



ELITE 3-LOOP WINCH BAR

FITTING INSTRUCTIONS



FORD RANGER 2015-2021

FORD EVEREST 2015-2021

PK105FGOELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RMB_UPMB

PK105FGOELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RMB_UP0

PK105FGOELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RO_UPMB

PK105FGOELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RO_UP0

Fitting Time : approx. 3.5 hours

Elite 3 Loop Winch Bar Ford Ranger 2015-2021

Everest 2015-2021

SD-RD-FT/FB-06

Rev.02 (02-MAY-2024)

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.

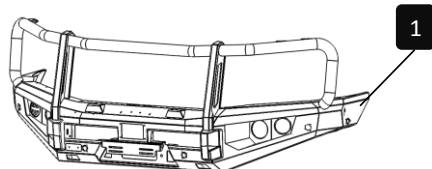
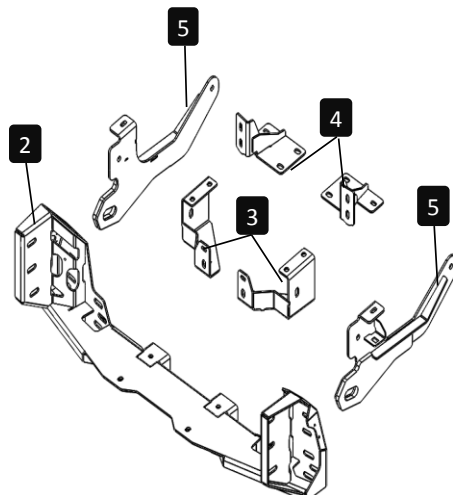
TOOLS REQUIRED

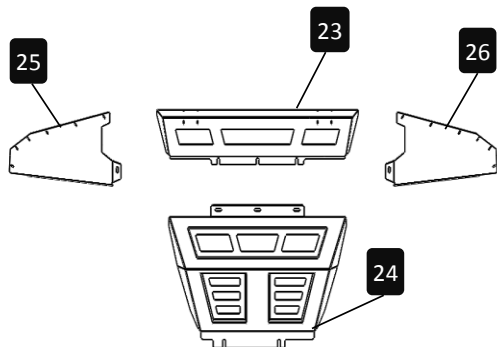
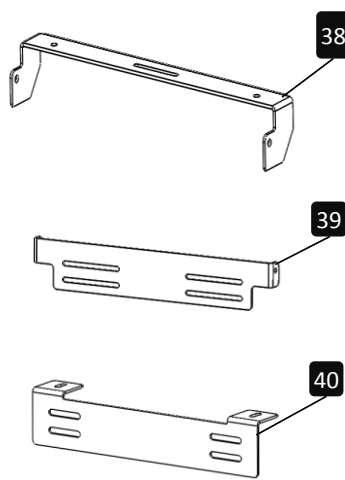
1. Torque , Socket wrench
2. Screw driver
3. Open spanner
4. Flexible plug socket
5. Long offset wrench
6. Adhesive Tape
7. Masking Tape
8. Fine sandpaper
9. Drill and metric drill bits

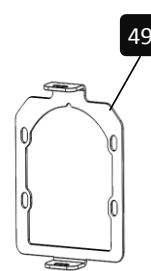
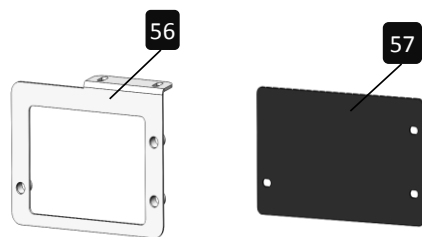
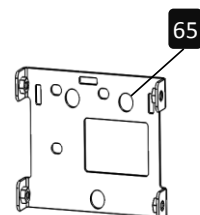
PARTS LIST

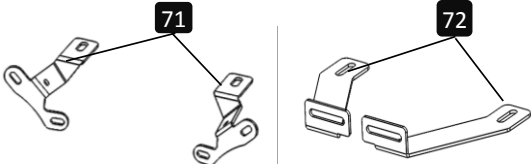
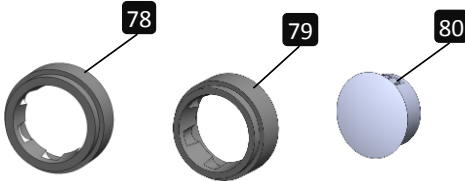
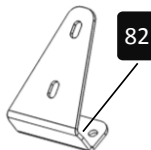


Important : Check contents of fitting kit before commencing fitment and report any discrepancies.

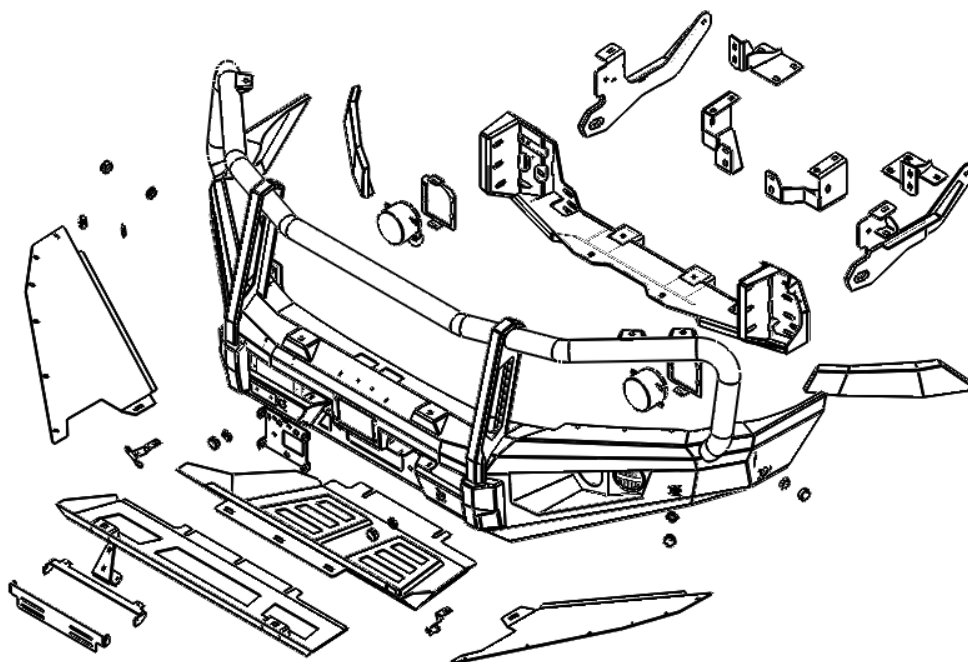
Steel Bull Bar			
Item	Component Name	Q'ty	Remarks
1	Winch Bull Bar	1	
Mounting Bracket (RH & LH)			
Item	Component Name	Q'ty	Remarks
2	Chassis Mounting Bracket	1	
3	Mounting Bracket Support (LH&RH)	2	
4	Mount Bracket Upper (LH/RH)	2	
5	Mount Support & Recovery(LH/RH)	2	
6	Hex Bolt M8x35x1.25	2	
7	Spring Washer M8	2	
8	Flat Washer M8 OD22	4	
9	Flange Nut M8x1.25	2	
10	Hex Bolt M10x35x1.5	28	
11	Spring Washer M10	28	
12	Flat Washer M10 OD27	48	
13	Hex Nut M10x1.5	20	
14	Hex Bolt M12x35x1.5	6	
15	Spring Washer M12	6	
16	Flat Washer M12 OD33	12	
17	Hex Nut M12x1.5	6	
18	Hex Bolt M12x100x1.5	4	
19	Spring Washer M12	4	
20	Flat Washer M12 OD33	8	
21	Hex Nut M12x1.5	4	
22	Flat Washer 4xØ48 mm.	2	

Protection Plate			
Item	Component Name	Q'ty	Remarks
23	Protection Plate Center 01	1	
24	Protection Plate Center 02	1	
25	Protection Plate (RH)	1	
26	Protection Plate (LH)	1	
27	Hex Bolt M6x20x1.0	12	
28	Spring Washer M6	12	
29	Flat Washer M6	12	
30	Cage Nut M6x1.0x3T	12	
31	Hex Bolt M8x20x1.25	4	
32	Spring Washer M8	4	
33	Flat Washer M8	4	
34	Cage Nut M8x1.25x3.2T	4	
35	Hex Bolt M10x35x1.5	3	
36	Spring Washer M10	3	
37	Flat Washer M10 OD27	3	
License Plate Bracket			
Item	Component Name	Q'ty	Remarks
38	License Plate Bracket FR18/FE18 (Inner)	1	
39	License Plate Bracket FR18/FE18 (Outer)	1	
40	License Plate Bracke FR15/FE15	1	
41	Hex Bolt M6x20x1.0	4	
42	Spring Washer M6	4	
43	Flat Washer M6 OD20	6	
44	Button Head Bolt M6x20x1.0	2	
45	Nyloc Nut M6x1.0	2	
46	Nylon Washer M6	4	
47	Flat Washer M6 OD14	4	
48	Flange Nut M6x1.0	4	

Fog Light Bracket			
Item	Component Name	Q'ty	Remarks
49	Fog Light Bracket	2	
50	Hex Bolt M6x20x1.0	4	
51	Spring Washer M6	4	
52	Flat Washer M6 OD20	8	
53	Flange Nut M6x1.0	12	
54	Hex Bolt M6x15x1.0	8	
55	Flat Washer M6 OD14	16	
Adaptive cruise bracket For FR15			
Item	Component Name	Q'ty	Remarks
56	FR15 Sonar Mounting Bracket	1	
57	FR15 Perspex Cover	1	
58	Hex Bolt M6x20x1.0	2	
59	Spring Washer M6	2	
60	Flat Washer M6 OD20	2	
61	Cage Nut M6x1.0x3T	2	
62	Button Head Bolt M6x40x1.0	3	
63	Flat Washer M6 OD14	6	
64	Flange Nut M6x1.0	3	
Adaptive cruise bracket For FR18			
Item	Component Name	Q'ty	Remarks
65	FR18 Sonar Mounting Bracket	1	
66	Hex Bolt M6x15x1.0	4	
67	Hex Bolt M6x30x1.0	3	
68	Spring Washer M6	7	
69	Flat Washer M6	10	
70	Flange Nut M6x1.0	3	

Front Grill Bracket (LH,RH)			
Item	Component Name	Q'ty	Remarks
71	Front Grill Bracket FR15/FR18 (LH,RH)	2	
72	Front Grill Bracket FE15/FE18 (LH,RH)	2	
73	Hex Bolt M6x20x1.0	2	
74	Spring Washer M6	2	
75	Flat Washer M6 OD20	4	
76	Flange Nut M6x1.0	2	
77	Hex Socket Cap Head Self-Tapping Screw M5x12	4	
Sensor plugs			
Item	Component Name	Q'ty	Remarks
78	Sensor housing D18.5x10	6	
79	Sensor housing D19.5x12	2	
80	Sensor blanking plugs D25.5x14.5 mm	6	
81	Cable Tie (L=150 mm)	10	
Winch Control Plate			
Item	Component Name	Q'ty	Remarks
82	Winch Control Plate	1	
83	Hex Bolt M6x20x1.0	2	
84	Spring Washer M6	2	
85	Flat Washer M6	4	
86	Flange Nut M6x1.0	2	

COMPONENTS OVERVIEW

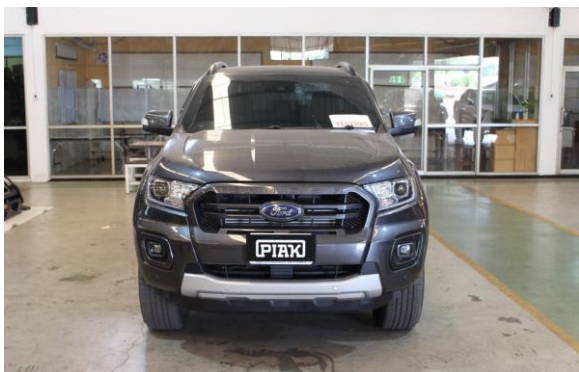


TORQUE SETTING OF FASTENER

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

Bolt Diameter (mm.)	Class 8.8		Class 10.9	
	Torque (Nm.)	Torque (ft-lb.)	Torque (Nm.)	Torque (ft-lb.)
M6	10.5	7.7	15	11.1
M8	25.5	18.8	36.5	26.9
M10	50.5	37.2	72.2	53.3
M12	88	64.9	126	92.9
M14	140	103	200	148

FITTING PROCEDURE



1

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



2

Unclip and remove the grille from vehicle and place on a soft surface.

Notice- Refer to vehicle repair manual for correct removal procedure.



3

Remove the screws retaining the bumper bar in the wheel arch.

Repeat the opposite side.

FITTING PROCEDURE



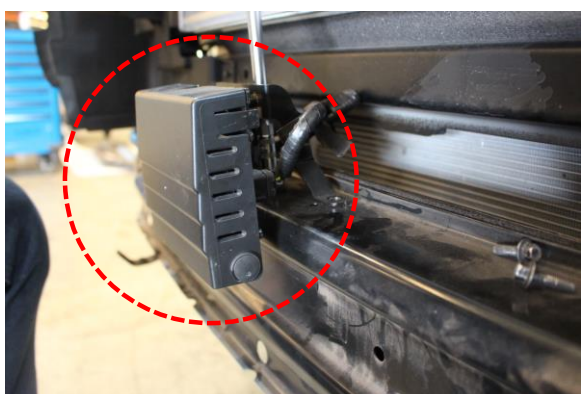
- 4 Remove the original bolts securing the lower section of the bumper as indicators.



- 5 Unclip and remove the grille from vehicle .



- 6 Remove four original bolts fitted to the front intrusion beam.



- 7 Remove Adaptive cruise & Emergency braking.

FITTING PROCEDURE



8

Remove and discard two front bolts from the under body guard.



9

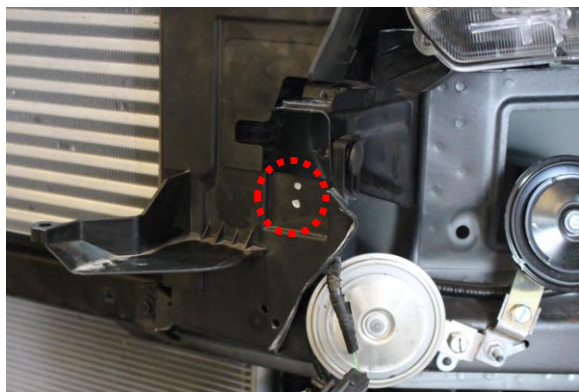
Remove and discard the front intrusion beam.



10

Trim off the bottom section of the air dam plastic as shown in image.

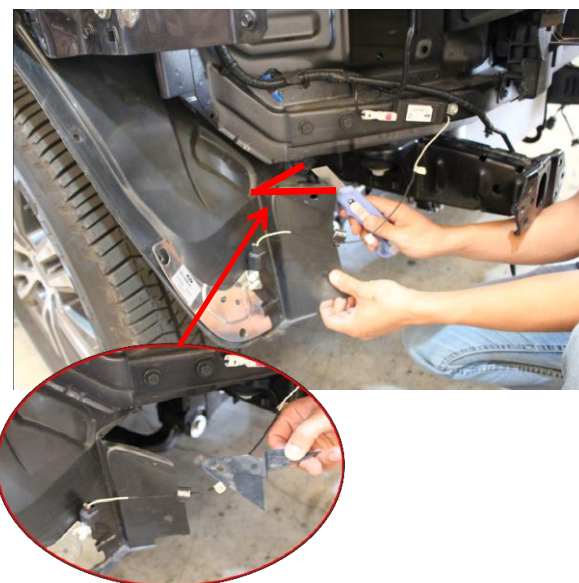
FITTING PROCEDURE



- 11 Drill two M5 mm holes air dam plastic as shown in image

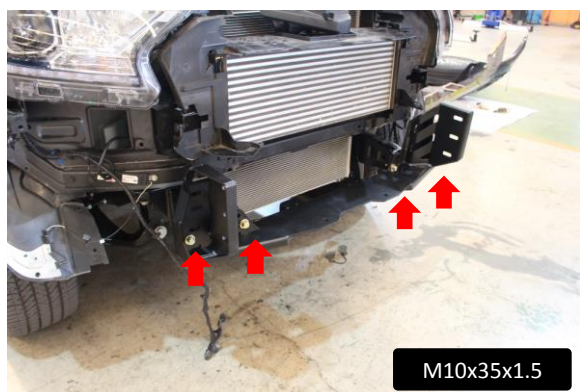


- 12 Installed Temperature sensor on plastic.



- 13 Trim the inner guard as shown in the picture.

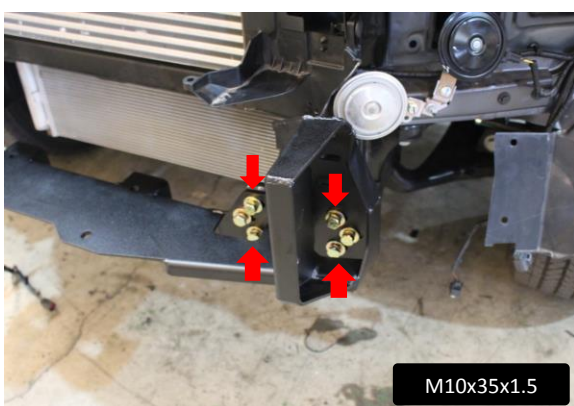
FITTING PROCEDURE



14

Lift the chassis mounting bracket onto the chassis of vehicle.

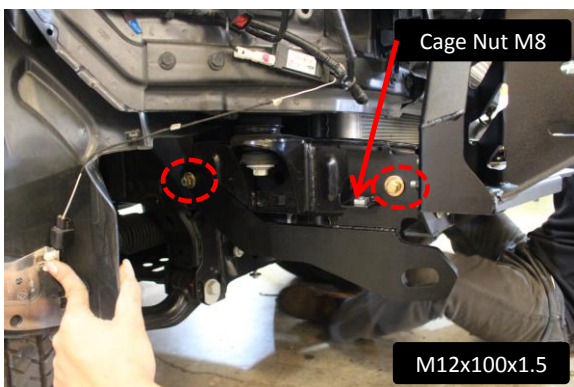
Using four M10 x 1.5 x 35mm hex bolts, M10 spring and flat washers loosely fit the chassis mount bracket.



15

Using four M10 x 1.5 x 35mm hex bolts, M10 spring ,flat washers and hex nut loosely fit the chassis mount bracket.

Repeat the opposite side.

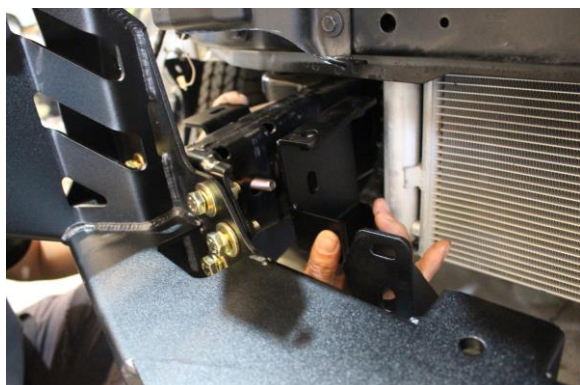


16

Lift the chassis winch mount support recovery spacer
(1) Using M12 x 1.5 x 100mm hex bolts, M12 spring ,flat washers and hex nut.

(2)Using M12 x 1.5 x 100mm hex bolts, M12 spring ,flat washers,spacer flat washer Ø48mm and hex nut.

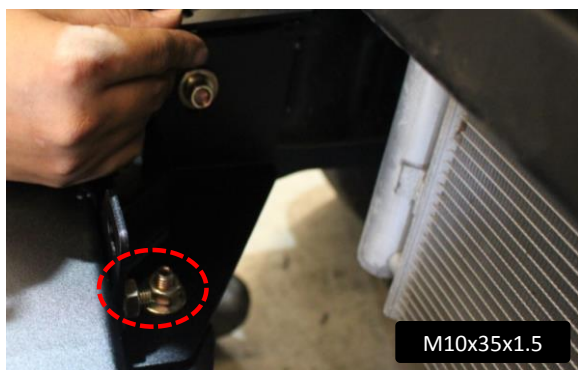
Repeat the opposite side.



17

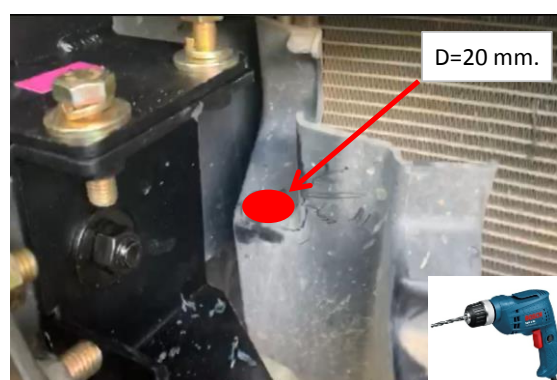
Attach mounting Bracket Support onto the chassis mounting bracket .

FITTING PROCEDURE

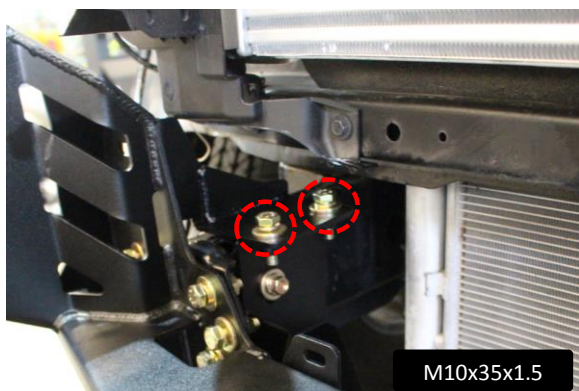


- 18** Secure the mounting Bracket Support to the chassis mounting bracket with two M10 x 1.5 x 35mm hex bolts, M10 spring , flat washers and hex nut.

Repeat the opposite side.



- 19** Drill a 20 mm hole in the plastic as shown.



- 20** Secure the Mount Bracket Upper to the chassis support assembly with two M10 x 1.5 x 35mm hex bolts, M10 spring and flat washers .



- 21** location of winch on the chassis mount bracket.
Reinstall original under body plate .

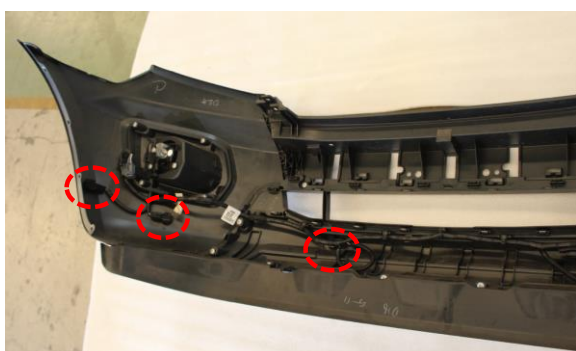
Repeat the opposite side.

FITTING PROCEDURE



22

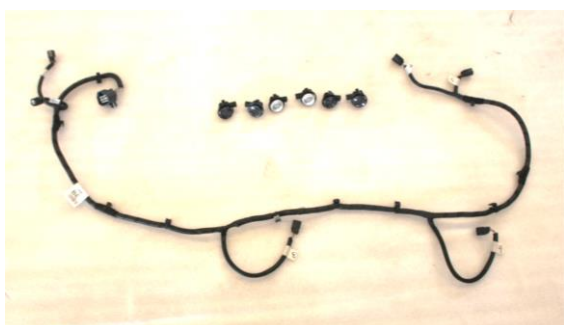
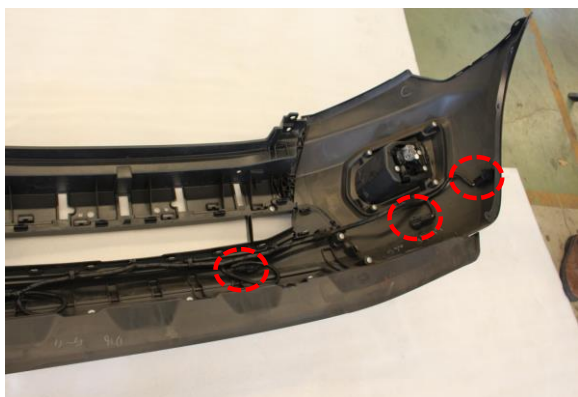
location of winch on the chassis mount bracket.



23

If fitted, remove the parking sensors and parking sensor loom from the bumper bar.

Note: the location of each parking sensor.
The parking sensors .



FITTING PROCEDURE

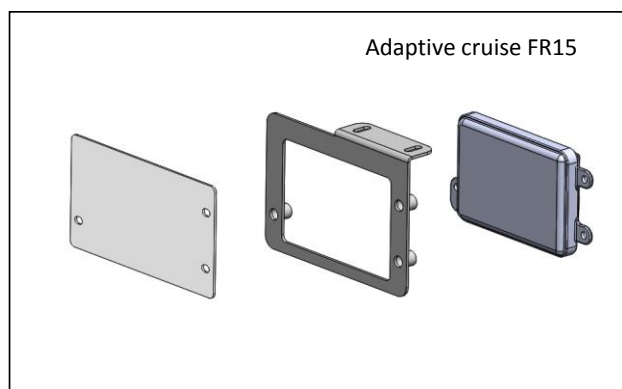


24

remove the original fog light from the bumper bar.



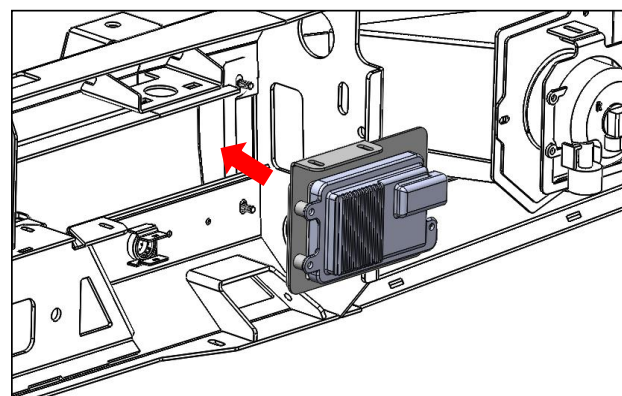
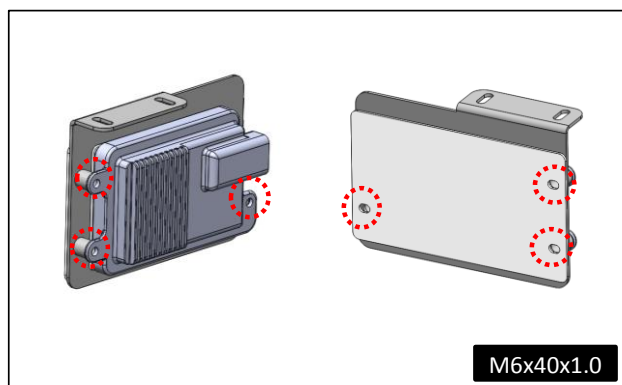
original fog light.



25

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

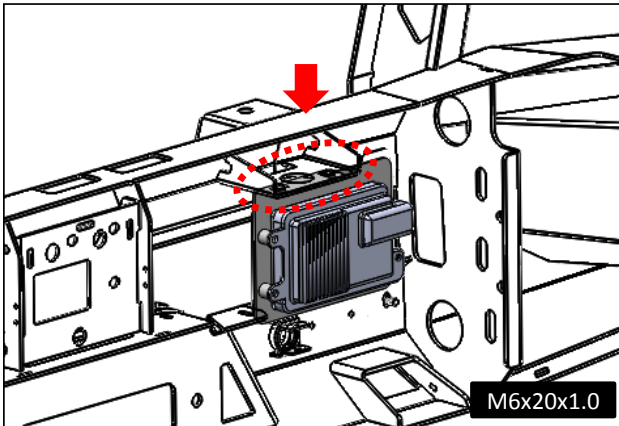
A car with cruise control is fitted to the Adaptive cruise bracket by installing an acrylic cover plate on the front of the Button Head Bolt (M6x40x1.0 EDP) 3Pcs and Flat washer M6 OD14 and Flang nut M6 and then mounting it on the bumper.



26

Insert tow M6x1.0x3T cage nuts onto the bullbar as indicators.

FITTING PROCEDURE



27

fix Adaptive cruise on the bull bar Using four M6 x 1.0 x 20mm hex bolts, M6 spring and flat washers .

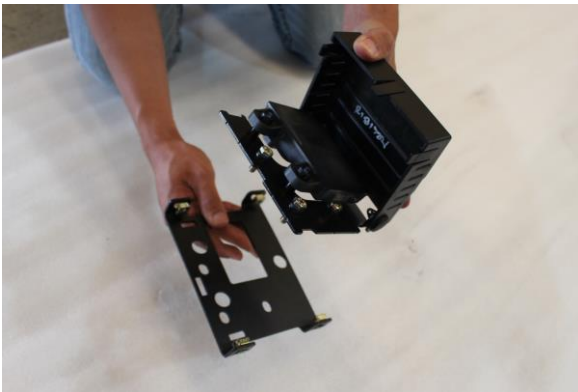
Adaptive cruise FR18



28

Adaptive cruise bracket For FR18 (Ford Ranger 2018)

Remove the mounting bracket



29

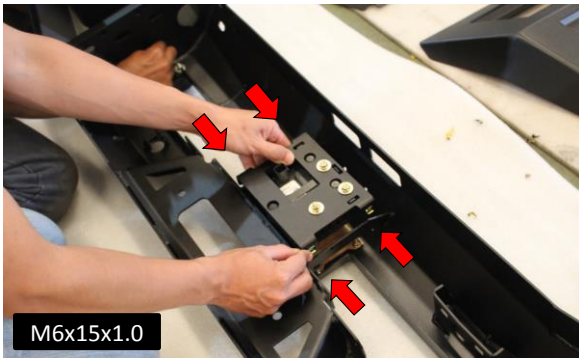
fix Adaptive cruise on the Adaptive cruise bracket .



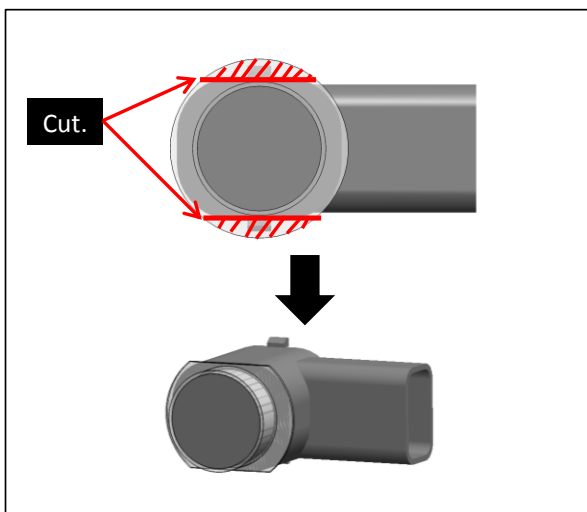
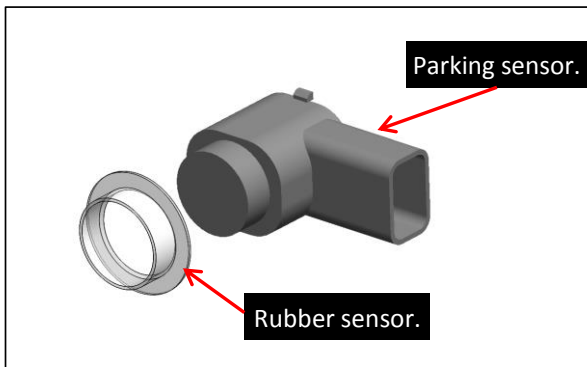
30

Using three M6 x 1.0 x 30mm hex bolts, M6 spring ,flat washers and Flange nut.

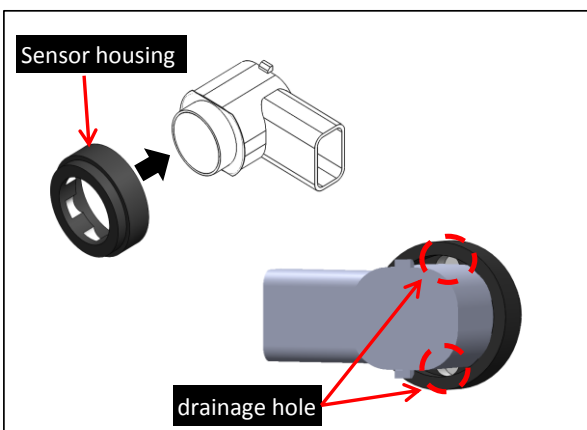
FITTING PROCEDURE



- 31 fix Adaptive cruise on the bull bar Using four M6 x 1.0 x 15mm hex bolts, M6 spring and flat washers .

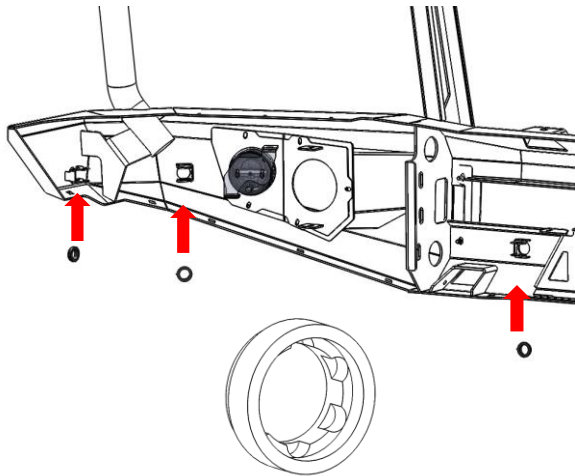


- 32 Cut off the excess of the sensor tire as shown in the picture.



- 33 Test the sensor housing on the sensor by observing that the drain hole in the sensor housing is in the sensor gap as shown.

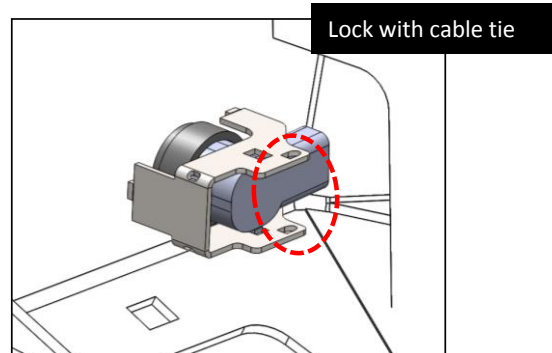
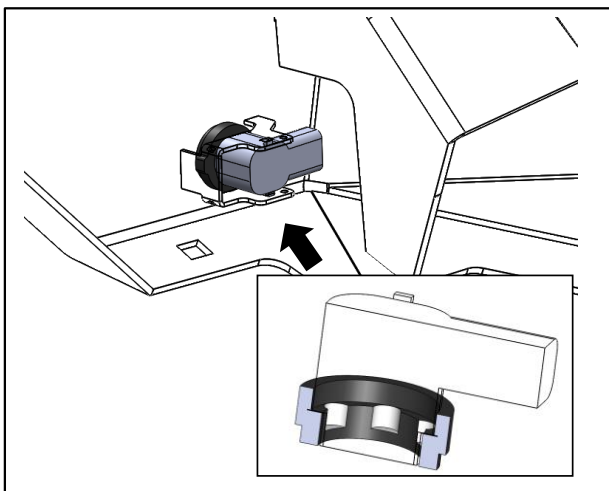
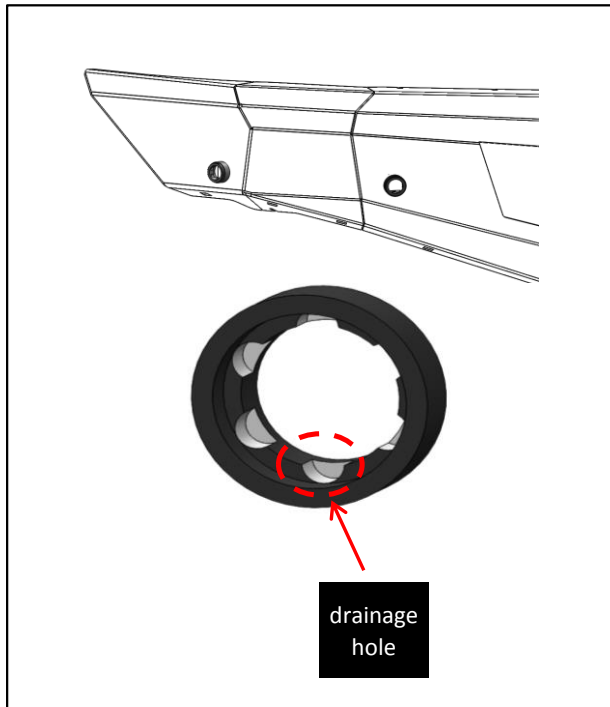
FITTING PROCEDURE



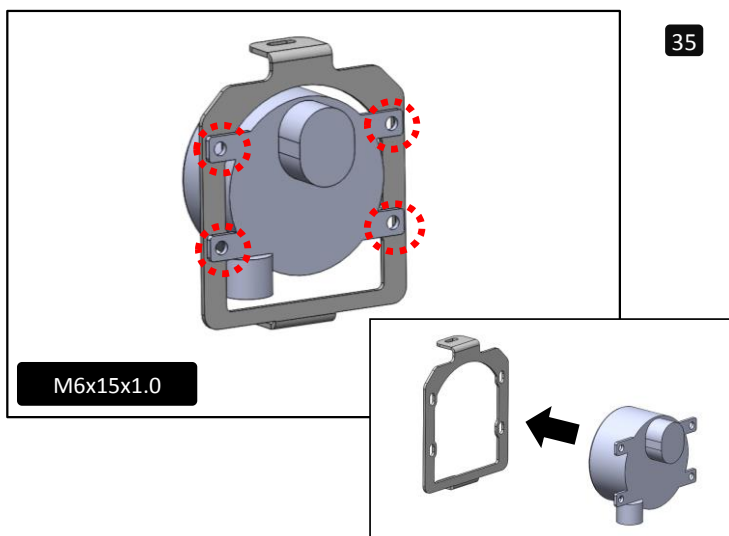
34

Insert Sensor housing on the bull bar. Let the drainage hole at the bottom

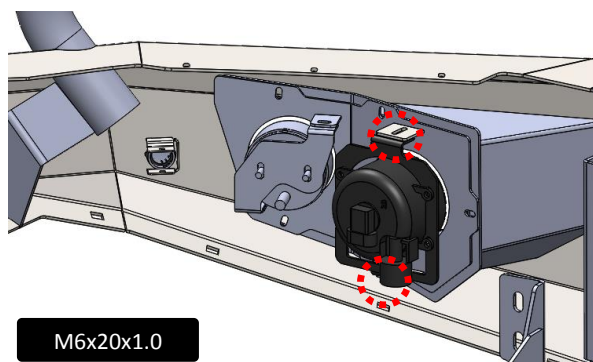
Re-install the parking sensors to the bull bar. Fit parking sensors, noting orientation, ensuring that each one "snaps" into place, as shown.



FITTING PROCEDURE



- 35 Fit original fog light on the Fog light Bracket. using M6 x 1.0 x 15 hex bolts flat washers and Flange Nut M6.



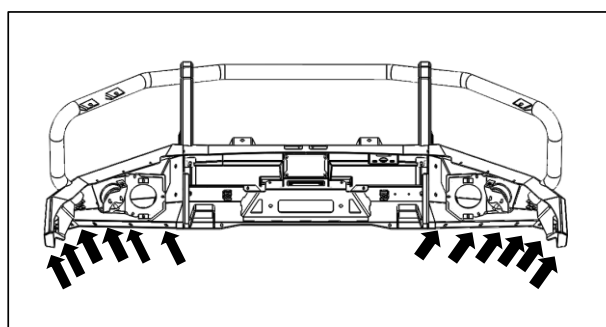
- 36 Fit Fog light Bracket on bar. using two M6 bolts (flat washers and Flange nut.

Repeat the opposite side.

Using a LED test lamp or multi meter locate the "Parking Lights" wires. Wires are located behind the headlamp inside the engine bay.

PIAK LED Harness codes

- Indicator Yellow
- Park brown
- Earth White



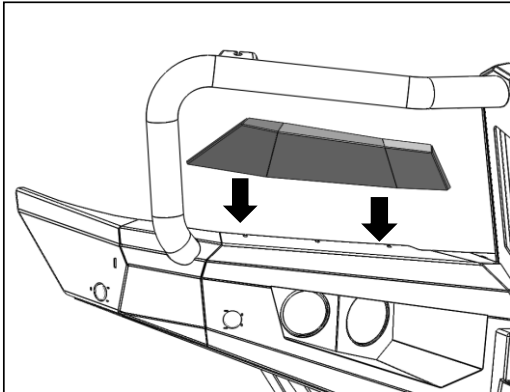
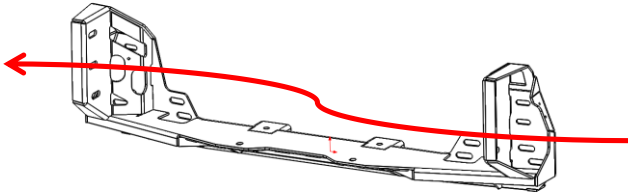
- 37 Insert twelve M6x1.0x3T cage nuts onto the bullbar as indicators.



- 38 Attach the sensor cable to the hole in the chassis mounting bracket .

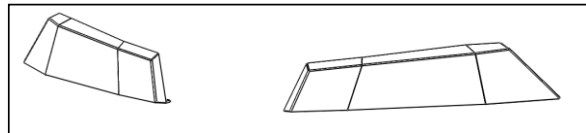
FITTING PROCEDURE

parking sensor loom

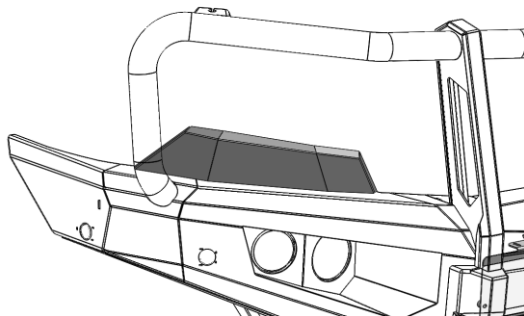


Install Elite Infill (Ranger 2015/2018 Elite Infill or Everest 2015/2018 Elite Infill - Head Lamp washer) as listed below.

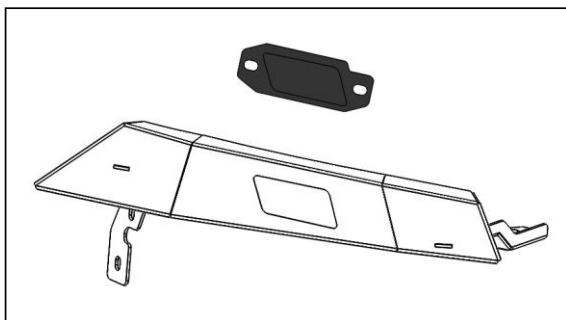
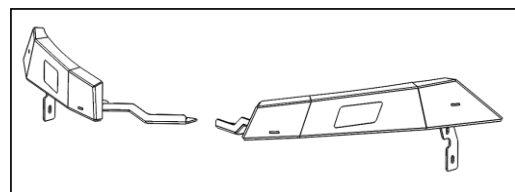
- 39** PK105S/106SFR15E/FR18E/FE15E/FE18E - I
(Ranger 2015/2018 Elite Infill)



Fit plate infilled on the bull bar.using M6 x 1.0 x 15 hex bolts flat washers and Flange Nut M6.



- PK105S/106SFE15E/FE18E (HLW) -I**
(Everest 2015/2018 Elite Infill - Head Lamp washer)



- 40** Remove Headlamp Washer plugs from the Elite Infill .

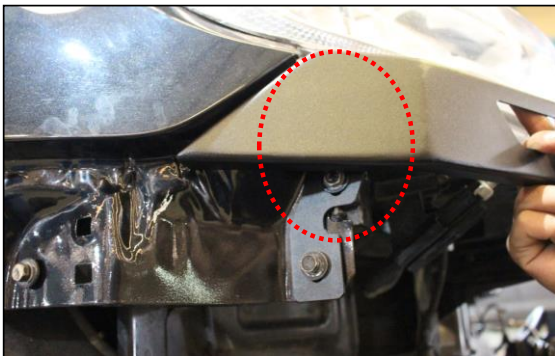
FITTING PROCEDURE



- 41 location of Elite Infill - Head Lamp washer .



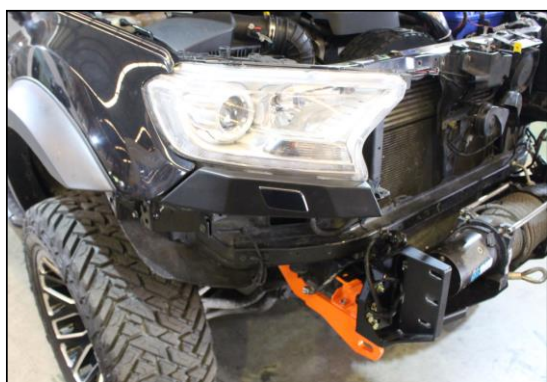
- 42 Fit plate infilled on the vehicle .
using tow hex bolts M6 OE .using one M6 x 1.0 x 25
hex bolts flat washers and Flange Nut M6.



FITTING PROCEDURE



- 43 Reinstall the headlamp washer cover as shown.



- 44 Lift the bullbar onto the chassis of the vehicle.

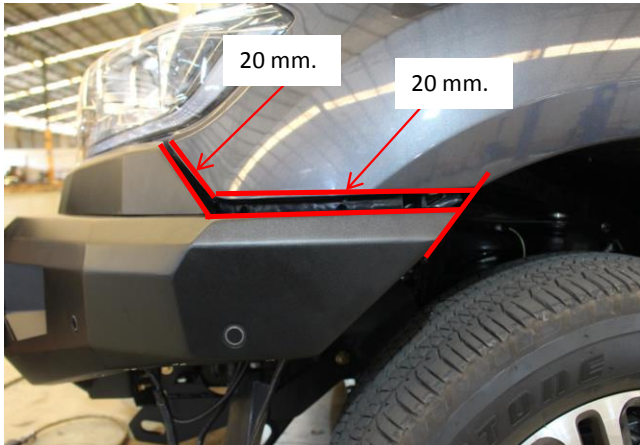
Secure bull bar onto the chassis mounting bracket by using three M12 bolts (M12x35x1.5), spring washers and flat washers



- 45 **PK105S/106SFE15E/FE18E (HLW) -I**
(Everest 2015/2018 Elite Infill - Head Lamp washer)

Position bar onto vehicle, making sure it is centered, lining up with the wheelarch and has a 20mm gap between the quarter panel and the wing of the bar.

FITTING PROCEDURE



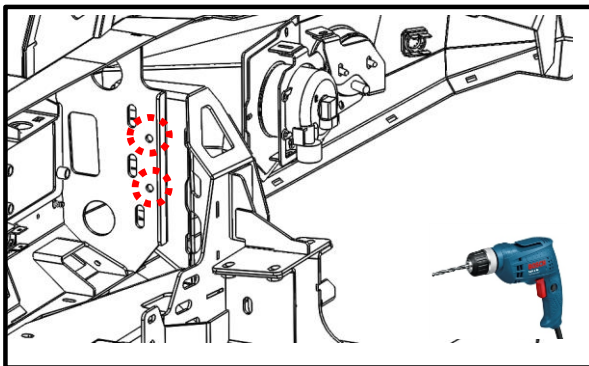
PK105S/106SFR15E/FR18E/FE15E/FE18E - I (Ranger 2015/2018 Elite Infill)

46

Position bar onto vehicle, making sure it is centered, lining up with the wheelarch and has a 20mm gap between the quarter panel and the wing of the bar.

If the bar does not sit centrally across the front of the vehicle, loosen the chassis mount and adjust accordingly.

Tighten all bolts to the correct torque.



47

Drill two 10 mm holes through the chassis mount bracket by using holes on the bullbar as a guide.

Secure with two M10 bolts (M10x35x1.5) and flange nuts .

Repeat the opposite side.

Connect the sensor wiring harness, Adaptive wiring harness and power cable. fog light wiring.



48

Cut the front grill along the marked cutting line using air saw.

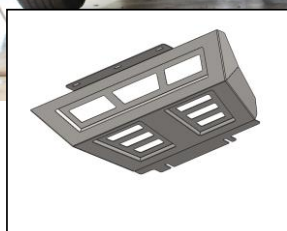


FITTING PROCEDURE



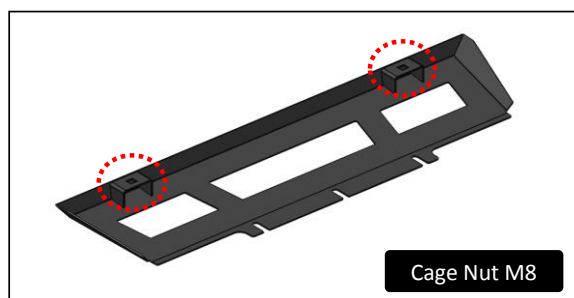
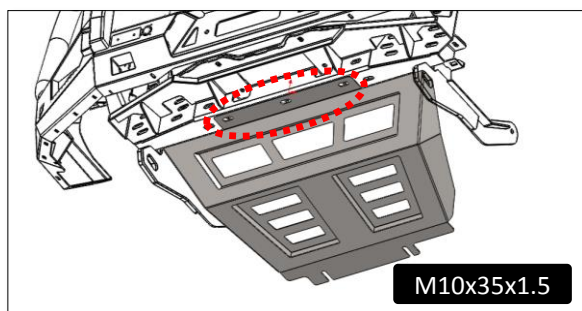
49

Fit Front Grill Bracket on the Front Grill .using Screw Phillips M5xL12.



50

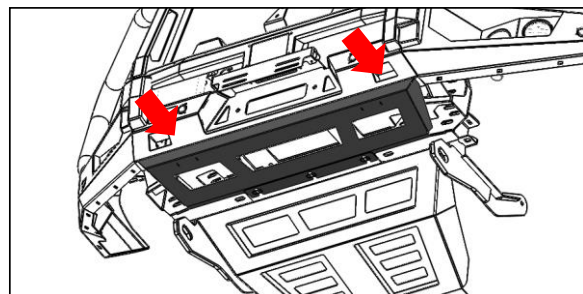
Place the center protection plate (2) onto the chassis mounting bracket by using three M10 bolts (M10x35x1.5), spring washer and flat washer as indicators.



51

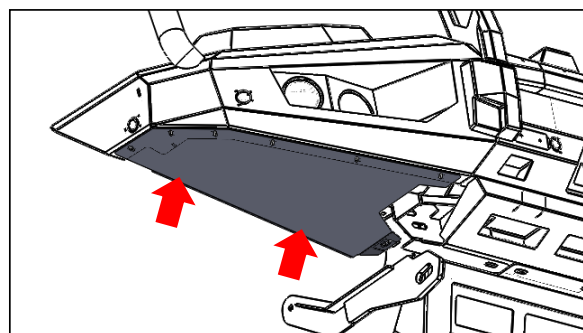
Insert tow M8 cage nuts onto the Under protection plate Center (1) as indicators.

FITTING PROCEDURE



52

Fit the the Under protection plate Center onto the bullbar.Using tow M8 x 1.25 x 25mm hex bolts, spring and flat washers.



53

Fit the wing protection plate onto the bullbar.Using six M6 x 1.0 x 20mm hex bolts, spring and flat washers.

Repeat the opposite side.

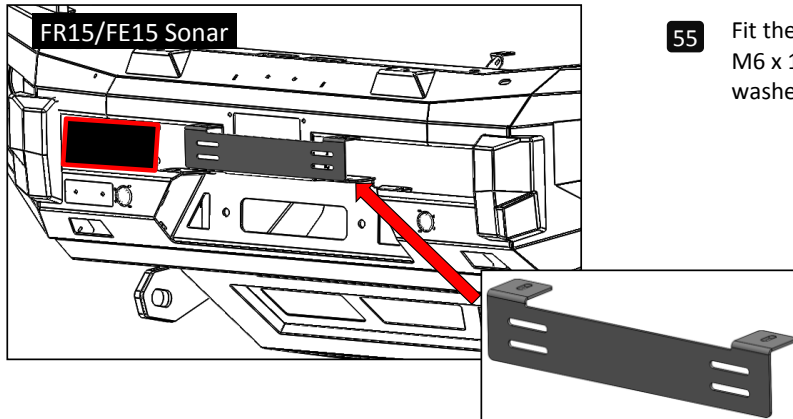


54

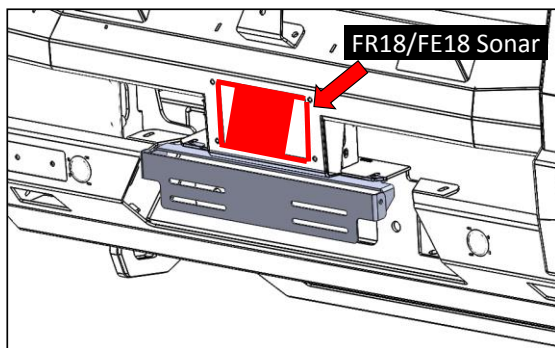
Re-fit the front grill by using the original bolts and clips removed earlier.

Re-fit the plastic cover attached to thegrille by using the original screws and clips.

FITTING PROCEDURE



- 55** Fit the License plate bracket FR15/FE15. Using two M6 x 1.0 x 20mm hex bolts, spring and flat washers.



- 56** Assemble License plate bracket FR18/FE18 by using two M6 button head, flat washer, Nylon Washer M6 and nyloc nut as shown.

Do not fully tighten.
Secure the license plate to the bracket and place to the bar by using the supplied M6 bolt kits.

FITTING PROCEDURE

