

FORD RAPTOR RANGER

MY2019 ON

PREDATOR FRONT BAR

IMPORTANT! – READ BEFORE INSTALLATION

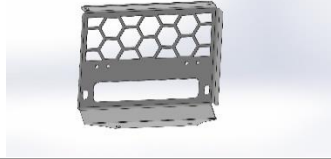
- When installed in accordance with these instructions, the front protection bar does not affect the operation of the vehicles SRS airbags.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning 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 RAPTOR	
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	B-0607	PX Ranger Front Bar - Center Section Brace	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
10	M6CN3MM	CAGE NUT M6x2.6-3.5
1	M6x12 BHCS	SCREW, BUTTON HEAD CAP, M6X12X1 GR12.9 ZP
16	M6x16 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9 BLACK ZP
16	M6 FLAT WASHER BLACK ZINC	M6 FW BLACK ZP
22	M6 FLANGE NUT	Flange Nut, M6x1 G8.8 ZP
8	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
16	M12 FW LHD	M12 FW Large Heavy Duty
8	M12 Nyloc nut	M12 NYLOC NUT
4	M8 X 30 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X30X1.25 BLACK ZP
14	M8 FLAT WASHER- BLACK ZINC	M8 FW- BLACK ZINC
20	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP
10	M8 X 16 BHCS BZP	SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9 BLACK ZP
2	M8 X 25 HEX	Bolt Hex, M8X25x1.25, GR8.8 ZP
6	M8 FLAT WASHER	M8 FW
3	M10X25 BHCS	SCREW, BUTTON HEAD CAP, M10X25X1.5 GR12.9 ZP
11	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
27	M10 Flat Washer	M10 FW

2	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25 BLACK ZP
2	M8X20	Bolt Hex, M8X20X1.25, GR8.8 ZP
20	M10 x 30	Bolt Hex, M10X30x[1.5], GR8.8 ZP
4	M10 NYLOC	NYLOC SELF LOCKING NUT, ST STL A2 ISO
2	P-0072	Predator Bash Plate Shim





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

TOOLS REQUIRED**FASTENERS**



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



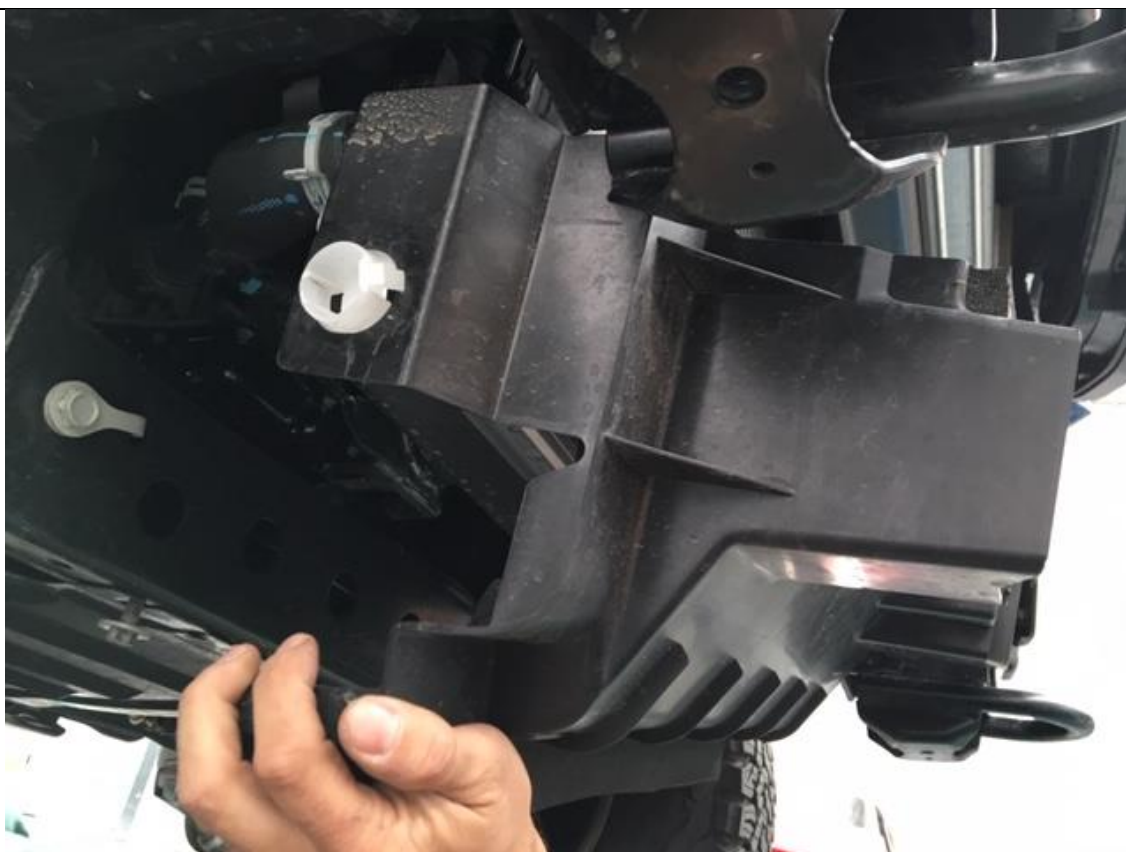
22. Shown is front bumper, bash plate and fascia panels that are no longer required.

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

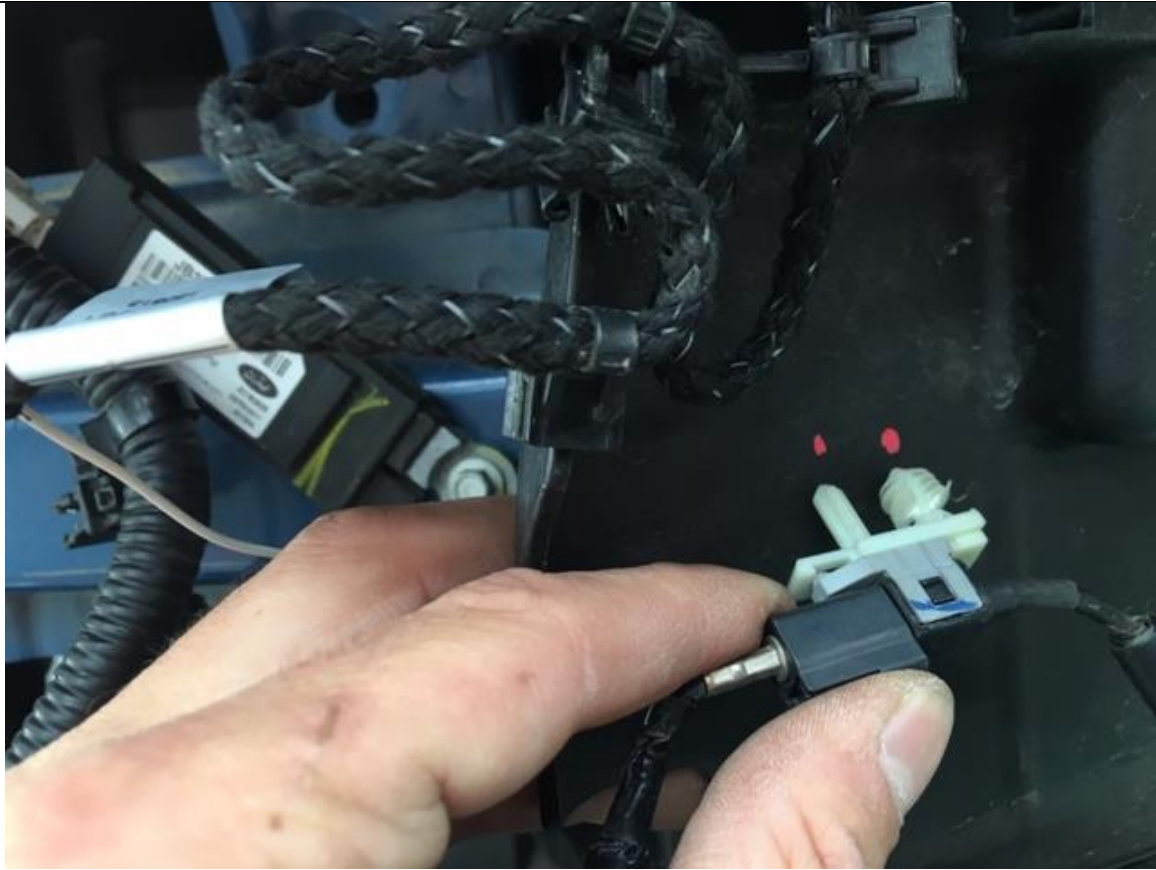
FASTENERS

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



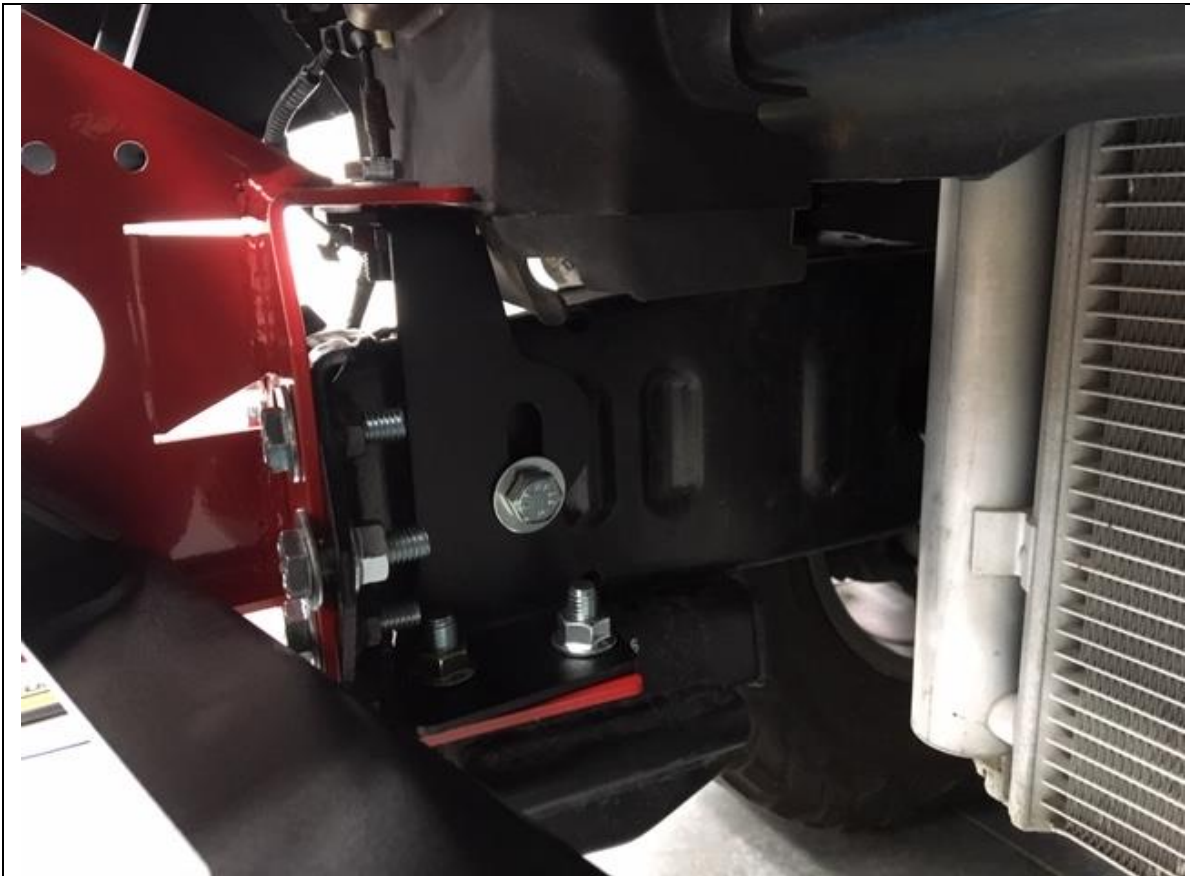
30. Place Chassis mounts on to chassis with M10 x 30 Bolts
Leave loose. Use M10 x 30 bolts with washers directly
through mount into Chassis. Two bolts will need nuts on
the back
31. Repeat for other side

TOOLS REQUIRED

16mm Socket or spanner
17mm Spanner

FASTENERS

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



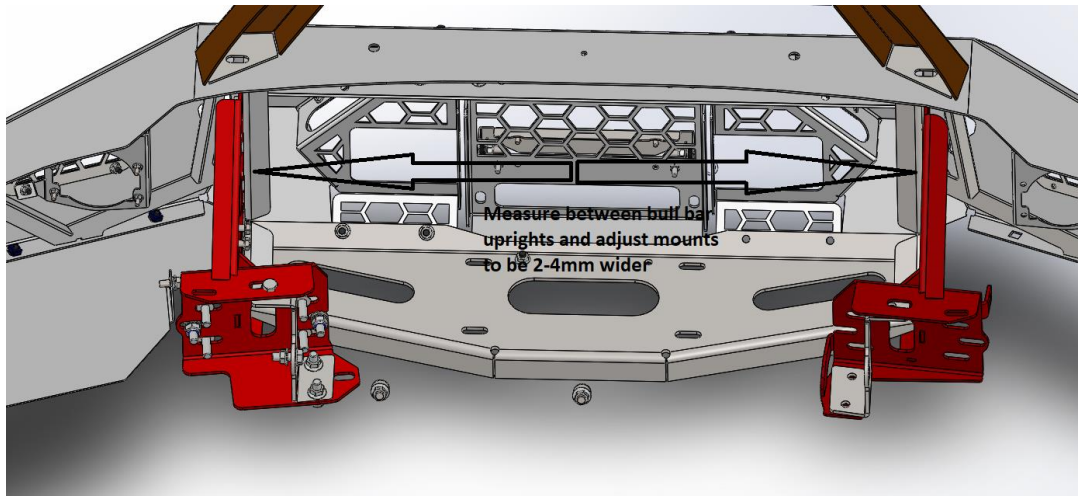
32. Fit Chassis bracket gusset as shown. Position a flange nut inside the chassis with your fingers then using M10 x 30 hex bolt and flat washer loosely fit bracket. Using 3 more M10 x 30 bolts, washers and flange nuts loosely fit top and bottom of gusset to chassis mount
33. Repeat for other side

TOOLS REQUIRED**16mm socket and spanner****FASTENERS**

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



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



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

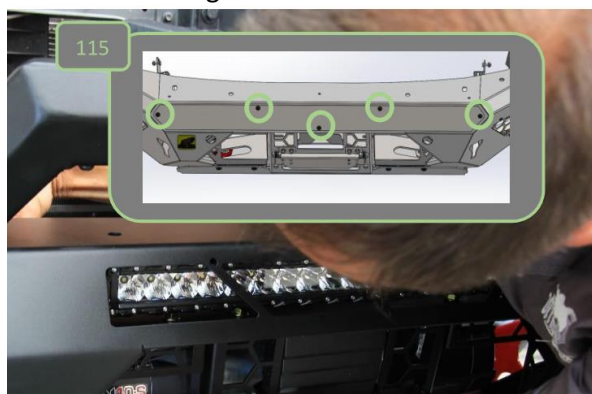
13mm spanner

FASTENERS

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

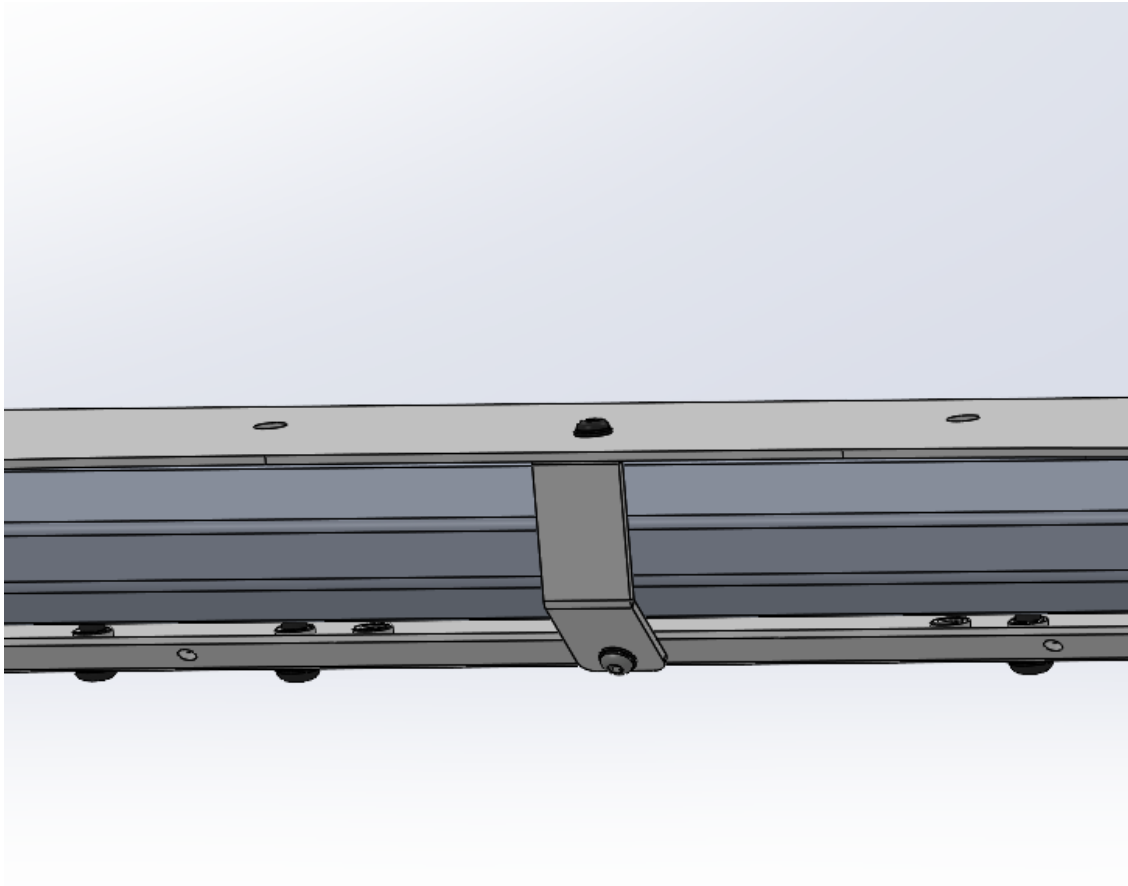


45. If fitting LED light bar to bull bar, feed into location now but do not bolt down.
46. If not fitting a light bar fit cover plate over this area and secure with 5 x M6 x 16 black button head cap screws washers and flange nuts



TOOLS REQUIRED
4mm Allen Key

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



47. Fit the center pan support brace, using M6x12 Button Head bolts, Flat Washer and Flange nut to gusset and M6x16 Black Button head bolt to Pan.

NOTE: If your bar does not come with the pan support brace, please contact Offroad Animal for retrofittable version.

TOOLS REQUIRED
4mm Hex Key

FASTENERS
1xM6x12 BHCS
1x M6x16 Black BHCS
2x M6 Flat Washer
2xM6 Flange Nut



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

TOOLS REQUIRED

Depends on what was
supplied with winch

FASTENERS



49. 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)



50. 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)



51. 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)



52. 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)

	
<p>53. If fitting factory LED fog lights fit them to the fog light brackets now.</p> <p>54. Do this using using M6x16 BHCS bolts and flat washers. Secure with M6 Flange Nuts.</p> <p>55. Next fit the Fog light brackets to the mesh panels</p>	<p>TOOLS REQUIRED</p> <p>4mm Allen key 10mm Spanner Utility Knife</p>
	<p>FASTENERS</p> <p>M6 x 16 button head (8) M6 flange nuts (8) M6 Nut (16) M8x16mm Button head bolts (3) 3x M8 Flat Washer (3) 3x M8 Flange Nuts (3)</p>



56. If fitting cube lights, fit directly to mesh panels as shown	TOOLS REQUIRED Depending on lights
	FASTENERS Supplied with lights



57. Repeat for other side

TOOLS REQUIRED

FASTENERS



58. Feed mesh panel and lights in from under bar and position to bar.
59. 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.
60. Repeat for other side

TOOLS REQUIRED**4mm Allen key****FASTENERS****M6 x 16 black bhcs (8)**
M6 flange nuts (8)



61. 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)



62. 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)



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

TOOLS REQUIRED**FASTENERS**

		
64. Once all bolts are started you can torque up M8 bolts	TOOLS REQUIRED	
	5mm Allen Key	
	FASTENERS	



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

TOOLS REQUIRED

15mm socket or spanner

FASTENERS

Factory bolts



66. Torque up M10 bolts (3)

TOOLS REQUIRED
6mm Allen key

FASTENERS



67. Plug in fog light loom
68. Fit ADR compliance plate on inside of bar

TOOLS REQUIRED**FASTENERS**



69. If fitting stealth top hoop, do so now with supplied M10 bolts from hoop kit

TOOLS REQUIRED

16mm spanner

FASTENERS

M10 x 30 hex bolt (2)
M10 flat washer (2)
M10 flange nut (2)



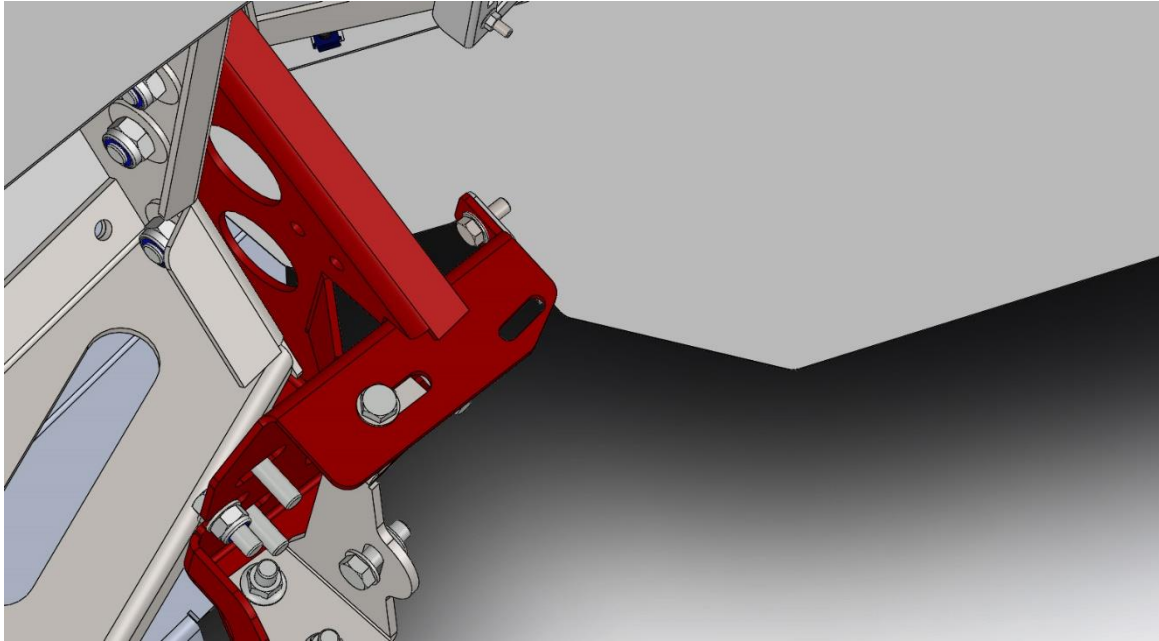
70. Position under panel on to bottom of wing and secure with M6 button head cap screws and washers

TOOLS REQUIRED

4mm Allen Key

FASTENERS

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



71. 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)



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