



## FORD RANGER PX 2011 MY ONWARDS REAR BAR

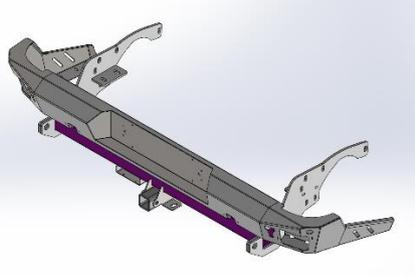
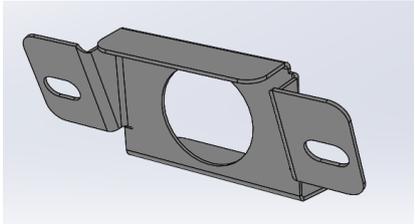
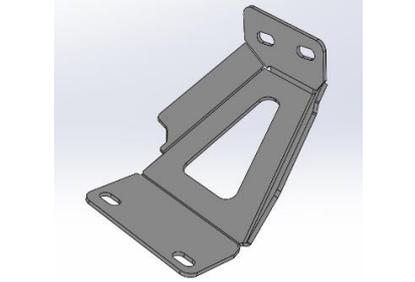
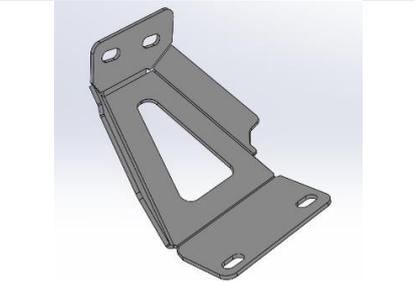
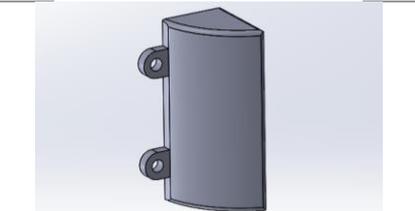
### **IMPORTANT! – READ BEFORE INSTALLATION**

- 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.

# 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	

**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.

<b>Hand Tools</b>	<b>Power Tools</b>	<b>Workshop Equipment</b>
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

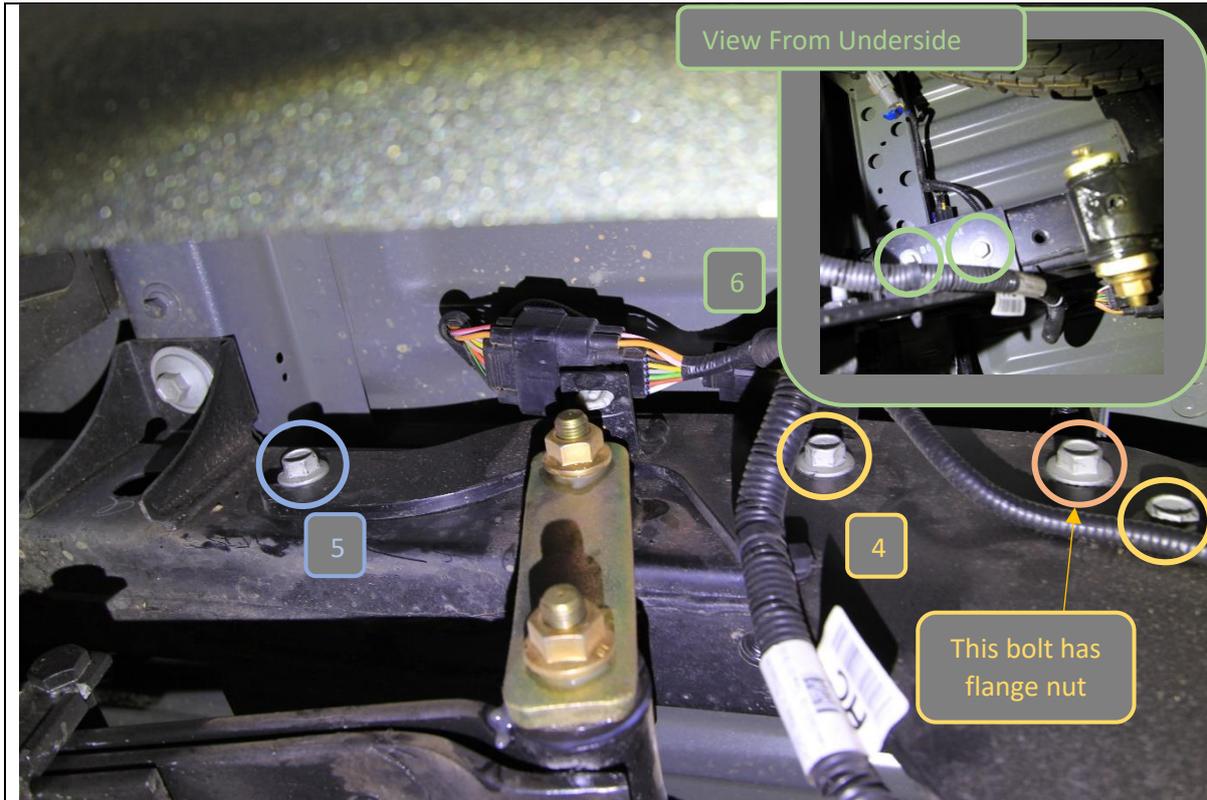
**FASTENERS**



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

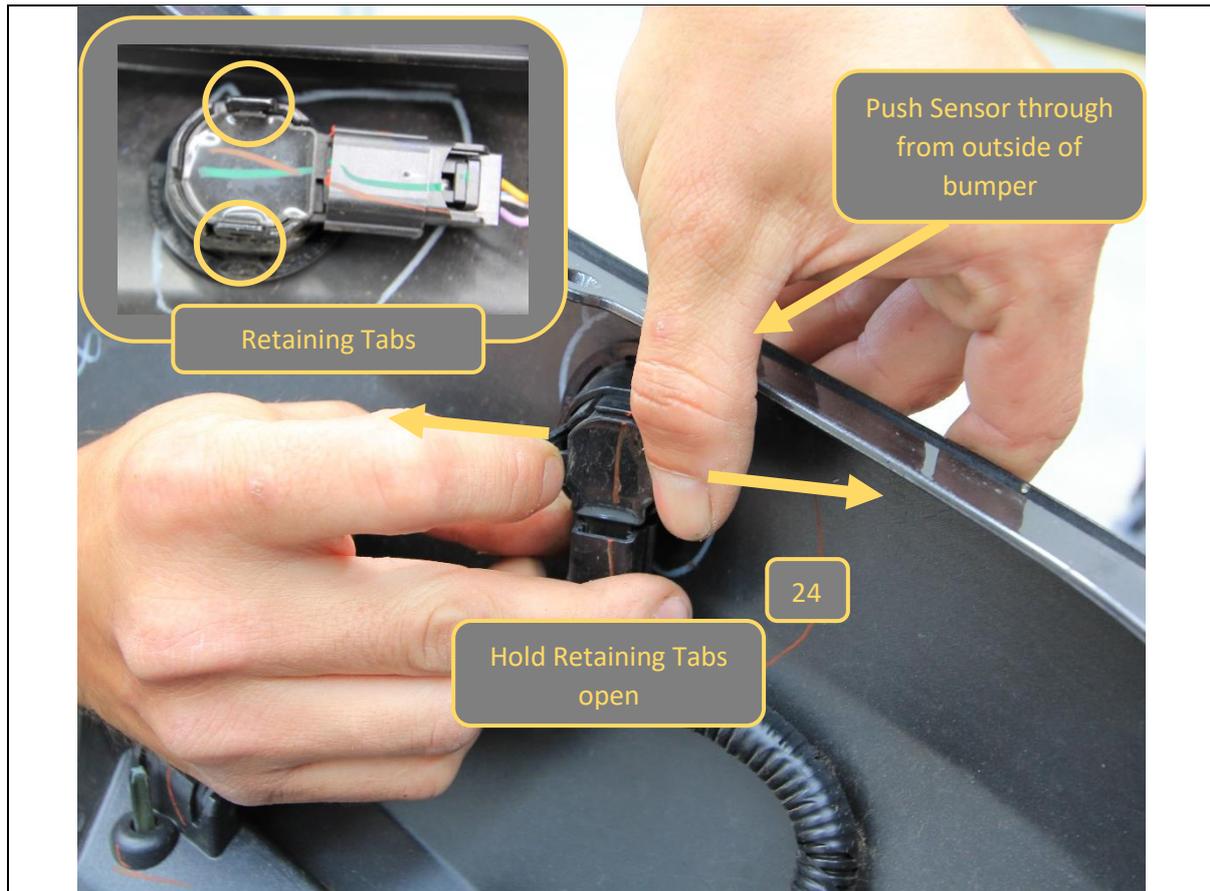
**FASTENERS**



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**

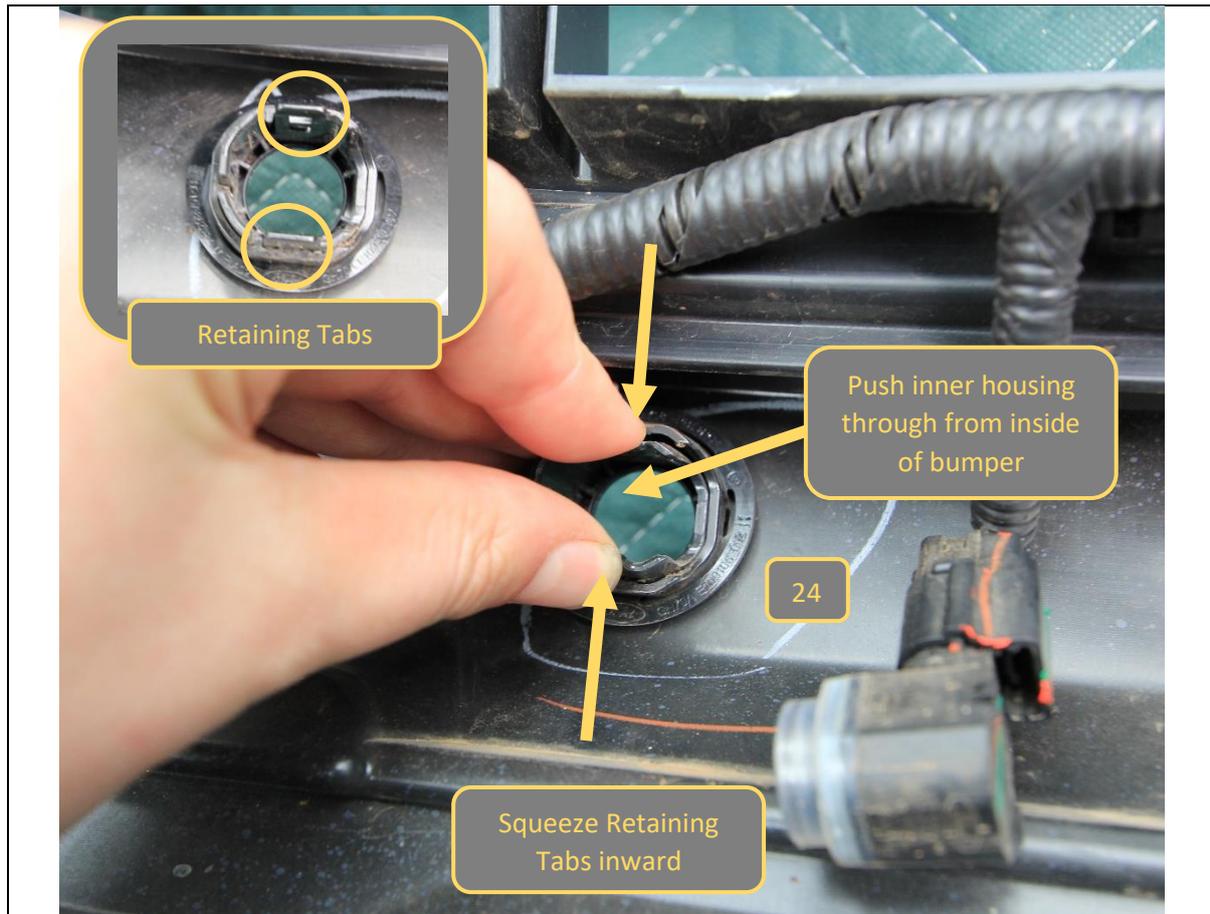


12. Remove parking sensors from housings, by holding open the retaining tabs, whilst pushing the sensor through the housing from the outside of the bumper

13. Repeat for all sensors in the bumper.

**TOOLS REQUIRED**

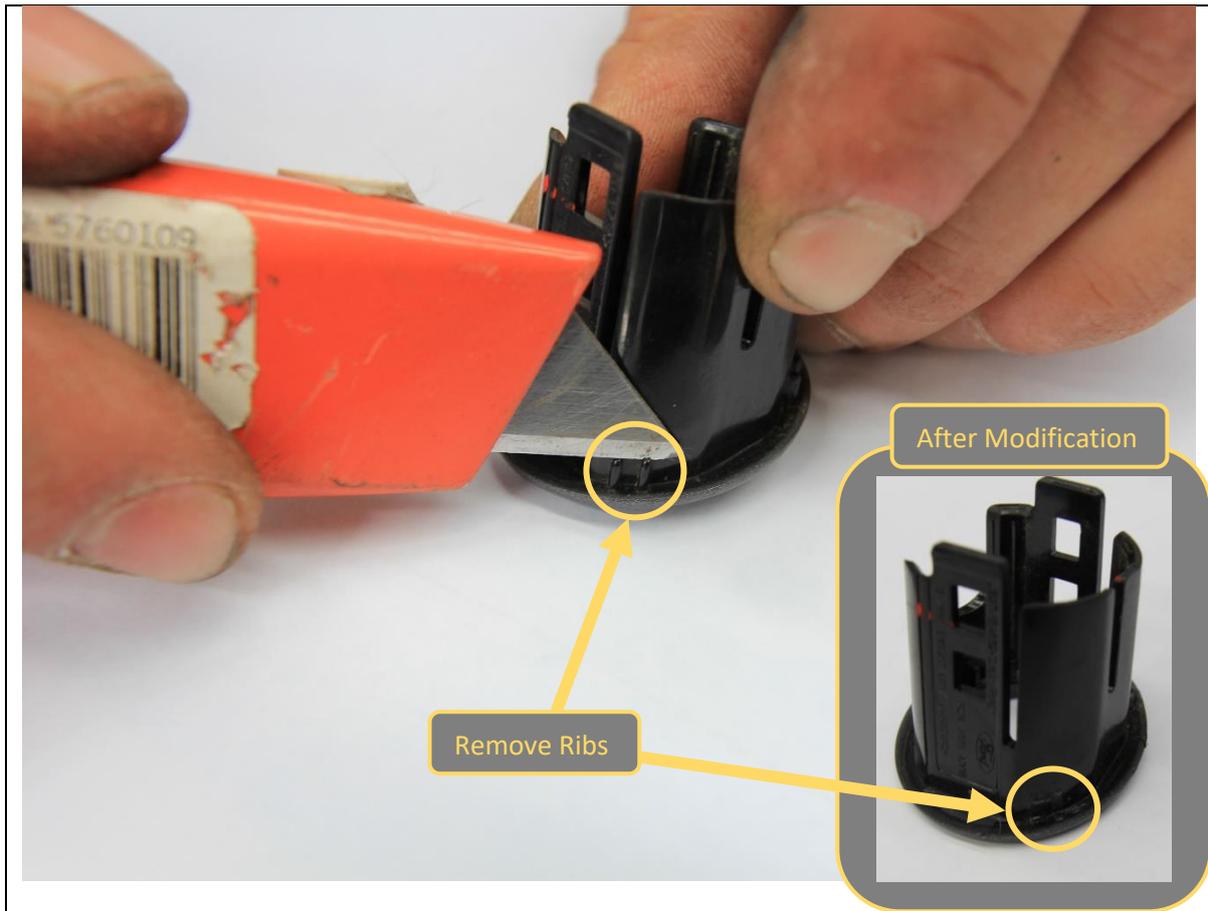
**FASTENERS**



14. Remove parking sensor housings from bumper by squeezing the retaining tabs whilst pushing the inner housing through the bumper from the inside.
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.

**TOOLS REQUIRED**

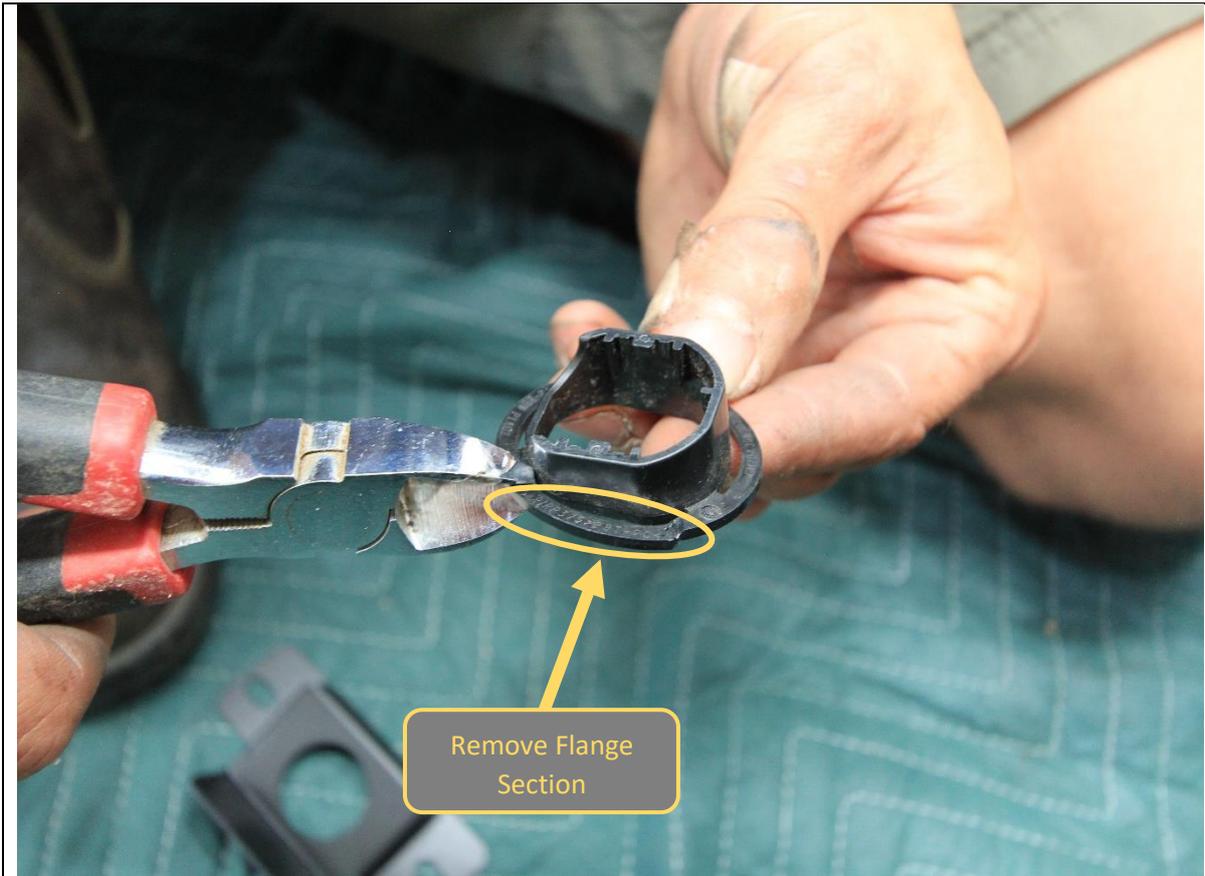
**FASTENERS**



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**



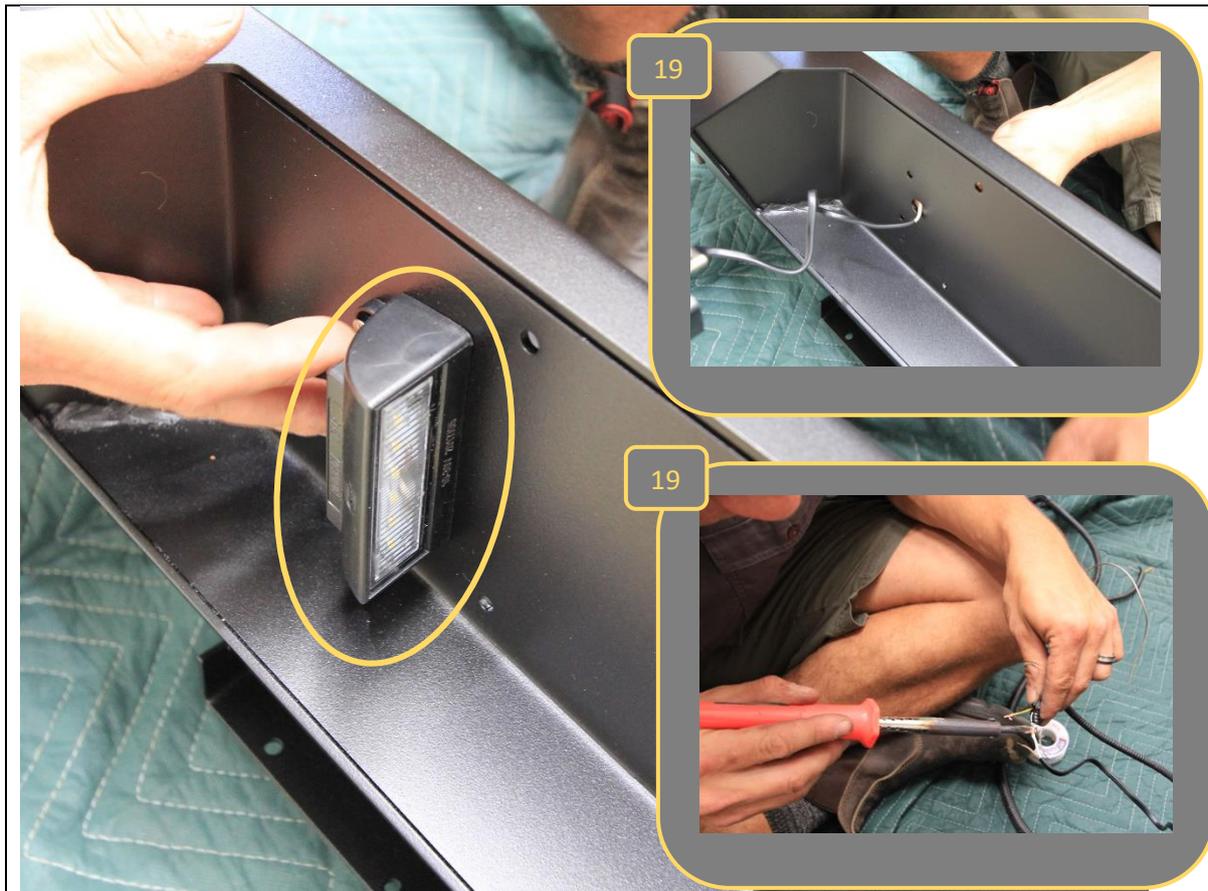
20. Fit the center housings into the sensor brackets. Insert outer housing from outside then replace inner bracket and press until an audible "Click" is heard.
21. Complete the same process to install the outer sensor brackets directly in the wing of the rear bar.
22. Install sensor brackets in rear 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



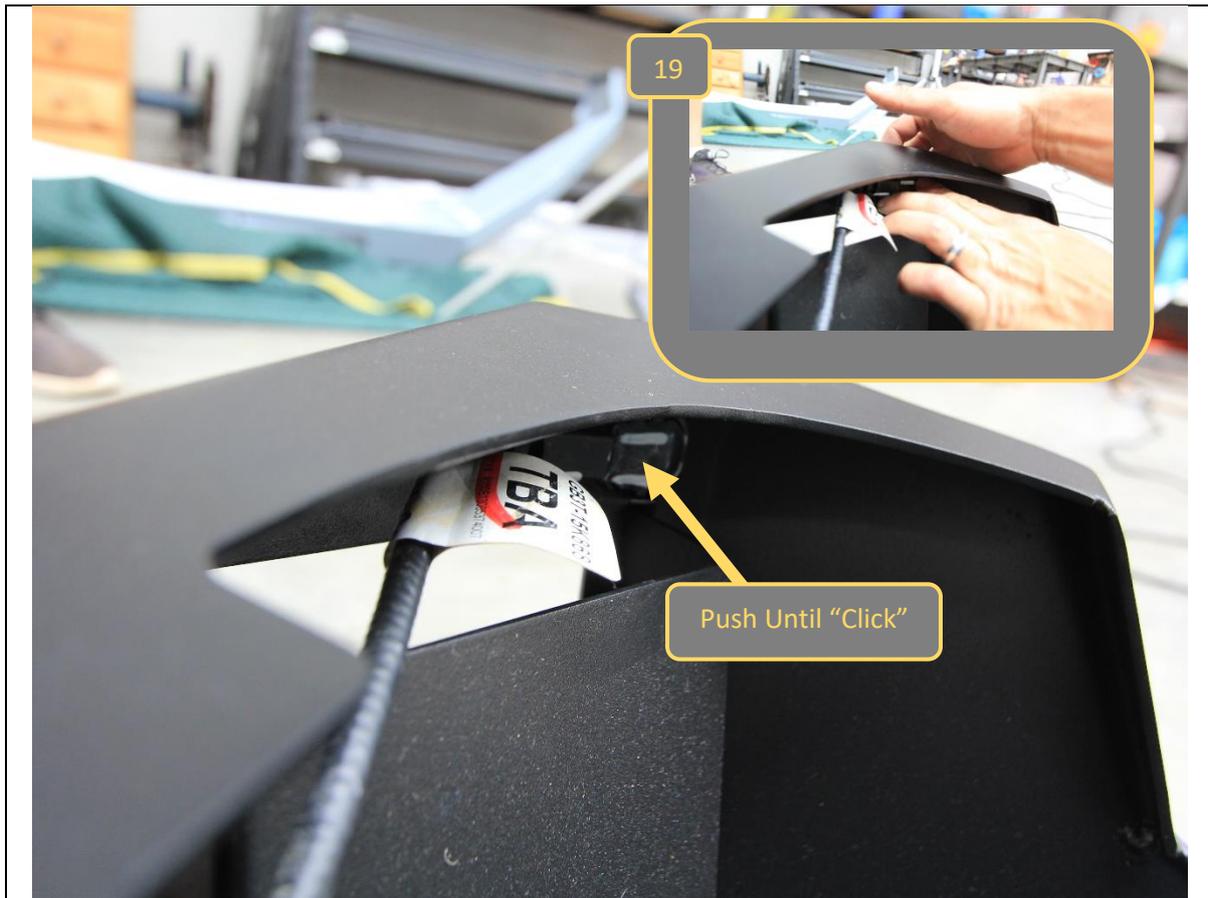
23. Fit the number plate lamps to the rear bar, by first feeding the cable the bar, then securing with screws and nuts supplied in the lamp box.
24. Cut off lamp holders from the factory loom. Strip ends and solder to new LED number plate lamp cables. Use heat shrink or electrical tape to insulate solder connections.
25. Complete for both sides of vehicle.

**TOOLS REQUIRED**

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

**FASTENERS**

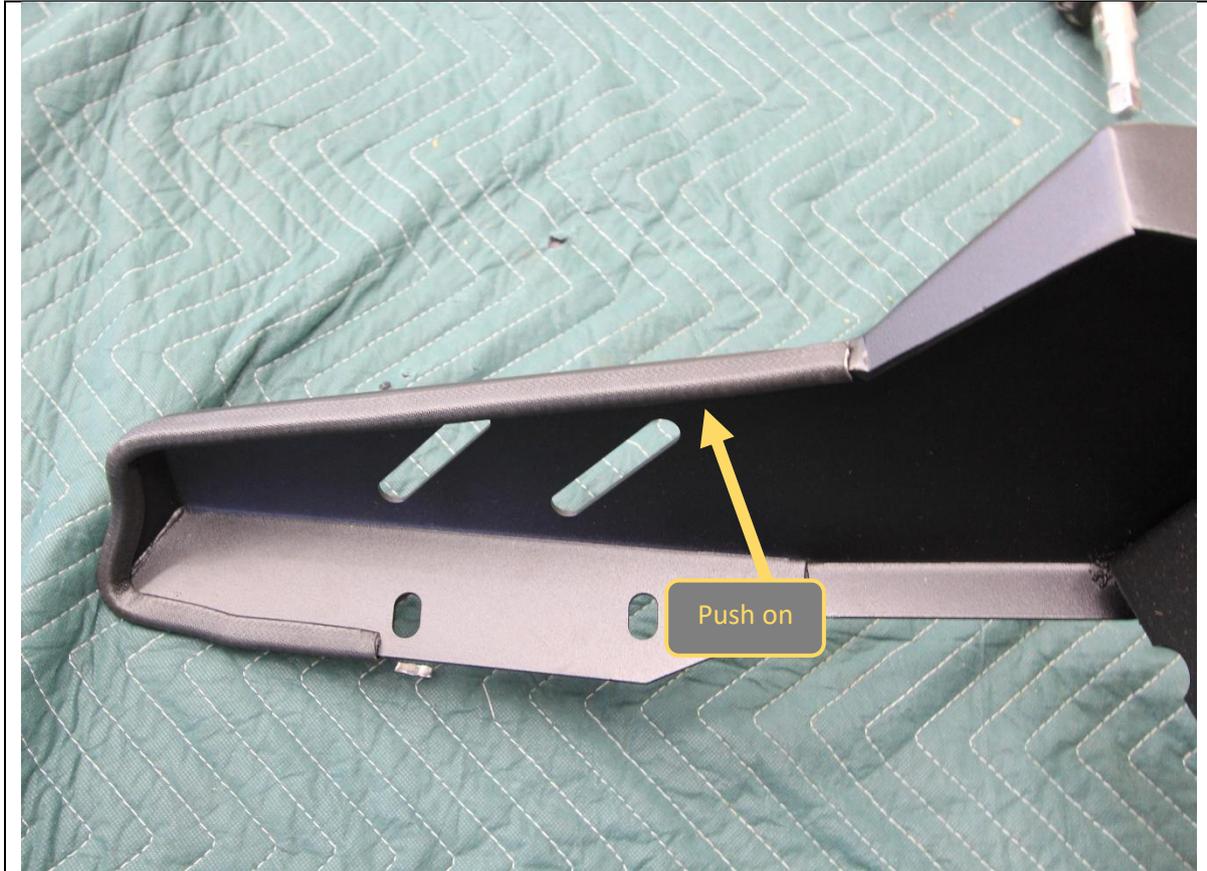
- Screws supplied with Lights



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

**TOOLS REQUIRED**

**FASTENERS**



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

30. Complete for both sides of vehicle.

**TOOLS REQUIRED**

**FASTENERS**



31. 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.
32. 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**



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

**TOOLS REQUIRED**  
 16mm Socket / 15mm  
 Spanner  
 6mm Hex wrench

**FASTENERS**  
 6x M12 Flange head bolts  
 1x M12 Flange Nut  
 1x Factory tow bar nut plate  
  
**per side**



- 36. Re – Fit trailer wiring harness.
- 37. Secure trailer plug to bracket on vehicle using M5 Screw and Nyloc Nut provided
- 38. 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.



- 39. Fit M10x30 Hex bolt and M10 Nut to anti rattle location on bottom of Hitch Box
- 40. Replace TBM and secure with new Pull Pin and R Clip provided.
- 41. Attach Offroad Animal Logo plate to chamfered face, using attached adhesive backing.
- 42. With that you are done!

**TOOLS REQUIRED**

- FASTENERS**
- Pull Pin
  - R-Clip
  - M10x30 Bolt
  - M10 Nut



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