

# Nissan Navara NP300 Series 5 MY 2021 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-NNV-NP300- 21-ASM1	NP300 21+ Navara Rear Bar Weldment	
1	B-0621R	NP300 21+ Navara Rear Bar - Wing Brace Br kt	
1	B-0621L	NP300 21+ Navara Rear Bar - Wing Brace Brkt	
1	N-0001R	Nissan NP300 Navara Rear Bar Plastic Radar Cover	
1	N-0001L	Nissan NP300 Navara Rear Bar Plastic Radar Cover	
1	B-0671R	NP300 21+ Navara Rear Bar Top Radar Support Bracket	400
1	B-0671L	NP300 21+ Navara Rear Bar Top Radar Support Bracket	
1	B-0672R	NP300 21+ Navara Rear Bar Bottom Radar Support Bracket	
1	B-0672L	NP300 21+ Navara Rear Bar Bottom Radar Support Bracket	
2	BR25B	LED NUMBER PLATE LIGHT	a
2	PW-P-14x9-870	Pinch Weld - Plain Non Seal 870mm	
1	RB-NNV-NP300- 21-ADRCP	NAVARA 21+ REAR BAR ADR COMPLIANCE PLATE	MANUFACTURED BY OFFOAD ANIMAL NISSAN NAVARA NIPSOD SS MY2021 ON NOVOLIE FART NO: BENEAMAND CONCIE FART NO: BENEAMAND EARTE OVER CAPACITY SIZEOG MAX TOWARL DOWN LOAD SIXEO FOR TOWNING PURPOSES ONLY MFG DATE:

### **Small Parts – Contained in Small Parts Kit Bag**

Part Number	Description	
M12X30X1.25	Bolt Hex, M12X30x1.25, GR8.8 ZP	
M12 FW LHD	M12 FW Large Heavy Duty	
M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP	
M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP	
M10X20 BHCS	SCREW, BUTTON HEAD CAP, M10X20X1.5 GR12.9 ZP	
M10 Flat Washer	M10 FW	
M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP	
M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP	
M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP	
M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP	
M5 Flat washer	M5 FW	
M5X15 PAN	SCREW, PAN HEAD PHILLIPS, M5X15X0.8 GR4.6 ZP	
M5 FLANGE NUT	Flange Nut, M5x0.8 G8.8 ZP	
M5X30 PAN	SCREW, PAN HEAD PHILLIPS, M5X30X0.8 GR4.6 ZP	
M5 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO	
M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP	
M10 NUT	Hex Nut, M10x1.5 G8.8 ZP	
	M12X30X1.25 M12 FW LHD M10 x 30 M10 FLANGE NUT M10X20 BHCS M10 Flat Washer M8 FLANGE NUT M6x16 BHCS BLACK ZINC M6 FLAT WASHER BLACK ZINC M6 FLANGE NUT M5 Flat washer M5X15 PAN M5 FLANGE NUT M5X30 PAN M5 NYLOC M10 x 25	

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	Marker
Hex (Allen) Key Set 4-	Driver (Optional but	
8mm	speeds up fitting	
Trim Tool	process)	
Utility Knife		
Side Cutters	Air Hacksaw or	
Wire Strippers	Reciprocating Saw	

## **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.



1. Before beginning work on the bumper, remove factory towbar if fitted. The vehicle used for this example did not have towbar fitted.

**TOOLS REQUIRED** 



- 2. Disconnect the bumper electrical harness connectors, located on the top of the LH chassis rail.
- 3. The connectors have a locking tab that needs to be slid forward to allow the connector to unlock.

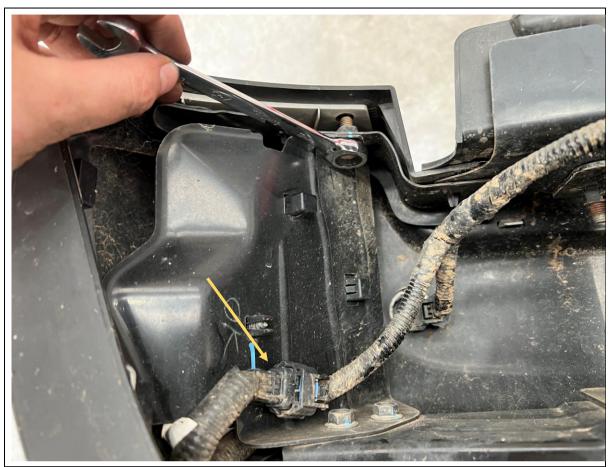


- 4. Support bumper with lift trolley.
- 5. Remove 3x 17mm head factory bolts securing each side of the bumper to the chassis
- 6. Remove the factory tie down point on LH side by removing the 2x 17mm head bolts securing to chassis.
- 7. Carefully lower and remove factory bumper from car.

17mm Socket / Spanner

#### **FASTENERS**

**Factory Flange Bolts** 



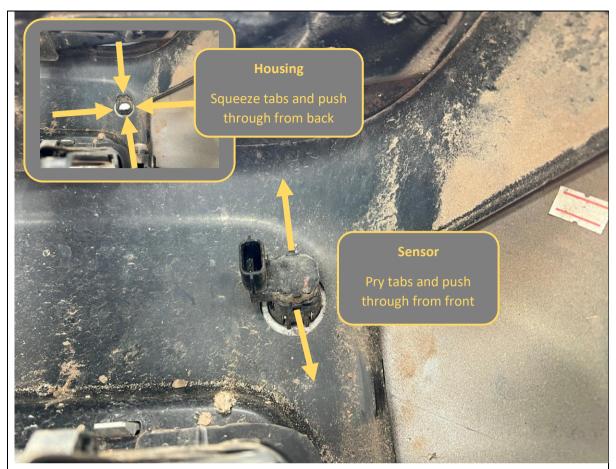
- 8. Disconnect the radar sensor wiring harness, this uses the same type of slide locking tab as the main connectors.
- 9. Remove the radar sensor bracket from bumper. Remove the 3x 12mm head factory flange bolts that secure to the rear bumper.
- 10. Complete on both sides of the bar.

12mm spanner

#### **FASTENERS**

Factory flange bolts

Retain for refitment

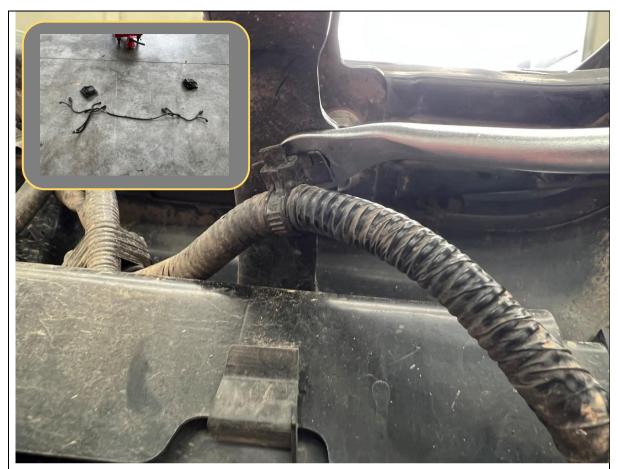


- 11. Remove parking sensors from housings, by prying the retaining tabs whilst pushing the sensor through from the front side of the bumper.
- 12. Repeat for all sensors in the bumper.
- 13. Remove sensor housing from the bumper, by squeezing the retaining tabs whilst pushing the housing through from the back side of the bumper.
- 14. Repeat for all housings in the bumper.
- 15. Remove number plate from original rear bar.



16. Disconnect the number plate light wiring connectors from the lamp housings.

**TOOLS REQUIRED** 



- 17. Remove the main rear bar loom from the metal bumper beam, by unclipping harness connections with the trim tool.
- 18. Lay out removed harness in correct orientation to aid refitment to the new rear bar.

Trim Tool



19. Fit the harness to the rear bar, routing the cables through the side arms so that the sensor wiring positions are in the correct locations.

Ensure the correct orientation of the harness connectors in maintained.

**TOOLS REQUIRED** 



20. Fit plastic radar windows to the inside of the opening in the wing of the rear bar, using supplied M6x16 black bolts, flat washers, and flange nuts.

The textured side faces outwards.

#### **TOOLS REQUIRED**

4mm Hex Key

#### **FASTENERS**

6x M6x16 Black BHCS 6x M6 Black Washer 6x M6 Flange Nut

Per Side



21. Fit the mounting brackets to the radar sensor bracket that contains the rear radar module.

Note the brackets are handed, match orientation to bar to determine correct brackets.

22. Re-use the factory 12mm head bolts, and supplied M8 Flange nuts.

#### **TOOLS REQUIRED**

12/13mm socket / spanner

#### **FASTENERS**

3x M8 Factory bolts 3x M8 Flange Nut

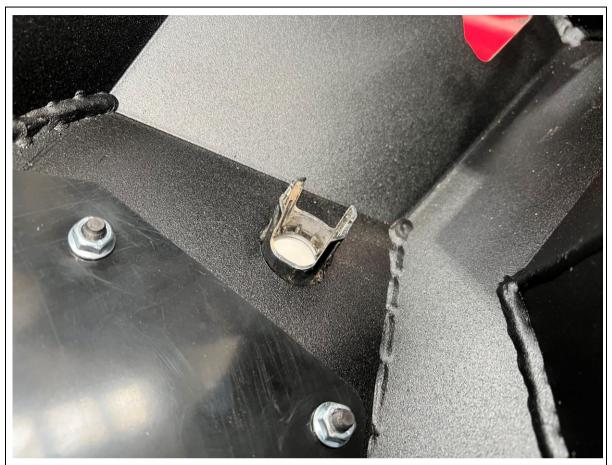


- 23. Fit the number plate lamps to the rear bar, by first feeding the cable the bar, then securing with screws and nuts supplied in the lamp box.
- 24. Cut off lamp holder plugs from the factory wiring.
- 25. Solder to new LED number plate lamp cables. Use heat shrink or electrical tape to insulate solder connections. Crimp connectors can also be used if preferred.
- 26. Complete for both sides of vehicle.

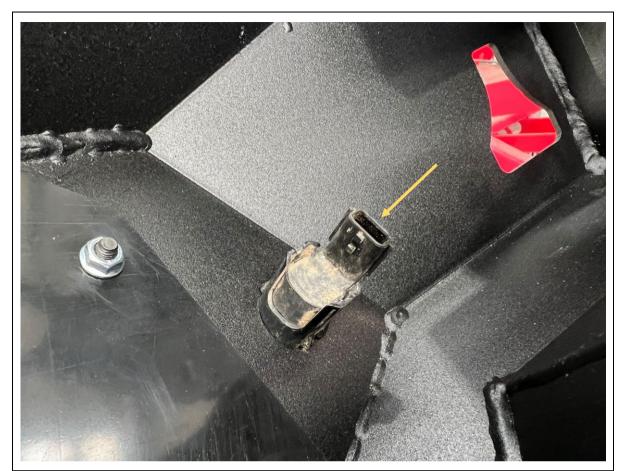
Soldering Iron
Solder
Heat Shrink / Gun
Electrical Tape
Side cutters
Wire strippers

#### **FASTENERS**

Screws supplied with Lights



- 27. Install sensor housings by inserting the housing from outside of bar and pushing until sensor housings sit flush with the bar.
- 28. Complete for all sensor locations on rear bar.



- 29. Install sensors in housings by inserting into housing from rear of bar and pushing until audible "Click" is heard.
- 30. Plug in loom to sensors once seated.
- 31. Complete for all sensors in bar.



- 32. Mount the radar brackets to the bar, using supplied M6x16 Button head screws, Flat washers, and Flange Nuts.
- 33. Complete for both sides of bar.
- 34. Reconnect rear radar sensor loom to sensors.

4mm Hex Key

#### **FASTENERS**

4x M6x16 Button Head 4x M6 Flat Washer 4x M6 Flange Nut

Per side



- 35. Fit rubber pinch weld to edges of wing, in the location shown by pushing rubber over the edge.
- 36. Complete for both sides of vehicle.
- 37. Re fit number plate to rear bar, using original hardware.

Phillips Screwdriver

#### **FASTENERS**

**Original Number Plate Bolts** 



- 38. With assistance, from a lift trolley or another person, lift the rear bar onto the car.
- 39. Secure to side of chassis using 2xM12x30x1.25 Bolts, and M12 Large Flat Washers into captive chassis nuts.
- 40. Secure to Bottom of chassis nuts using 4xM12x30x1.25 Bolts into captive chassis nuts.
- 41. Fit bolts to both sides of chassis.
- 42. Tighten all bolts.

18mm Socket / Spanner

#### **FASTENERS**

6x M12x30x1.25 Bolts 6x M12 Large Flat Washer

Per side



- 43. Fit tub protection brace to the upright using 2x M10x30 Hex Bolts, flat washers, and M10 Flange nuts.
- 44. Secure to wing using 2x M10x20 Button head bolts, flat washers, and M10 Flange nuts.
- 45. Repeat for other side of vehicle.

16mm Socket / 15mm Spanner

6mm Hex wrench

#### **FASTENERS**

2x M10x30 Hex Bolts
2x M10x20 Button Head
Bolts
4xM10 Flange Nut
4xM10 Flat Washer

Per side



- 46. Secure the trailer plug to bracket on vehicle using M5 Screw and Flange Nut provided. If trailer wiring is not yet fitted now is the best time to complete. Follow instructions with trailer wiring harness.
- 47. Secure the loom using cable ties as required.
- 48. Re connect the sensor and number plate lamp harness connectors

8mm socket / spanner Phillips head screwdriver Cable Ties

#### **FASTENERS**

2x M5 Phillips head screw 2x M5 Flange nut.



- 49. Fit M10x25 Hex bolt and M10 Nut to anti rattle location on bottom of Hitch Box
- 50. Replace Trailer Ball Mount and secure with Pull Pin and R Clip.
- 51. Attach Offroad Animal Logo plate to chamfered face, using attached adhesive backing.
- 52. Fit towbar compliance plate to underside of tow bar, using attached adhesive backing.
- 53. With that you are done!

#### **FASTENERS**

Pull Pin R-Clip M10x25 Bolt M10 Nut



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