

### PART NUMBER AND DESCRIPTION:

3614120 - REAR STEP TOW BAR (RSTB)

SUITED TO VEHICLE/S:

Toyota Hilux 2015 ON

## WARNING

#### 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 tow bar component, contact your nearest authorised ARB stockist.
- Do not use this product for any vehicle make or model, other than those specified by ARB.
- Do not remove labels from this tow 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.
- The eyelets on the rear bar have been designed and tested for connection of trailer safety chains. They are not to be used for recovery or direct towing.
- For recovery, fit a suitable and rated tow hitch to the central tow hitch receiver.
- Position high lift jack at lift locations beneath the middle of the wings and corner of the RSTB. Do
  not lift directly from the end of the wing.
- When using the tow hitch receiver, the centre panel should be in the raised position.

# **ARB 4x4 ACCESSORIES**

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# **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:**

BASIC TOOL KIT	SIDE CUTTERS
INSULATION TAPE	70MM HOLE SAW BIT
DEUTSCH CRIMPING TOOL	WIRE STRIPPER
NEEDLE NOSE PLIERS	POWER DRILL
ALLEN KEY SET	SOCKET SET
FINE ROUND FILE	TAPE MEASURE
MASKING TAPE	RUST PREVENTATIVE PAINT

#### 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:

Torque Nm	Torque lbft			
9Nm	7lbft			
22Nm	16lbft			
44Nm	32lbft			
77Nm	57lbft			
95Nm	71lbft			
	Torque Nm 9Nm 22Nm 44Nm 77Nm			

RSTB PARTS LISTING				
APPLICATION	PART NO.	QTY	DESCRIPTION	
	4654116	1	ASSY RSTB HILUX 150N WELDED	
	6151715	18	NUT M6 CAGED 3.6-4.5MM 836-D	
	6602011	2	CANOE CLIP	
PREPARE REAR STEP TOW BAR	4584295	4	WASHER FLAT M6 x 12 x 1.3 BLK ZN	
(RSTB)	6523002	1	LIFT UP PANEL	
. ,	5670026	2	SPRING EXT 11.25 OD x 43	
	6151256	2	SCREW BTN HD M6 x 16 SS	
	6151549	2	NUT NYLOC M6 x 1.0 GR8.8 BTZP480	
	3789470	1	TEMPLATE HILUX 2015 NUMBER PLATE	
	6523079R	1	PANEL BEAVER HILUX 2015 RH	
	6523079L	1	PANEL BEAVER HILUX 2015 LH	
	3194833	1	PLATE 10MM SPANNER	
	6821189	4	PLASTIC SNAP-IN LARGE GROMMET	
	6151135	4	NUT M12 x 1.25 ZP	
	6151384	4	SCREW ST PHDCOL PH 5.2 x 16 TBZP480	
	5848302	4	PACKER RB NYLON	
	6151213	8	BOLT M6 x 1.0 x 20 Gd8.8 BZ	
	4584295	18	WASHER FLAT M6 x 12 x 1.3 BLK ZN	
	6151459	4	SCREW BTN HD M6 x 16 BZ	
<b>RSTB TO VEHICLE</b>	6151549	8	NUT NYLOC M6 x 1.0 GR8.8 BTZP480	
	4581287	2	WASHER SPRING M6 x 2.5 x 1.6 BLK ZN	
	3759696	1	BRKT NUMBER PLATE FRAME	
	3759695R	1	BRKT NUMBER PLATE MOUNT RH	
	3759695L	1	BRKT NUMBER PLATE MOUNT LH	
	6151096	14	BOLT HXHD M12 X 1.25 X 40 CL8.8 ZP	
	4581049	18	WASHER FLAT, M12 METRIC	
	4581050	14	WASHER SPRING M12 METRIC	
	3194821	2	PLATE ASSY CHASSIS	
	3194820	2	PLATE INFILL	
	3194819	1	STEP PLATE EXTRUSION	
	6151256	10	SCREW BTN HD M6 x 16 SS	
	3199943	1	CAGE PLATE JK JEEP (225mm)	
	6151303	1	NUT CAGED M8 1.8-3.2	
	3759746	1	BRKT WING MOUNT	
	3759774	1	ASSY SENSOR GUARD MOUNT	
	3759776	1	BRKT WING MOUNT LH	
PREPARE RSTB/VEHICLE FOR	6151022	12	BOLT M8 x 1.25 x 25 Gd 8.8 ZP	
PANELS	4581046	10	WASHER SPRING M8 METRIC	
	4581063	8	WASHER FLAT, M8 x 25 x 3 GOLD ZN	
	4581020	1	WASHER FLAT M8 x 30 x 3 TZP480	
	6151083	1	BOLT M8 X 1.25 X35 ZP	
	4581044	3	WASHER FLAT, M8 ZP	
	3789454	1	TEMPLATE HILUX 2015 WING H/CUT	

RSTB PARTS LISTING			
APPLICATION	PART NO.	QTY	DESCRIPTION
	6151022	12	BOLT M8 x 1.25 x 25 Gd 8.8 BP
	4581063	20	WASHER FLAT M8 x 25 x 3 ZN
PANELS TO RSTB/VEHICLE	6151032	10	NUT NYLOC M8 x 1.25
	4581046	4	WASHER SPRING M8 x 3/32 x 3/32
PANELS TO RSTB/VEHICLE	6151256	8	SCREW BTN HD M6 x 16 SS
	6151549	2	NUT NYLOC M6 x 1.0 GR8.8 BTZP480
	4581304	8	WASHER FLAT M6 S/S
	4584295	2	WASHER FLAT M6 x 12 x 1.3 BLK ZN
	6523071	1	PANEL DIFFUSER RH NO SENSOR
	3194723	2	PLATE NUT ASSEMBLY
	3194724	2	PLATE NUT ASSEMBLY
	6523072	1	PANEL DIFFUSER LH NO SENSOR
	4581082	4	WASHER M6 X 20 BZ
	3131538R	1	WING ASSY HILUX - NO SENSOR RH
	3131538L	1	WING ASSY HILUX - NO SENSOR LH
	1		
TOW TONGUE	4761170	1	TOW TONGUE 45 DEG
	55010	1	TOW BAR PULL PIN
	55020	1	SPRING CLIP
	180302	10	CABLE TIE 200MM

#### **TRAILER WIRING**

The following trailer wiring solutions can be purchased from ARB. Purchase the main wiring harness with ECU (Part no. 3600010) in conjunction with the appropriate socket and tail listed below. Alternatively, this product is compatible with the factory trailer wiring solution.

To install this loom, a crimping tool suitable for crimping contact typesize16Deutsch pins is required. Suitable crimping tools can be purchased from auto electrical wholesalers as shown.



APPLICATION	PART NO.	QTY	DESCRIPTION
TRAILER WIRING	3600010	1	RSTB WIRING INCLUDING ECU
	3600020	1	RSTB SOCKET & TAIL   7 PIN FLAT
	3600030	1	RSTB SOCKET & TAIL   12 PIN FLAT
	3600040	1	RSTB SOCKET & TAIL   7 PIN ROUND LRG
	3600050	1	RSTB SOCKET & TAIL   7 PIN ROUND SML

OPTIONAL ACCESSORIES					
The following ARB accessories can be fitted to this product:					
APPLICATION		PART NO.	QTY	DESCRIPTION	
		171403	1	ARB AIR LINE FITTING	
OPTIONAL ACCESSOR	OPTIONAL ACCESSORIES		1	ARB TRAILER CAMERA KIT	
			1	RECOVERY HITCH AND SHACKLE	
		6594050	1	50 AMP ANDERSON PLUG	
			• >	ALE OFFICIAL	
AIR LINE FITTING TH	RAILER C	AMERA KIT	REC	OVERY HITCH	ANDERSON PLUG

#### **GENUINE ACCESSORIES REMOVAL**



#### **VEHICLE/RSTB WIRING**

A trailer wiring solution that incorporates a smart ECU is available for this vehicle. To fit this solution, the rear vehicle wiring harness must be cut and high quality, waterproof Deutsch connectors installed to provide signal pickup points for the ECU.

To install this loom, a suitable crimp tool is required. Refer to Page 4 for more details about the crimp tool.

Follow the steps below to install the trailer wiring solution:



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#### **VEHICLE/RSTB WIRING**



Insert one set of wires into a male 6-pin connector from the back in the following order:

Pin position	Wire colour
1	Yellow
2	Red
3	Light Blue
4	Blue
5	Green

## *Note: Pin positions are shown on the back of the connector.*

- 0. Insert the white blank pin into position 6 as shown in the previous step.
- 1. Insert the plastic cover to the front of the connector as shown.
- 12. Repeat steps 17-19 for the other connector.
- Position ECU on top of LH chassis rail behind cross member as shown. Secure using the ECU mounting holes and chassis rail holes with 2 cable ties.
- 14. Connect the ECU unit to the RSTB wiring harness using the large 12 pin connector.
- Connect the ground wire of the RSTB harness to the bolt on the LH chassis rail near the rear shock absorber mount.

#### **VEHICLE/RSTB WIRING** 16. Route the positive supply wire to the front of Existing vehicle the vehicle following the existing vehicle harness harness along the left chassis rail. 17. Continue routing the positive supply wire Positive terminal through the engine bay to the battery. 18. Connect the positive supply wire to the positive terminal of the battery using the existing bolt as shown. 20A Fuse 19. Connect the RSTB wiring harness to the 2 male 6-pin connectors. Note: The RSTB wiring harness is not polarity sensitive in this region so the male 6-pin connectors can be connected to either female connector. 20. Ensure vehicle tail lights function correctly. Cable tie connectors and RSTB 21. Fasten the connectors to the vehicle loom wiring harness to vehicle loom using the cable ties provided. 22. Re-wrap the un-cut wires with the existing split corrugated tubing and new tape. Tidy and fasten all wiring using the cable ties 23. provided. Warning: Make sure all wires are securely fastened away from any hot, sharp or moving surfaces. Do not fasten wiring harness to fuel or brake lines. 24. Ensure vehicle tail lights function correctly.

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#### PREPARE REAR STEP TOW BAR (RSTB)



34. Fit 10 long-leg M6 caged nuts to the RSTB. Fit 5 caged nuts to the right side as shown and 5 cage nuts to the left hand side

35. Rotate and support the RSTB and fit 8 longleg M6 caged nuts. Fit 4 caged nuts to the right side as shown and 4 cage nuts to the left hand side





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#### **RSTB TO VEHICLE**



- 54. Fix the front two horizontal mount points using M12x1.25x40 (fine pitch) hex head bolts, flat /spring washer and nut.
- 55. Insert chassis plate in chassis and fasten the remaining horizontal mount points using 2 M12x1.25x40 (fine pitch) hex head bolts, 2 M12 spring washers and 2 M12 flat washers
- Check RSTB spacing to vehicle and tighten 56. all fasteners to the specified torque.

M12 X 1.25 - **95 Nm.** 

- 57. Route the trailer plug loom through the RSTB and attach to the appropriate connector on the RSTB wiring harness or vehicle loom as shown.
- 58. Ensure all trailer tail lights function normally.

Note: Test that the trailer park, brake and reverse lights function normally. Also test the left and right indicators along with the hazard setting.

59. Tidy and fasten all wiring using cable ties and the slots in the RSTB brackets, as well as existing fastening locations.

> Warning: Make sure all wires are securely fastened away from any hot, sharp or moving surfaces. Do not fasten wiring harness to fuel or brake lines.

Ensure trailer tail lights function normally as 60. per step 58.

61. Fit infill plate on either side of licence plate as shown using 1 M6 X 16 Stainless button head screw per infill plate. Only hand tighten fastener at this stage ensuring second hole is aligned.

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62. Attach the step plate extrusion to the RSTB using 8 M6x1.0x16 button head screws. Proceed to tighten fasteners installed in step 61

NOTE : Do not install washers under the 8 M6 button head screws that are fixing the step plate extrusion to the RSTB



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#### PREPARE RSTB/VEHICLE FOR PANELS



75. Fit left hand wing mount as shown using 2 M8x1.25x25 hex head bolts, 4 M8 flat washers and 2 M8 nyloc nuts. Do not fully tighten at this stage.

#### PANELS TO RSTB/VEHICLE



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