembly
66. Frame should release from latch and engage as per the supplied label.

If necessary, adjust the slam latch and or the bump stops to ensure that the frame complies and does not have any free play when latched in the home position yet releases to come forward with slight backward pressure on top of tube when lever is pulled forward.

WARNING: THIS FRAME IS NOT DESIGNED TO SUSTAIN EXCESS LOADING EITHER FORWARDS OR BACKWARDS, SUCH LOADS MAY DAMAGE THE FRAME ASSEMBLY TILT MECHANISM

FITTING PROCEDURE BAR ON VEHICLE



Running lamp wiring



Indicator lamp wiring

54. Wire up indicators and parking lamps.

Note:

Wire configuration of supplied indicator looms;

Black = ground

Green = indicator (amber)

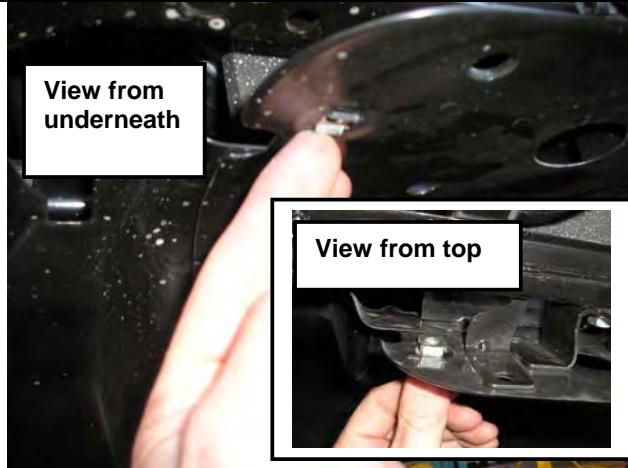
Red = run lamp (clear)

55. Use supplied scotch locks for the electrical connections then secure wiring with cable ties when complete.

56. Wire up P# 6821201 ARB fog lamps if fitted.

NOTE: For vehicles without factory fog lamp loom, use ARB Loom MD02 plus switch. Supplied tails can be joined to OE loom

View from underneath



View from top



77. Using square file, increase slot length in 2 x existing holes in sump guard (those pitched 570mm apart) to a size of 12.3mm A/F.

78. Fit two M8 cage nuts to slots in sump guard (NOTE: nut body above panel as shown).



79. Fit stone tray using 4 x M8 bolts and washer sets at front and 2 x M8 bolts, washers and into fitted M8 cage nuts at two locations into existing sump guard front section as shown.



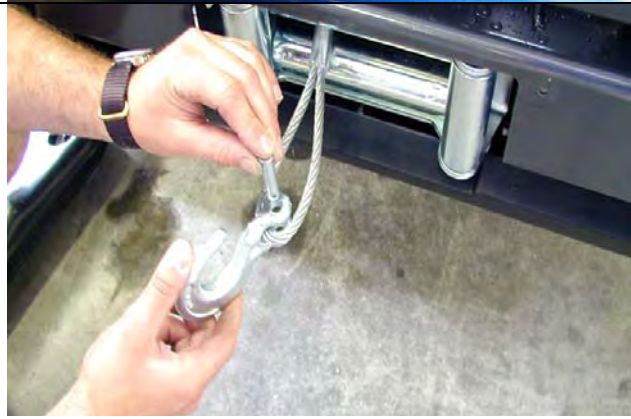
72. Trim fender liner if required. Tuck behind wing return.

73. If required secure with cable ties through holes in bulkhead.

FITTING PROCEDURE BAR ON VEHICLE



80. Unless fitting CB aerials, fit blanking plugs in provided holes in the top of the wings.



81. If winch fitted, fit off winch hook.

NOTE:

- ◆ **Connect wiring to fitted sensors, lights and winch.**
- ◆ **Check that wiring does not contact sharp edges and piping etc is clear of moving parts by at least 15mm**
- ◆ **Check operation of all lights.**
- ◆ **Check operation of parking sensors. If sensors do not function correctly refer to appropriate section in notes.**
- ◆ **Adjust fog lamp beam aim.**
- ◆ **Check winch operation**
- ◆ **If fitted check frame tilt operation**

FITTED PRODUCT

