



## FORD RAPTOR RANGER MY2019 ON PREDATOR FRONT BAR

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

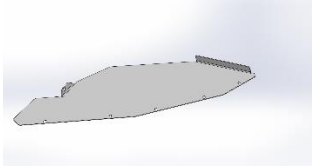
- When installed in accordance with these instructions, the front protection bar does not affect the operation of the vehicles SRS airbags.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning 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.
- Fitting time: 3 hours more for winch and lights

## 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	FB-FRR-PX3-19-PR-ASM1	Ford Ranger Raptor Predator Bar Weldment	
1	FB-FRR-PX-11-PR-ASM2R	IMPACT ASSY PREDATOR PX RAPTOR	
1	FB-FRR-PX-11-PR-ASM2L	IMPACT ASSY PREDATOR PX RAPTR0	
1	B-0082L	PX CHASSIS BRKT GUSSET LH	
1	B-0082R	PX CHASSIS BRKT GUSSET RH	
1	U-0012	RANGER RAPTOR FRONT BASH PLATE	
1	U-0013	RANGER RAPTOR UNDERBODY BASH PLATE	

1	U-00014L	RANGER RAPTOR SIDE UNDERPANEL LH	
1	U-0014R	RANGER RAPTOR SIDE UNDERPANEL RH	
1	M-0011	PX MESH NO ACC FAIRLEAD MOUNT	
1	M-0010L	PX3 Mesh Infill Panel LHS	
1	M-0010R	PX3 Mesh Infill Panel RHS	
1	B-0216	Ranger Winch control box bracket	
1	NPF-COM-SM-ASM0	NUMBER PLATE FLIP ASM SMALL	
1	M-0002R	Light Cover Mesh rh	
1	M-0002L	Light Cover Mesh lh	

1	B-0186L	Fog Lamp Bracket - Ranger PX	
1	B-0186R	Fog Lamp Bracket - Ranger PX	
1	P-0025	TRIM PLATE FRONT	

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

Qty	Part Number	Description
10	M6 CN 3MM	CAGE NUT M6
28	M6 X 16 BHCS BZ	M6 X 16 BUTTON HEAD CAP SCREWS BLACK ZINC
20	M6 FW BZ	M6 FLAT WASHER BLACK ZINC
26	M6 FN	M6 FLANGE NUT
8	M12 X 30	M12 X 30 HEX BOLT ZINC PLATE
16	M12 FW LHD	M12 FLAT WASHER LARGE
8	M12 NN	M12 NYLOC NUT
2	M8 X 20 BHCS BZ	M8 X 20 BUTTON HEAD CAP SCREW BLACK ZINC
14	M8 FW BZ	M8 FLAT WASHER BLACK ZINC
20	M8 FN	M8 FLANGE NUT
10	M8 X 16 BHCS BZ	M8 X 16 BUTTON HEAD CAP SCREW BLACK ZINC
2	M8 X 25 ZP	M8 X 25 HEX ZINC PLATE
6	M8 FW	M8 FLAT WASHER
3	M10 X 25 BHCS	M10 X 25 BUTTON HEAD CAP SCREW ZINC
11	M10 FN	M10 FLANGE NUT
27	M10 FW	M10 FLAT WASHER
2	M8 X 20	M8 X 20 HEX BOLT ZINC PLATE
20	M10 X 30	M10 X 30 HEX BOLT ZINC PLATE
4	M10 NN	M10 NYLOC NUT

1	OFA-LOGO	OFFROAD ANIMAL METAL LOGO PLATE
8	M5 FN	M5 FLANGE NUT
8	M5 X 15 PAN	M5 X 15 PAN HEAD SCREW
2	P-0072	PREDATOR BASH PLATE SHIM
4	M8 X 30 BHCS BZ	M8 X 30 BUTTON HEAD CAP SCREW BLACK ZINC
16	M8 NUT	NUT,M8X1.25P G8.8 ZP
8	M6x35 BHCS	M8 X 35 BUTTON HEAD CAP SCREW BRIGHT ZINC

## TOOLS REQUIRED

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Supplies
Metric Socket Set 8-19mm Socket Extension Bar Metric Spanner Set 10-19mm Torx Drivers T25 Trim Puller Tool or Flat Blade Screwdriver Phillips Head Screwdriver Allen keys 4mm, 5mm and 6mm	Electric Drill 6mm Drill Bit  Electric/Air Impact Driver (Optional)	

# 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. Remove screws from edge of wheel arch (3 per side)

**TOOLS REQUIRED**

**T25 Torx bit**

**FASTENERS**

Discard



2. Remove one screw from underside (1 per side)

**TOOLS REQUIRED**

**T25 Torx bit**

**FASTENERS**

discard





3. Pull away plastic insert as shown from both sides

**TOOLS REQUIRED**

**FASTENERS**



4. Remove factory bash plate (4 screws, 2 fwd and 2 at back)

**TOOLS REQUIRED**

**15mm Socket or spanner**

**FASTENERS**

Retain



5. Rear bolts shown in this step

**TOOLS REQUIRED**

**15mm socket or spanner**

**FASTENERS**

retain



6. Be smart and save this or sell it to some sucker on ebay/facebook how doesn't have a cool new bull bar like you.

**TOOLS REQUIRED**

**FASTENERS**



7. Remove 2x M6 bolts from under bumper

**TOOLS REQUIRED**

**10mm socket**

**FASTENERS**

discard



8. Using a trim tool pry off lower fascia as shown from both sides

**TOOLS REQUIRED**

**Trim Tool or flat head screw driver**

**FASTENERS**





9. Discarded piece shown. You won't need this anymore	<b>TOOLS REQUIRED</b>
	<b>FASTENERS</b>



10. Remove 2 x M8 bolts from front as shown

**TOOLS REQUIRED**

**13mm socket**

**FASTENERS**

discard





11. Remove 2 x M8 bolts per side as shown

**TOOLS REQUIRED**

**13mm socket or spanner**

**FASTENERS**

discard



12. Pry out connector and retainers for fog light loom as shown

**TOOLS REQUIRED**

Trim tool or flat head screw driver

**FASTENERS**



13. Remove Connector show from under bumper

**TOOLS REQUIRED**

Trim tool or flat head  
screwdriver

**FASTENERS**



14. Remove 2 x M10 bolts shown per side behind bumper

**TOOLS REQUIRED**

15mm socket

**FASTENERS**

Discard



15. Remove plastic clips as shown, do this by pushing male section from outside to push clip back towards car (2 clips)

**TOOLS REQUIRED**

**FASTENERS**  
Discard





16. Remove factory bumper and place on ground

**TOOLS REQUIRED**

**FASTENERS**



17. Remove FM antenna control box as shown

**TOOLS REQUIRED**

**7mm socket or spanner**

**FASTENERS**

Retain



18. Pry out all cable/loom keeper for FM control box

**TOOLS REQUIRED**

Trim tool or flat head screw driver

**FASTENERS**





19. Remove Fog light with (3 screw per side)

**TOOLS REQUIRED**

**T25 Torx bit**

**FASTENERS**

discard



20. Set aside wiring harness from bumper

**TOOLS REQUIRED**

**FASTENERS**



21. Be a good lad and don't forget to remove your front number plate

**TOOLS REQUIRED**

Phillips head screw driver

**FASTENERS**

Discard



22. Shown is front bumper, bash plate and fascia panels that are no longer required.

**TOOLS REQUIRED**

**FASTENERS**





23. Here is what your front should look like at this stage. A bit naked I know.

**TOOLS REQUIRED**

**FASTENERS**



24. Time to remove lower air damn. See the white clip in the pic above, you need to pry this out from the inside of the chassis. One per side

**TOOLS REQUIRED**

**Trim tool or flat head screw driver**

**FASTENERS**

Discard



25. Here is the lower air damn removed

**TOOLS REQUIRED**

**FASTENERS**  
discard



26. Relocate FM control box to tapped hole on body as shown

**TOOLS REQUIRED**

**7mm socket**

**FASTENERS**

Factory

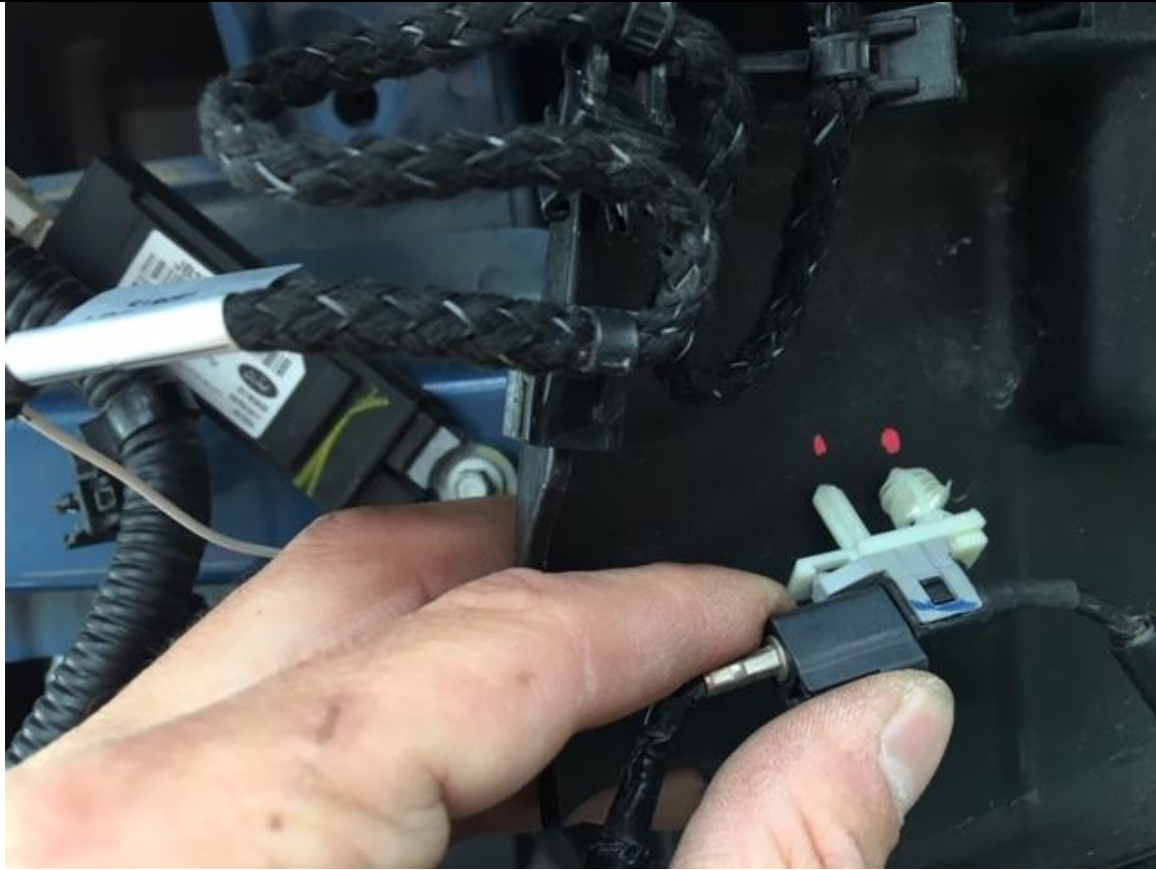




27. No idea why this pic looks like this, sorry. Anyway do some magic and pin up the wires as shown Where exactly it goes doesn't really matter as long as it stays up.

**TOOLS REQUIRED**

**FASTENERS**



28. Relocate connector shown up on to plastic air dam guides as shown. Mark with paint pen then drill out with 6mm drill bit

**TOOLS REQUIRED**

**Paint Pen  
6mm Drill bit  
Power Drill**

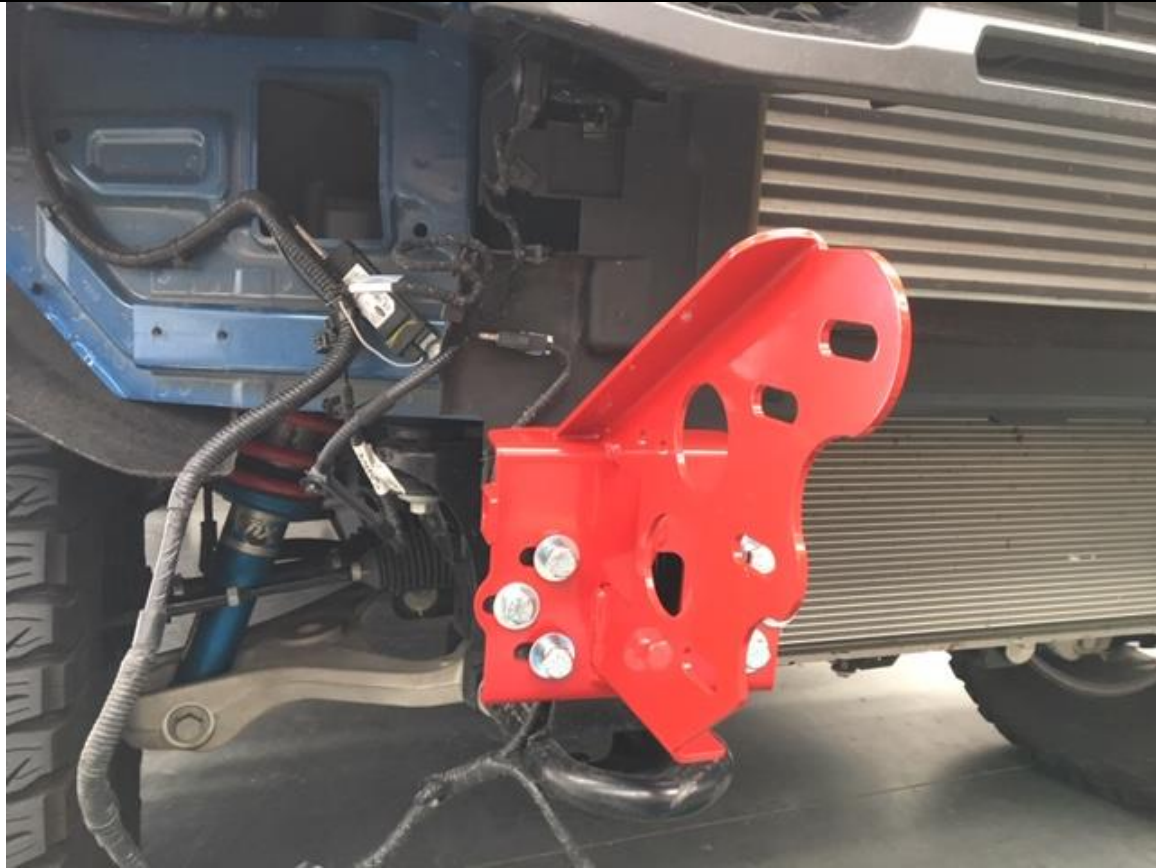
**FASTENERS**



29. Push connector into new drilled holes as shown

**TOOLS REQUIRED**

**FASTENERS**



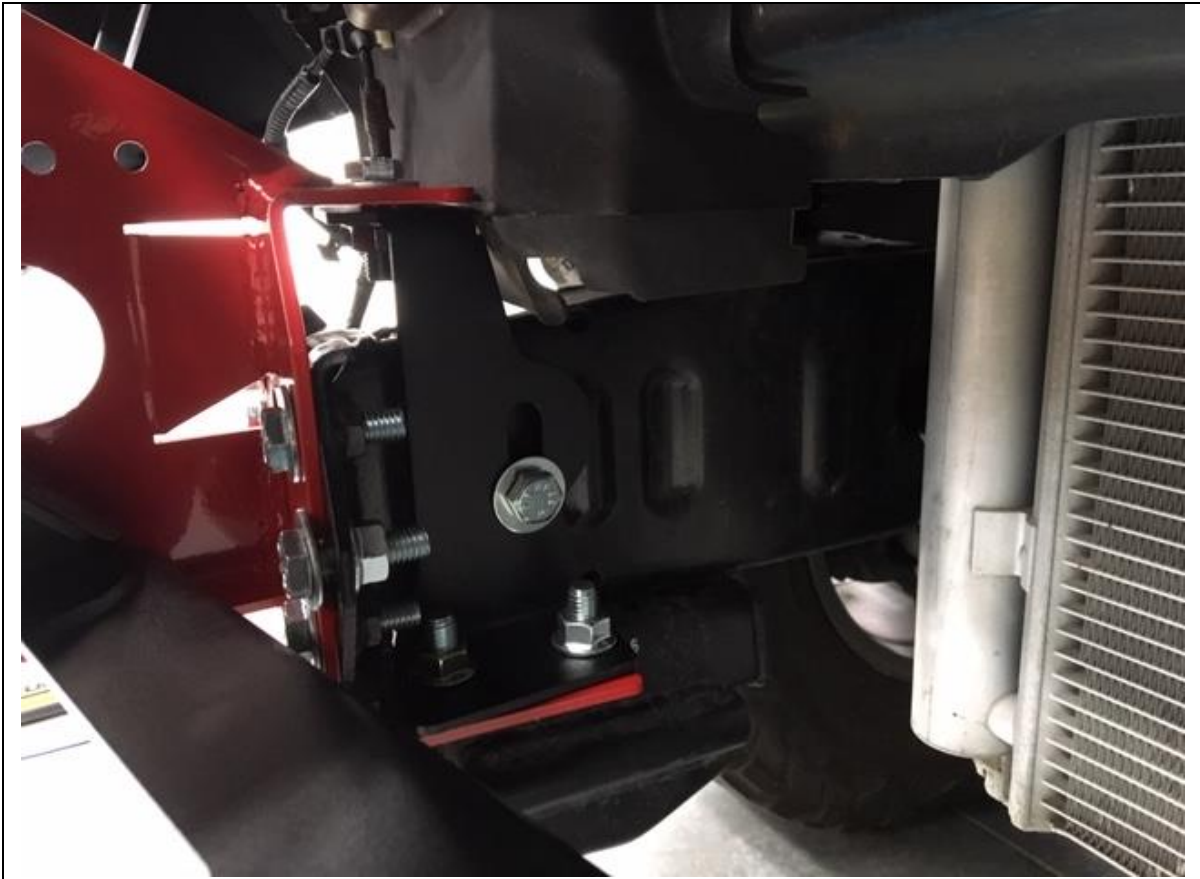
- 30. Place Chassis mounts on to chassis with M10 x 30 Bolts  
Leave loose. Use M10 x 30 bolts with washers directly  
through mount into Chassis. Two bolts will need nuts on  
the back
- 31. Repeat for other side

**TOOLS REQUIRED**

- 16mm Socket or spanner**
- 17mm Spanner**

**FASTENERS**

- M10 x 30 hex bolt (12)
- M10 flat washer (12)
- M10 Nyloc nuts (4)



- 32. Fit Chassis bracket gusset as shown. Position a flange nut inside the chassis with your fingers then using M10 x 30 hex bolt and flat washer loosely fit bracket. Using 3 more M10 x 30 bolts, washers and flange nuts loosely fit top and bottom of gusset to chassis mount
- 33. Repeat for other side

**TOOLS REQUIRED**

**16mm socket and spanner**

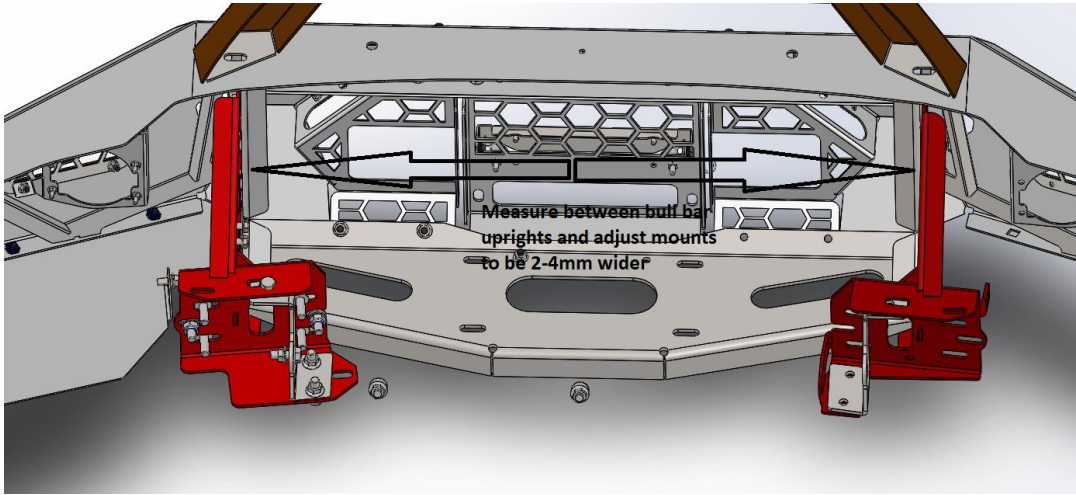
**FASTENERS**

M10 x 30 Hex (8)  
M10 flat washer (8)  
M10 flange nut (8)





<p>34. Using a flat head screw driver fit cage nuts to bottom edge of bar</p>	<p><b>TOOLS REQUIRED</b></p> <p>Flat head screwdriver</p>
	<p><b>FASTENERS</b></p> <p>M6 cage nuts (10)</p>



35. Measure bull bar between uprights and then adjust mounts to be 2mm-4mm wider.

**TOOLS REQUIRED**

**16mm Spanner and socket  
17mm spanner**

**FASTENERS**



36. With the help of a friend or a lifting table raise the bar on to the mounts and place bolts through mounts and bar uprights
37. Lowest most bolt goes in from the outside while all other bolts go in from the inside.
38. Tighten one bolt per side at this stage

**TOOLS REQUIRED**

- 18mm socket**
- 19mm spanner**

**FASTENERS**

- M12x30 hex bolt (8)
- M12 large flat washers (16)
- M12 nyloc nuts (8)





- 39. Take time to position bar on vehicle with special care to keeping bar in centre of vehicle.
- 40. Leave a 15mm-20mm gap between bar and body. This is due to body being mounted on body rubbers so will move separate to chassis and bull bar
- 41. Once happy with position, torque down all bolts for mounts and bar

**TOOLS REQUIRED**

- 16mm spanner**
- 16mm socket**
- 17mm spanner**
- 18mm socket**
- 19mm spanner**

**FASTENERS**



- 42. If fitting a winch, now is the time to feed it through centre gap
- 43. You may need to rotate the clutch lever to suit mesh panels and hand access

**TOOLS REQUIRED**

**16mm spanner or socket**

**FASTENERS**

Supplied with winch



44. Depending on control box, ideal location is to mount on top of the winch, however if required fit winch control box mount as shown with

**TOOLS REQUIRED**

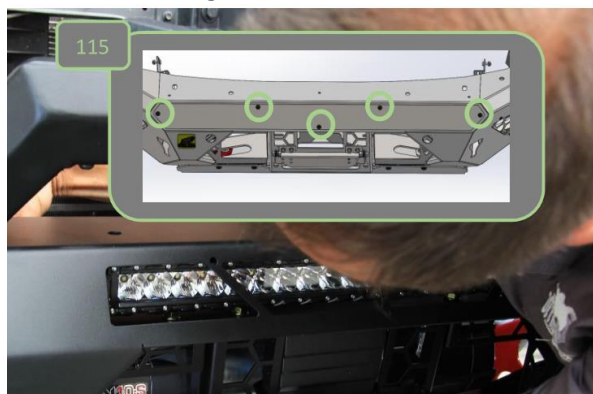
**13mm spanner**

**FASTENERS**

M8 x 25 hex bolt (2)  
M8 flat washer (2)  
M8 flange nut(2)



- 45. If fitting LED light bar to bull bar, feed into location now but do not bolt down.
- 46. If not fitting a light bar fit cover plate over this area and secure with 5 x M6 x 16 black button head cap screws washers and flange nuts



**TOOLS REQUIRED**  
4mm Allen Key

**FASTENERS**  
M6 x 16 bhcs black (5)  
M6 flat washer black (5)  
M6 flange nuts (5)





47. If fitting a winch fit fairlead to centre mesh panel with winch supplied hardware

**TOOLS REQUIRED**

Depends on what was supplied with winch

**FASTENERS**





48. Fit Number plate flip bracket to centre panel with M6 hardware

**TOOLS REQUIRED**

**10mm socket and spanner**

**FASTENERS**

M6 x 20 hex bolt (2)  
M6 flat washer (2)  
M6 flange bolt (2)



49. Fit centre mesh panel to bar with M8 x 16 black button head cap screw through the top and M8 x 20 black button head cap screws through bottom. Use washers and flange nuts

**TOOLS REQUIRED**

**5mm Allen key**

**FASTENERS**

M8 x 16 black BHCS (2)  
M8 x 20 black BHCS (2)  
M8 flat washer black (4)  
M8 flange nuts (4)



50. Fit RH mesh panels with M8 x 16 button head cap screw wash and flange nut from above as shown

**TOOLS REQUIRED**

**5mm Allen key**

**FASTENERS**

M8 x 16 black BHCS (1)  
M8 flat washer black (1)  
M8 flange nuts (1)



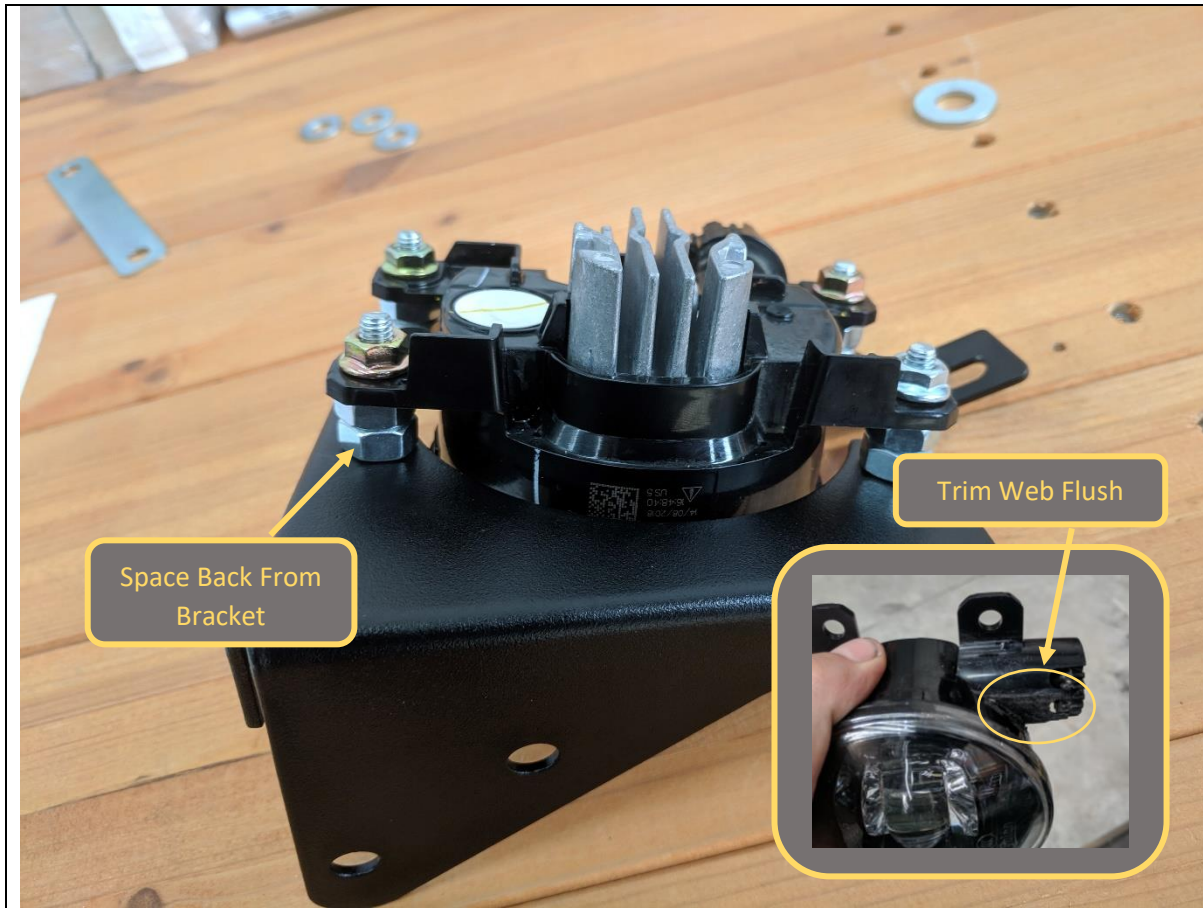
51. Fit LH mesh panel same as right

**TOOLS REQUIRED**

**5mm Allen key**

**FASTENERS**

M8 x 16 black BHCS (1)  
M8 flat washer black (1)  
M8 flange nuts (1)



- 52. If fitting factory LED fog lights, First trim webs from angle adjuster at bottom of light housing using a utility knife as shown.
- 53. Fit fog lights to mesh panels using M6x35 BHCS bolts and space back from bracket using M8 Nuts as shown. Secure with M6 Flange Nut.

**TOOLS REQUIRED**  
4mm Allen key  
10mm Spanner  
Utility Knife

**FASTENERS**  
M6 x 35 pan head (8)  
M6 flange nuts (8)  
M8 Nut (16)





54. If fitting cube lights, fit directly to mesh panels as shown

**TOOLS REQUIRED**

Depending on lights

**FASTENERS**

Supplied with lights



55. Repeat for other side

**TOOLS REQUIRED**

**FASTENERS**



- 56. Feed mesh panel and lights in from under bar and position to bar.
- 57. Secure with M6 x 16 black button head cap screws and flange nuts (no washers.) On some bolts it's easier to hold nut in place then feed screw in.
- 58. Repeat for other side

**TOOLS REQUIRED**

**4mm Allen key**

**FASTENERS**

M6 x 16 black bhcs (8)  
M6 flange nuts (8)



59. Fit front bash plate to lower section of bar. Insert part P-0072 shim plate between bar and bash plate. Use M8 x 30 button head cap screws, flat washers and flange nuts. Leave bolts loose

**TOOLS REQUIRED**

**5mm Allen Key**

**FASTENERS**

M8 x 30 bhcs black (4)  
M8 flat washer black (4)  
M8 flange nut (4)



60. Time to fit new lower bash plate, with factory bolts started into threads at the back you can use them to hold up the back of the bash plate while you lift up the front and feed in M10 x 25 button head cap screws and washers.

**TOOLS REQUIRED**

**FASTENERS**

- Factory bolts (2)
- M10 x 25 bhcs (3)
- M10 flat washer (3)
- M10 flange nut (3)





61. M10 button head cap screws tying in both bash plates shown

**TOOLS REQUIRED**

**FASTENERS**



<p>62. Once all bolts are started you can torque up M8 bolts</p>	<p><b>TOOLS REQUIRED</b></p> <p><b>5mm Allen Key</b></p>
	<p><b>FASTENERS</b></p>



63. Don't forget to torque up bottom factory bolts

**TOOLS REQUIRED**

15mm socket or spanner

**FASTENERS**

Factory bolts



64. Torque up M10 bolts (3)

**TOOLS REQUIRED**  
6mm Allen key

**FASTENERS**



- 65. Plug in fog light loom
- 66. Fit ADR compliance plate on inside of bar

**TOOLS REQUIRED**

**FASTENERS**





<p>67. If fitting stealth top hoop, do so now with supplied M10 bolts from hoop kit</p>	<p><b>TOOLS REQUIRED</b></p> <p>16mm spanner</p>
	<p><b>FASTENERS</b></p> <p>M10 x 30 hex bolt (2) M10 flat washer (2) M10 flange nut (2)</p>



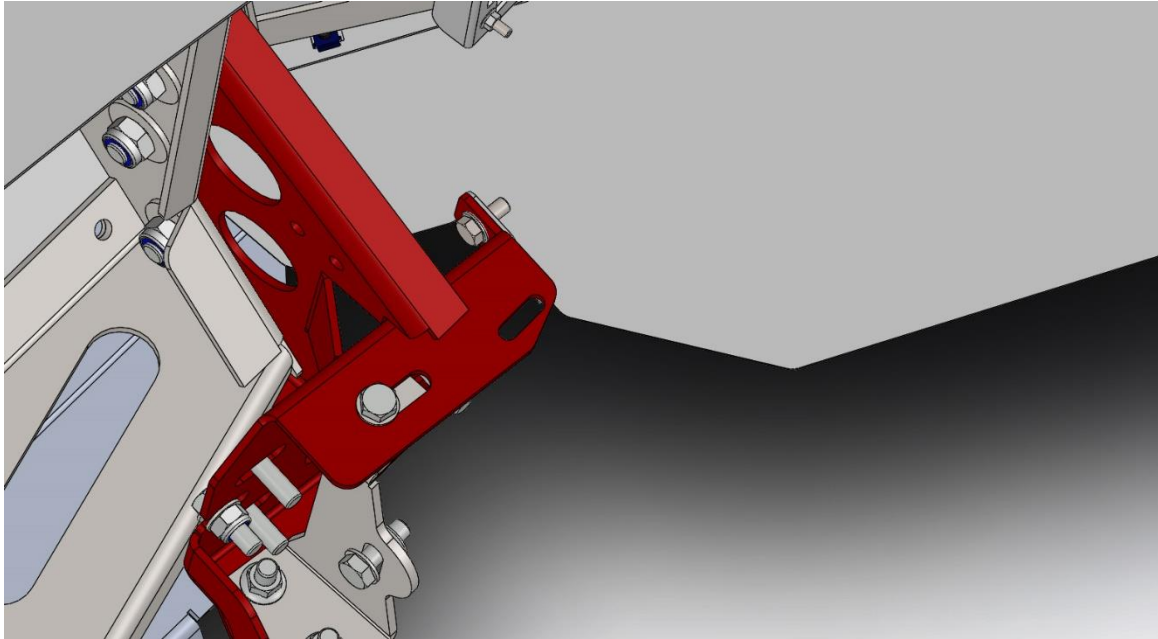
68. Position under panel on to bottom of wing and secure with M6 button head cap screws and washers

**TOOLS REQUIRED**

**4mm Allen Key**

**FASTENERS**

M6 x 16 BHCS black (10)  
M6 flat washer black (10)



69. Secure inside edge of under panel to mount with M8 hardware

**TOOLS REQUIRED**

**13mm Spanner**

**FASTENERS**

M8 x 20 hex bolt (2)

M8 flat washer (2)

M8 flange nut (2)



70. Fit logo plate to front of bar

**TOOLS REQUIRED**

**FASTENERS**



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