



OFFTRACK NUDGE BAR

FITTING INSTRUCTIONS



FORD RANGER 2015-2018

PK101FR15/FR18

Fitting Time : approx. 1.5-2 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.

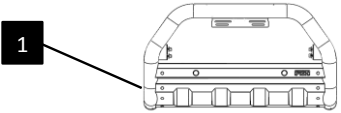
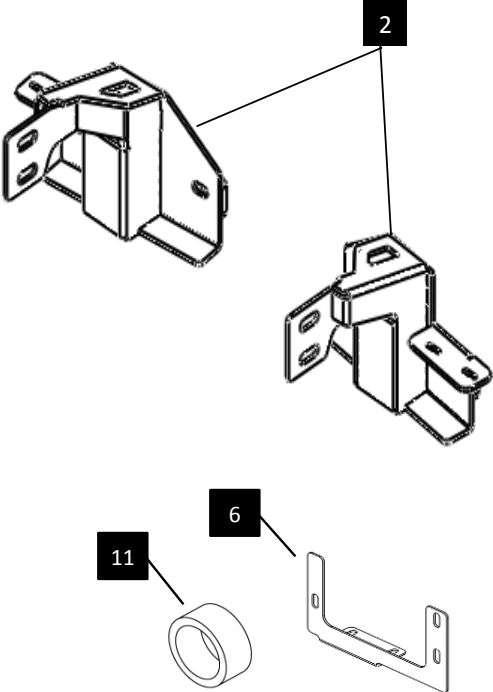
BY USING THIS PRODUCT YOU ACKNOWLEDGE AND AGREE THAT TO THE EXTENT PERMITTED BY LAW PIAK WILL NOT ACCEPT LEGAL OR OTHER LIABILITY FOR ANY LOSS, INJURY OR DAMAGE CAUSED BY INCORRECT OR INAPPROPRIATE INSTALLATION OR USE OF THE PRODUCT.

TOOLS REQUIRED

- | | |
|--|--------------------------------|
| 1. Metric socket and spanners | 5. 2" Masking tape |
| 2. Phillips and flat head screw driver | 6. Jigsaw |
| 3. Torque wrench | 7. Test lamp or multi-meter |
| 4. Marking pen | 8. Drill and metric drill bits |

PARTS LIST

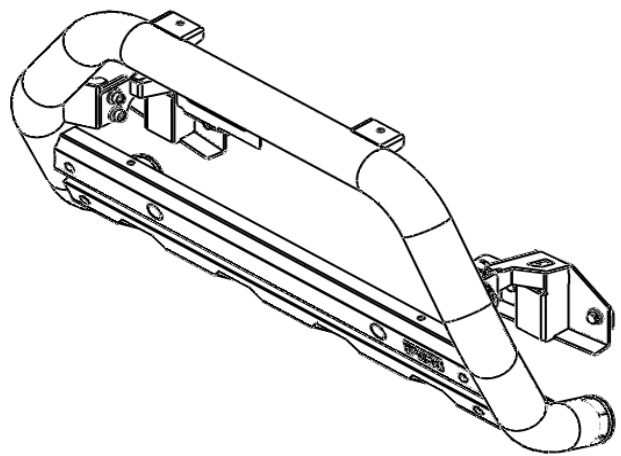
⚠ Important : Check contents of fitting kit before commencing fitment and report any discrepancies.

Steel Bull bar			
Item	Component Name	Q'ty	Remarks
1	Main Nudge bar Assy {FR18}	1	
Chassis Mounts to Vehicle			
Item	Component Name	Q'ty	Remarks
2	Chassis mounting bracket LH / RH	1	
3	Hex bolt M10x1.5xL35	4	
4	M10 Flat washer	4	
5	M10 Spring washer	4	
6	Adaptive cruise bracket	1	
7	Hex bolt M6x1.0xL20	5	
8	M6 Flat washer	5	
9	M6 Spring washer	5	
10	Flange nut M6	5	
11	Washer spacer	3	

** Item 6-11 for ford RANGER MY 2015

Nudge Bar to Chassis Mounts			
Item	Component Name	Q'ty	Remarks
12	Socket head M10x1.5xL35	4	
13	M10 Flat washer	8	
14	M10 Spring washer	4	
15	Flange nut M10x1.5	4	
16	SENSOR BLANKING PLUG 27mm	2	
Hinge number plate			
Item	Component Name	Q'ty	Remarks
17	License Plate Bracket	1	
18	Hex bolt M6x1.0 L20	4	
19	Flange nut M6x1.0	4	
20	M6 Flat washer	4	
21	M6 Spring washer	4	

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 in a suitable position.



2 Then remove OEM Plastic radiator cover attached to the top of grille.



3 Remove the plastic clip and M6 Bolt from lower outer edge of each side behind the grille, return for re fitment and remove grille.

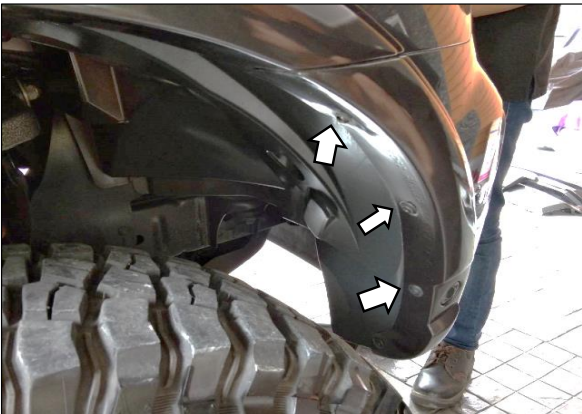


4 Remove the two clip that retain the bumper. Keep for re-fitment of bumper.

FITTING PROCEDURE

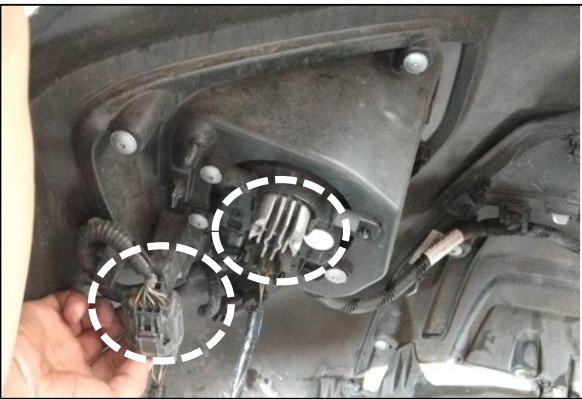


- 5 Remove the clip and screw retaining the lower edge. Keep for re-fitment.



- 6 Remove the two clips that retain the outer edge of the bumper. Keep for re-fitment of bumper.

Repeat for the opposite side.



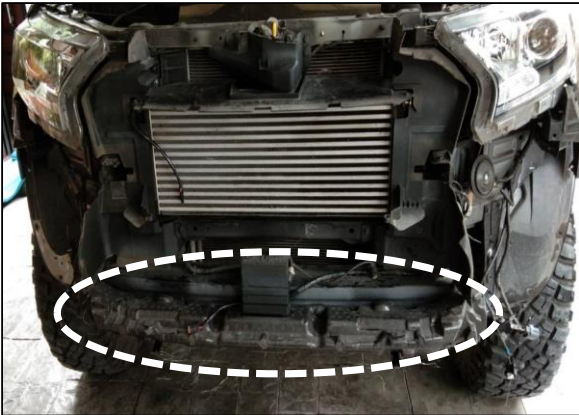
- 7 Disconnect fog lamp and parking sensors then remove bumper.

Repeat for the opposite side.



- 8 Remove bumper from the plastic clips on the inner fender either side of the vehicle.

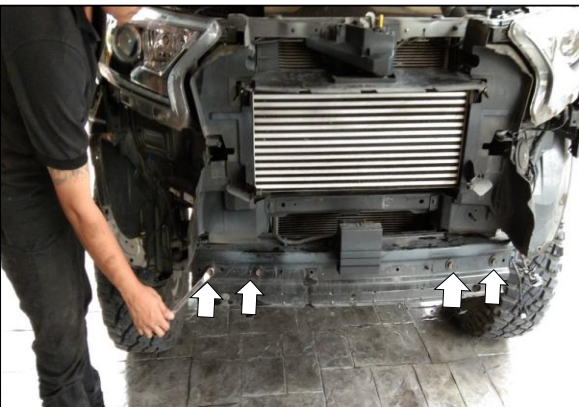
FITTING PROCEDURE



- 9** Remove and retain two clips on plastic air deflector from the front of intrusion beam .



- 10** Remove and discard four bolt on intrusion beam as show in the figure.



- 11** Fit the chassis mounting bracket on bumper mount by using two M10 bolts (M10x35x1.5), spring washer and flat washers as shown.

Repeat for the opposite side.
and fully tighten.

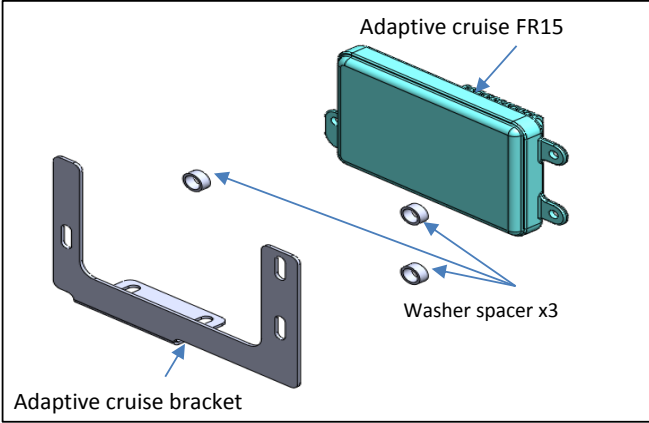
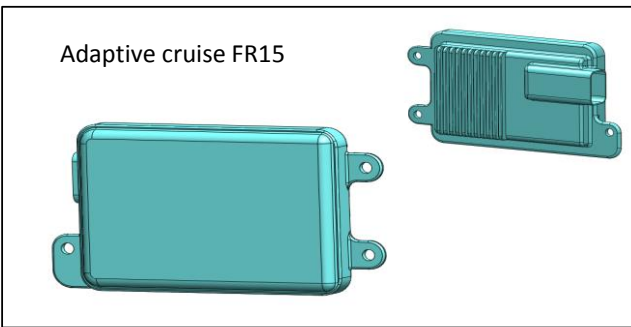


FITTING PROCEDURE

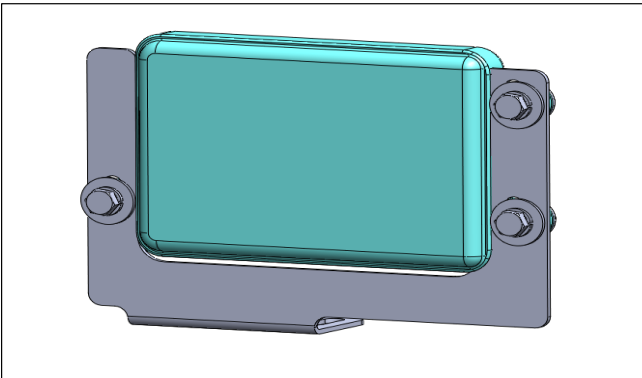


**Adaptive cruise bracket For FR15
(Ford Ranger 2015-2017)**
Ford Ranger 2018 next step

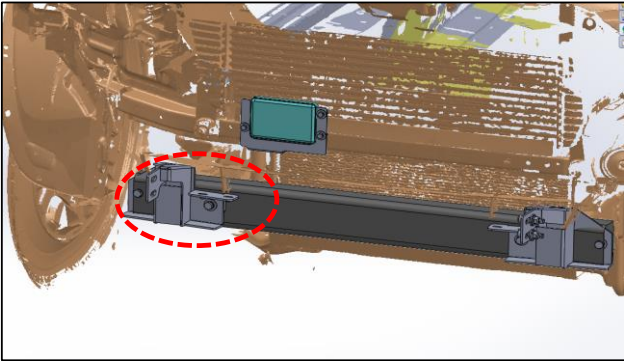
- 12** Remove the mounting bracket OE.



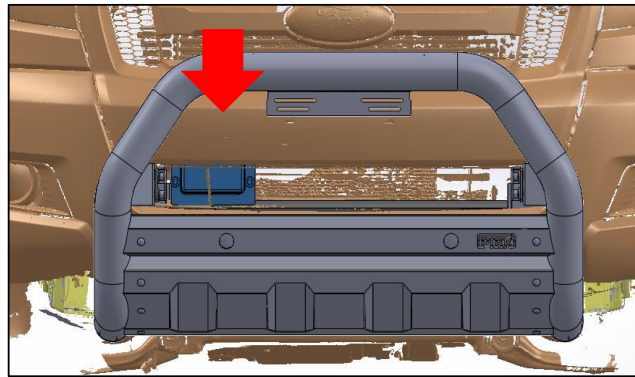
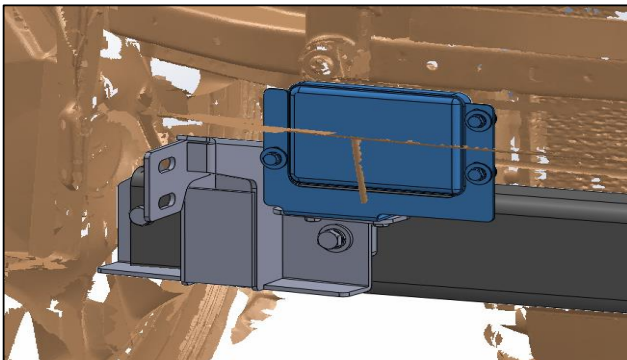
- 13** Install the radar box into the Adaptive cruise bracket by using bolt (M6x1.0x20), spring washer, flat washers, Washer spacer and flang nut.



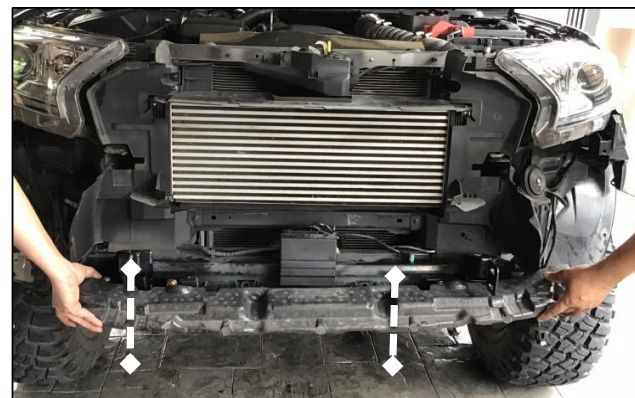
FITTING PROCEDURE



- 14** Adaptive cruise Bracket into want bracket chassis (RH)
 A bar and secure by using M6 bolt (M6x1.0x20), spring washer, flat washers and flang nut.



Adaptive cruise bracket For FR15 (Ford Ranger 2015-2017)

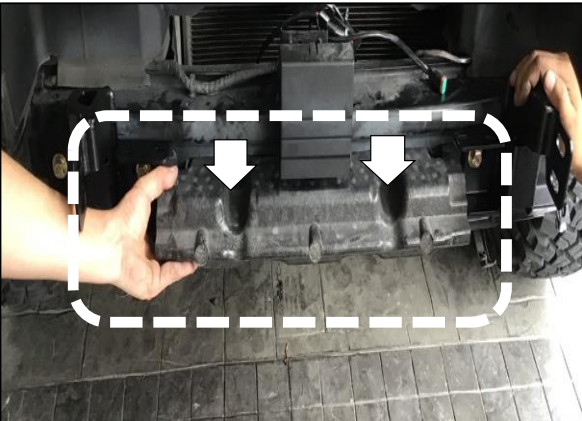


- 15** Re-fitment Plastic air deflector and begining marking as show in the figure.

FITTING PROCEDURE



16 Cut the plastic air deflector along the marked line using jigsaw.



17 Re-fitment Plastic air deflector and place on vehicle.

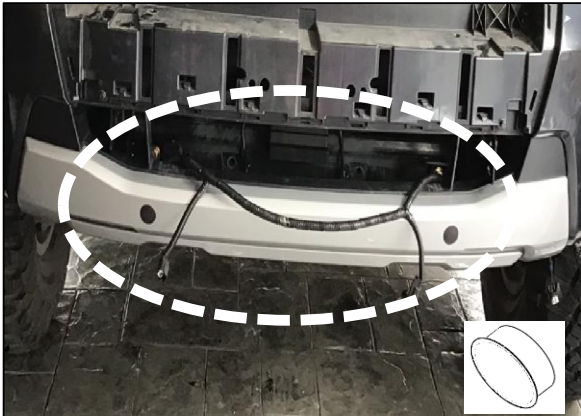


18 Carefully remove parking sensors mount bracket from bumper making sure not damage the bracket in the process.



19 Re-install the front bumper and place the chassis mounting bracket through out the bumper as shown.

FITTING PROCEDURE



- 20** Ensure the Parking sensors hang freely below the grille for easy access during A-bar fitment.

****Note ****Replace by sensor plug supplied



- 21** Place sensors in the nudge bar bracket, Carefully locate the sensors and bracket into the bar correct orientation same with original in bumper.



- 22** Lift the A- bar fit to the chassis mount, Align the A- Bar to the desired position, and fully tighten the Chassis Mounting Bolts. by using four M10 Socket head (M10x35x1.25), spring washers, flat washers and flange nuts.

Repeat for the opposite side.



- 23** Reconnect Parking sensors on either side of the front bar.

FITTING PROCEDURE



- 24** Re-install the front grille to the vehicle.



- 25** Assemble License plate bracket by using M6 x L 20, M6 Flat washer , M6 Spring washer , Flange nut M6 and fully tighten.



- 26** Check Parking Sensor Compatibility. Now that Nudge Bar is centred, ensure that it is not interfering with the front parking sensors. You may need to adjust the sensor housing if you have any issues.

NOTE : The parking sensors are very sensitive and if the sensor is off-centre by even a few mms, it can cause the sensors to pick up the bar. If you're having trouble, be sure the Parking sensor are installed correctly.

FITTING PROCEDURE

PIAK NUDDGE BAR NOW FULLY INSTALLED



FASTENERS • Check fastener tightness regularly and tighten if required. We recommend checking fasteners after every large off-road trip.