



STEEL BRUSH RAIL KITS

FITTING INSTRUCTIONS



FORD RANGER RAPTOR 2018 PK402FRR18E

Fitting Time : approx. 1.5 hours



BULL BAR SAFETY NOTICE:

INSTALLATION SHOULD ONLY BE DONE BY APPROPRIATELY QUALIFIED OR EXPERIENCED PERSONS
IN ACCORDANCE WITH THESE INSTRUCTIONS.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE PRODUCT IS CORRECTLY FITTED.

WARNING:

- Do not attach Vehicle Frontal Protection System (VFPS) to the vehicle using anchorages not intended for this purpose. (e.g. engine mounting bolts)
- Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- Do not remove the plaque or label from the VFPS.
- Do not modify the structure of the VFPS in any way.
- The VFPS has been produced to provide continued functionality of parking sensors and other "driver assist" features as closely as possible to Original Equipment. However, as all possible road conditions and combination of other accessories fitted to the vehicle which may affect functionality characteristics cannot be anticipated, ***the driver remains responsible at all times for properly controlling the vehicle, monitoring all "driver assist" features and intervening where required to ensure the vehicle is safely operated.***

IMPORTANT INFORMATION:

- Before installing the VFPS:
 - Check that all components, as listed in the assembly table, are available.
 - Thoroughly read all instructions.
- This product or its fasteners must not be modified in any way.
- These instructions are accurate as at the revision date and do not take into account any changes made by the vehicle manufacturer to vehicle design after the revision date or other accessories that are or have been fitted to the vehicle. Piak cannot be held responsible for such changes and appropriate enquiries should be made before installation.
- Before installing, inspecting and/or maintaining the VFPS, the work space should be safe and clear of fuel, debris, electrical or other components.
- During installation:
 - It is the responsibility of the installer to confirm correct operation/clearance of all components.
 - All holes drilled shall have all burrs and swarf removed then coated with a suitable rust preventative paint.
 - Ensure that all hardware is fastened to torque list as detailed in these instructions.

MAINTENANCE AND CARE:

To ensure continued safety and correct operation of the product, the VFPS must be routinely inspected and regularly serviced (including bolt torque checked for correct tension) by an appropriately qualified or experienced person.

The high tensile fasteners supplied with this product were used to achieve the specified rating. If replacement of the fasteners is required, fasteners of the same rating and quality must be used.

If this VFPS is fitted with a hinged number plate bracket, extra care must be taken when returning back to public roads following the use of the winch or conducting a deep water crossing.

The driver must ensure that the number plate bracket is returned back to the down position allowing full visibility of the number plate when returning to public roads.

EQUIPMENT:

These safety products should, at a minimum, be used when fitting or working on the product.



Protective Glasses



Hearing Protection

Installation in accordance with these instructions and adherence to warnings will ensure compliance with relevant regulatory and safety standards as at the revision date.

Failure to adhere to these instructions may affect the roadworthiness of the vehicle or cause personal injury, death or damage to property.

BY USING THIS PRODUCT YOU ACKNOWLEDGE AND AGREE THAT TO THE EXTENT PERMITTED BY LAW PIAK WILL NOT ACCEPT LEGAL OR OTHER LIABILITY FOR ANY LOSS, INJURY OR DAMAGE CAUSED BY INCORRECT OR INAPPROPRIATE INSTALLATION OR USE OF THE PRODUCT.

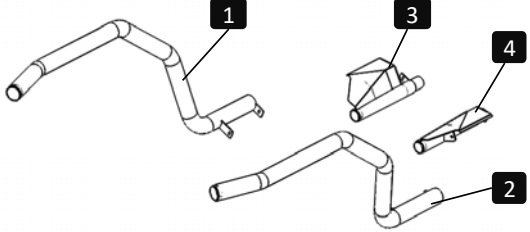
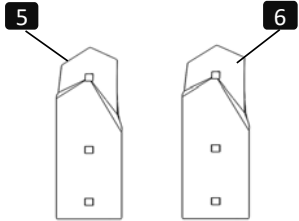
TOOLS REQUIRED

1. Metric socket and spanners
2. Torque wrench
3. Drill and metric drill bits
4. Phillips and flat head screw driver
5. Masking Tape

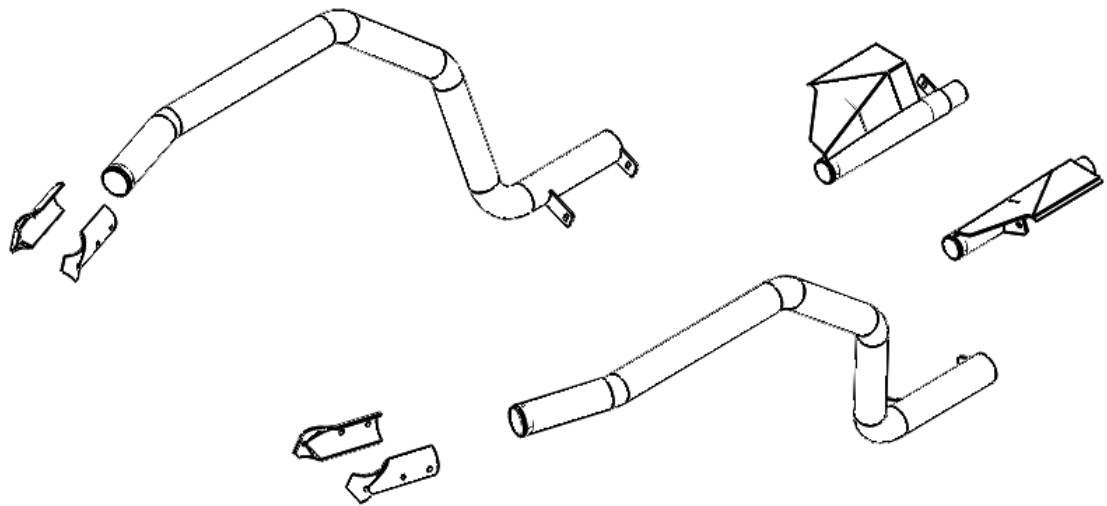
PARTS LIST



Important : Check contents of fitting kit before commencing fitment and re port any discrepancies.

Steel side Rail			
Item	Component Name	Q'ty	Remarks
1	Steel Side Rail (RH))	1	
2	Steel Side Rail (LH)	1	
3	Steel Side Rail Cover (RH)	1	
4	Steel Side Rail Cover (LH)	1	
Components			
Item	Component Name	Q'ty	Remarks
5	Side Rail Clamp 2.5" (63 deg) RH	2	
6	Side Rail Clamp 2.5" (63 deg) LH	2	
7	Bottom Head Bolt M8x85x1.25	6	
8	Flat Washer M8 OD16	12	
9	Nut Lock M8 x1.25	6	
10	Hex Bolt M8x35x1.25	6	
11	Spring Washer M8	6	
12	Flat Washer M8	12	
13	Flange Nut M8x1.25	6	
14	Side Rail End Plug (d=2")	2	
15	Side Rail End Plug (d=2.5")	2	
16	Piak Logo Sticker Mylar 23x61 mm.	2	

COMPONENTS OVERVIEW

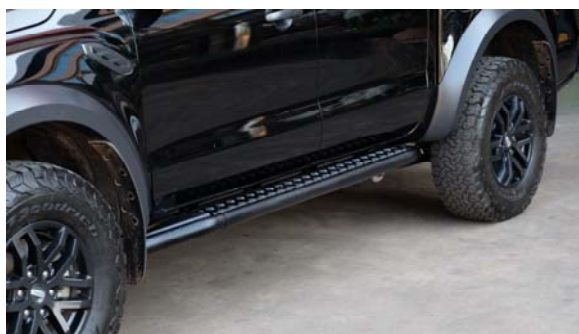


TORQUE SETTING OF FASTENER

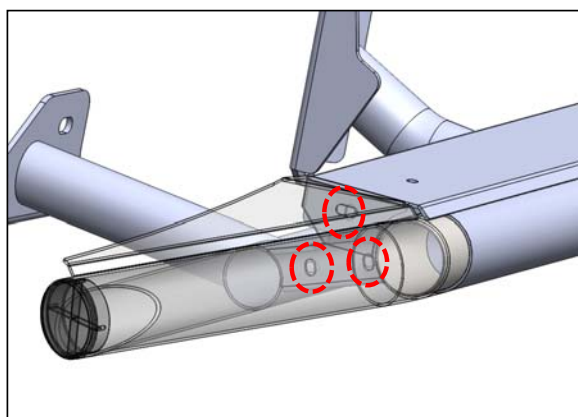
Mounting bolts must be tightened to torque's specified following ;

Bolt Diameter (mm.)	Torque (Nm)	Torque (ft.lb)
M6	9	7
M8	22	16
M10	44	32
M12	77	57

FITTING PROCEDURE



- 1 Locate the vehicle to the suitable area.



- 2 If side steps are already fitted with step returns remove them and retain the tow M8 bolts, washers and nuts.
one M6 bolts, washers and nuts



- 3 Locate the vehicle to the suitable area.

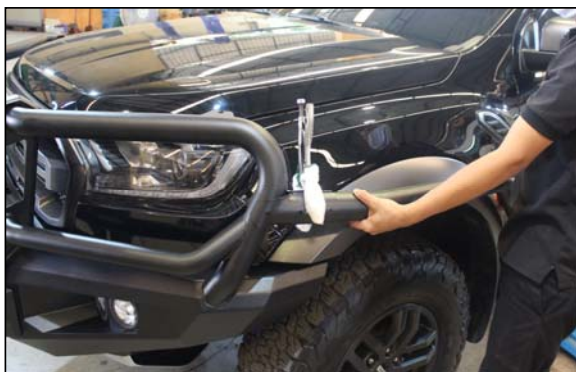
FITTING PROCEDURE



- 4 Fit the side rail into the ends of the side steps by using M8 bolt kits removed earlier.



- 5 Clamp the side rail clamps to the siderail and bull bar outer loop. Ensure the top section of the side rail is parallel to the side step.



- 6 Clamp the side rail clamps to the side rail and bull bar outer loop.

Using the three holes in the side rail clamps as a guide, drill 8mm holes through the side rail and outer loop of the bullbar.

Clean and de-bur the holes in the side rail and the bullbar outer loop.

Treat the drilled holes with rust preventative.



- 7 Secure the side rail to the bullbar using three M8 button head bolts, six M8 flat washers and three M8 Nyloc nuts. Tighten bolts to the correct torque.

FITTING PROCEDURE



- 8 Fit the Steel Side Rail Cover into the side step.using tow M8 bolts, spring washers, flat washers and nut. one M6 bolts, washers and nuts

