



FORD RANGER RAPTOR

PX3 2019-2022

ROCK SLIDERS

IMPORTANT! – READ BEFORE INSTALLATION

- 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 estimated 1-2 hours

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
2	E-0002-1800	Slider extrusion - 1800MM	
2	B-0207	Slider Step PX Ranger	
1	RS-FRA-PX-11-ASM2L	Ranger Slider Front Mount Assy	
1	RS-FRA-PX-11-ASM2R	Ranger Slider Front Mount Assy	
5	NP-COM-M12-300-ASM0	M12 NUT PLATE 300MM STEM	
2	NP-COM-M12-300LP-ASM1	M12 NUT PLATE 300MM STEM LOW PROFILE HEAD	
2	P-0119	Front Mount Brace Plate	

3	RS-FRA-PX-11-ASM3	PX Ranger Slider - Mid / Rear Mount	
1	RS-FRR-PX3-19-ASM2	Ford Ranger Raptor Slider Rear Mount	
4	P-0066	PX Ranger Slider Backing Plate	
2	COM-RS-AEC	Slider End Cap- Angled	
2	COM-RS-AECM	Slider End Cap- Angled	

Small Parts – Contained in Small Parts Kit Bag

Qty	Part Number	Description
3	M12X40	Bolt Hex, M12X40X1.75, GR8.8 ZP
4	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
13	M12 FLAT WASHER	M12 FW
32	M10 FLANGE NUT	Flange Nut, M10x1.5 G8.8 ZP
32	M10 x 25	Bolt Hex, M10X25x[1.5], GR8.8 ZP
6	M12X130 GR10.9	Bolt Hex, M12X130x1.75, GR10.9 ZP
6	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
1	M6 X 20 HEX	M6X20 HEX BOLT, ZP, 8.8
1	M6 FLAT WASHER	M6 FW
30	M8 NUT	Hex Nut, M8x1.25 G8.8 ZP
32	M8 X 20 BHCS BLACK ZINC	SCREW, BUTTON HEAD CAP, M8X20X1.25 BLACK ZP
46	M8 FLAT WASHER- BLACK ZINC	M8 FW- BLACK ZINC
14	M8X20 CAP SCREW	CAP SCREW, M8X20X1.25 GR10.9 ZP
12	M8 FLANGE NUT	Flange Nut, M8x1.25 G8.8 ZP




TOOLS REQUIRED

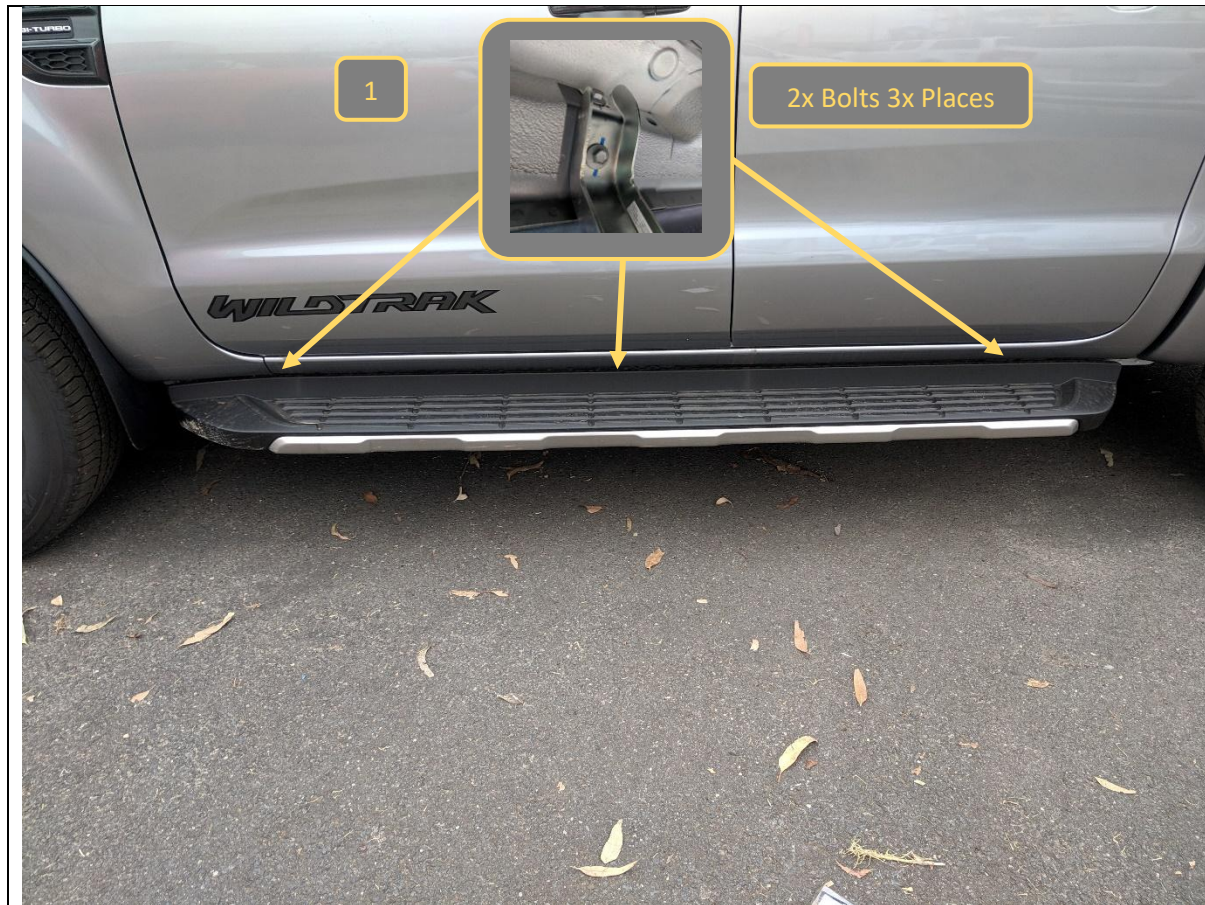
The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric Socket Set 8-19mm Socket Extension Bar Metric Spanner Set 10-19mm Torx Drivers T25-T30 Hex (Allen) Key Set 4-6mm Trim Puller Tool Flat Blade Screwdriver set Phillips Head Screwdriver set Utility Knife Side Cutters Pliers	Electric/Air Impact Driver (Optional)	Hydraulic Floor Jack

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 Factory side steps if fitted by removing the 6x Bolts (2 Per mount) securing them to the body using a 12mm socket.
2. Discard Factory steps and bolts.

TOOLS REQUIRED

12mm socket

FASTENERS6x Factory Flange head Bolts
(per side)




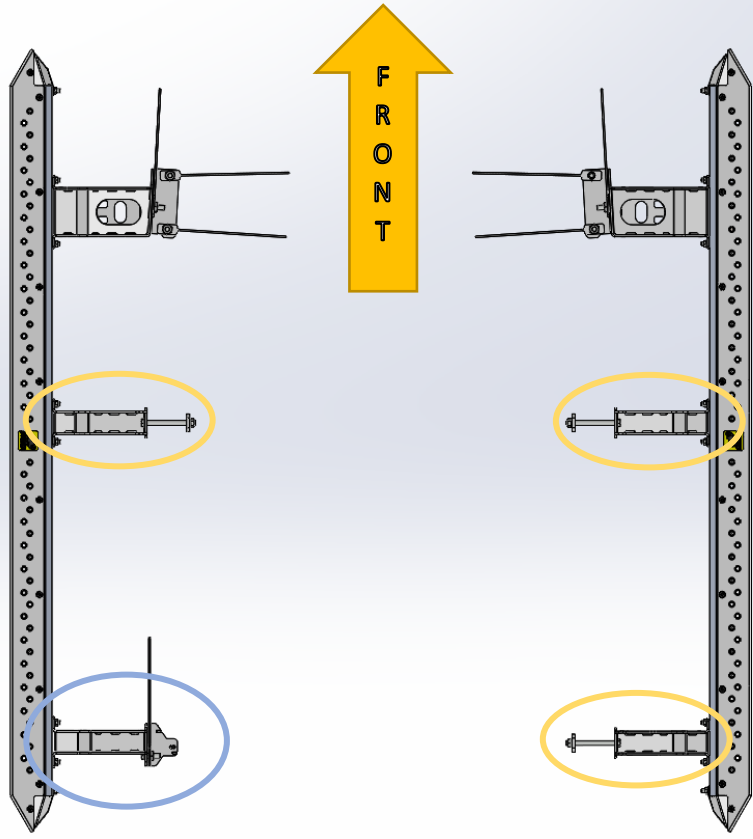
3. Locate features that front mount mounts to. The easiest way to do so is locate the rectangular slot on forward part of chassis closest to the seam weld.
4. Lift front mount up to chassis rail and position against chassis rail using Jack.

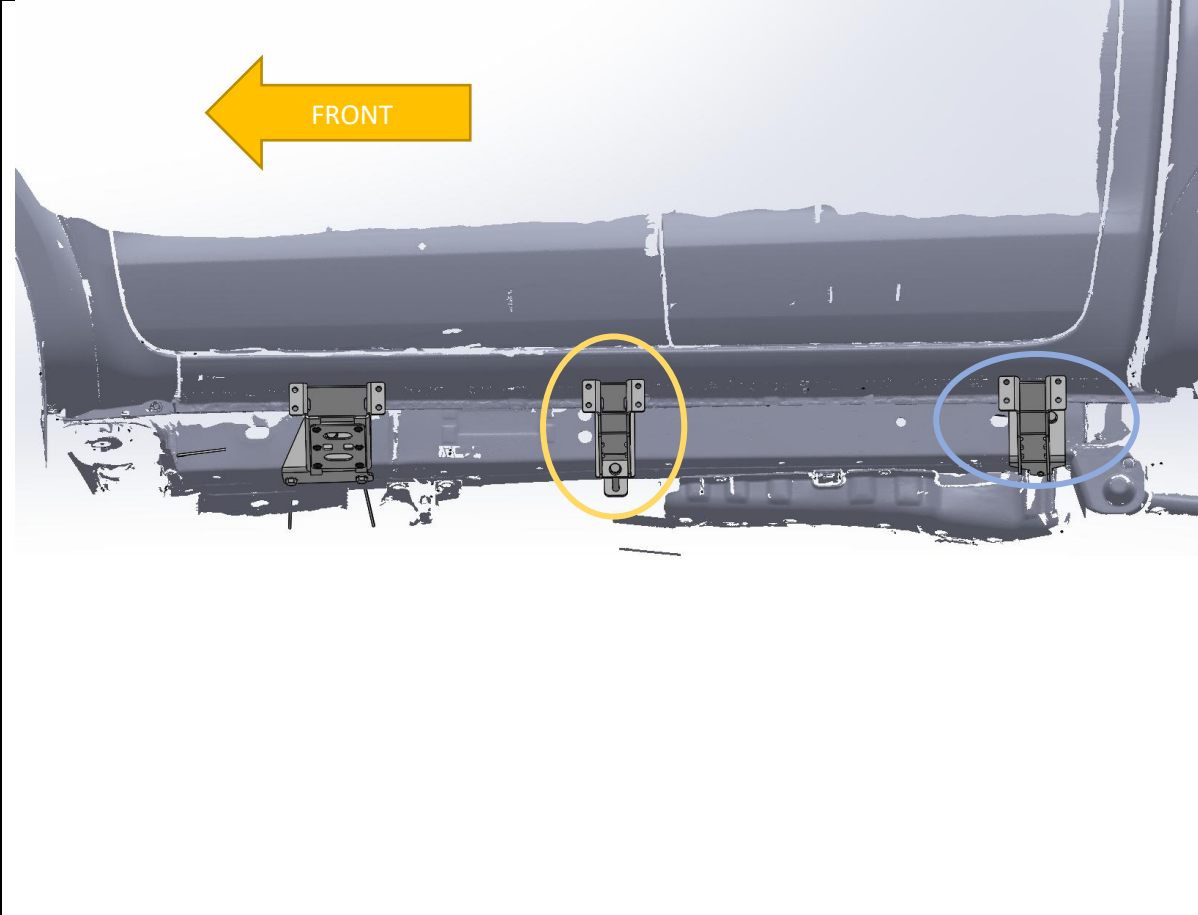
TOOLS REQUIRED

Jack

FASTENERS

	
<p>5. Check to ensure that slots on mount are aligned with holes in chassis rail. Adjust position of mount if required.</p> <p>6. Feed in nut plates, behind chassis using slot in front of mount for access, position nut behind the hole in mount using stem, then secure with M12x30 Bolt and Flat washer from front.</p> <p>7. First secure front face bolt (Blue). Then remove jack and secure the two bottom mounts using standard nut plate closest to front of car (Green) and short nut plate closest to rear of car (Orange).</p>	TOOLS REQUIRED Jack
	FASTENERS 3xM12x30 Bolt 2x Standard M12 Nut Plate 1x Short M12 Nut Plate Per Side

	
<p>8. Layout the mid / rear mounts in preparation for fitting.</p> <p>9. RHS of car uses two clamp type mounts (RS-FRA-PX-11-ASM3).</p> <p>10. LHS of car uses one clamp type mount (RS-FRA-PX-11-ASM3) in the mid position and different bolt type mount in the rear position (RS-FRR-PX3-19-ASM2).</p>	TOOLS REQUIRED
	FASTENERS

	
<p>11. Note the correct location for the mid and rear mounts on the chassis in the above image.</p> <p>12. Mid mount is located just aft of the two holes in chassis near center. Rear mount is located just in front of the rear suspension control arm bracket.</p>	TOOLS REQUIRED
	FASTENERS



13. Prepare mid and rear mounts by pre-inserting the M12x130 Bolt, with flat washer, part way through the top mounting hole.
14. Lift mid / rear mount up to chassis rail and position against chassis in position marked. Ensure that the bolt, inserted earlier goes over the top of the chassis rail.

TOOLS REQUIRED**FASTENERS**

M12x130 Bolt
M12 Flat Washer




15. Install the mid / rear mount backing plate, by sliding up against back side of chassis and secure through top bolt from mount.
16. This may require manipulation of the top bolt.
17. Ensure that the plate is beneath any fuel / brake lines and sitting directly against the chassis. Secure with M12 Flange Nut, finger tight only at this stage.

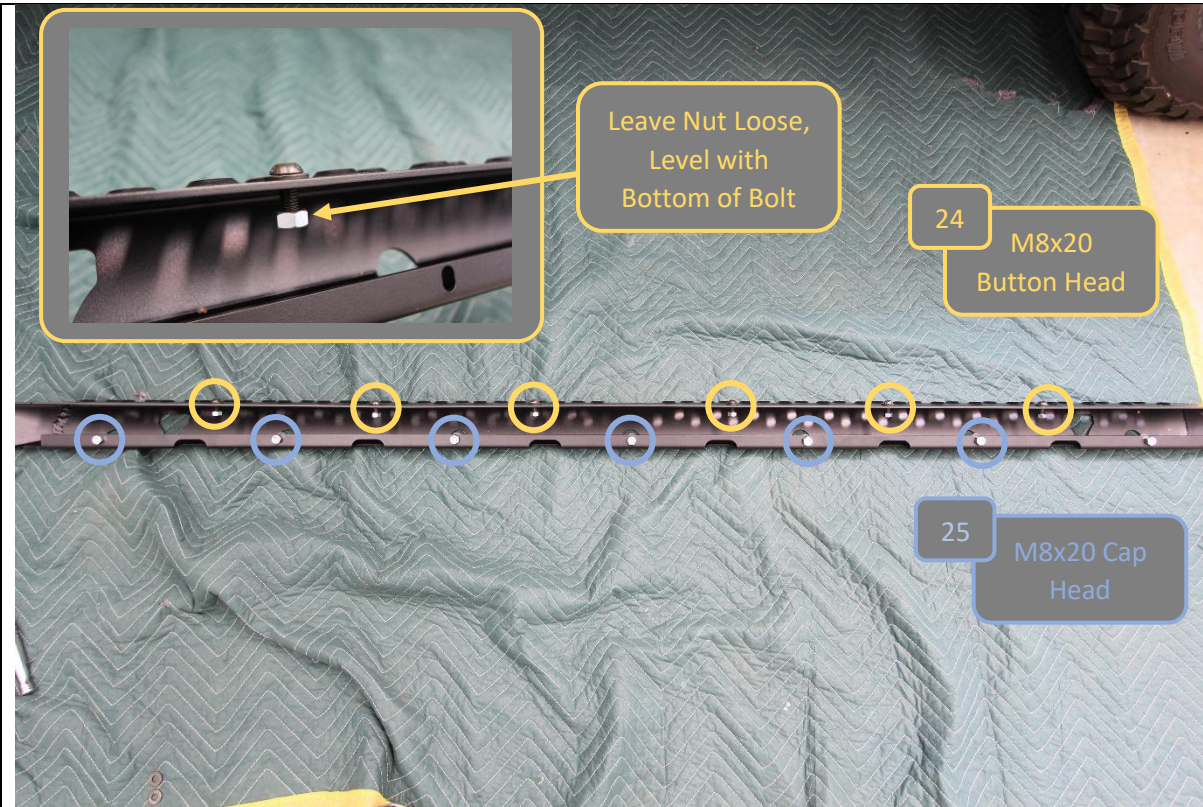
TOOLS REQUIRED**FASTENERS**

M12 Flange Nut



18. Locate and remove the rear most 10mm head factory bolt securing the plastic fuel tank guard to the chassis.	TOOLS REQUIRED 10mm Socket
	FASTENERS

	
<ol style="list-style-type: none">19. Raise Rear mount into position and secure with M6x20 Bolt and flat washer, over the top of the plastic fuel tank guard.20. Insert M12 Nut Plate through hole in chassis just forward of mount.21. Manipulate plate to align with bolt hole on opposite side of mount and secure with M12x40 Bolt.22. Tighten bolts on this mount straight away. Use 18mm spanner and 10mm socket to tighten.	TOOLS REQUIRED 10mm socket 18mm spanner
	FASTENERS M6x20 Bolt M6 Flat Washer M12x40 Bolt M12 Nut Plate M12 Flat Washer



<p>23. Prepare step plate by loosely pre fitting the fasteners to the step.</p> <p>24. Use M8x20 black button head screws, black M8 washers and M8 Nuts on 6x locations on top of step as shown.</p> <p>25. Use M8x20 cap head screws M8 washers and M8 nuts on 7x locations on bottom side of step.</p>	<p>TOOLS REQUIRED</p>
<p>NOTE THERE ARE 2 WAYS TO FIT THE STEP ON THE EXTRUSION, IF YOU FIND THIS WAY DIFFICULT SKIP STEP 23-27 AND GO TO STEP 28-33</p>	<p>FASTENERS</p> <p>6x M8x20 Black Button Head</p> <p>7xM8x20 Cap Head</p> <p>13x M8 Black Washer</p> <p>13x M8 Nut</p>



26. Slide the step plate onto the main slider structural extrusion. Align the nuts as they enter the T Slots on the extrusion.
27. Center the Step on the extrusion, by measuring distance from extrusion to tip of step, and adjusting until both sides are equal.

TOOLS REQUIRED**FASTENERS**



28. Lie extrusion down and place step on top.

29. Feed nut into slot with something long and skinny (like a dowel or piece of all thread). Do centre ones first the move outwards.

TOOLS REQUIRED

Long Dowel or skinny stick

FASTENERS



30. Thread cap screws into each hole

TOOLS REQUIRED

6mm Allen Key

FASTENERS

M8 x 20 Cap screws (7)
M8 hex nuts (7)
M8 flat washers (7)



31. Flip Slider up as shown.

32. Clamp step hard to extrusion.

TOOLS REQUIRED

Clamps

FASTENERS



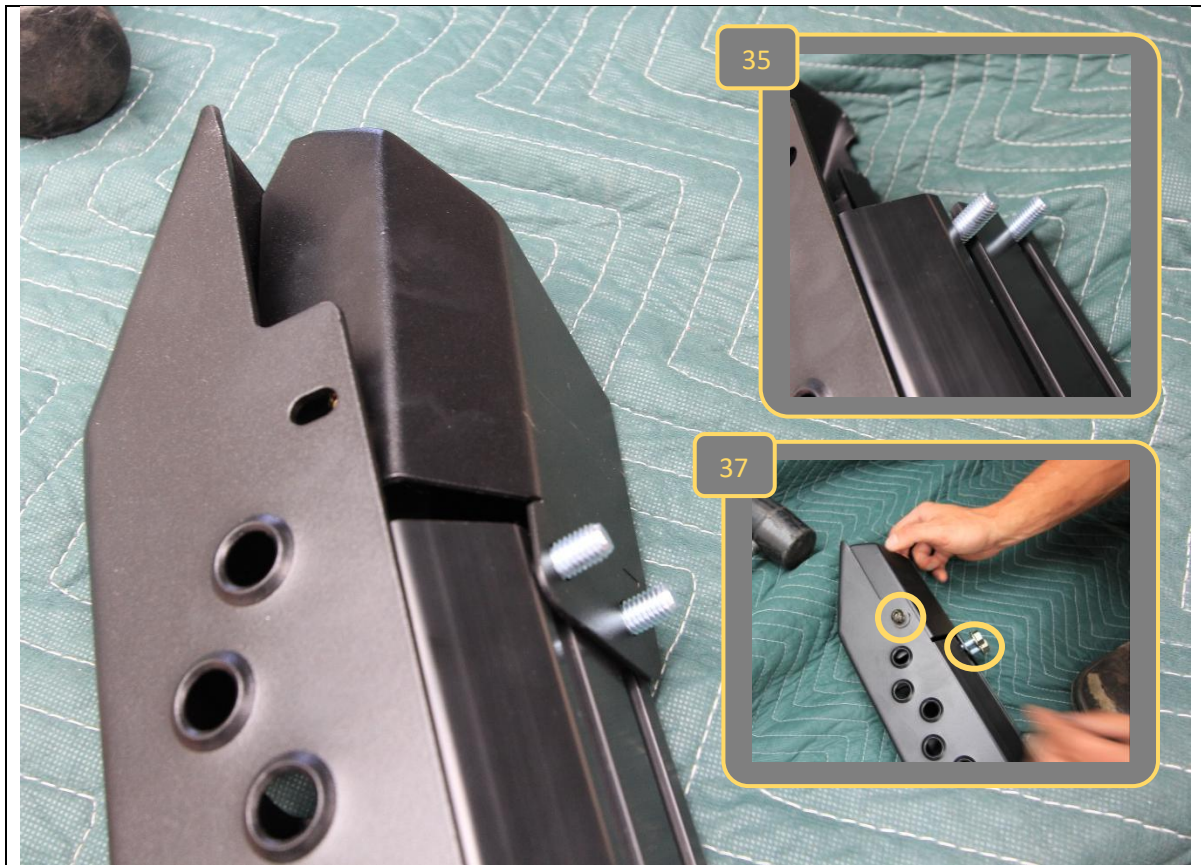
33. Using long tool feed nuts in to centre first and thread in with black M8 button head cap screws and washers

TOOLS REQUIRED

5mm Allen Key

FASTENERS

M8 x 20 BHCS black (8)
M8 hex nuts (8)
M8 flat washer black (8)




34. Fit end cap to one end of the extrusion.
35. First slide 2x M10x25 Hex bolts into the T slots on back side of extrusion.
36. Fit end cap over these bolts.
37. Secure with M10 flange nuts on T slot bolts and M8x20 bolt in top, through tread plate. End cap should align with end of tread plate if tread plate is centered correctly.

TOOLS REQUIRED**FASTENERS**

2x M10x25 Bolts
1x M8x20 Button Head
bolt
1xM8 Flat Washer
2x M10 Flange Nut



<p>38. Slide the 12x M10x25 Hex bolts into the T slots on back side of extrusion. 6 bolts per slot.</p> <p>39. Loosely arrange the bolts in 3x groups of 4, in approximate location of mounts, as shown.</p>	TOOLS REQUIRED
	FASTENERS 12x M10x25 Bolts



<p>40. Fit mirrored end cap to remaining end of slider, using 2x M10x25 hex bolts and M8x20 Button head bolt with flat washer as per previous steps 35-37.</p> <p>41. Check alignment of end caps, End cap should align with edge of tread plate if properly centered. Adjust end cap / tread plate position as required.</p> <p>42. Once happy with alignment tighten all bolts on slider extrusion, using 5/6mm hex key and 15mm spanner.</p>	TOOLS REQUIRED 5mm Hex key 6mm Hex key 15mm spanner
	FASTENERS 2x M10x25 Bolts 1x M8x20 Button Head bolt 1xM8 Flat Washer 2x M10 Flange Nut



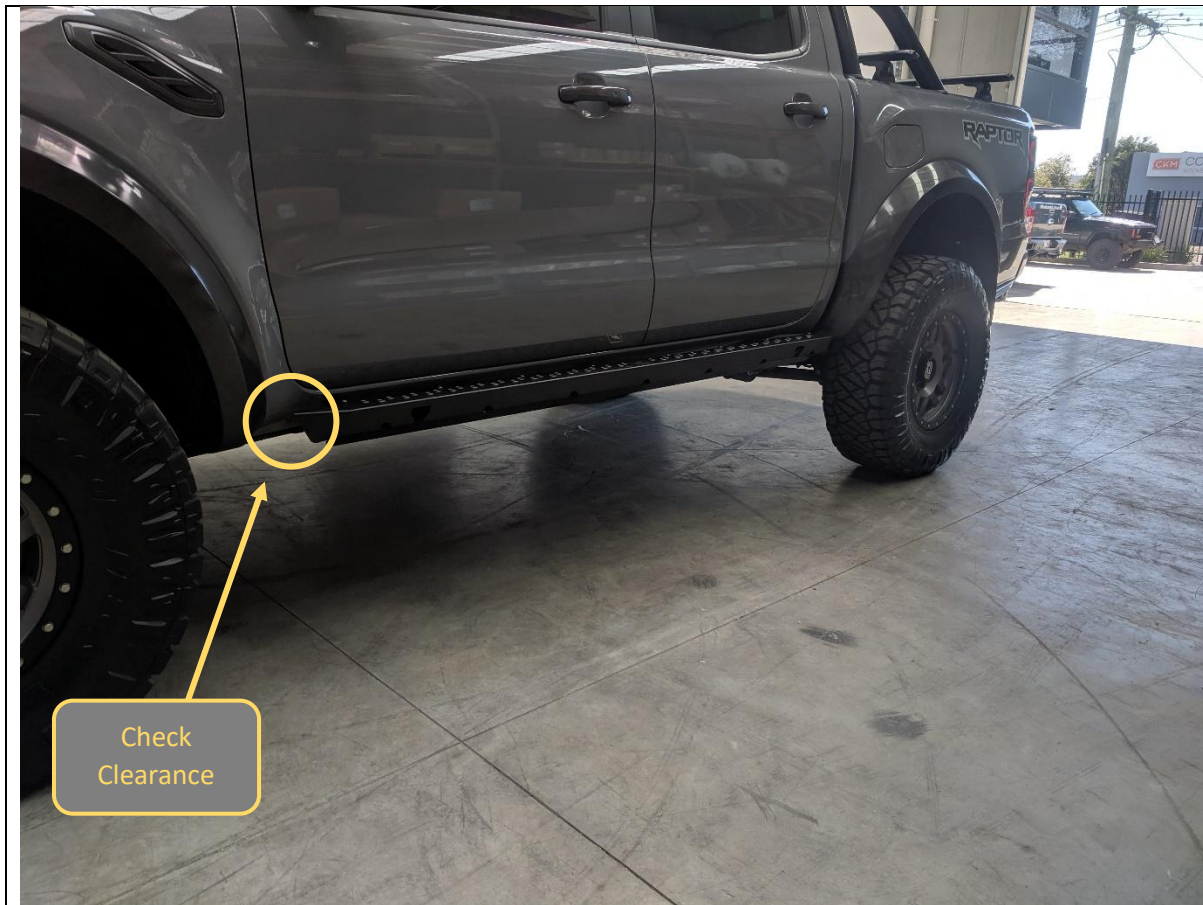
43. With Assistance from another person, or mechanical lifting aid such as a lift trolley, Lift the slider onto the mounts.
44. Manipulation of position of bolts in T slot to align with mounts will be required to get slider on. Secure with M10 Flange Nuts.

TOOLS REQUIRED

5mm Hex key
6mm Hex key
15mm spanner

FASTENERS

12x M10 Flange Nut

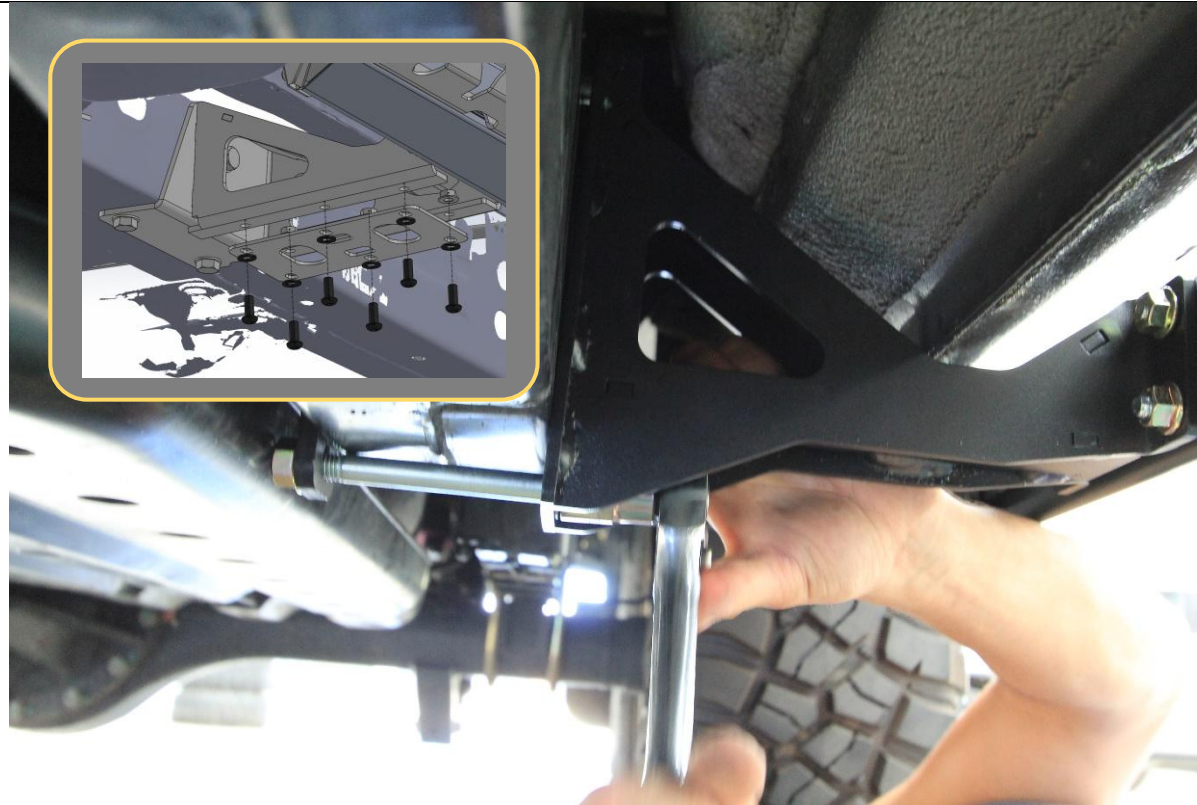


45. Adjust fore / aft position of sliders on mounts to achieve even appearance if required.

46. Take care to ensure adequate clearance where panel curves toward wheel at front end, near end cap.

TOOLS REQUIRED**FASTENERS**

12x M10 Flange Nut



47. Once satisfied with alignment, tighten all bolts, starting with chassis mounts.
48. Double check mount positions against initial marks made at beginning. Adjust position as required.
49. Tighten front mount M12 bolts using 18mm Socket.
50. Once front mount bolts are tightened, fit the brace plate using 6x M8x20 Button Head, M8 Flat washers and M8 Flange Nuts
51. Tighten Mid and Rear mount bolts using 18mm Socket / Spanner. Ensure that mid / rear mounts are tightened evenly, by alternating a few turns on top then bottom bolt when tightening.

TOOLS REQUIRED

18mm Socket / Spanner
5mm Allen Key

FASTENERS

6x M8x20 Button Head
Screw
6xM8 Flange Nut
6xM8 Flat Washer

Per Side



52. Tighten all mount to slider M10 flange nuts using 15mm spanner. A ratcheting spanner makes this process easier

TOOLS REQUIRED

15mm Socket / Spanner

FASTENERS



53. Repeat the entire process for the other side of the vehicle.
Note different mount on back LHS as mentioned in step 10.

54. After that you are done!

TOOLS REQUIRED**FASTENERS**



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