



FITTING INSTRUCTIONS

Part Number: **5614010 / 5714010 / 2814040**
Product Description: **HILUX ROGUE/SR5 SUMMIT MKII REAR BAR**
Suited to vehicle/s: **2022ON TOYOTA HILUX WITH OE TOW BAR FITTED (Equipped with rear blind spot monitors)**
Optional Accessory: **5714010 – LOWER PROTECTION RAIL KIT**
2814040 – RECOVERY POINT PAIR

For vehicles without factory wiring: **3600010 - RSTB WIRING INCLUDING ECU**
3600020 - RSTB SOCKET & TAIL | 7 PIN FLAT
3600030 - RSTB SOCKET & TAIL | 12 PIN FLAT

WARNING

NOTE THE FOLLOWING:

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ 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	METRIC SOCKET SET
METRIC ALLEN KEY SET	TORQUE WRENCH CAPABLE OF 102Nm

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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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 (8.8)	77Nm	57lbft
M12 (10.9)	95Nm	70lbft
M12 (11.9)	102Nm	75lbft

PARTS LISTING

APPLICATION.	PART NO.	QTY	DESCRIPTION
REAR BAR FITMENT	4655383	1	REAR BAR WELDED ASSY
	180302	8	CABLE TIE 4.8 X 180 MM BLACK
	3163282	2	RADAR COVER R/BAR
	3195154	2	PLATE-SPACER
	4584329	8	WASHER FLAT M6x12.2x1.2 BTZP480
	5848509	4	GASKET - REAR BAR RADAR COVER
	6151173	8	NUT FLANGE M6 ZNB480 SERRATED
	6151213	8	BOLT HXHD M6x1.0x20 PC8.8 ZNB480
	6151256	10	SCREW BHD M6x16 SS MG304
	6151300	10	NUT CAGED M6 2.6-3.5 956-C
	6151384	4	SCREW ST PHD 5.2x16 PH PC8.8 BTZP480
	6602018	2	ALCHOL SWAB SINGLE SACHET
	665044	1	3M PRIMER STICK
	6821189	4	GROMMET RND FC 1500 080 090
	3195328	1	ALUMINIUM TREADPLATE
OPTIONAL: LOWER PROTECTION TUBE KIT	4655386 L&R	1 PR	WELDED ASM TUBE KIT SUIT HILUX
	4584393	4	WASHER FLAT M8x19x2 HV300 BTZP480
	6151235	4	NUT FLANGE M8x1.25 BZP
	6151546	4	BOLT HXHD M8x1.25x25 PC8.8 BTZP480
	6151657	4	NUT FLANGE M12x1.75 PC8 TZP480
	6152127	4	BOLT HXHD FL M12x1.75x30 PC8.8 ZNS480
OPTIONAL: RECOVERY POINT PAIR	4655387 L&R	1 PR	WELDED ASM RECOVERY POINT
	4655388 L&R	1 PR	WELDED BRKT RECOVERY POINT
	211512	1	OPERATOR INSTRUCTION CARD
	2125484	2	RECOVERY POINT WARNING LABEL
	3194821	2	PLATE ASSY CHASSIS
	4581040	2	WASHER FLAT M10x25x3 TZP480
	6151478	2	NUT FLANGE M10x1.25 TZP FINE PITCH SERRATED
	6151686	2	BOLT HXHD M10x1.25x30 FT PC10.9 TZP480
	6151817	8	BOLT HXHD FL M12x1.25x40 PC11.9 ZAB1000
	6152022	8	BOLT HXHD FL M12x1.25x70 PC10.9 ZAB1000
6152023	12	NUT FLANGE M12x1.25 PC10.9 ZAB1000	

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 type size 16 Deutsch 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

OPTIONAL ACCESSORIES

The following ARB accessories can be fitted to this product:

APPLICATION	PART NO.	QTY	DESCRIPTION
OPTIONAL ACCESSORIES	3600020	1	RSTB SOCKET & TAIL 7 PIN FLAT
	3600030	1	RSTB SOCKET & TAIL 12 PIN FLAT
	171403	1	ARB AIR LINE FITTING
	10600030	1	ARB TRAILER CAMERA KIT
	6594050	1	50 AMP ANDERSON PLUG



AIR LINE FITTING



TRAILER CAMERA KIT



ANDERSON PLUG

FITTING PROCEDURE – REAR BAR



1. **Removal of OE bumper** (by following steps 2-13).



2. Remove the radar covers by gently peeling then mack to unclip them.



3. The radars need to be removed to disconnect the harness. Remove the 4 screws that retain each radar and then disconnect the radars.

Note: Mark the radars (LH & RH) to ensure they are installed correctly into the ARB bar.

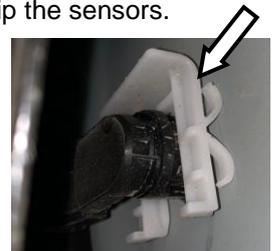


4. To remove the bumper from the vehicle, the parking sensors need to be removed and the wiring harness needs to be routed out of the way. (There is no plug to disconnect the harness).

Remove backing clips that retain the sensors in the bumper and gently unclip the sensors.

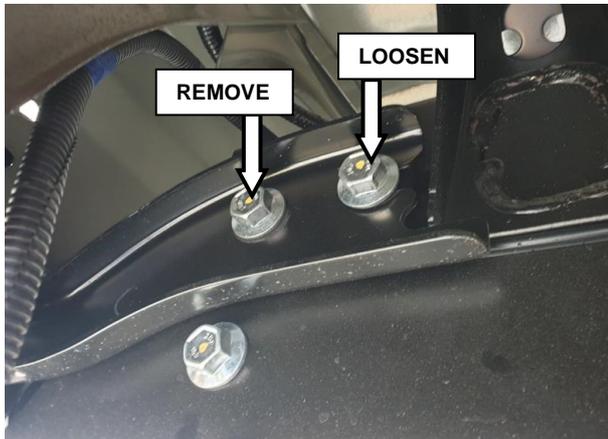
Let the harness hang down as shown.

Note: sensors are fragile and need care when removing them from the housing.





5. Remove the upper rear bolts on the tow bar and retain the bolts for re-fitment later.



6. Remove the front bolts that retains the bumper to the tow bar and loosen the rear bolts



7. Remove the rear bumper and set aside. Carefully unclip the parking sensor housings from the bumper for fitment into the ARB rear bar.



8. If the vehicle comes with a trailer plug, remove it and let it hang down with the rest of the loom. Set the fasteners aside for refitment later.



9. Using pliers, bend the LHS bracket up 90° as shown.



10. With the aid of a lifting trolley, support the tow bar so that it can be removed.



11. Remove the three bolts and two shims per side and set aside for refitment later.



12. Remove the tow bar from the vehicle.



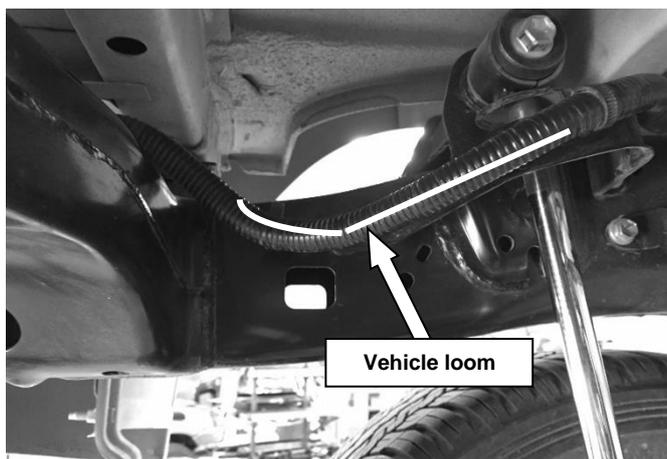
13. Remove the tow bar mount plates from the chassis by removing the three bolts per side. Set mount plates and bolts aside for refitment later.

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.

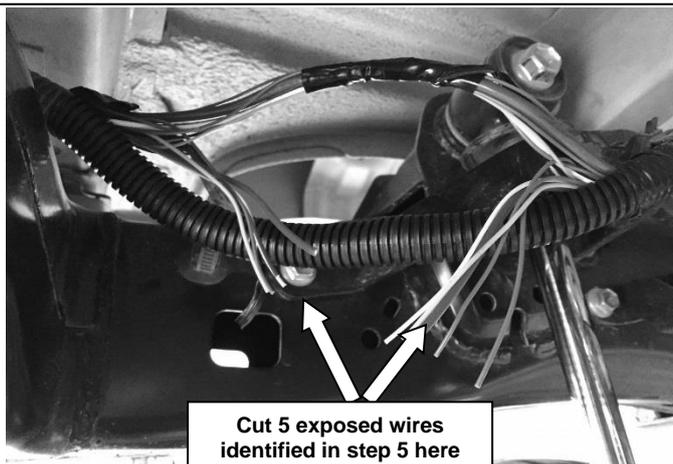
Follow the steps below to install the trailer wiring solution:



LHS:

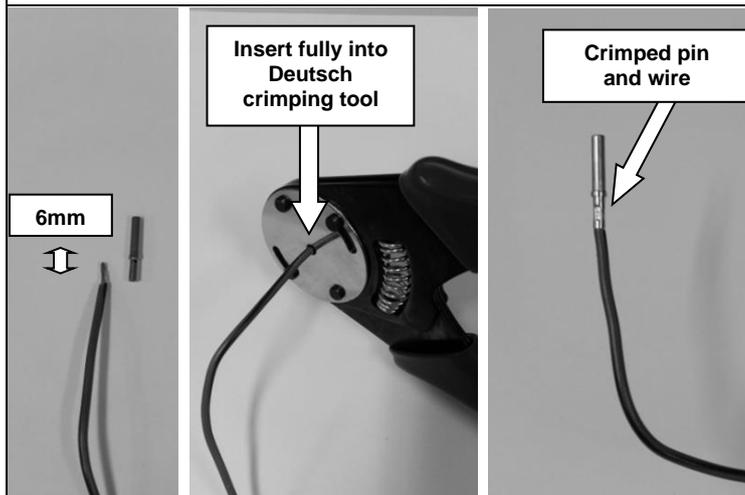
14. Locate the vehicle loom on the left-hand chassis rail near rear shock absorber mount as shown. Remove tape if present, and expose 200mm of the following-coloured wires from the split corrugated tubing:

Yellow	(LH Indicator)
Red	(Reverse)
Light Blue	(RH Indicator)
Blue	(Brakes)
Green	(Clearance)



Note: Prior to cutting the exposed wires, please ensure and re-check (with a test light or multimeter) that the correct wires have been identified as per their corresponding function, as there are multiple wires of the same colour in the vehicle loom.

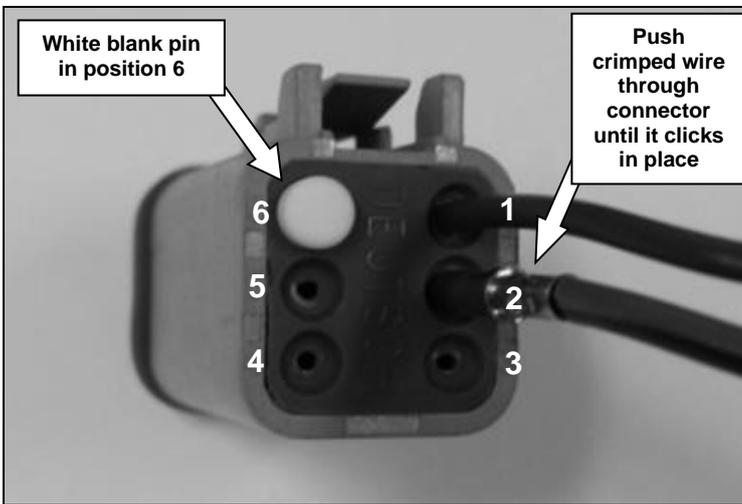
15. Cut a 90mm section from the centre of the 5 exposed wires. This will leave ~55mm of wire before they re-enter the corrugated tubing at each end.



16. Remove 6mm of the plastic insulation coating from the end of each newly cut wire.

Insert each wire into the shorter end of a metal Deutsch pin.

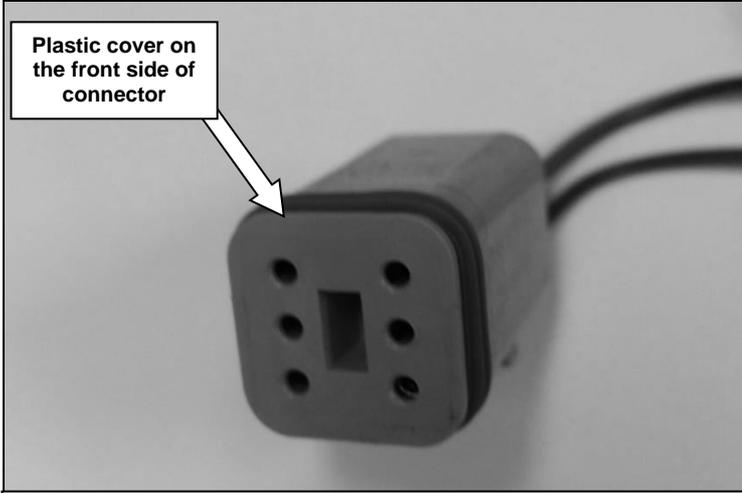
Insert the longer end of the metal Deutsch pin into a crimping tool and crimp the wire and pin together as shown.



17. 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

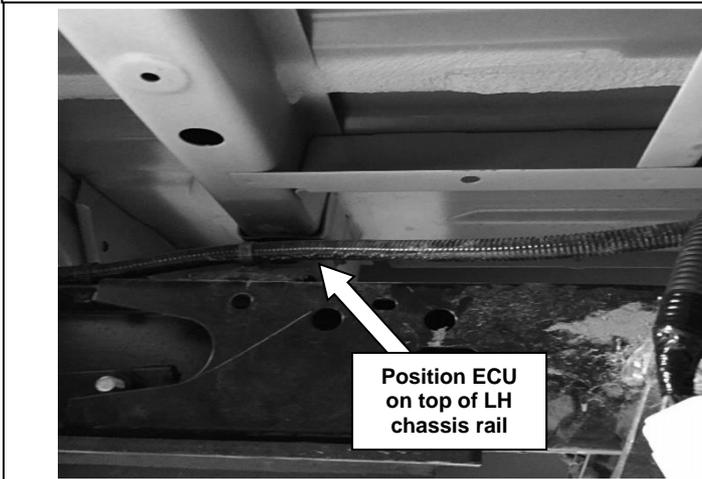
Note: Pin positions are shown on the back of the connector.



18. Insert the white blank pin into position 6 as shown in the previous step.

Insert the plastic cover to the front of the connector as shown.

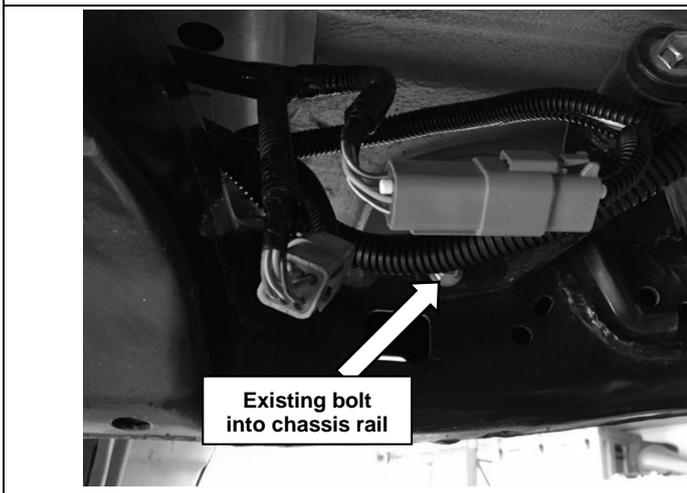
Repeat step 17-18 for the other connectors.



LHS:

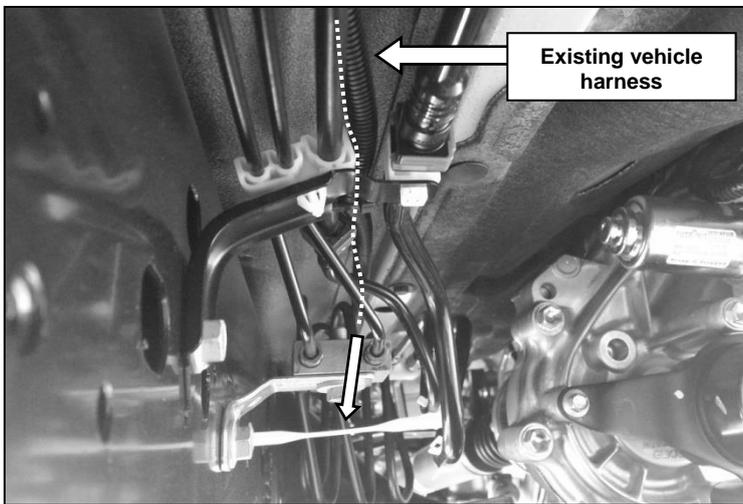
19. Position ECU on top of LH chassis rail behind cross member as shown. Secure using the ECU mounting holes and chassis rail holes with 2 cable ties.

Connect the ECU unit to the RSTB wiring harness using the large 12 pin connector.



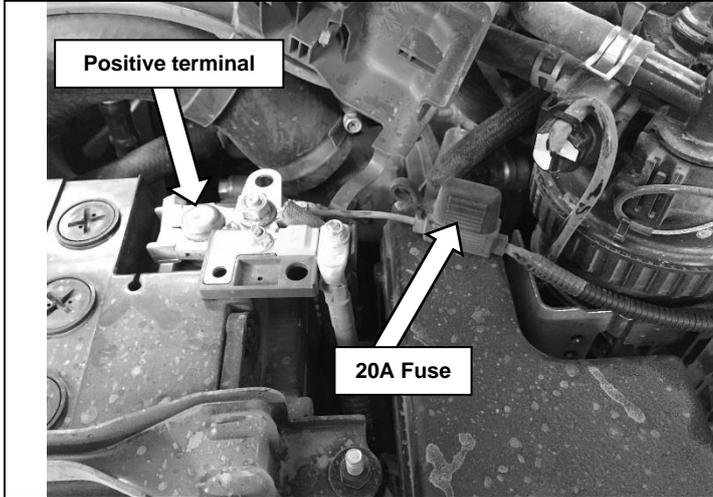
LHS:

20. Connect the ground wire of the RSTB harness to the bolt on the LH chassis rail near the rear shock absorber mount.



Existing vehicle harness

21. Route the positive supply wire to the front of the vehicle following the existing vehicle harness along the left chassis rail.

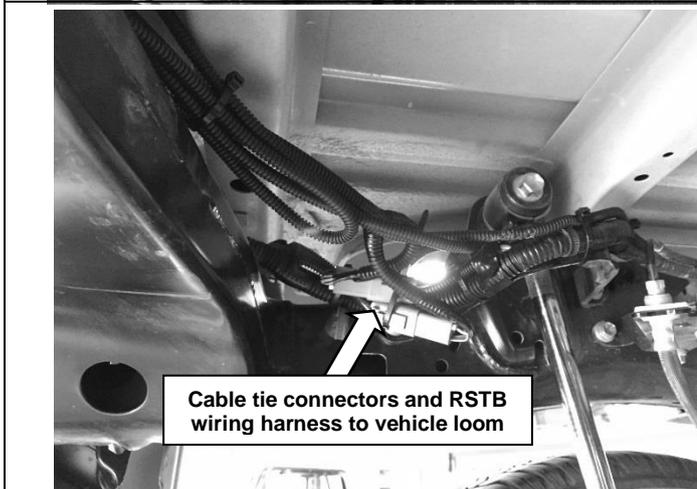


Positive terminal

20A Fuse

22. Continue routing the positive supply wire through the engine bay to the battery.

Connect the positive supply wire to the positive terminal of the battery using the existing bolt as shown.



Cable tie connectors and RSTB wiring harness to vehicle loom

23. 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.

Ensure vehicle tail lights function correctly.

Fasten the connectors to the vehicle loom using the cable ties provided.



24. Re-wrap the un-cut wires with the existing split corrugated tubing and new tape.

Tidy and fasten all wiring using the cable ties provided.

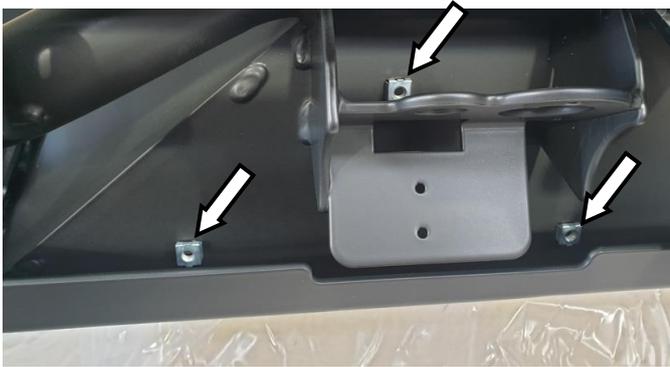
Warning: Make sure all wires are securely fastened away from any hot, sharp or moving surfaces. Do not fasten wiring harness to fuel or brake lines.

25. Ensure vehicle tail lights function correctly.

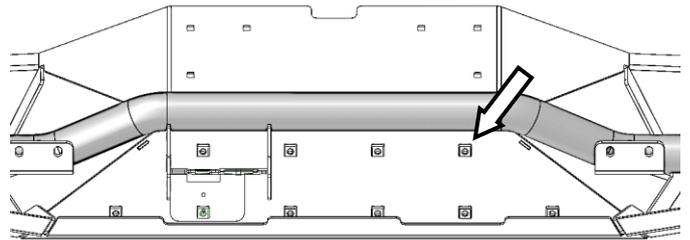
ARB REAR BAR FITMENT



26. Carefully lay the ARB rear bar face down on a soft surface.



27. Fit ten M6 caged nuts to the underside of the bar as shown.



28. Loosely fit the Toyota tow bar and side mount plates in the ARB rear bar using the shims and bolts removed in step 11.

There are additional shims in the fitting kit (if required) to close the gap to the tow bar.



29. Support the rear bar on a lifting trolley as shown. Note the orientation of the tow bar and side mount plates in the image.





30. Use an alcohol wipe to clean the surfaces on the radar covers and rear bar where double-sided adhesive tape will be applied.

Use the supplied 3M primer stick on the outer flange of the plastic radar cover as shown.



31. Use the supplied 3M primer stick on the inner face of the radar cut-out on the ARB bar as shown.



32. Fit the radar gaskets to the radar covers as shown.



33. Fit the radar covers in the bar as shown. They must be firmly pushed into position.

Note: Ensure the notch in the centre of the radar cover is facing upwards





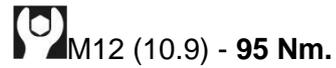
34. Install the radars removed in step 3 using four M6x20 bolts, washers and flange nuts per side.

Tighten to specification.



35. Offer the rear bar up to the vehicle and fit four M12 bolts per side removed from step 13.

Tighten all eight M12 bolts per side to specification.

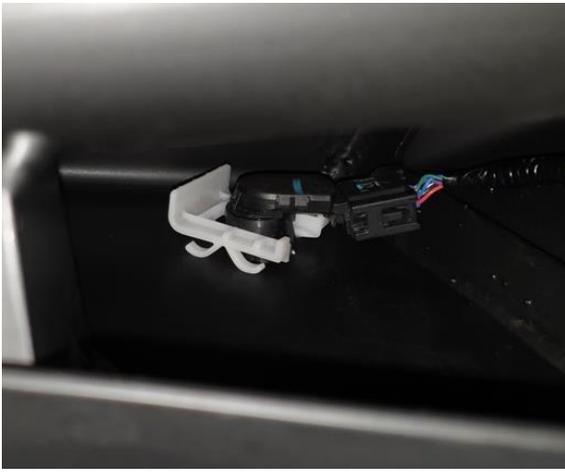


36. Fit the tread plate using ten M6x16mm stainless steel button head screws and stainless washers.

Fit the 4x plastic gromets for the licence plate.



37. Fit the licence plate using four self-tapping screws.



38. Fit the parking sensor housings in the correct positions to the bar removed in step 7. The housings.

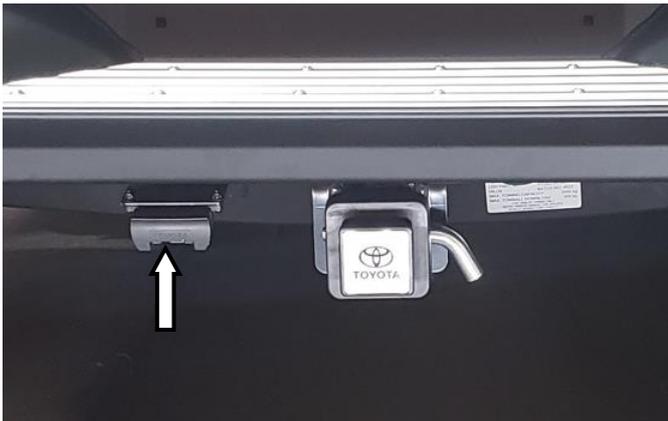
Route the parking sensor loom and gently clip the four parking sensors into the housings.

Fit the retaining clips to the four sensors as shown.

Note: The sensors and housings can only be oriented/clocked one way.



39. Connect the plugs to the radars. Ensure they are fully clipped in.



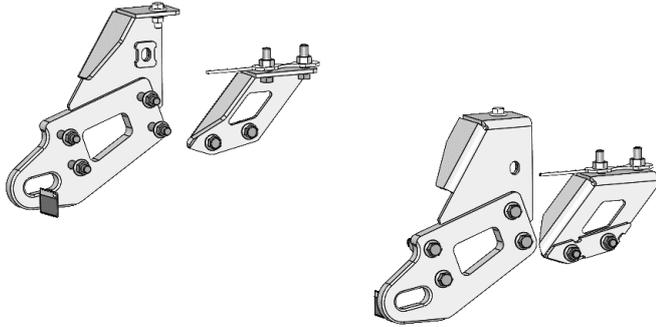
40. If the vehicle came with a trailer plug, refit this to the tow bar using the fasteners removed in step 8.



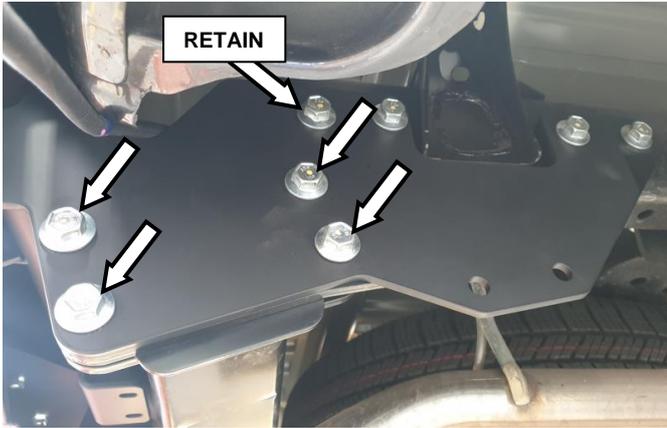
41. Using the cable ties provided, secure the wiring harness up out of the way, and keeping it free from the exhaust.



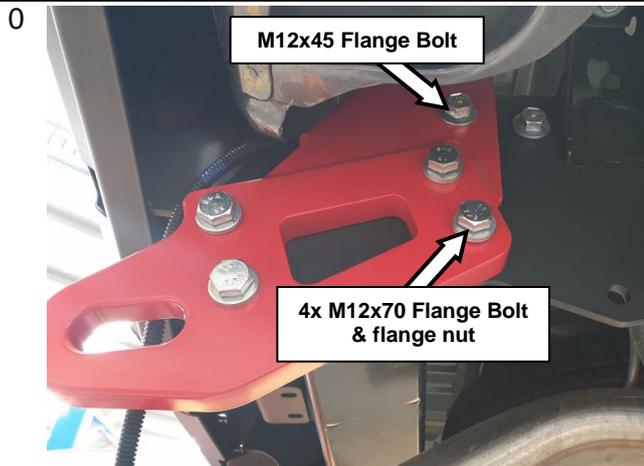
FITTING PROCEDURE – RECOVERY POINTS



42. Steps 43-50 are for the fitment of the optional 2814040 recovery point set.



43. Working on one side at a time, remove the four bolts and shims that secure the tow bar to the ARB rear bar. Retain the shims but discard the bolts & nuts.
44. Remove the front top bolt shown and retain for refitment later.



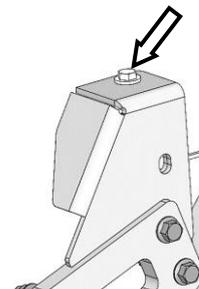
45. Lift the recovery point in place (RHS shown) and fit using the top front bolt (M12x45) removed in step 44, and four M12x70mm flange bolts and flange nuts supplied in the recovery point fitting kit.

Leave finger tight.



46. Fit one M10x30 bolt, washer and flange nut to the top hole of each recovery point as shown.

Tighten all fasteners to specification.



 M12 (10.9) - 95 Nm.

 M10 - 44 Nm.



47. Locate the Recovery point support brackets and nut sticks.



48. Feed the nut stick in through the rear of the chassis and line it up with the two mount holes.



49. Loosely fit the support brackets to the inside of the rear bar using two M12x40mm flange bolts and flange nuts.

Install two M12x40mm flange bolts up through the chassis and into the nut stick.

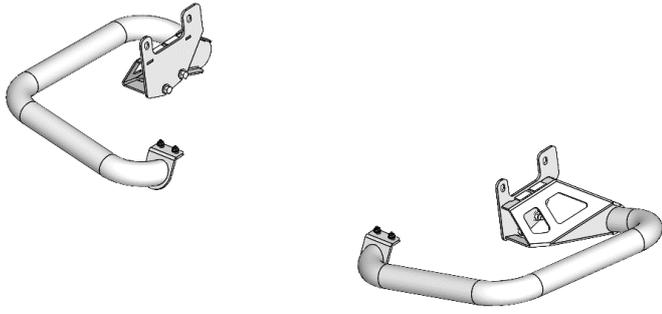
Tighten to specification.

 M12 (11.9) - 102 Nm.



50. Fit the warning label as shown to each recovery point.

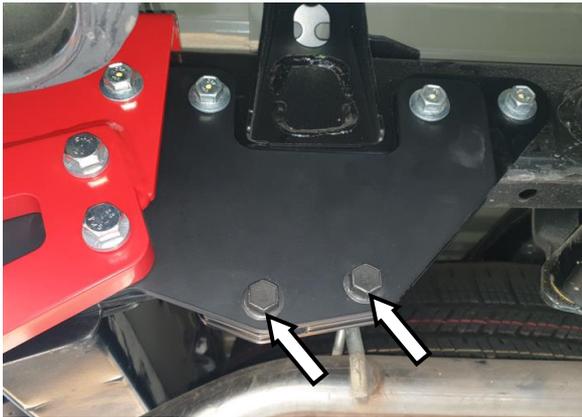
FITTING PROCEDURE – LOWER PROTECTION TUBES



51. Steps 52-58 are for the fitment of the optional 5714010 lower protection tube set.



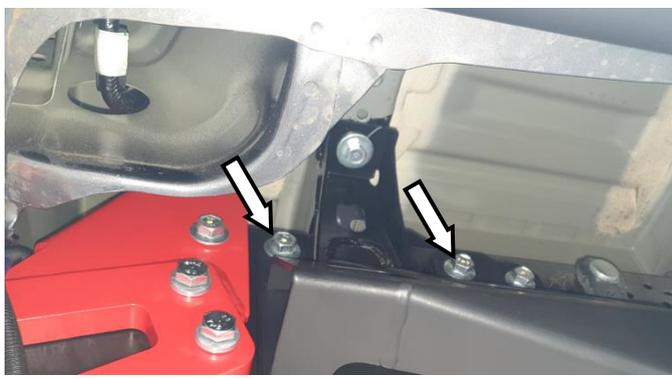
52. Remove the two M12 bolts per side shown and set aside for refitment later.



53. If the bar has recovery points fitted, remove the two lower M12 flange bolts and flange nuts and set aside for refitment later.



54. Hold the lower tube in position.



55. Fit the two M12x45 (10.9) bolts removed in step 52. Leave finger tight.



56. Fit the two M12x30 (8.8) flange bolts and flange nuts from the lower tube kit if there are no recovery points fitted.

Note: If there are recovery points fitted, use the M12x40 (11.9) bolts and flange nuts removed in step 53. Leave finger tight.



57. Fit two M8x25 bolts, washers and flange nuts to the inboard bracket on each tube assembly. Leave finger tight.



58. Adjust the tube so that it sits parallel to the vehicle tub as well as the ARB rear bar wing.

Tighten all fasteners to specification.



 M8 - 22 Nm.

 M12 (8.8) - 77 Nm.

 M12 (10.9) - 95 Nm.

 M12 (11.9) - 102 Nm.

FITTED PRODUCT – 2023 HILUX SR5



NOTICE: ONCE 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 all wiring and connections to lamps and sensors.
- ◆ If fitted, test operation of parking sensors after fitment.

NOTE:

Sensors may not function well under the following conditions:

- ◆ After the vehicle has been sitting out in hot or cold weather.
- ◆ When the system is affected by electrical equipment or devices generating an ultrasonic wave.
- ◆ When operating in bad weather.