



FORD RANGER PX

2011 - 2022

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-FRA-PX-11-ASM1	PX Ranger Rear Bar Weldment	
2	B-0197	PX Ranger Center Rear Sensor Bracket	
1	B-0199R	PX Ranger Rear Bar Tub Protection Brace	
1	B-0199L	PX Ranger Rear Bar Tub Protection Brace	
2	BR25B	LED NUMBER PLATE LIGHT	
1	RB-FRA-PX-11-ADRCP	RANGER REAR BAR ADR COMPLIANCE PLATE	<div> <p>MANUFACTURED BY OFFROADANIMAL FORD RANGER PX 2011 ON PART NO: RB-FRA-PX-11-ASM0 TONGUE PART NO: RB-TBM-01 RATED TOW CAPACITY 3500KG MAX TOWBALL DOWN LOAD 350KG FOR TOWING PURPOSES ONLY</p> <p>MFG DATE: </p> </div>

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
4	M10X30 BHCS	SCREW, BUTTON HEAD CAP, M12X30X1.5 GR12.9 ZP
8	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
8	M12 FLAT WASHER	M12 FW
4	M10X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
4	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
4	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
6	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
2	M5X20 PAN	SCREW, PAN HEAD PHILLIPS, M5X20X0.8 GR4.6 ZP
2	M5 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
1	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
1	M10 NUT	Hex Nut, M10x1.5 G8.8 ZP
2	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
2	M6 FLAT WASHER	M6 FW
1	OFA-LOGO	OFFROAD ANIMAL METAL LOGO
2	PW-S-450	Pinch Weld - Plain Non Seal 450mm

TOOLS REQUIRED

The following tools will be required to install the product.

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

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.

<p>Hearing Protection</p> 	<p>Always wear ear protection when using power tools.</p>
<p>Eye Protection</p> 	<p>Ensure eye protection is always worn when cutting or drilling.</p>
<p>Manual Handling</p> 	<p>Do not attempt to lift bar assemblies or rock sliders on your own.</p> <p>Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.</p>
<p>Vehicle Support</p> 	<p>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.</p>

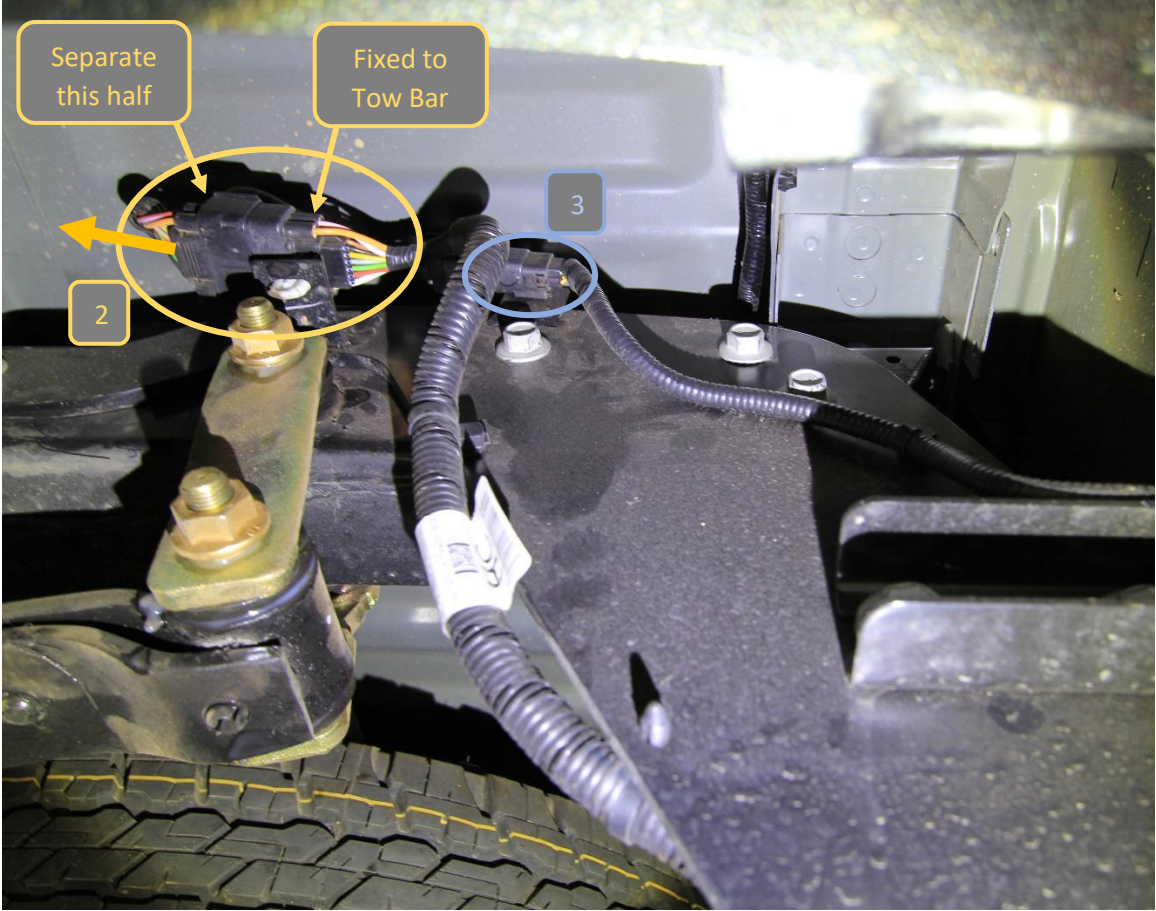


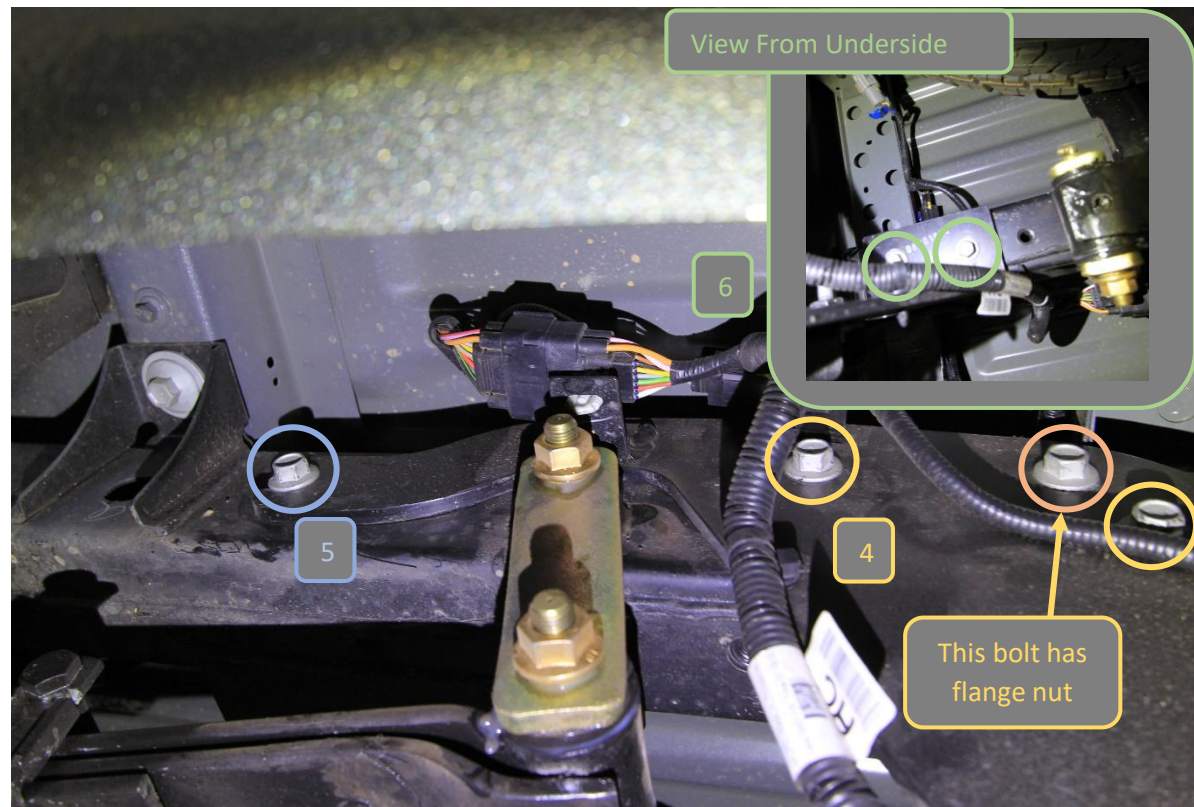
1. Before beginning work, support the factory rear bar / tow bar using lift trolley or jack.

TOOLS REQUIRED

Lift Trolley

FASTENERS

	
<ol style="list-style-type: none">2. Disconnect the trailer wiring harness by depressing the tab on the connector and separating the half connected to the vehicle away from the fixed connector.3. Disconnect the parking sensor harness, by using same technique.	TOOLS REQUIRED
	FASTENERS



4. Remove 3x M12 bolts per side securing the Tow bar to the Chassis. One bolt, denoted above, has a flange nut inside the chassis rail. Others are secured into weld nuts in chassis.
5. Loosen 1x M12 Bolt per side in front of the spring hanger. Loosen sufficiently such that a gap of approx. 2-3mm between the tow bar and bolt head is created. Do not remove this bolt at this stage.
6. Remove the 2x M12 Bolts per side securing the underside of tow bar to the chassis. These bolts are retained by a nut plate inside the chassis.

TOOLS REQUIRED

16mm Socket
Extension bar

FASTENERS

6x M12 Flange head bolts
1x M12 Flange Nut
1x Factory towbar nut plate

Per side



7. With all fasteners removed and the factory bar/ bumper assembly free, carefully lower, then remove from vehicle towards the back once clear of the lower tub panels.

TOOLS REQUIRED

Lift trolley or Jack

FASTENERS

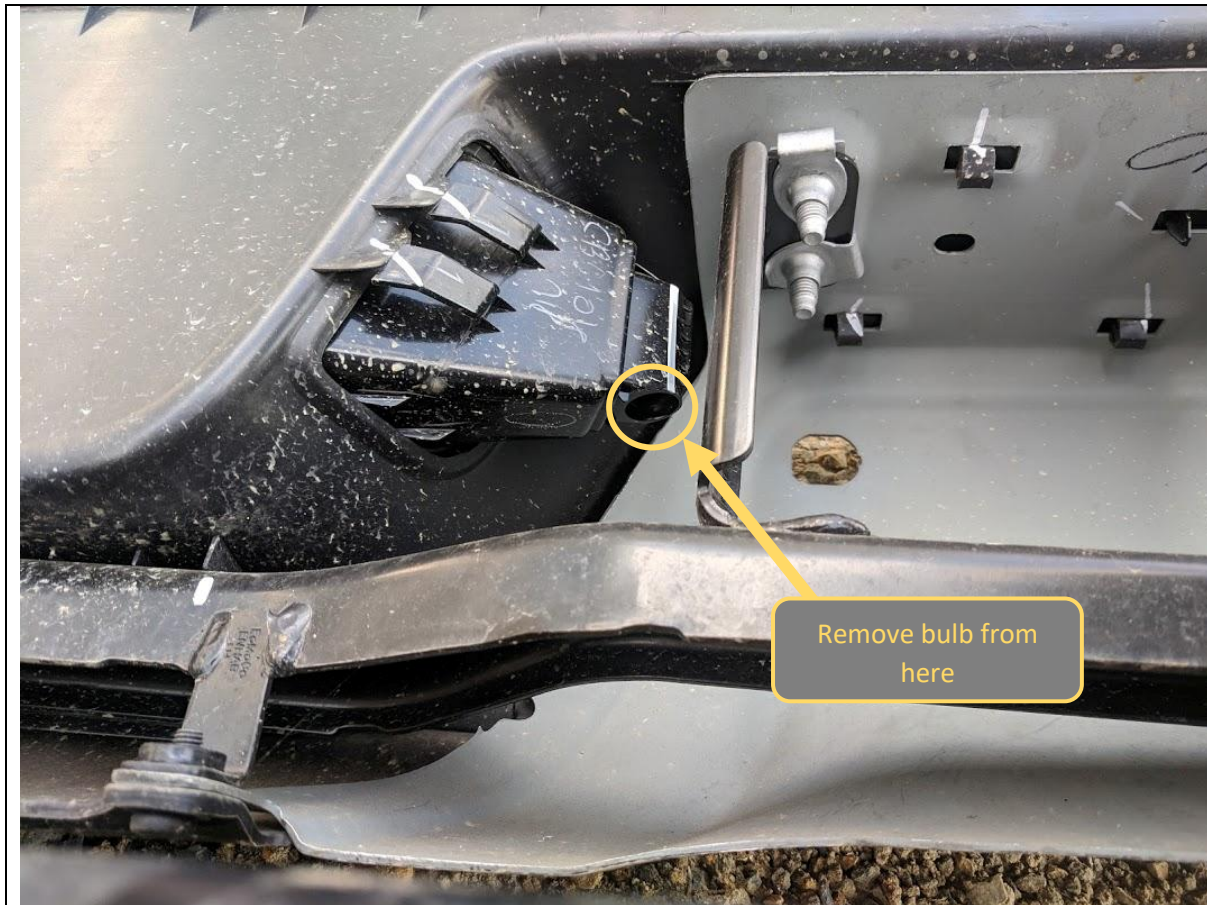


8. Remove the trailer wiring harness, by releasing all the clips securing it to the factory bar with a trim tool. Set aside for refitment to Offroad Animal bar.

TOOLS REQUIRED

Trim Tool

FASTENERS



9. Remove Bulbs from Number plate lamps. Bulbs are secured with spring loaded bayonet type attachment, Push and turn to release.

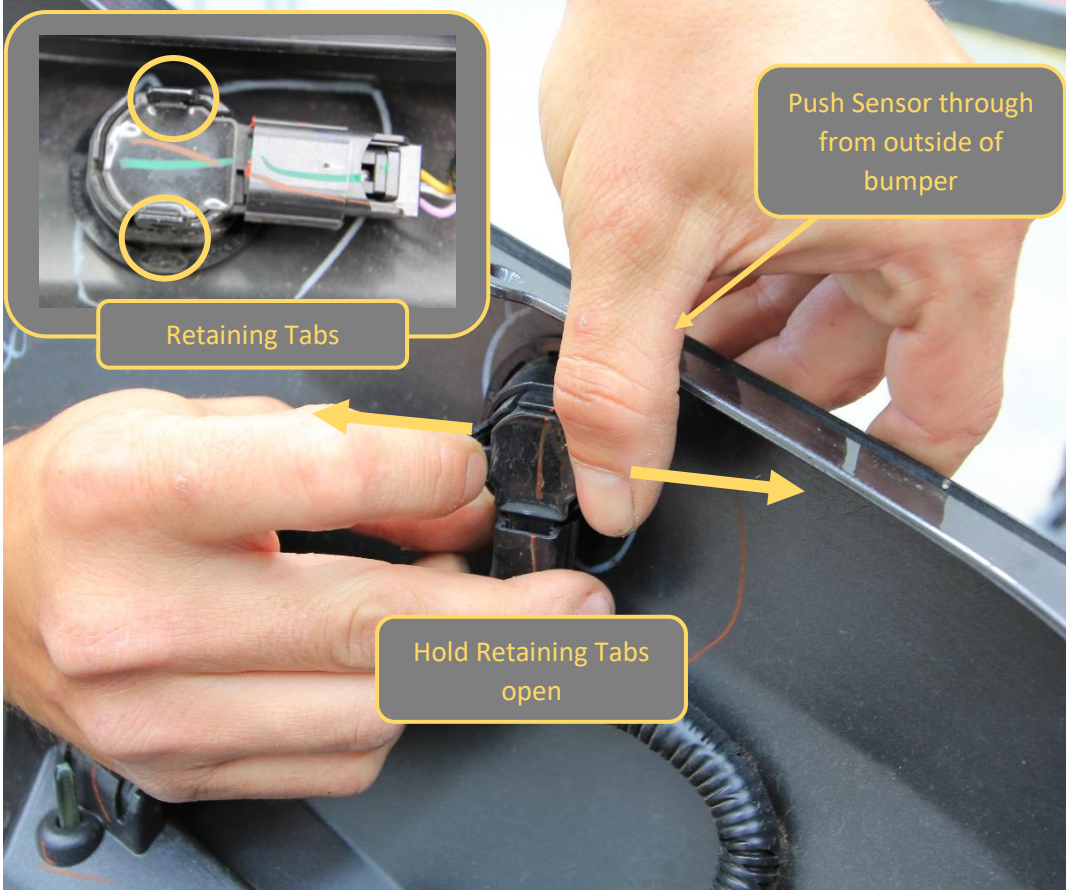
10. Unclip and remove number plate light loom.

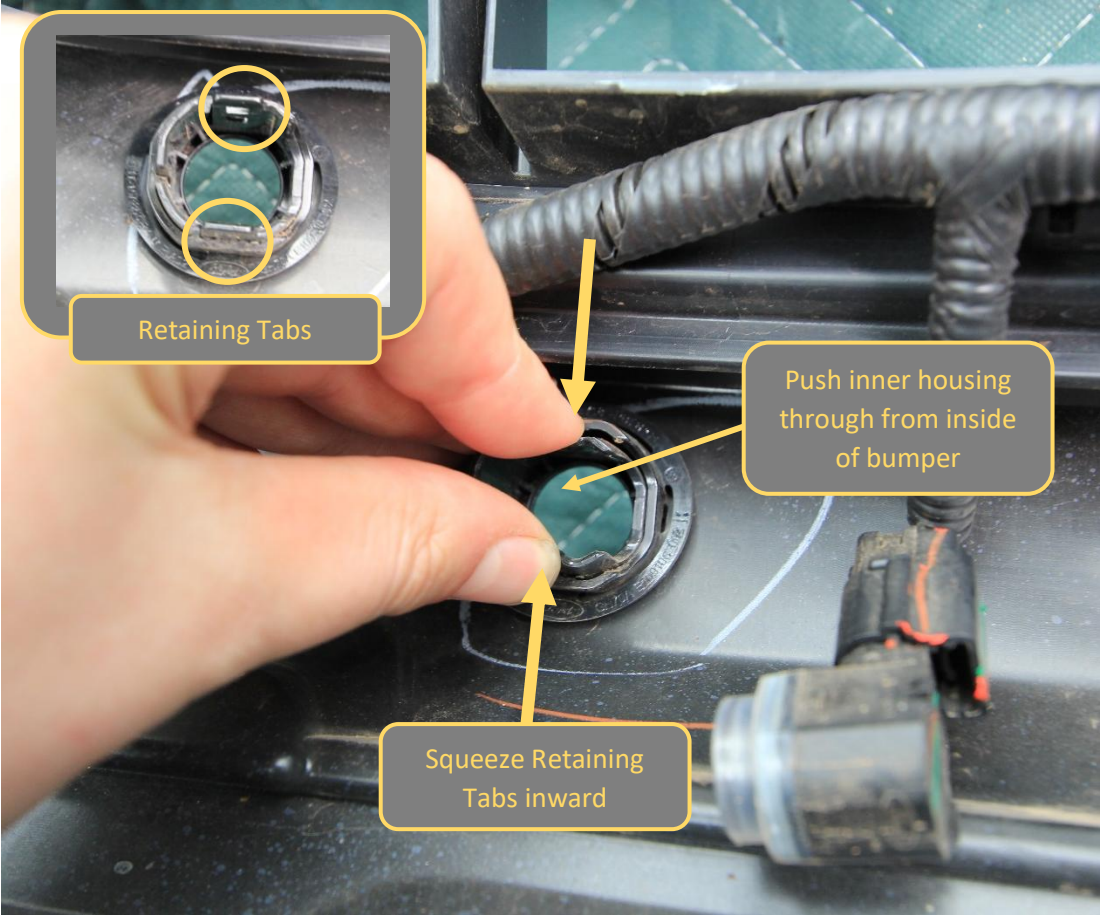
11. Remove number plate from original rear bar.

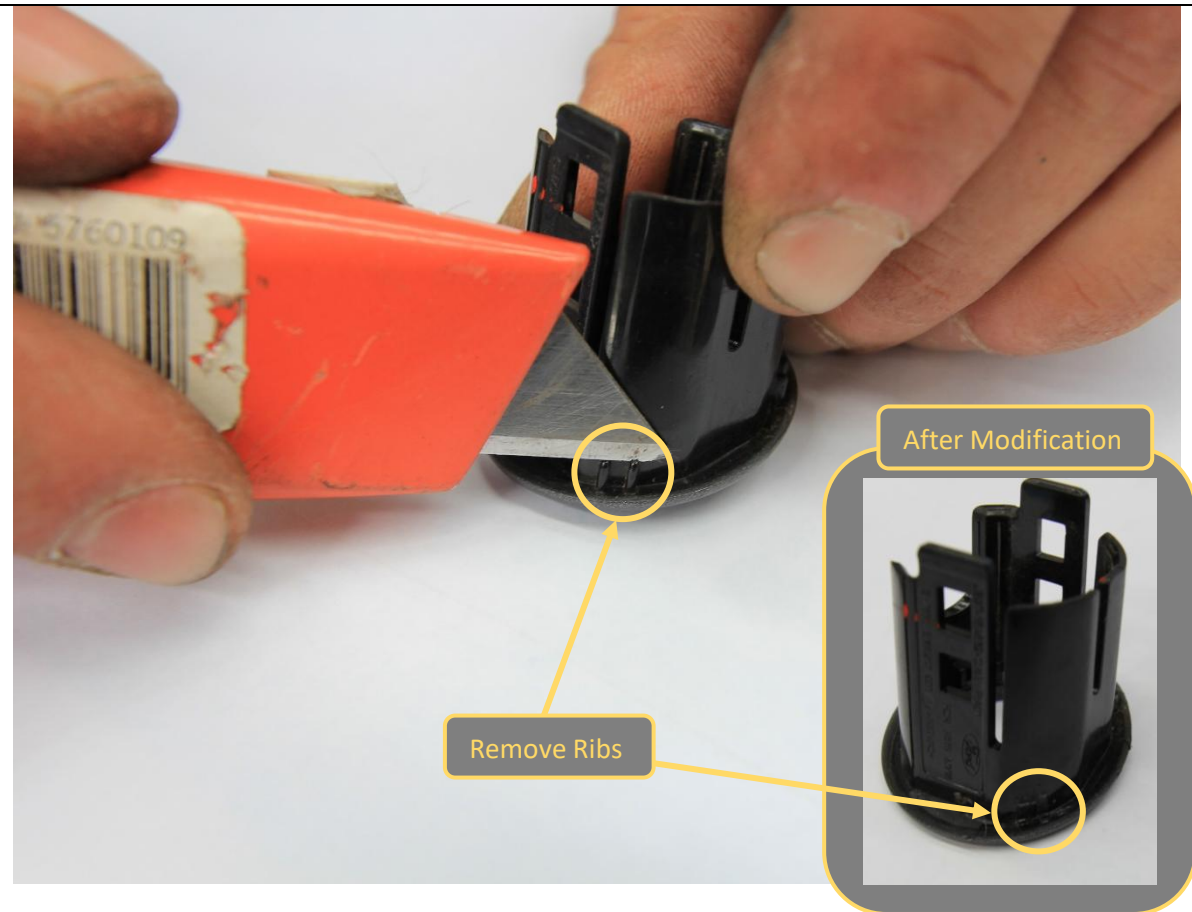
TOOLS REQUIRED

Phillips Screwdriver

FASTENERS

 <p>Retaining Tabs</p> <p>Push Sensor through from outside of bumper</p> <p>Hold Retaining Tabs open</p>	
<p>12. Remove parking sensors from housings, by holding open the retaining tabs, whilst pushing the sensor through the housing from the outside of the bumper</p> <p>13. Repeat for all sensors in the bumper.</p>	TOOLS REQUIRED
	FASTENERS

	
<p>14. Remove parking sensor housings from bumper by squeezing the retaining tabs whilst pushing the inner housing through the bumper from the inside.</p> <p>15. Repeat for all sensors in the bumper. Take care to ensure that each inner and outer housing are matched. Label positions of housings to aid with re-fitment to bar.</p>	TOOLS REQUIRED
	FASTENERS

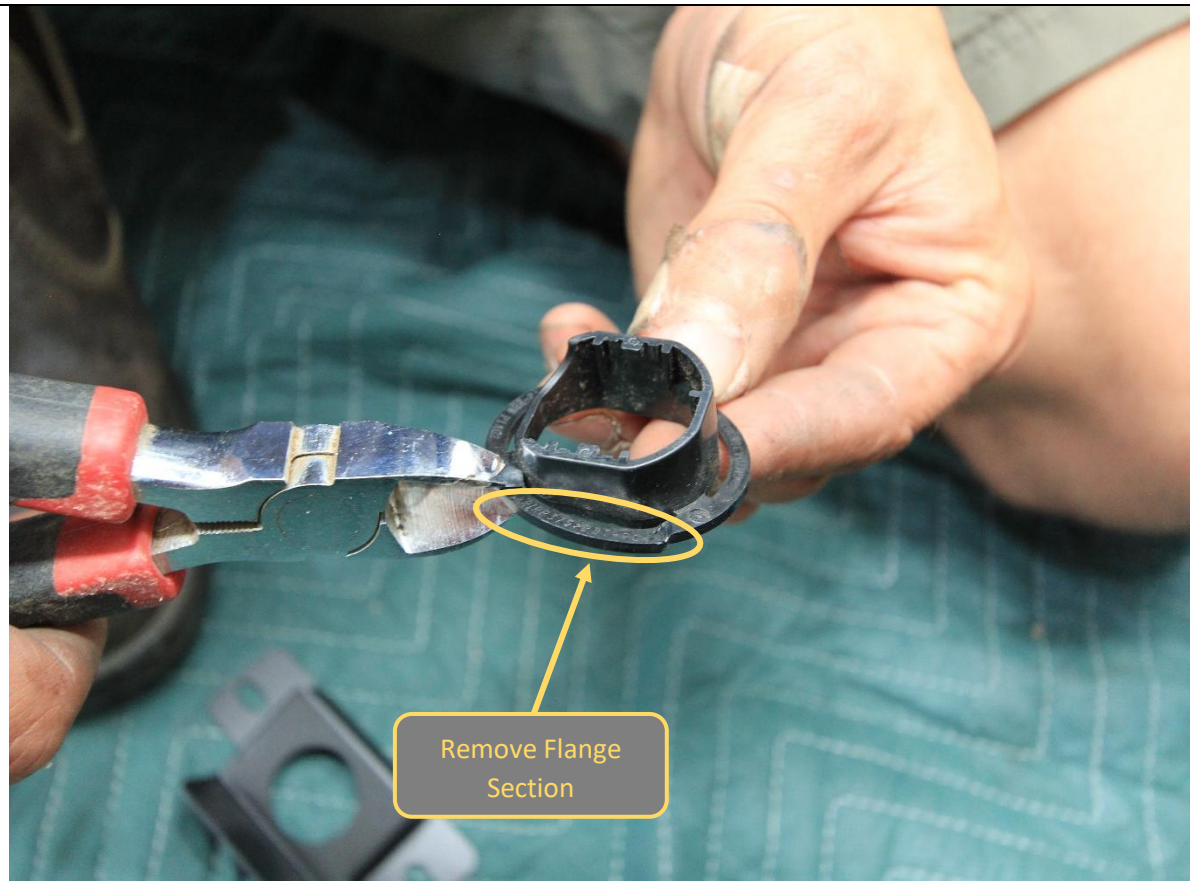


16. Modify sensor housings to fit in rear bar by removing the small locating ribs using a utility knife.
17. Complete these modifications for all sensor housings.

TOOLS REQUIRED

Utility Knife

FASTENERS

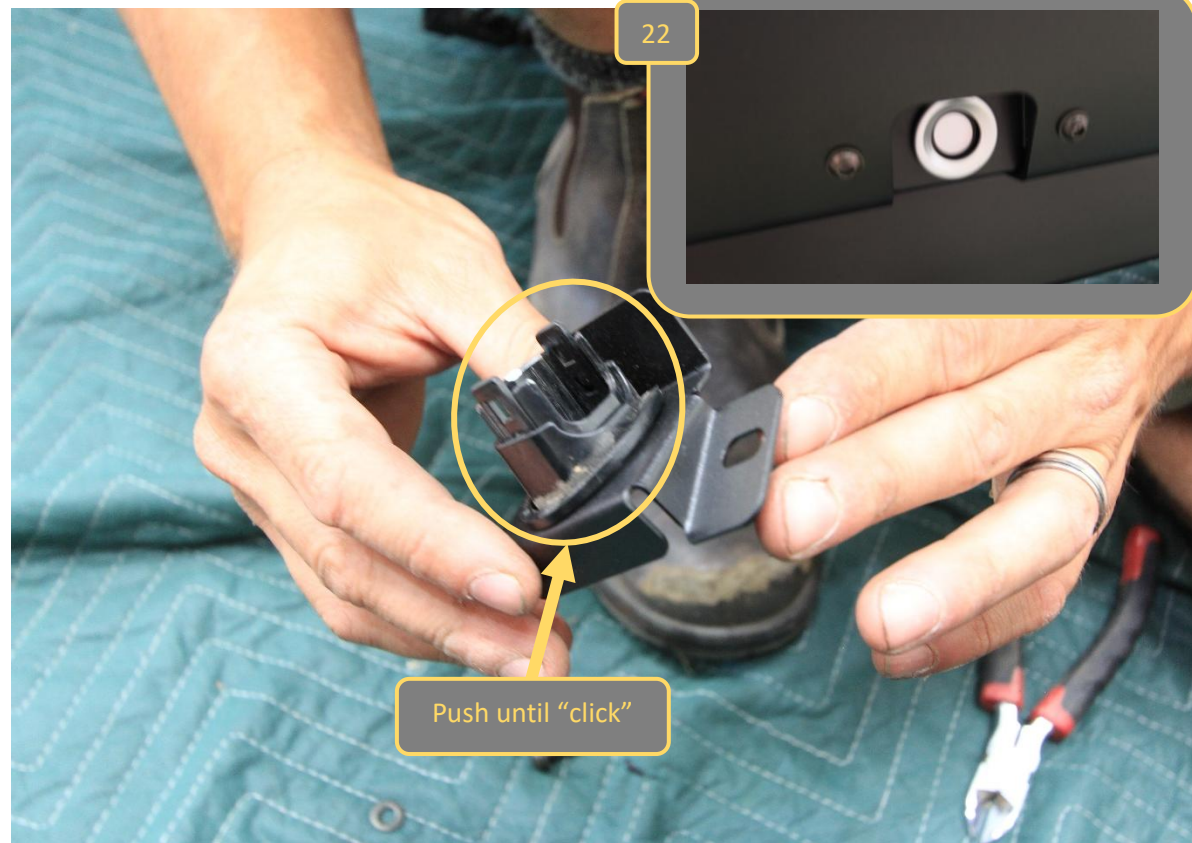


18. Modify inner sensor housings to fit in rear bar sensor brackets by removing lower section of the outer flange using side cutters.
19. Complete these modifications for the center two sensor housings ONLY.

TOOLS REQUIRED

Side Cutters

FASTENERS



20. Fit the center housings into the sensor brackets. Insert outer housing from outside then replace inner bracket and press until an audible "Click" is heard.
21. Complete the same process to install the outer sensor brackets directly in the wing of the rear bar.
22. Install sensor brackets in rear bar using M6x16 Button head bolt, Flat washer and M6 Flange Nut.

TOOLS REQUIRED

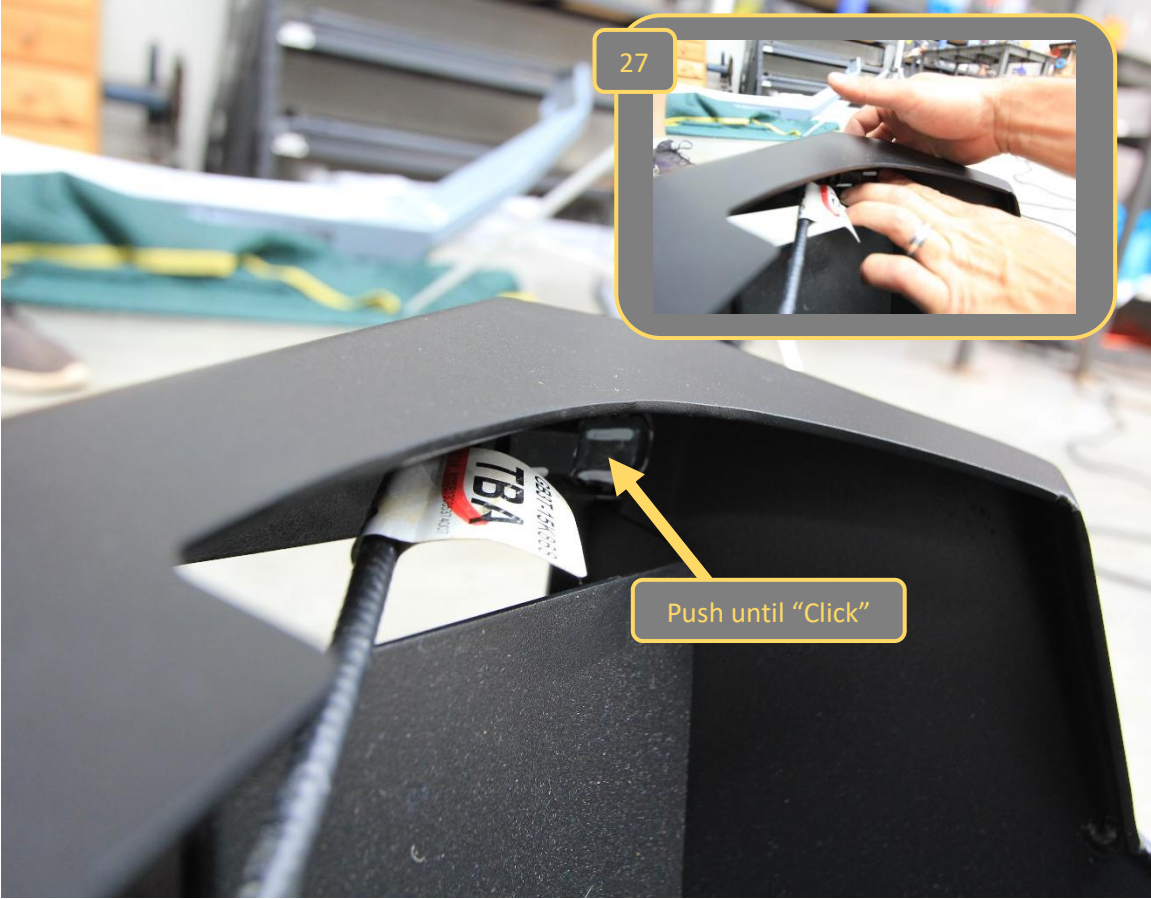
Utility Knife
4mm Hex
10mm Spanner

FASTENERS

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



<div>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.</div> <div>24. Cut off lamp holders from the factory loom. Strip ends and solder to new LED number plate lamp cables. Use heat shrink or electrical tape to insulate solder connections.</div> <div>25. Complete for both sides of vehicle.</div> <div>26. Fit number plate to rear bar using M5x15 pan head screws and flange nuts.</div>	<div>TOOLS REQUIRED</div> <div>Soldering Iron</div> <div>Solder</div> <div>Heat Shrink / Gun</div> <div>Electrical Tape</div> <div>Side cutters</div> <div>Wire strippers</div> <div>Phillips head screwdriver</div>
	<div>FASTENERS</div> <div>Screws supplied with Lights</div> <div>2x M5x15 pan head screw</div> <div>2x M5 flange nut</div>

	
<p>27. Install sensors in housings by inserting into housing from rear of bar and pushing until audible "Click" is heard.</p> <p>28. Run the loom neatly around the bar, Secure with cable ties if required.</p> <p>29. Complete for both sides of vehicle.</p>	TOOLS REQUIRED
	FASTENERS



30. Fit rubber pinch weld to lower edges of wing, in the location shown by pushing rubber over the edge.

31. Complete for both sides of vehicle.

TOOLS REQUIRED**FASTENERS**



32. With assistance, from a lift trolley or another person, lift the rear bar onto the car. Tilting the bar to clear the spring hangers whilst lifting will be required.
33. Secure using original factory M12 flange bolts, Flange nut and factory nut plate removed earlier. Tighten all bolts.


TOOLS REQUIRED

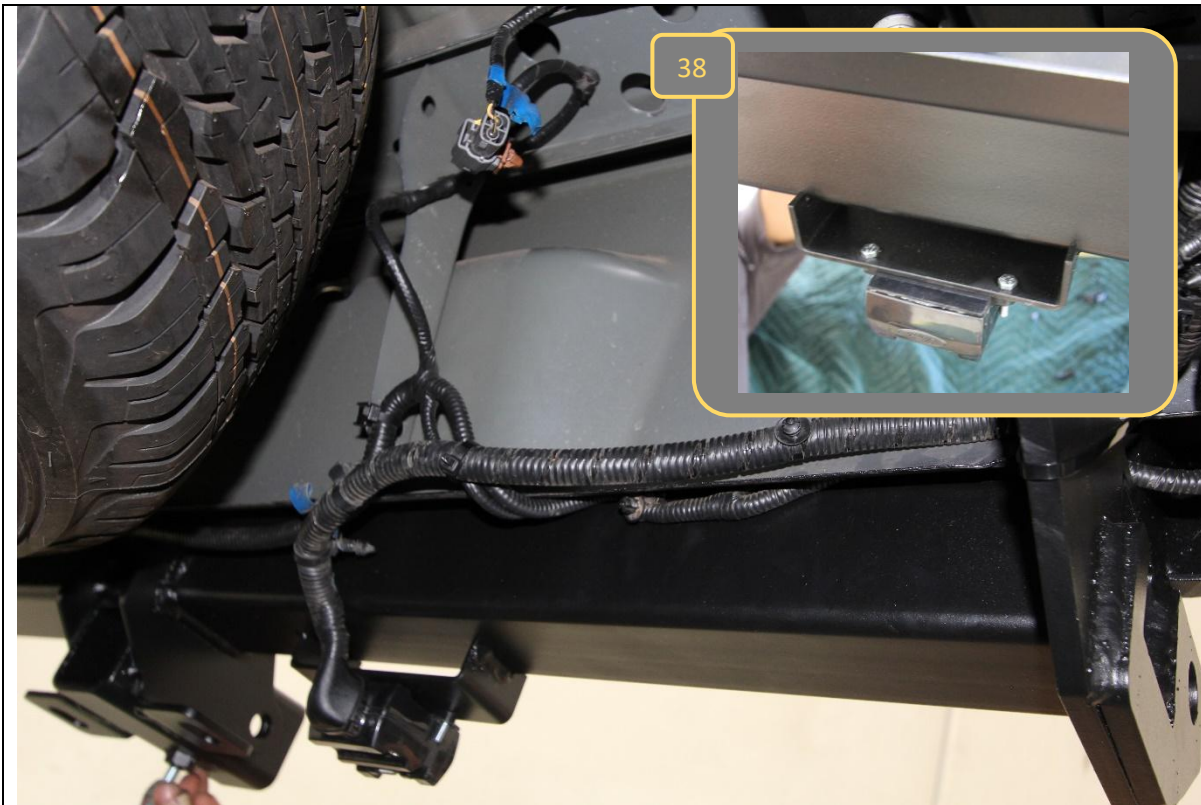
16mm Socket / Spanner

FASTENERS

6x M12 Flange head bolts
1x M12 Flange Nut
1x Factory towbar nut plate

Per side

	
<p>34. Fit tub protection brace to the upright using 2x M10x30 Hex Bolts, flat washers and M10 Flange nuts.</p> <p>35. Secure to wing using 2x M10x30 Button head bolts.</p> <p>36. Repeat for other side of vehicle.</p>	TOOLS REQUIRED 16mm Socket / 15mm Spanner 6mm Hex wrench
	FASTENERS 2x M10x30 hex bolt 2x M10x30 button head 4x M10 flat washer 4x M10 flange nut Per side



37. Re-fit trailer wiring harness.

38. Secure trailer plug to bracket on vehicle using M5 Screw and Nyloc Nut provided

39. Secure the loom using cable ties as required

TOOLS REQUIRED

8mm socket / spanner
Phillips head screwdriver
Cable Ties

FASTENERS

2x M5 Phillips head screw
2xM5 Nyloc nut.

	
<p>40. Fit M10x30 Hex bolt and M10 Nut to anti rattle location on bottom of Hitch Box</p> <p>41. Replace TBM and secure with new Pull Pin and R Clip provided.</p> <p>42. Attach Offroad Animal Logo plate to chamfered face, using attached adhesive backing.</p> <p>43. Fit towbar Compliance plate to underside of towbar, using attached adhesive backing.</p> <p>44. With that you are done!</p>	TOOLS REQUIRED
	FASTENERS Pull Pin R-Clip M10x30 Bolt M10 Nut



Congratulations!
Head for the tracks and enjoy your newly protected Ford Ranger!