

Part Number: 3414680

Description: HILUX SUMMIT MKII BULLBAR

Suited to

vehicle/s: Toyota Hilux 06/20ON

Optional

Fitting Kits: 3501130 – WINCH INSTALL KIT SUMMIT

3501070 - SUMMIT RFL COVER MATT BLACK | DOES NOT SUIT 200 OR Y62

3514140 - CAMERA RELOCATION

3500520 - ARB LOOM (For vehicles not fitted with factory fog 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

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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 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.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC TOOL KIT	ELECTRIC DRILL WITH COMPLETE METRIC DRILL SET
JIG SAW OR OSCILATING MULTITOOL WITH BLADE SUITABLE FOR PLASTIC	LOW TACK MASKING TAPE
FILE	UTILITY KNIFE
TAPE MEASURE	CLAMP
STEEL RULE	WHITE FELT MARKER
HACK SAW	TORQUE WRENCH
TOUCH UP PAINT ANTI CORROSION	RIGHT ANGLE ELECTRIC DRILL

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 Ibft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

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PARTS LISTING				
	PART			
APPLICATION.	NO.	QTY	DESCRIPTION	
	3194818	4	PLATE NUT ASSY HILUX BAR 150N	
	3759666L	1	BRKT CHASSIS IN HILUX 150N LHS	
	3759666R	1	BRKT CHASSIS IN HILUX 150N RHS	
	3759667L	1	BRKT CHASSIS OUT HILUX 150N LH	
	3759667R	1	BRKT CHASSIS OUT HILUX 15ON RH	
	4581007	2	WASHER FLAT 1/2x1 1/2x4mm TZP SILVER T	
MOUNTS TO	4581040	16	WASHER FLAT M10x25x3 TZP480	
VEHICLE	4654475L	1	MNT BRKT ASSY SUITS HILUX LHS	
	4654475R	1	MNT BRKT ASSY SUITS HILUX RHS	
	6151094	2	BOLT HXHD M12x1.25x30 PC8.8 ZP	
	6151428	10	NUT FLANGE M12x1.75 PC8.8 SERRATED	
	6151752	12	NUT FLANGE M10x1.5 PC8.8 BTZP480	
	6151965	12	BOLT HXHD FL M10x1.5x30 PC8.8 ZNB480	
	6152127	18	BOLT HXHD FL M12x1.75x30 PC8.8 ZNS480	
	3163289	1	GRILLE CENTRE, SUIT SUMMIT	
	3163294	1	KIT, CVR STRAP SUIT SUMMIT	
	3163295	1	KIT, GRILLE OUTER SUIT SUMMIT	
BUFFERS & MOULDINGS	3753105	2	BRKT GRILL MOUNT	
WOOLDINGS	4584329	4	WASHER FLAT M6x12.2x1.2 BTZP480	
	6151173	4	NUT FLANGE M6 ZNB480 SERRATED	
	6151459	4	SCREW BHD M6x16 BTZP480	
			·	
	6151301	4	NUT CAGED M8 3.3-4.7 1238-C	
	6151526	10	NUT CAGED M6 1.8-2.7 BZP480	
	6151655	3	NUT FLANGE M8x1.25 PC8 TZP480 ENS 14/002	
LINDED DANIELO	6151730	7	BOLT HXHD FL M8x1.25x20 FT PC8.8 BZP480 ENS14-001	
UNDER PANELS	6152008	10	BOLT HXHD FL M6x1.0x25 PC8.8 ZNB480	
	6523579L	1	PANEL WING SUIT HILUX MKII LHS	
	6523579R	1	PANEL WING SUIT HILUX MKII RHS	
	6523580	1	PANEL CENTER SUIT HILUX MKII	
WINCH COVER	4584329	8	WASHER FLAT M6x12.2x1.2 BTZP480	
PANEL FITMENT	6151213	4	BOLT HXHD M6x1.0x20 PC8.8 ZNB480	
(IF NO WINCH IS FITTED)	6151223	4	NUT HEX NYLOC M6x1.0 ZNB480	
	6523321	1	PANL WINCH COVER MB SUIT PXIII	
TOTAL THE CONTENT OF				
	4584329	2	WASHER FLAT M6x12.2x1.2 BTZP480	
	5848302	2	PACKER RB NYLON	
NUMBER PLATE	6151173	2	NUT FLANGE M6 ZNB480 SERRATED	
	6151459	2	SCREW BHD M6x16 BTZP480	
	0.01100	_	CONCERNION OF BILLION	

PARTS LISTING - CONTINUED				
	3514130	1	SENSOR SURROUND KIT SUMMIT MKII HILUX	
	3163222	1	PLUG SNSR BLANKING PAIR	
	3500991	1	LAMP CLUSTER, ARB SUMMIT RH&LS LAMP SET	
	3755037L	1	BRKT SUPPORT FOG CLUSTER L	
LIGHTS &	3755037R	1	BRKT SUPPORT FOG CLUSTER R	
SENSORS	6151173	4	NUT FLANGE M6 ZNB480 SERRATED	
	6151300	2	NUT CAGED M6 2.6-3.5 956-C	
	6152008	4	BOLT HXHD FL M6x1.0x25 PC8.8 ZNB480	
	6152094	2	SCREW PHD M6x1.0x30 PC8.8 TX ZNB 480	
	6821454	1	LIGHTING HARNESS FOG CLUSTER SUIT MKII SUMMIT HILUX 20 ON	
MISC	180302	8	CABLE TIE 4.8 X 180 MM BLACK	
	6191030	1	PINCH WELD 520mm	
TEMPLATE	37800042	1	CUTTING TEMPLATE SUITS HILUX	



Note: Read the instructions thoroughly before starting.

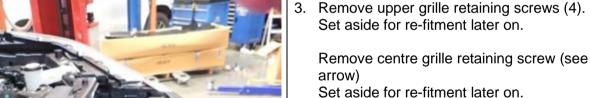
 Open the bonnet and remove all scrivets (8) retaining plastic cover. Set aside scrivets removed for re-use later on.

HINT: Depress centre to remove.

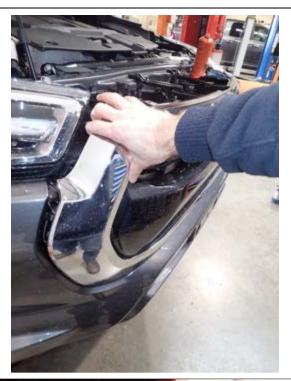




2. Remove plastic cover from above grille and set aside, this will be reused.







4. Gently unclip and pull back the top outside corners of the grille to reveal final two screws retaining grille. Using an extension and socket, remove and set aside for re-fitment later on.



5. Remove all fasteners and scrivets retaining bumper along inside edge of wheel arches – (Right hand side shown).

Set aside for re-fitment later on.



 Remove all fasteners and scrivets retaining bumper along lower lip – (Left Hand side shown).

Set aside scrivets and fasteners used to attach bumper to OEM stone deflector for re-use later on.





7. Remove dressing piece from underside of bumper and discard.



8. If vehicle is equipped with Toyota Safety sense and/or 360° around view camera, locate the plugs (positioned behind the badge on the grille) and unplug from their respective units prior to proceeding.



9. Ensure inner guards are unclipped from front bumper.



 If equipped, disconnect fog light wiring and front parking sensors – (Right Hand side shown).



11. Remove registration plate and set aside, then carefully remove bumper from vehicle by pulling on each side of the bumper near the wheel arches and working your way towards the centre.

Set grille and bumper aside on a soft nonmarking surface for re-use later in the fitment procedure.





12. Using a paint pen or white marker, label each parking sensor (Left or Right) prior to removing from bumper.

Once marked, unclip parking sensors (2) from bumper and store for reuse.



13. If equipped, remove the camera and camera bracket by removing the two Philips head screws connecting the bracket to the grille.



Remove plastic lower crush absorber from vehicle and discard.

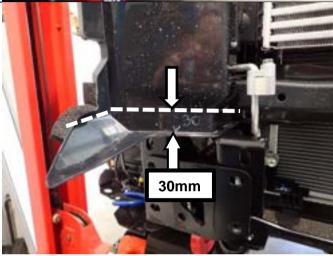
Note: Lower crush absorber is retained by plastic clips. Levering absorber free with a large screw driver may aid removal.



15. Remove two M10 bolts on both sides (4 total) fixing crash beam to chassis and remove crash beam.

Discard crash beam.

Note: Retain four M10 bolts for reuse.



- Locate air deflector panels and mark up 30mm from bottom edge as detailed in the image – (Right Hand side shown).
- 17. Use an oscillating multitool or shears to carefully cut lower portion away and discard.

Note: Take care not to damage any other components on the vehicle whilst cutting.

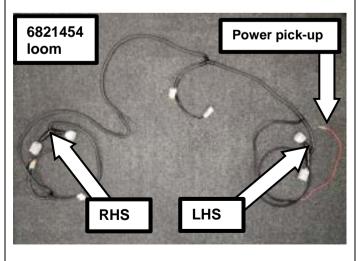
18. Carefully remove any burrs or sharp edges with a file and/or sandpaper.







RHS SHOWN Indicator Plug Parker/Clearance Plug



WORKMATE & SR MODELS:

 Remove the headlight cluster on boths sides of the vehicle to gain access to the head light plugs.

Note: The parker and indicator plugs are the two outer-most plugs.

20. Solder the following wires together:

Side	Wire	Vehicle Wire	Loom Wire
	Туре	Colour	Colour
RHS	Parker	Grey	Brown
RHS	Indicator	Red	Green/Black
RHS	Ground	White/Black	Black
LHS	Parker	Green	Brown
LHS	Indicator	Yellow	Yellow/Black
LHS	Ground	White/Black	Black

Note: Older revision looms require conduit to be opened to connect the aforementioned wires together, newer revisions have integrated extension wires.

21. Plug the large 8 pin male and female connectors into one another. Repeat on other end of loom.

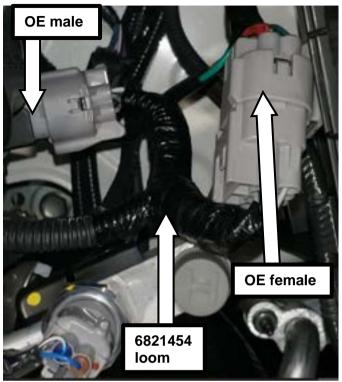


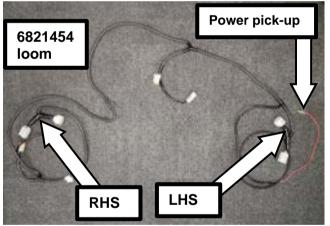
22. Once wiring is complete, reinstall headlight cluster.

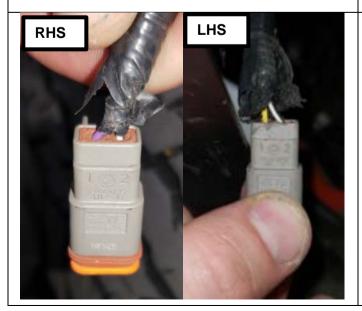


SR5 MODELS:

23. From the inside of the engine bay, unplug the grey OE connector from each headlight. Plugin the corresponding male/female connectors from the wiring loom 6821454 (provided in the kit) into the OE connectors.





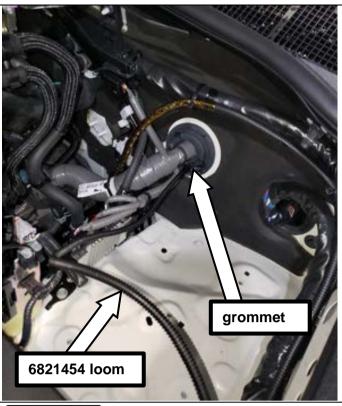


ALL MODELS, CONTINUE ON FROM HERE:

24. If the vehicle comes with OE fog lights, cut the OE connector off the loom and fit the deutsch connectors as shown. If there were no OE fog lights on the vehicle, use ARB harness 3500520.

For vehicles with the OE fog lights, use the following table for wiring;

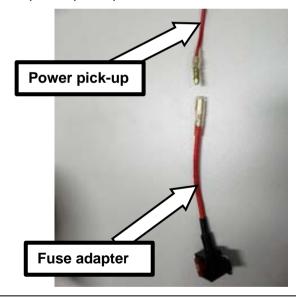
Side	•	Deutsch Pin	Vehicle Wire Colour
RHS	3	1	Purple
RHS	3	2	White/Black
LHS	3	1	Yellow
LHS	3	2	White/Black

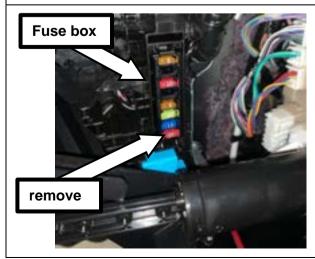


25. Located in the rear left hand side of the engine bay, cut the end of the grommet nipple, and feed the power pick-up end of the 6821454 through the firewall.

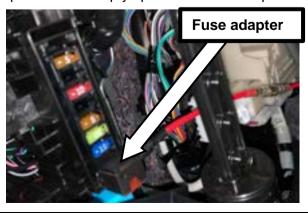


- Fuse box
 Power pick-up
- 26. Drop the glove box in accordance with the vehicle manual to gain access to the fuse box located behind.
- 27. Connect the fuse adapter to the end of the power pick-up end.



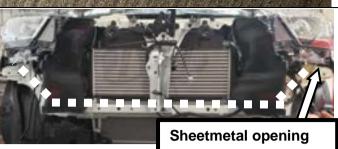


28. Remove the bottom fuse in the fuse box, and place in the empty spot in the fuse adapter.

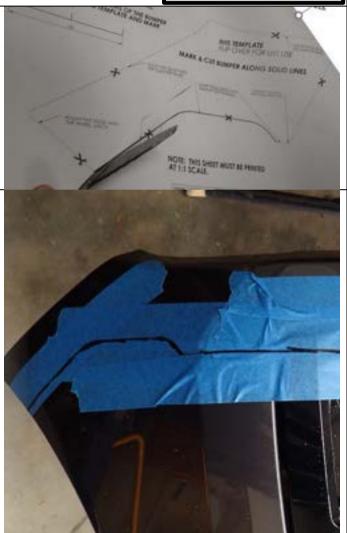




- 29. Trim the fuse box cover, and reconnect over fuse box.
- 30. Reinstall glovebox as per vehicle manual.



31. Ensure wiring loom 6821454 is routed down through the opening in the sheetmetal behind the headlight, and across the air deflectors.

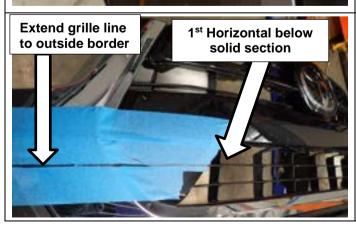


- 32. Carefully cut out bumper cut template supplied.
- 33. Note: Template will be used for both sides (LH & RH) be careful not to damage.

- 34. Stick masking tape onto bumper at area underneath headlight as shown running the tape well in towards the centre of the bumper.
- 35. Position template onto RHS of bumper aligning with edges of bumper specified on template.
- 36. Using a permanent marker, outline edges of bumper cut template onto masking tape where the bumper cut will be performed.

Remove template and repeat for LHS. Take care not to rip template upon removal.





37. Identify the first horizontal line of the grille below the solid section. The grille will be trimmed immediately below this line.

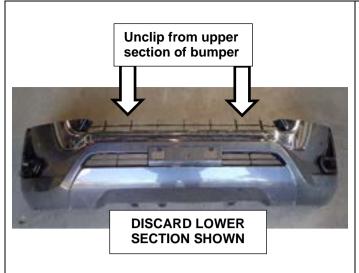
Apply a generous amount of masking tape in the area indicated on the grille. Extend horizontal line to the outside edge of chrome/black border of the grille. 38. Using a ruler draw a continuous straight line from the edge of the cutting template to the line marked in the previous step.

Note: A steel rule or tape measure can be used as a guide for marking out.



39. Repeat above for LHS.





- 41. Carefully cut bumper along marked lines using an oscilatting multitool or jig saw. Repeat for LHS.
- 42. Unclip lower grille section from upper bumper and grille.
- 43. Discard lower grille and bumper section, this will not be reused





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



44. Re-install trimmed bumper and grille using OE fasteners removed in previous steps.

Ensure both scrivets are fitted inside wheel arches on each side.

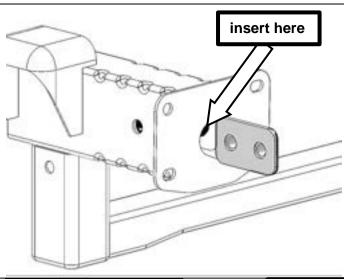


45. If vehicle is equipped with adaptive cruise control, reconnect radar.



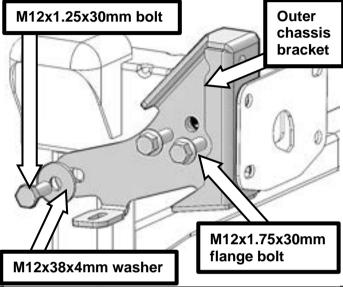
46. Fit Pinch weld to RH side along the full length of the cut edge. Carefully trim off any excess length and use remainder for other side.

Note: 1 full length of pinch weld supplied, ½ used on each side of vehicle.

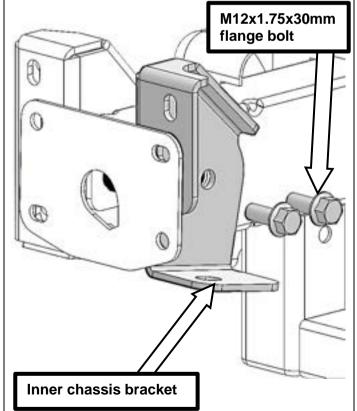


47. Insert two M12x1.75 nut plate into RHS chassis rail as shown.

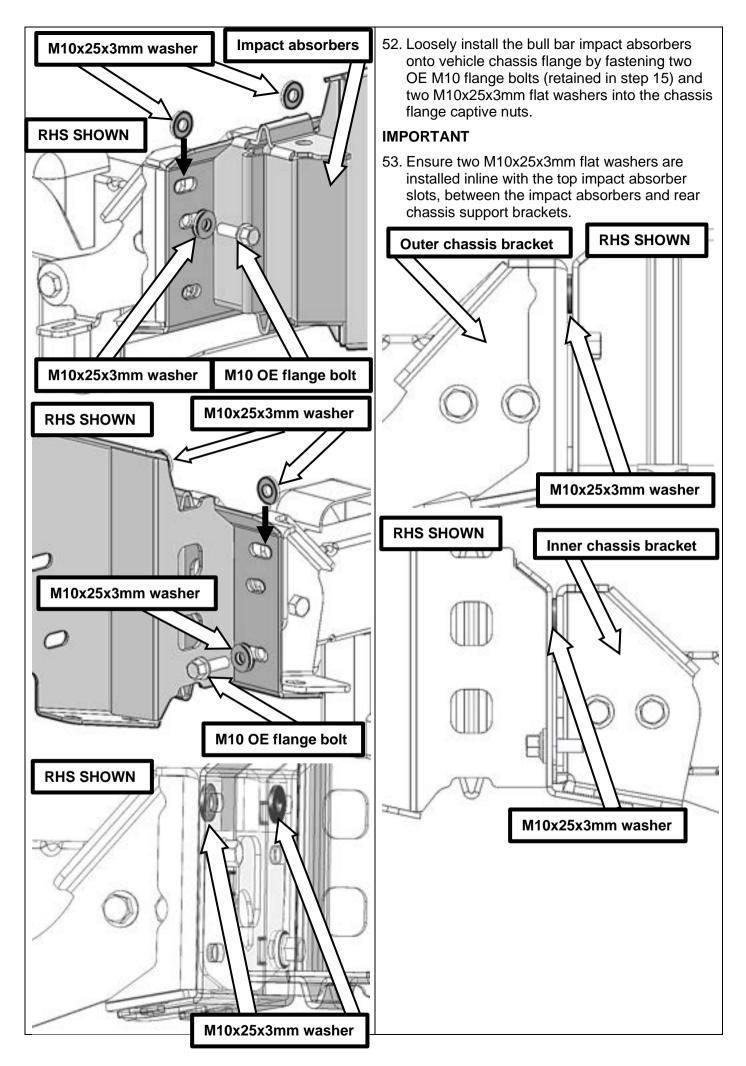
Note: 1 x nut plate is used to fasten the outer chassis support to the outside face of the chassis and 1 x nut plate is to fasten the inner chassis support to the inner face of the chassis. Install nut plates accordingly.

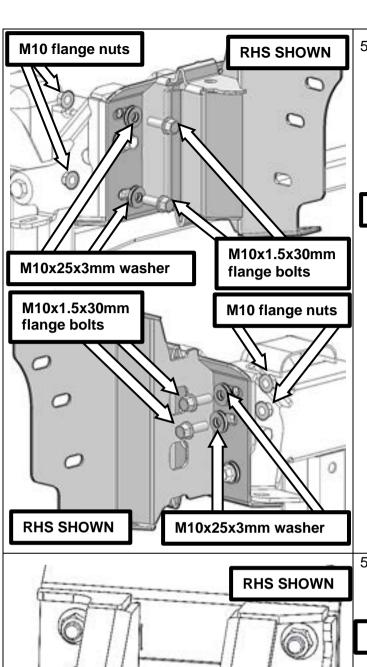


- 48. Loosely fasten RHS outer chassis support bracket to outside face of chassis using two M12x1.75x30mm flange bolts installed into the previously installed nut plate.
- 49. Loosely fasten the RHS outer chassis support bracket at the rear hole using one M12x1.25x30 bolt and M12x38x4mm flat washer installed into OE captive nut in the chassis bracing.



- 50. Loosely fasten RHS inner chassis support bracket to inside chassis face using two M12x1.75x30mm flange bolts installed through the holes into the previously installed nut plate.
- Repeat process to install chassis support brackets on LHS



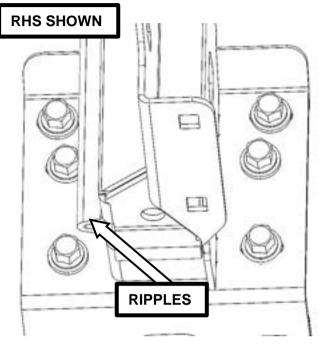


M12x1.75x30mm

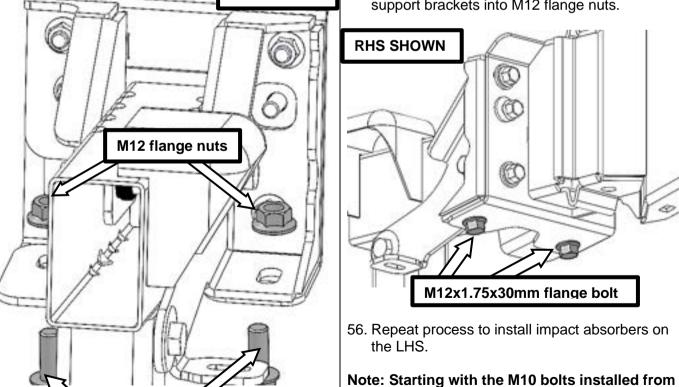
flange bolt

54. Loosely fasten four M10x1.5x30mm flange bolts, M10x25x3mm flat washers, M10 flange nuts through bull bar impact absorbers, chassis flange and rear chassis support brackets.

NOTE: IMPACT ABSORBERS ARE HANDED. RIPPLES ARE ON THE OUTSIDE OF MOUNTS

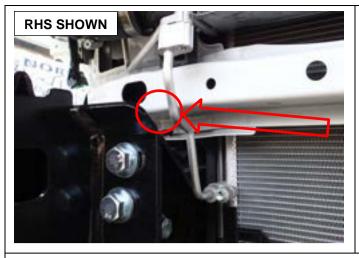


55. Loosely install two M12x30 flange bolts through lower slot of the impact absorbers and chassis support brackets into M12 flange nuts.



the front of the impact absorber, tighten all fasteners enough to eliminate any play in mount or support brackets but to still allow for adjustment of bull bar

adjustment of bull bar.



57. Check clearance between mount and AC line is approximately 15mm.

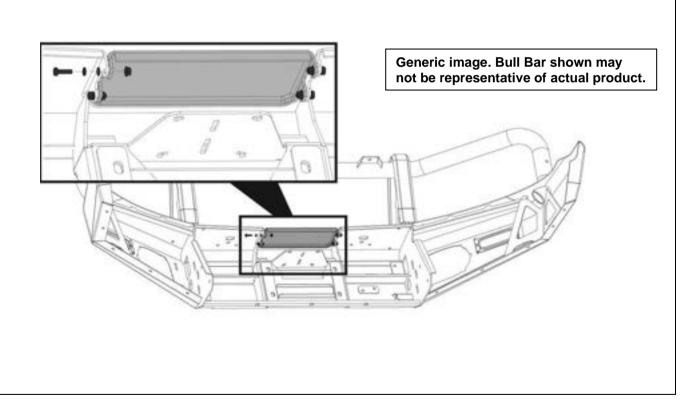
NOTE:

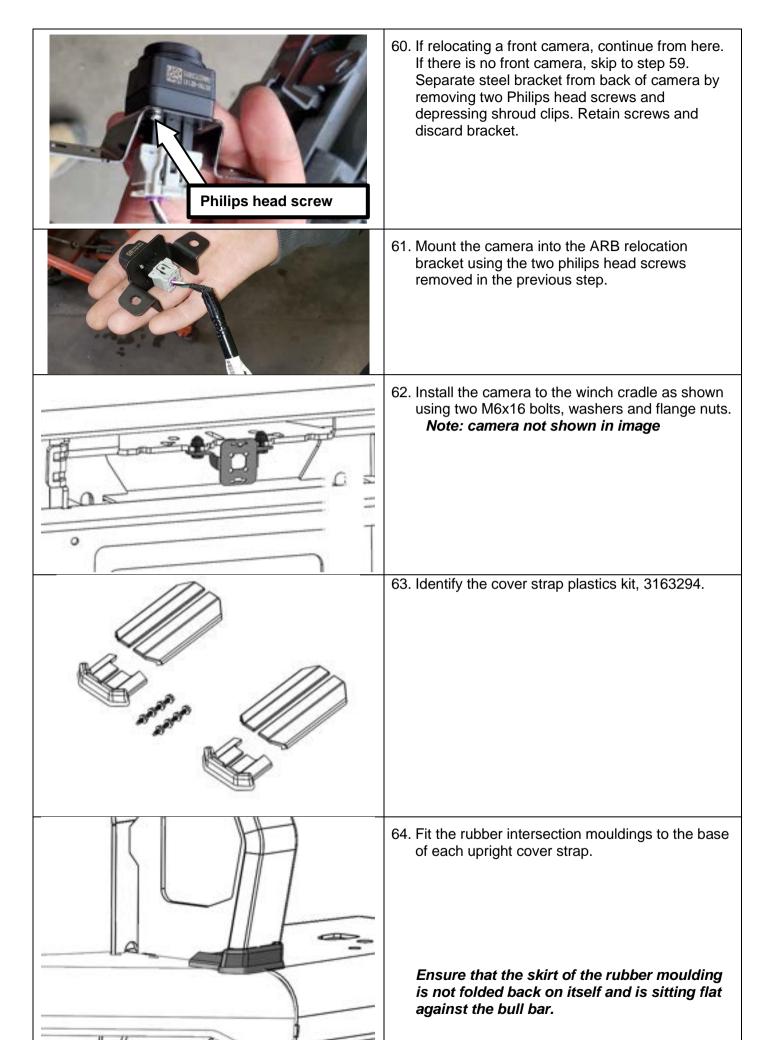
If necessary the AC tube can be carefully bent away from the bracket by pushing the top section towards the vehicle. While bending the tube. Make sure you support the lower fittings to avoid damage.

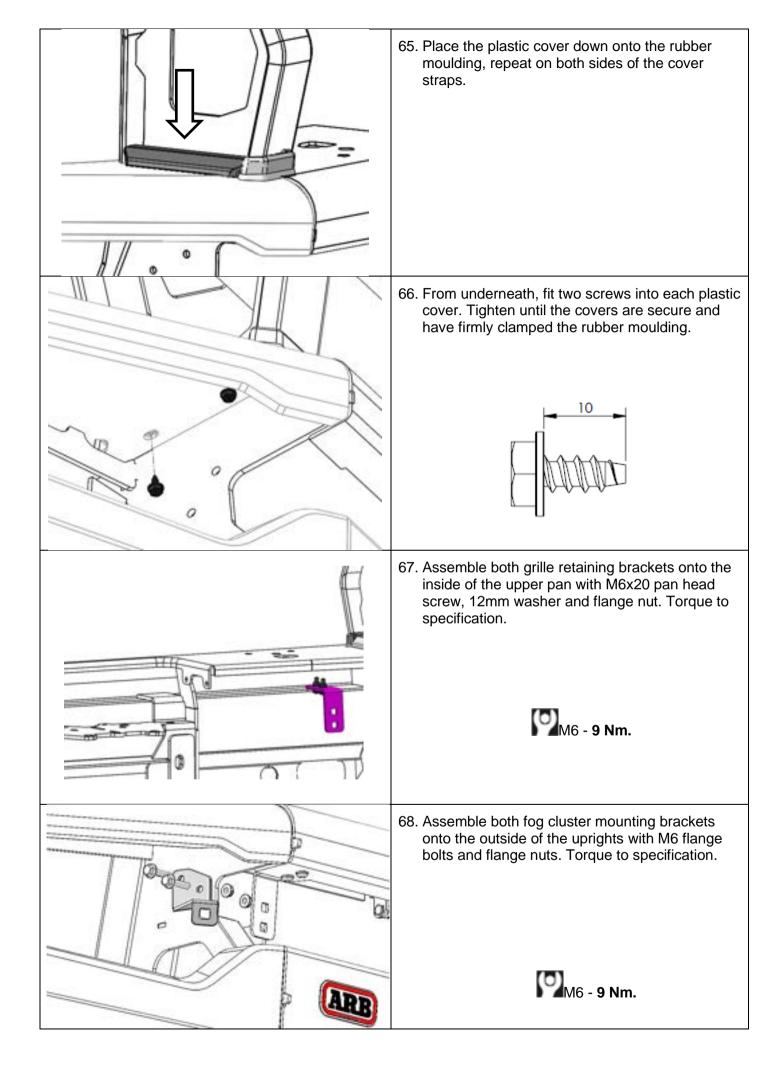
Note: If fitting a winch proceed from here using fitting instructions 37801131 supplied with 3501130 bull bar winch install kit. Once the winch is fitted, please continue to step 58. If no winch is being fitted, continue from here.

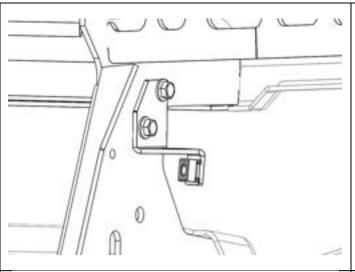
- 58. Slide the winch cover panel from the bottom up until it is level with the top face of the bar.
- 59. Fit the winch cover panel to the bar using 4 x M6 x 20 hex bolts, flat washers and nyloc nuts.

Warning: Be careful not to scratch the finish of the winch cover panel.

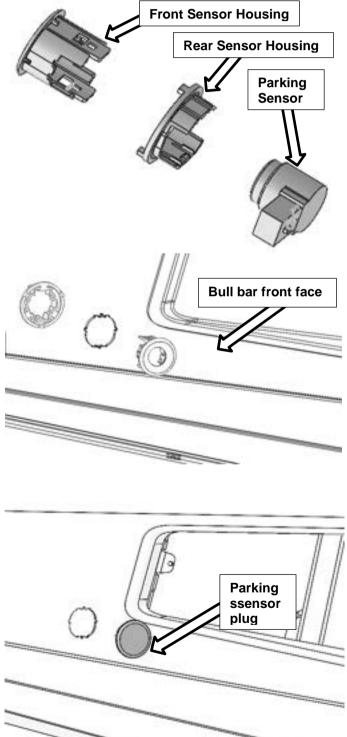








69. Assemble silver M6 cage nuts into both fog cluster mounting brackets.



If the vehicle is equipped with OE parking sensors, continue from here, if not, skip to step 73.

- 70. Fit the front sensor housing from the front of the bull bar into the designated aperture.
- 71. Fit the rear sensor housing to the rear side of the bull bar.

Note: Ensure the two pieces engage correctly and are secure.

72. Fit the parking sensor into the sensor housing. Ensure the tails of the sensors are in the same orientation as found in the bumper.

For vehicles without OE parking sensors:

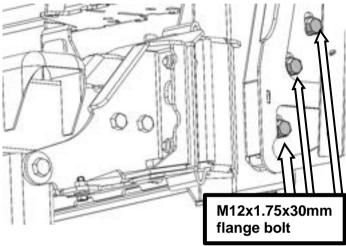
73. Insert the sensor plug from the front of the bar into the designated aperture.



Fitment of bull bar to vehicle

74. With the assistance of another person, place the bar on the vehicle mount brackets.

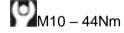
WARNING: Due to the weight of the bar and winch if fitted, it is advised that you use some form of mechanical assistance when lifting the bar onto the vehicle such as an elevating trolley.



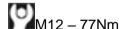
75. With the bull bar sitting in place, fit three black M12x1.75x30 flange head bolts and M12 flange nuts per side. Leave finger tight for now.

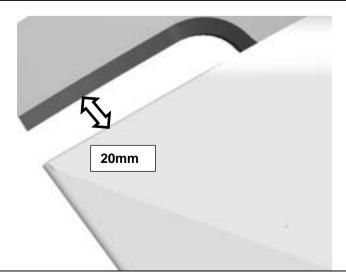


76. Check the clearance of the bar to the vehicle, and adjust position of bar left/right until it's sitting central to body, then tighten all fasteners joining mount assembly to chassis brackets (four M10 ARB and two M10 OE bolts each side).



77. Tighten all inner and outer M12 chassis support bracket fasteners.

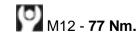


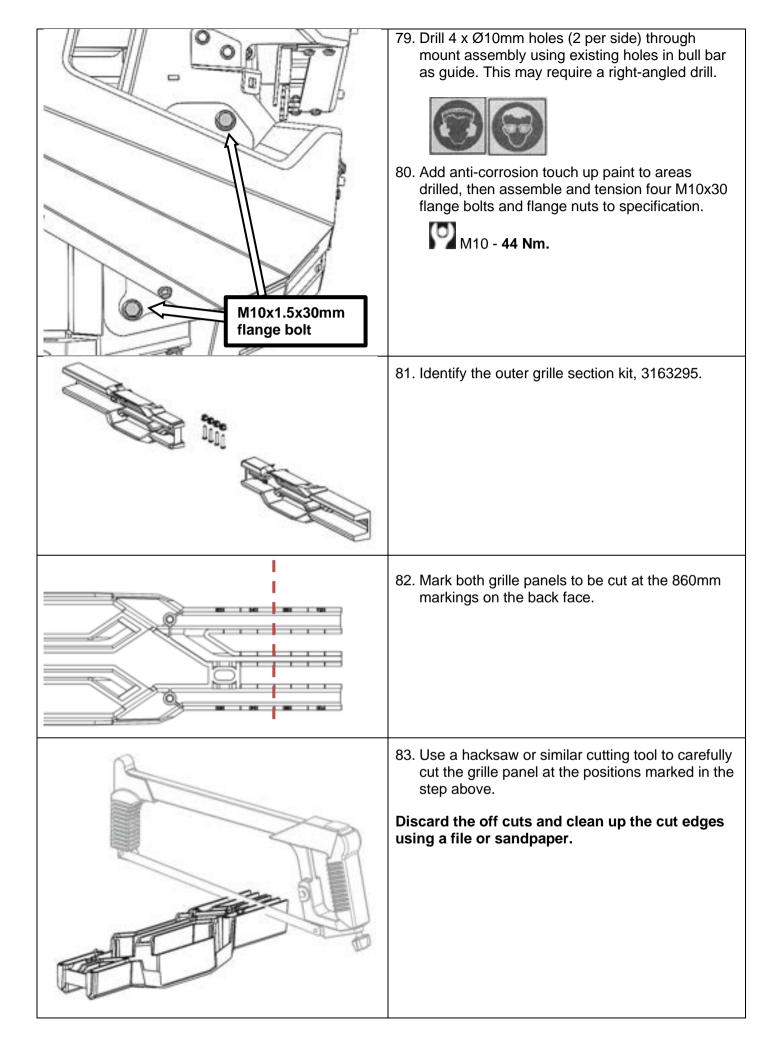


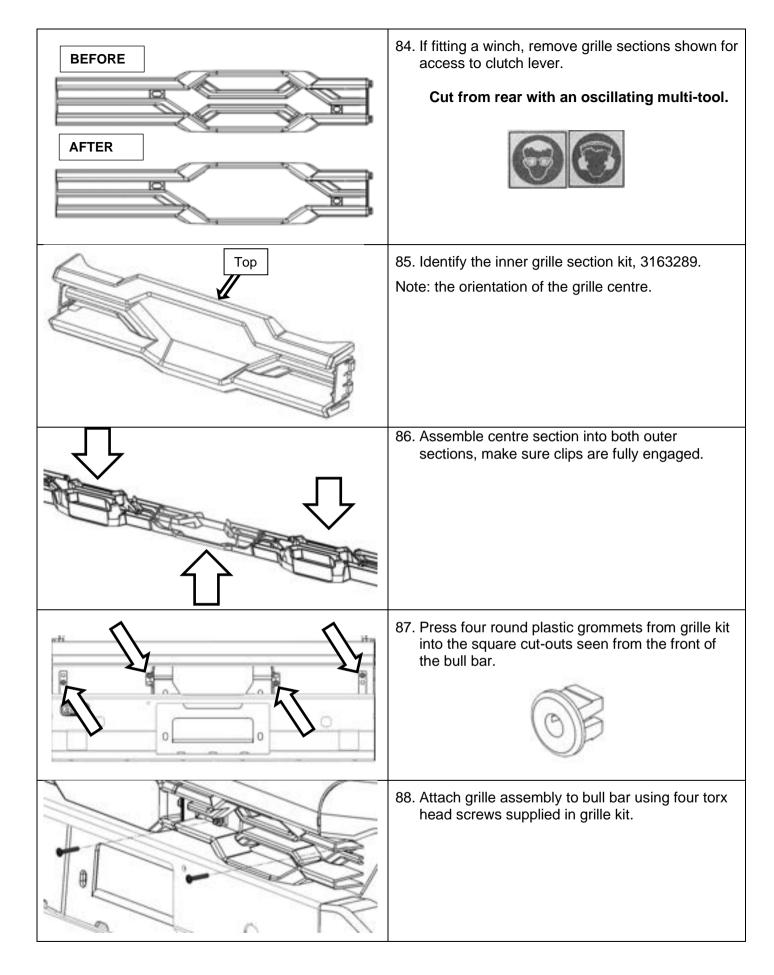
78. Once shim position has been confirmed, adjust bull bar on mounting slots to achieve a parallel 20mm gap between wings and bumper cut profile.

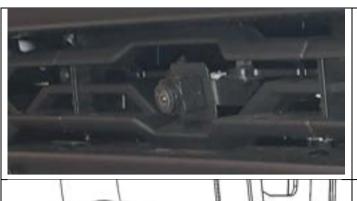
Wing return should align to wheel arch tangent.

Torque M12 mounting bolts to specification.

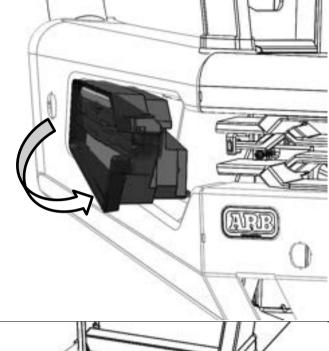




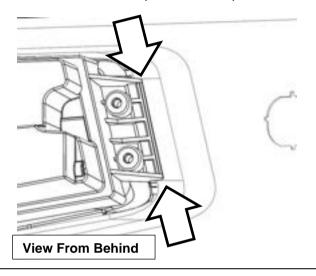




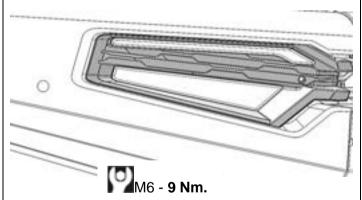
89. Camera (if fitted) should sit in the grille as shown.



90. Index the outside groove of the lamp cluster over the edge of the aperture in the bull bar wing. Then rotate the lamp cluster into place.

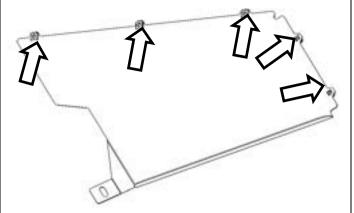


91. Secure lamp cluster with M6 torx head screw. If there is no nylon patch on the screw, use Loctite 243.



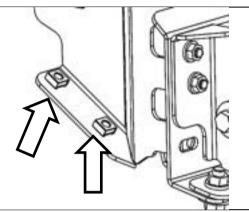
Note: push lamp cluster hard against the aperture in the bull bar wing when fastening.

Connect lighting harness into the back of each fog cluster.



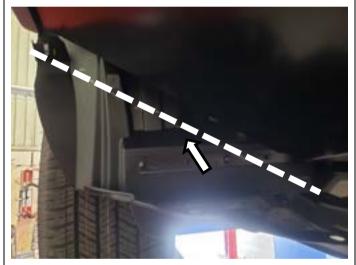
92. Fit five M6 cage nuts to each wing under panel.

Note: Cage nut heads to be located on top side.



93. Fit four M8 cage nuts to RH and LH bull bar impact absorbers as indicated. (RH Mount Shown)

Note: Cage nut heads to be located on top side of mount assembly.



94. Temporarily place the wing under panel in position, and mark lines onto the OEM inner guards (LH & RH) using lower edge of wing under panels as guide ensuring enough guard remains so that it may be neatly tucked/secured behind wing under panel lip.

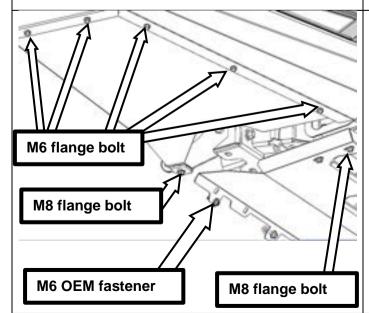
Caution: Use care not to damage the windscreen washer bottle or hoses when trimming LH inner guard.

95. Carefully cut along marked lines using jig-saw or shears.





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



96. Fasten stone tray using five M8 flange bolts and two M6 OEM fasteners.

Fasten wing under panels to bull bar using eight M6 flange bolts.

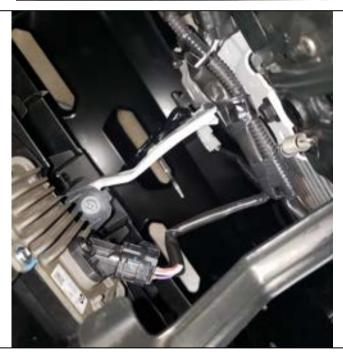
Fasten lower corner of wing under panel using two M8x1.25x20mm flange bolts and M8 flange nuts





97. Use a pair of shears to cut a section approximately 20mm x 20mm from the inner guard outer edge to allow it to be pushed into the end of the wing. (RH Shown).

98. Push inner guard panel inside the end of the wing and behind the rear lip of the wing underpanels.



99. If equipped, reach down from behind the grille, and plugin camera.



100.e-install upper radiator cover panel and fasten using eight OE scrivets.

FITTED PRODUCT - TOYOTA HILUX SUMMIT MKII

NOTICE: ONCE SUMMIT BAR IS FITTED:

- Ensure all bolts are tensioned correctly.
- ♦ All wiring is clear of sharp edges or moving surfaces and secured properly.
- Piping is secured well away from sharp or moving components.
- Check operation of winch, if fitted.

♦ Check all wiring and connections to turn signal lamps and clearance lights and that they are functioning correctly.

