

Part Number: 3421530 / 3421540 Fitting kit No: 6174125/6174126 Product **ARB WINCH BULL BAR** Description: Suited to **TOYOTA 4 RUNNER YEAR MODELS 03 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. ٠ 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. ٠
- Do not remove labels from this bull bar. ٠
- This product or its fixing must not be modified in any way. ۲
- The installation of this product may require the use of specialized tools and/or techniques ۲
- It is recommended that this product is only installed by trained personnel ٠
- These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held ۲ 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

42-44 Garden St Kilsyth, Victoria AUSTRALIA 3137 **Corporate Head Office** Tel: +61 (3) 9761 6622 Fax: +61 (3) 9761 6807

Australian enquiries North & South American enguiries Other international enquiries

sales@arb.com.au sales@arbusa.com exports@arb.com.au

### www.arb.com.au

Page 1 of 13

# **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 authorised ARB stockist.

### FITTING REQUIREMENTS

#### **REQUIRED TOOLS FOR FITMENT OF PRODUCT:**

| Metric socket and spanner sets 8-25mm range | External Circlip pliers  |
|---|--------------------------|
| Screwdrivers Philips and Flat blade         | Cold chisel              |
| Hammer                                      |                          |
| Power Drill 13mm capacity                   | 10mm and 13mm drill bits |

#### 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.

| SIZE | Torque Nm | Torque lbft |
|------|-----------|-------------|
| M6   | 9Nm       | 4lbft       |
| M8   | 22Nm      | 16lbft      |
| M10  | 44Nm      | 32lbft      |
| M12  | 77Nm      | 57lbft      |

#### FASTENER TORQUE SETTINGS:

#### **OPTIONAL LIGHT SETS TO SUIT THIS PRODUCT:**

- ARB 6821201 FOG LAMP SUIT 3163015
- Up to IPF 900 SERIES FOG OR DRIVING LIGHT SETS

| PARTS LISTING                          |                    |     |   |
|--|--------------------|-----|---|
| APPLICATION.                           | PART NO.           | QTY | DESCRIPTION                                     |
|  | 3756893            | 1   | Bracket Mount Assembly                          |
|  | 3756851R           | 1   | Bracket Mount Brace RHS                         |
|  | 3756851L           | 1   | Bracket Mount Brace LHS                         |
|  | 3193741            | 2   | Captive Nut Plate                               |
|  | 6151306            | 2   | Nut Cage M12 x 1.75                             |
| Mount Assembly To Chassis              | 6151255            | 8   | Bolt M12 x 1.75 x 40mm                          |
|  | 6151189            | 6   | Nut M12 x 1.75                                  |
|  | 6151094            | 2   | Bolt M12 x 1.25 x 30mm                          |
|  | 4581049            | 18  | Washer Flat M12                                 |
|  |                    |     |   |
|  | 4581050            | 10  | Washer Spring M12                               |
|  | 5846401            | 4   | Spacer 8mm                                      |
|  | 6151357            | 10  | SEMS Bolt M10 x 1.5 x 30mm                      |
| Bull Bar To Mount Bracket Assy         | 4581040            | 10  | Washer Flat M10 x 2mm                           |
|  | 6151026            | 10  | Nut M10 x 1.5                                   |
|  | 6542091            | 1   | Stone Tray                                      |
|  | 6151300            | 4   | Nut Cage 6mm                                    |
| Stone Tray to Bull Bar                 | 6151213            | 4   | Bolt M6 x 20mm                                  |
|  | 4581084            | 4   | Washer Flat M6                                  |
|  | 4581287            | 4   | Washer Spring M6                                |
|  | 3163015            | 1   | Combination Light Surround Kit                  |
|  | 6821152            | 2   | Turn signal / clearance light loom              |
|  | 180701             | 6   | Scotch lock                                     |
| Indicators To Bull Bar                 | 6821192            | 2   | Bulb 12V 10W BA15S                              |
|  | 6821151R           | 1   | Turn Signal / Clearance Light                   |
|  | 6821151L           | 1   | Turn Signal / Clearance Light                   |
|  | EG50               | 1   | Rubber Grommet                                  |
|  | 3756499            |     | Bracket Control Box                             |
|  |                    | 1   |   |
|  | 6151021            | 2   | Bolt M8 x 20mm                                  |
| Winch To Bull Bar                      | 4581044            | 2   | Washer Flat M8                                  |
|  | 6151132            | 2   | Nut Flange M8                                   |
|  | BLB560             | 2   | Cable Black 560mm                               |
|  | 4581040            | 4   | Washer Flat M10 x 2                             |
|  | 6151074            | 2   | Bolt 1 <sup>3</sup> ⁄ <sub>4</sub> " x 3/8" UNC |
|  | 3162470R           | 1   | Buffer  |
| Buffers to Bull Bar                    | 3162470L           | 1   | Buffer  |
|  | 6151128            | 12  | Nut M6 Flanged                                  |
|  | 6821189            | 2   | Grommet Nylon Nut                               |
| Number Plate To Bull Bar               | 6151384            | 2   | Screw   |
|  | 6781408<br>6151132 | 1   | Tape Double sided                               |
|  | 6151132            | 10  | Nut Flange M8x1.25P<br>Bolt M8x1.25x25 BZ       |
| Wing Under Panel Kit<br>(3421540 only) | 4581045            | 10  | Washer Flat M8x17x1.2 BZ                        |
|  | 6522670R           | 1   | Panel Washer Bottle Guard RH                    |
|  | 6522670L           | 1   | Panel Washer Bottle Guard LH                    |
|  | 6821132            | 2   | Rubber Grommet 3/8" ID                          |
| Miscellaneous                          | 180302             | 8   | Cable Ties                                      |
|  | 3162152            | 2   | Plastic Plug 16mm DIA                           |

### FITTING PROCEDURE

|   | 1.          | Undo bumper light electrical connections and then remove front bumper cover from vehicle  |  |
|---|-------------|---|--|
|   | NOT<br>4 an | E: For 03-05 Models only, follow steps 2 to d 42 to 44 regarding plastic trim support.  |  |
|   | 2.          | Remove plastic support from inside OE<br>bumper cover.  |  |
|   | 3.          | With trim piece fitted to OE bumper cover as<br>shown, mark out and draw a line 25mm (1")<br>from the leading edge of the lower grille trim<br>approx. 864mm (34") long |  |
|   | 4.          | Remove trim and then cut out plastic panel<br>along marked line from OE bumper facia, set<br>this piece aside for fitting later.  |  |
|   | 5.          | Remove trim piece and support bracket   |  |
| Paint this<br>area black<br>with trim<br>removed. | 6.          | With trim piece removed, mask the area<br>around the headlight and the front guard and<br>paint the lower section under the front guard<br>black.                       |  |
|   |             |   |  |

| FITTING PROCEDURE |   |  |
|-------------------|---|--|
|                   | 7. Remove front bumper reinforcing bar.<br>NOTE: Retain the 8 x flange nuts removed for<br>fitment of the bull bar chassis mount.   |  |
|                   | 8. Remove front fasteners only from stone tray.<br>Retain fasteners for reuse.  |  |
|                   | <ul> <li>9. Using the 13mm drill bit and power drill, drill out the M8 captive nut located at the outboard side of the chassis as shown, on both sides of the vehicle.</li> <li>Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.</li> </ul> |  |
|                   | <ul> <li>10. Check that the nut body is completely removed, if it is not cleared, using a cold chisel and hammer chisel the remainder off.</li> <li>Image: Warning: Hammering and chiselling operations can result in flying metal debris, safety glasses should be worn.</li> </ul>      |  |

| FITTING PROCEDURE   |     |   |  |
|---|-----|---|--|
|   | 11. | Fit an M12 cage nut to each of the captive nut plates 3193741.  |  |
| Use a M12<br>flat washer<br>as a spacer<br>between<br>chassis and<br>bracket. | 12. | Fit the chassis mount braces to the vehicle<br>using the M12 x 30mm fine pitched bolt, M12<br>spring and flat washers supplied in the lower<br>hole. Use an M12 flat washer as a spacer<br>between the brace and the chassis at the<br>upper hole and fix with an M12 x 40mm bolt<br>M12 spring and flat washers and M12 x 1.75<br>nut. Do not tighten the bolts. |  |
|   | 13. | Insert the captive nut assembly through the front of the chassis and line it up with the hole at the end of the mount brace. Fix in place with the M12 x 1.75 x 40mm bolt, M12 flat and spring washers. Break off the end of the captive nut plate. Do not tighten yet.   |  |
| Position brace so<br>spacer won't protrude<br>from the chassis                | 14. | Hold the 8mm spacer against the chassis<br>mount brace forward facing surface and<br>position the brace so that the spacers sit just<br>below the surface of the chassis front face.<br>Tighten the bolts.  |  |

|                     | 15. Fit the chassis mount bracket to the chassis   |
|---------------------|--|
|                     | using the original flange nuts removed with the bumper reinforcing bar. Centre the chassis mount bracket and tighten.  |
|                     | CAUTION: When fitting the Chassis mounting<br>bracket carefully bend the air-conditioning pipe<br>out of the way.  |
|                     | 16. If required, carefully bend piping clear of mount bracket assembly.  |
|                     | CAUTION: Piping must not rub on sharp<br>edges, secure with cable tie and protective<br>sheath if required.  |
|                     | 17. Fix the chassis mount bracket to the chassis<br>mount brace using M12 x 40mm bolts, M12<br>spring and flat washers, the 8mm spacers<br>and M12 x 1.75 nuts. Tighten bolts  |
|                     | NOTE: If fitting winch continue through step 18, if not skip to step 30  |
| View on gearbox end | 18. For ease of access the winch gearbox<br>handle needs to be rotated. To do this undo<br>all the cap screws, carefully lift the gearbox<br>clear of the winch body so as not to damage<br>the gasket. (Do not lift the gearbox more than<br>a couple of millimetres) Rotate the gearbox<br>anti-clockwise three hole spaces. Re-fit the<br>caps-crews. |

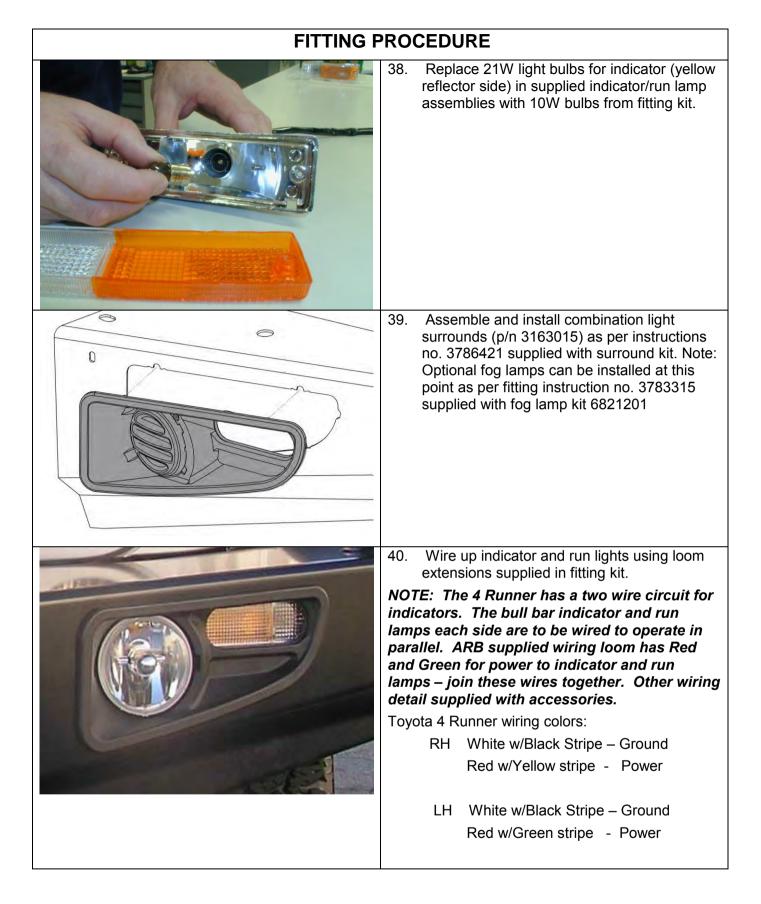
| FITTING PROCEDURE |   |  |
|-------------------|---|--|
|                   | <ul> <li>19. Using a 12mm drill bit, drill two new holes in the roller fairlead 25mm below the original holes.</li> <li>Original hole.</li> <li>New hole 25mm lower.</li> <li>Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.</li> </ul>                         |  |
|                   | <ul> <li>20. Remove the three screws from the control box and remove the cover.</li> <li>21. Replace the two cables marked "A" and "F1" and replace them with the two cables (BLB560) supplied with the fitting kit. Label the cables the same as the original to assist in the wiring of the winch.</li> </ul> |  |
|                   | 22. Place the winch on a table with the feet facing up and using an assistant; carefully lift the bull bar on top of the winch.   |  |
|                   | <ul> <li>23. Attach the winch to the bull bar using two 1 ½" x 3/8" bolts from the winch fitting kit, 3/8" spring washer and 3/8" flat washers in the top holes.</li> </ul>   |  |
|                   | 24. Fit the 4 x M6 cage nuts from inside of the lower flange on the pan, where the stone tray will bolt up.   |  |
|                   | NOTE: Access to this area for cage nut fitment<br>will be restricted once the RFL is fitted so it is<br>important to insert these now.  |  |
|                   | 25. Position the roller fairlead, and remove the circlips from the lower of the vertical rollers and push the pins up to give access to the lower bolts.  |  |
|                   | 26. Fix the roller fairlead to the bar using the 1<br><sup>3</sup> / <sub>4</sub> " x 3/8" bolts, spring and flat washers   |  |

Last Rev Date: 06/05/2016 Page 8 of 13 Fitting instructions# 3789560 Copyright © 2005 by ARB Corporation Limited. All rights reserved, this document must not be reproduced without the express authority of ARB Corporation Ltd

| FITTING PROCEDURE |  |  |  |
|-------------------|--|--|--|
|                   | 27. Fit the control box bracket to the bull bar<br>using two M8 x 20mm bolts, M8 flat washers<br>and M8 flange nuts.   |  |  |
|                   | <ul> <li>28. Fit the control box to the control box bracket and connect the power cables to the winch as per the winch instructions.</li> <li>29. Connect the ground wire to the tension bar of the winch.</li> <li>CAUTION: Cable-tie all cables together and keep all cables clear of sharp edges and all moving parts.</li> </ul>                     |  |  |
| ESFC 453.         | <ul> <li>30. Insert square grommets into holes in front of bar for number plate fixing. Place the double-sided tape along the top edge of the number plate. Using supplied black screws, attach the number plate to the bull bar.</li> <li>NOTE: If winch is not fitted, number plate can be located lower on bar front to cover RFL opening.</li> </ul> |  |  |
|                   | 31. Fit the buffers to either side of the bull bar<br>using 6 x M6 flange nuts. Do not over tighten.   |  |  |

| FITTING PROCEDURE |   |  |
|-------------------|---|--|
|                   | <ul> <li>32. With the help of an assistant position the bull bar on the chassis bracket and fix with six M10 x 30mm bolts, M10 spring and flat washers.</li> <li>CAUTION: Nip up bolts, but do not tighten them yet.</li> </ul> |  |
|                   | 33. Position the bull bar so that there is an even<br>gap of approximately 20-25mm from the top<br>face of the bar to the underside of the body<br>edge. Then tighten all the bolts.  |  |
|                   | <ul> <li>34. With the bull bar in position drill Dia10mm pinning holes, one though pilot hole in mount bracket and one through hole in upright for both sides of mounts.</li> </ul>   |  |
|                   | Warning: Drilling operations can result in flying<br>metal debris, safety glasses should be worn.35. Fix in place using two M10 x 30mm SEMS   |  |
|                   | bolts, M10 Flat washers and M10 x 1.5 nuts<br>per side.   |  |
|                   | 36. Fit the bull bar stone tray by sliding the tray<br>under the front of the vehicles original stone<br>tray and fixing in place with the original bolts<br>from the vehicles stone tray.                                      |  |
|                   | 37. Fit the front of the stone tray to the bull bar<br>with four M6 x 20mm bolts, M6 large panel<br>washers and M6 spring washers.  |  |

Last Rev Date: 06/05/2016Page 10 of 13Fitting instructions# 3789560Copyright © 2005 by ARB Corporation Limited. All rights reserved, this document must not be reproduced without the express authority of ARB Corporation Ltd



| 3421540 ONLY         41. Fit wing underpanels using panels and M8 fasteners supplied         42. Take cut out trim from OE bumper (Step 4) and tuck leading edge of plastic trim under back edge of bumper and use OE retaining clips in the OE holes to hold bumper piece into place         All Shap lower grille trim into place onto bumper         OF The second  | FITTING PROCEDURE  |   |  |  |
|---|--|---|--|--|
| 41. Fit wing underpanels using panels and MB fasteners supplied         Image: Supplied State of the support of th |  | 3421540 ONLY  |  |  |
| and tuck leading edge of plastic trim under back edge of bumper and use OE retaining clips in the OE holes to hold bumper piece into place         and tuck leading edge of plastic trim under back edge of bumper and use OE notes to hold bumper piece into place         and tuck leading edge of plastic trim under back edge of bumper and use OE notes to hold bumper piece into place         and tuck leading edge of plastic trim under back edge of bumper and use OE notes to hold bumper piece into place         and tuck leading edge of plastic trim under back edge of bumper piece into place         and tuck leading edge of bumper and use OE notes to hold bumper piece into place         and tuck leading edge of plastic trim under back edge of bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece into place         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper and use OE notes to hold bumper and use OE notes to hold bumper piece         and tuck leading edge of bumper and use OE notes to hold bumper and use OE notes to hold bumper piece         and tuck leading edge of   |  | 41. Fit wing underpanels using panels and M8  |  |  |
| piece.         Piece.         44.         Finished install of trim piece.   |  | and tuck leading edge of plastic trim under<br>back edge of bumper and use OE retaining<br>clips in the OE holes to hold bumper piece |  |  |
|   | A Contraction of the second se |   |  |  |
|   |  | 44. Finished install of trim piece.   |  |  |

 Last Rev Date: 06/05/2016
 Page 12 of 13
 Fitting instructions# 3789560

 Copyright © 2005 by ARB Corporation Limited. All rights reserved, this document must not be reproduced without the express authority of ARB Corporation Ltd

• When finished make sure all bolts are tightened and that all wiring is clear of hot, sharp and moving parts.

• Also supplied in the kit are two 3/8" rubber grommets and two 16mm plugs. The rubber grommets are for the two holes in the top pan if lights are being fitted. The two plastic plugs are for the holes in the top surface of the wings if no CB aerials are going to be connected.

• NOTE: Fog lamps shown fitted to bull bar below are optional accessories, ARB P#9249FCK 100mm 55WATT FOG LAMP KIT

