

VOLKSWAGEN AMAROK NF MY2023 ONWARDS REAR BAR

IMPORTANT! – READ BEFORE INSTALLATION

- When installed in accordance with these instructions, the rear protection tow bar maintains the factory tow rating of your vehicle.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

| GENERAL FASTENERS | | |
|-------------------|-----------|--|
| Size | Torque Nm | |
| M5 | 5 Nm | |
| M6 | 9 Nm | |
| M8 | 22 Nm | |
| M10 | 44 Nm | |
| M12 | 77 Nm | |

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

| FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR | | |
|--|-----------|--|
| Size | Torque Nm | |
| M10 | 57 Nm | |
| M12 | 100 Nm | |
| M14 | 164 Nm | |
| M16 | 248 Nm | |

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts - In the Box

| Qty | Part Number | Description | Image |
|-----|-----------------------|---|------------|
| 1 | RB-VAM-NF- 23-ASM1 | Amarok NF Rear Bar Weldment | |
| 2 | RB-FRA-NG-22- ASM2 | Next Gen Ranger Rear Bar - Light Cover Plate Assy | |
| 1 | B-1112R | Amarok NF Rear Bar Wing Brace | C. |
| 1 | B-1112L | Amarok NF Rear Bar Wing Brace | |
| 1 | B-1110R | Amarok NF Rear Bar Radar Bracket A | |
| 1 | B-1110L | Amarok NF Rear Bar Radar Bracket A | |
| 1 | B-1111R | Amarok NF Rear Bar Radar Bracket B | |
| 1 | B-1111L | Amarok NF Rear Bar Radar Bracket B | |
| 2 | F-0012 | Ford Ranger Next Gen Sensor Holder - 15 Deg Horizontal | 15° F-0012 |

| 4 | F-0016 | Ford Ranger Next Gen Sensor Holder - 18 Deg Horizontal | 18° F-0016 |
|---|---------------------|---|------------|
| 2 | BR25B | LED NUMBER PLATE LIGHT | |
| 2 | СРНРО20 | Plastic Hole Insert, 28MM, Black, Tigerlink Hardware CPHP020 | |
| 1 | TK-COM-PSEN- 6 | Tape Kit - 6 Sensor Universal | No Image |
| 1 | TK-FB-FRA-NG- 22 | Tape Kit - 3M 5952 2x 100x6mm | No Image |

Small Parts – Contained in Small Parts Kit Bag

| Qty | Part Number | Description |
|-----|--|------------------------------------|
| 2 | NP-COM- | Nut Plate - 2x M10 55mm Spacing |
| | 2XM10-55 | |
| | | M6 Flat Washer, 12x6.1x1, ISO4042 |
| | WASHER BLACK | ZnNi BLACK PASSIVATED FINISH |
| | ZINC | |
| 24 | M6x16 BHCS | SCREW, BUTTON HEAD CAP, M6X16X1 |
| | BLACK ZINC | M6x16 GR12.9, ISO4042 ZnNi BLACK |
| | | PASSIVATED FINISH |
| 24 | M6 FLANGE NUT | Flange Nut, M6x1 G8.8 ZP |
| 8 | M8 FLANGE NUT | Flange Nut, M8x1.25 G8.8 ZP |
| 4 | M8 X 16 BHCS | SCREW, BUTTON HEAD CAP, |
| | BZP | M8X16X1.25 GR12.9, ISO4042 ZnNi |
| | | BLACK PASSIVATED FINISH |
| 6 | M10 FW LHD | WASHER, FLAT M10X28.5X2.5 |
| 4 | M10 X 40 | Bolt Hex, M10X40X1.5, GR8.8 ZP |
| 4 | 4 M8 HD FLAT M8 FLAT WASHER - High Ter | |
| | WASHER - BZP | 19x8x2mm, ISO4042 ZnNi BLACK |
| | | PASSIVATED FINISH |
| 4 | M5 FLANGE NUT | Flange Nut, M5x0.8 G8.8 ZP |
| 4 | M5X15 PAN | SCREW, PAN HEAD PHILLIPS, |
| | | M5X15X0.8 GR4.6 ZP |
| 2 | NP-COM-M12- | M12 NUT PLATE SHORT, 30MM STEM |
| | 30-ASM0 | |
| 2 | M10 x 30 | Bolt Hex, M10X30x[1.5], GR8.8 ZP |
| 2 | M10 FLANGE | Flange Nut, M10x1.5 G8.8 ZP |
| | NUT | |
| 2 | P-0348 | Spacer Plate - Amarok Rear Bar 8mm |
| 2 | P-0347 | Spacer Plate - Amarok Rear Bar 5mm |

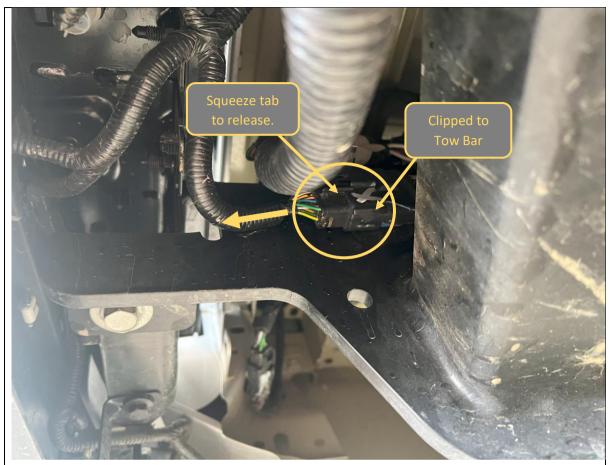
The following tools will be required to install the product.

| Hand Tools | Power Tools | Workshop Equipment |
|------------------------|-----------------------|----------------------|
| Metric Socket Set 8- | Soldering Iron | Lift Trolley |
| 19mm | Heat Gun | Solder |
| Metric Spanner Set 8- | | Heat Shrink |
| 19mm | Electric / Air Impact | Isopropyl Alcohol |
| Hex (Allen) Key Set 4- | Driver (Optional but | Clean Rag/Shop Towel |
| 8mm | speeds up fitting | |
| Trim Tool | process) | |
| Utility Knife | | |
| Side Cutters | | |
| Wire Strippers | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

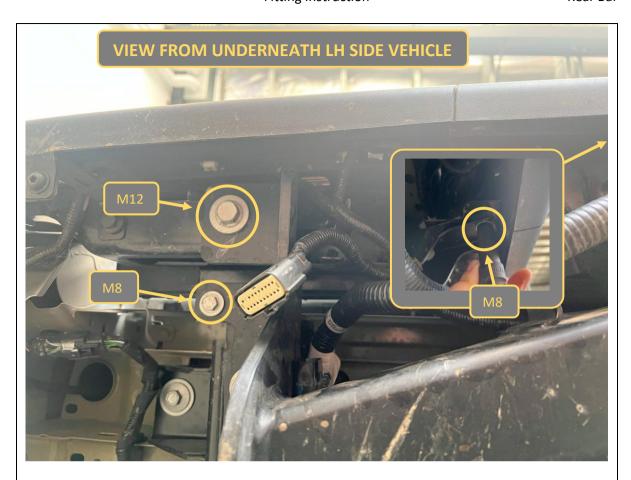
WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

| Hearing Protection | Always wear ear protection when using power tools. |
|--------------------|---|
| Eye Protection | Ensure eye protection is always worn when cutting or drilling. |
| Manual Handling | Do not attempt to lift bar assemblies or rock sliders on your own. Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley. |
| Vehicle Support | Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack. |



- This bar is designed to suit vehicles fitted with the Volkswagen genuine tow bar only. This is standard fitment on most model grades.
- 2. On the underside of the vehicle on the LH side towbar upright locate the rear bar wiring harness. Disconnect by depressing the tab on the connector and separating.



- 3. Remove the 2x M8 and 1x M12 flange head bolt per side securing the bumper to the tow bar.
- 4. Remove bolts on both sides of vehicle
- 5. Retain the bolts for re-use.

18mm Socket, 13mm Socket Extension bar

FASTENERS

1x M12 Flange head bolts 2x M8 Flange head bolts

> PER SIDE Retain

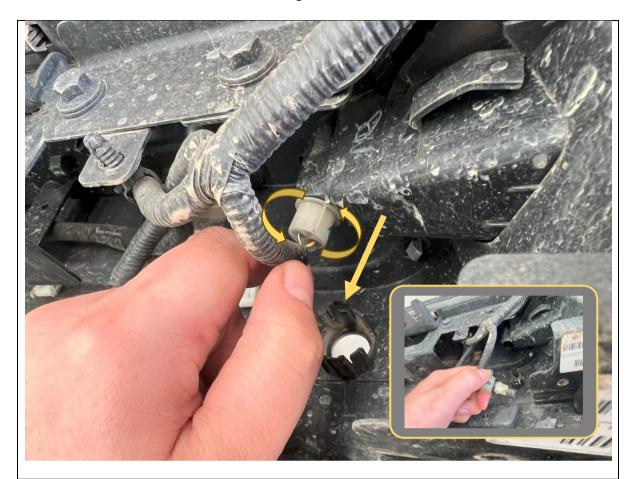


6. With all fasteners removed and the factory bumper assembly free, remove the bumper from the vehicle in a rearward direction.

TOOLS REQUIRED

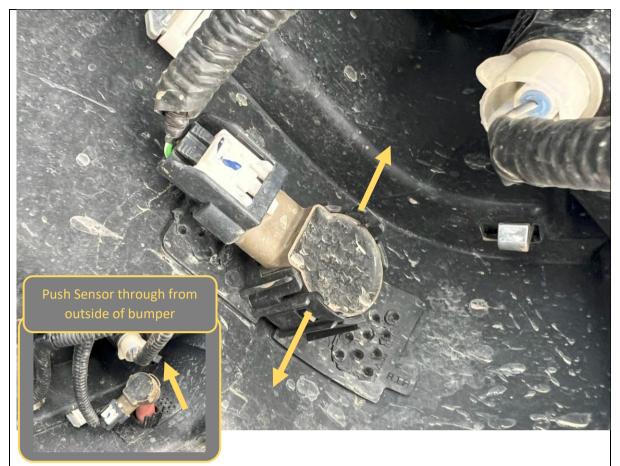


- 7. Remove the rear radar harness connectors.
- 8. Press down on the tab and pull to release.



9. Disconnect the Number plate lamp connectors. Twist to unlock then remove.

TOOLS REQUIRED

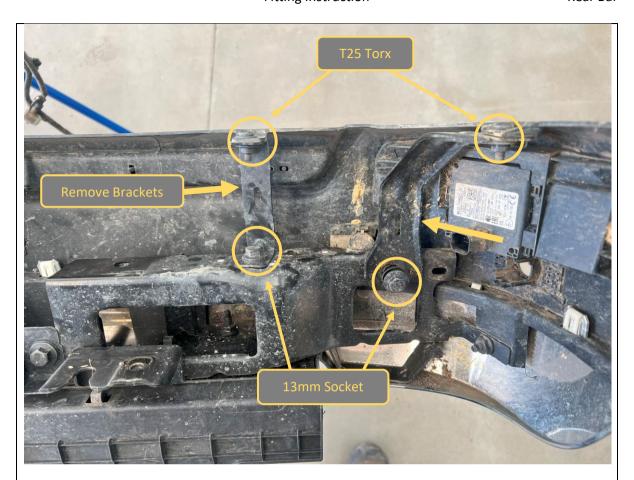


- 10. Remove parking sensors from housings, by Prying open the retaining tabs, whilst pushing the sensor through the housing from the outside of the bumper
- 11. Repeat for all sensors in the bumper. Leave looms connected to the outer and inner sensors at this stage. Remove loom from obstructed sensor.



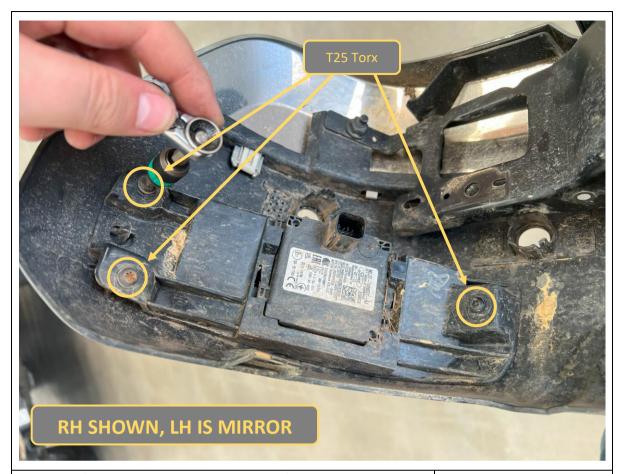
- 12. Remove the loom from the rear bumper, by releasing all the clips securing it to the bumper with a trim tool.
- 13. Set loom aside in safe place, being sure to keep the correct orientation in mind.

Trim Tool



- 14. Remove two outer bumper support brackets to gain access to the remaining parking sensor and the radar module
- 15. Remove the 2x T25 Torx bolts and 2x 13mm hex head bolts as indicated.
- 16. Complete on both sides of the bumper.
- 17. Once free finish removing the obstructed middle parking sensor.

T25 Torx Driver 13mm socket / spanner



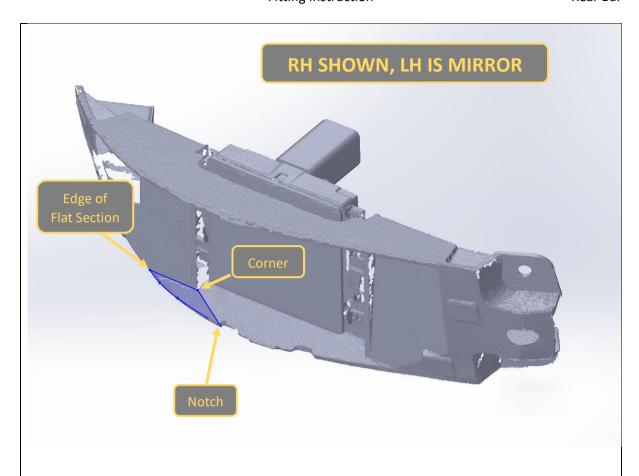
- 18. Before removing the radars it is helpful to mark L&R sides to aid in re-fitment to bar.
- 19. Remove the 3x T25 Torx bolts securing the radar mounting bracket to the bumper. Once removed carefully remove the radar in the mounting bracket from the bumper.

DO NOT DROP RADAR MODULE!!

20. Complete on both sides of the bumper.

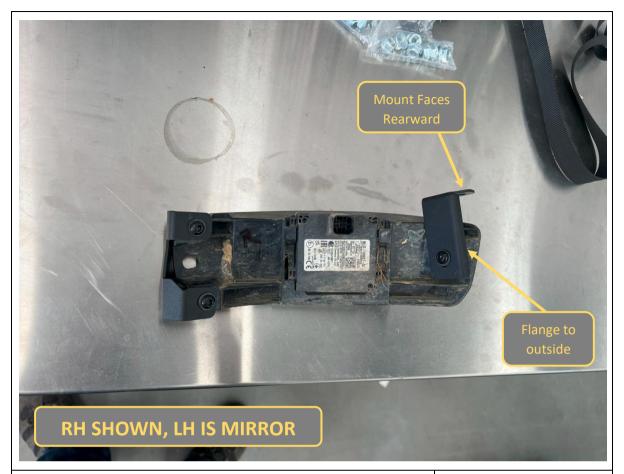
TOOLS REQUIRED

T25 Torx Driver



- 21. The plastic radar mounting bracket needs to be trimmed to fit in the Offroad Animal Rear Bar.
- 22. Mark the trim area on the radar bracket as per the blue shaded area in the image above.
- 23. Trim away the marked area using Sharp utility knife.
- 24. Complete on both Radar Brackets.

Utility Knife Marker



- 25. Fit the radar module to the supplied radar support brackets using the supplied M6x16 Button head bolts, washers, and flange nuts. Ensure brackets are positioned correctly as per image above.
- 26. Leave all bolts loose at this stage.
- 27. Complete for both radar brackets.

FASTENERS

3x M6x16 Button Head 3x M6 Flat Washer 3x M6 Flange Nut

Per Side



28. Fit the plastic radar covers to the **INSIDE** of the rear radar window, using supplied M6x16 Button Head bolts, Flat washers, and Flange Nuts.

The textured face of the cover should face to the outside of the bar.

- 29. Tighten all bolts.
- 30. Complete for both radar Windows.

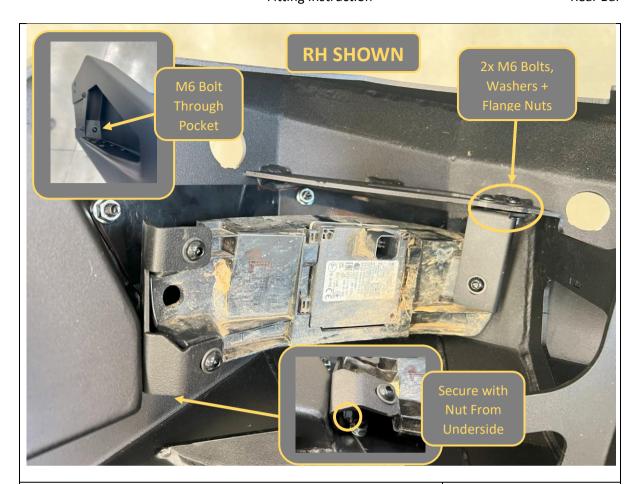
TOOLS REQUIRED

4mm Hex Key 10mm Socket / Spanner

FASTENERS

6x M6x16 Button Head 6x M6 Flat Washer 6x M6 Flange Nut

Per Side



- 31. Fit the radar assembly to the bar.
- 32. Secure from side with M6x16 Button head, Flat washer and Flange nuts through the step pocket as shown.
- 33. Secure from top with 2x M6x16 Button head bolts, Flat washer, and Flange nuts.
- 34. Complete for both radar assemblies.

4mm Hex Key 10mm Socket / Spanner

FASTENERS

3x M6x16 Button Head 3x M6 Flat Washer 3x M6 Flange Nut

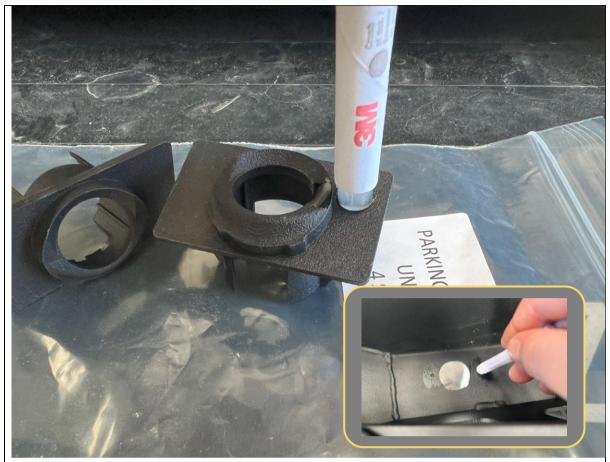
Per Side



35. Clean areas adjacent to parking sensor locations on inside of bar with isopropyl alcohol.

TOOLS REQUIRED

Isopropyl Alcohol Rag



- 36. Activate the ampule of adhesion promotor in the parking sensor tape kit by crushing tube in location indicated.
- 37. Apply adhesion promotor to sensor housing mounting faces, and bond areas of the bar adjacent to the sensor holes in the bar.

Important: allow at least 5 minutes for the primer to chemically bond to the surfaces before applying tape.

TOOLS REQUIRED



38. Determine correct sensor housings for each sensor location.

For 4x Sensor equipped models use only 18deg housings.

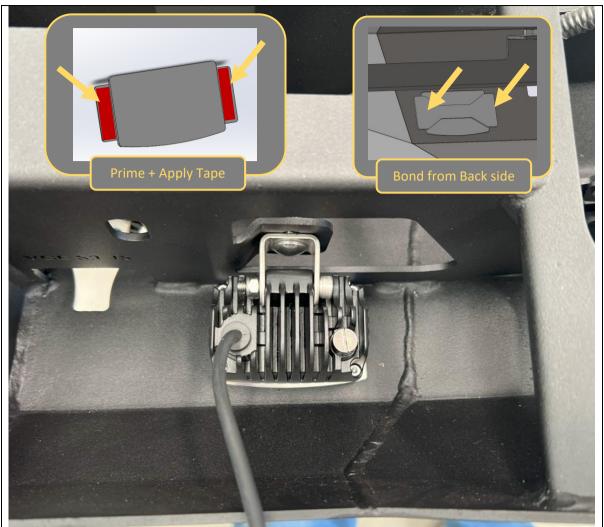
For 6x Sensor equipped models use 15 deg housing on far outer sensors and 18 deg housings on all others.

- 39. Sensor housings are keyed to prevent fitting in wrong location
- 40. Apply 3M Tape pads to all sensor mounting tabs on the sensor housings.
- 41. Re-fit parking sensors into new housings, ensure sensors are inserted square and there is no distortion to the rubber isolation ring.

TOOLS REQUIRED



- 42. Route the loom through the new bar. Disconnect sensors as required to pass wiring through smaller openings.
- 43. Ensure main plug is adjacent to the LHS side arm.
- 44. Reconnect sensors to wiring loom.
- 45. With sensors connected, remove tape backing and adhere sensors, in housings to the bar. Apply pressure for 20-30 seconds to ensure strong adhesion of tape.
- 46. If car is equipped with 4x sensors fit blanking plug to far outside sensor holes.

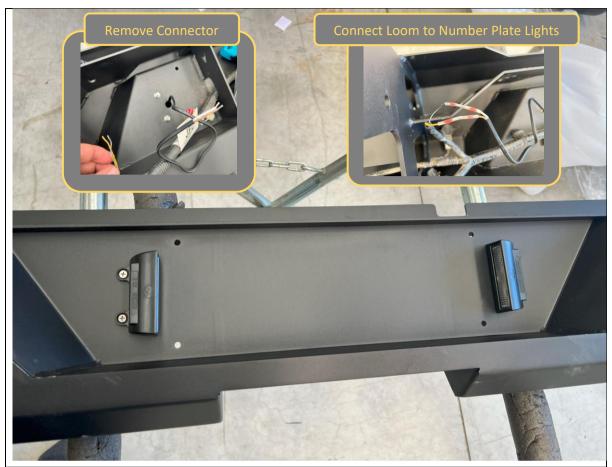


- 47. If optioned, install rear auxiliary lights to the rear light mounting tabs. Use the fasteners supplied with the auxiliary rear light kit.
- 48. If not fitting auxiliary lights fit the cover plates using 3M tape, using same clean -> prime -> bond process as parking sensors.

13mm Spanner or Isopropyl Alcohol Rag

FASTENERS

M8 Supplied with Lights



- 49. Fit the number plate lights to the bar using the supplied Phillips head screws and nuts.
- 50. Strip back the corrugated tubing on the number plate lamp connectors on the loom to expose wiring.
- 51. Cut off factory number plate light connector.
- 52. Strip wiring and connect lights to factory Loom: White -> Black = GND
 Yellow -> Brown = +12V Number Plate Lamp.
- 53. We like to use self-soldering heat shrink for this; however, any insulated auto electrical joint type is suitable (crimps, soldering etc.)
- 54. Complete for both number plate lamps.

Side Cutters
Wire Strippers
Heat Gun
Or
Soldering Iron
Or
Crimping Tool
Phillips Head Screwdriver

FASTENERS

Electrical Connectors
Phillips head screws supplied
with lights

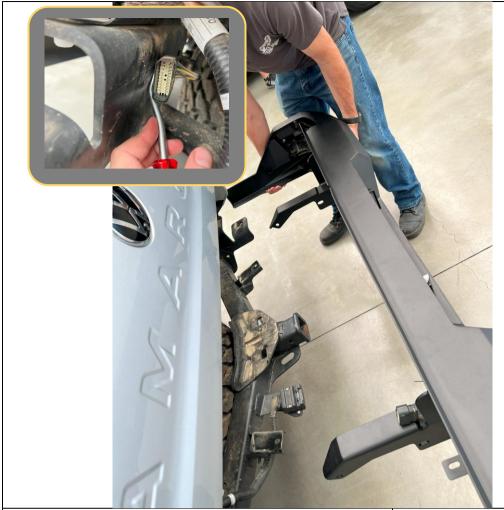


55. Re-Fit number plate to the bar, using supplied M5 Fasteners.

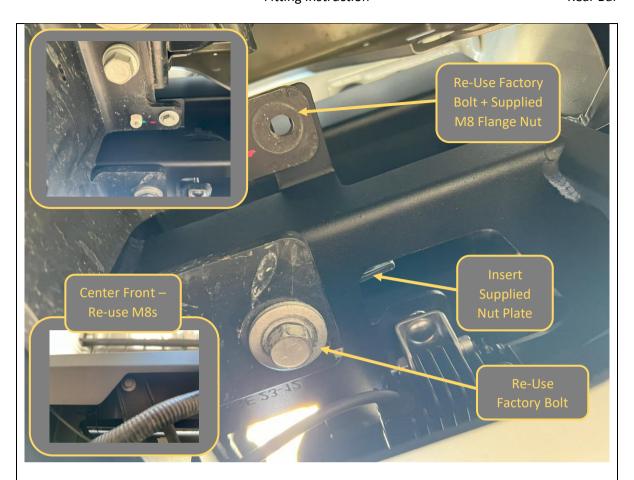
Phillips Head Screwdriver

FASTENERS

4x M5 Pan Head Screws 4x M5 Flat Washer 4x M5 Flange Nut



- 56. Before fitting bar, release clip securing the main harness from the towbar side arm, this will make it easier to position the bar.
- 57. With assistance, from a lift trolley or another person, lift the rear bar onto the car. The rear bar needs to sit **ON TOP** of the mounting flanges on the Tow bar.
- 58. Rear bar side arms need to sit **INSIDE** of the towbar side arms.
- 59. If the bar fouls on the trailer plug bend plug bracket down slightly as required.



- 60. Secure bar to tow bar mounting flanges using OE M12 and M8 Flange bolts removed earlier, into supplied M8 Flange Nuts & M12 Nut Plates
- 61. Leave all fasteners loose at this stage.

FASTENERS

1x M12 Nut Plate 2x M8 Flange Nut

Re-Use Factory Bolts

Per side

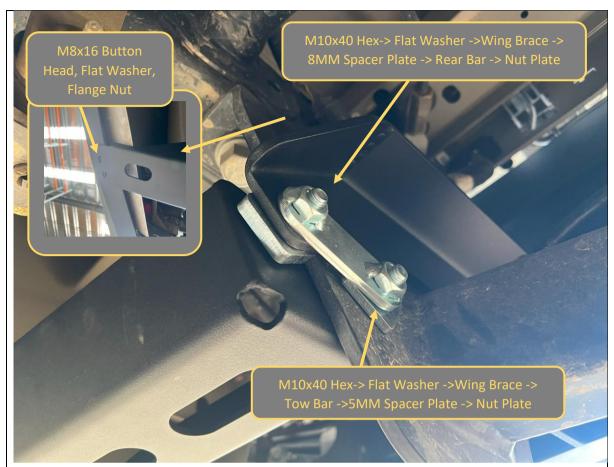


- 62. Fit the forward side arm mount bolt. Complete on both sides
- 63. Leave bolts loose at this stage.

16mm Socket / Spanner

FASTENERS

1x M10X30 Hex 1x M10 Large HD Washer 1x M10 Flange Nut



- 64. Fit the wing brace, first to the wing, using 2x M8x16 Button Head, Flat washer, and Flange nuts.
- 65. Fit the wing brace to the side arm of bar using Fasteners and orders shown in the image above. Order shown is from outside to inside.
- 66. Complete for other side of vehicle. Leave all fasteners loose at this stage.

FASTENERS

Ref Image Notes

Rear Bar



- 67. Check and adjust alignment of bar on vehicle. Ensure minimum clearances are achieved and bar is same side to side.
- 68. Check opening of tailgate that it clears the rear bar.
- 69. Once happy with alignment tighten bolts in the following order. Always tighten both sides before moving on to next bolt in sequence.

| Sequence | Location | Fastener |
|----------|----------------------|-----------------|
| 1 | Side Arm Mount | M10 – 16mm |
| 2 | Inner Wing Brace | 2x M10 – 16mm |
| 3 | Outer Wing Brace | 2x M8 – 5mm Hex |
| 4 | Inner Vertical Mount | M8 - 13mm |
| 5 | Outer Vertical Mount | M8 - 13mm |
| 6 | Outer Vertical Mount | M12 – 18mm |

TOOLS REQUIRED

Rule / Tape Measure 13mm Socket / Spanner 16mm Socket / Spanner 18mm Socket / Spanner 5mm Hex Key



- 70. Complete any wiring for the auxiliary lights (if equipped)

 These can be wired in several configurations depending on customer requirements.
- 71. Reconnect the main electrical harness connector on LH side arm.
- 72. Attach Offroad Animal Logo plate to chamfered face, using attached adhesive backing.
- 73. Double check all fasteners are tight.
- 74. With that you are done!





Congratulations!
Head for the tracks and enjoy your newly protected Amarok!