



FORD RANGER 2015–2021 FORD EVEREST 2015–2021

PK106FG0ELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RMB_UPMB PK106FG0ELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_RMB_UP0 PK106FG0ELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_R0_UPMB PK106FG0ELF90/PKFG1LFFR15E/FR18E/FE15E/FE18E_R0_UP0

Fitting Time : approx. 3.5 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.



Т	0	0	S	R	F	[]		ľ	S

- 1. Torque , Socket wrench
- 2. Screw driver
- 3. Open spanner
- 4. Flexible plug socket
- 5. Long offset wrench

PARTS LIST

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

6.

7.

8.

9.

Adhesive Tape

Masking Tape

Fine sandpaper

Drill and metric drill bits

Steel Bull Bar

Item	Component Name	Q'ty	Remarks			
1	Winch Bull Bar	1	_			
			1			
Moun	ting 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			
5	Mount Support & Recovery(LH/RH)	2				
6	wing support bracke (LH/RH)	2	2			
7	Hex Bolt M8x35x1.25	2				
8	Spring Washer M8	2				
9	Flat Washer M8 OD22	4				
10	Flange Nut M8x1.25	2				
11	Hex Bolt M10x35x1.5	30				
12	Spring Washer M10	30				
13	Flat Washer M10 OD27	52	and the second sec			
14	Hex Nut M10x1.5	22				
15	Hex Bolt M12x35x1.5	6				
16	Spring Washer M12	6				
17	Flat Washer M12 OD33	12				
18	Hex Nut M12x1.5	6				
19	Hex Bolt M12x100x1.5	4	5			
20	Spring Washer M12	4				
21	Flat Washer M12 OD33	8				
22	Hex Nut M12x1.5	4				
23	Flat Washer 4xØ48 mm.	2				



Prote	Protection Plate						
Item	Component Name	Q'ty	Remarks				
24	Protection Plate Center 01	1					
25	Protection Plate Center 02	1					
26	Protection Plate (RH)	1	24				
27	Protection Plate (LH)	1	26 27				
28	Hex Bolt M6x20x1.0	12					
29	Spring Washer M6	12					
30	Flat Washer M6	12					
31	Cage Nut M6x1.0x3T	12					
32	Hex Bolt M8x20x1.25	4					
33	Spring Washer M8	4					
34	Flat Washer M8	4					
35	Cage Nut M8x1.25x3.2T	4					
36	Hex Bolt M10x35x1.5	3					
37	Spring Washer M10	3					
38	Flat Washer M10 OD27	3					
Licen	se Plate Bracket	<u> </u>					
Item	Component Name	Q'ty	Remarks				
39	License Plate Bracket FR18/FE18 (Inner)	1					
40	License Plate Bracket FR18/FE18 (Outer)	1					
41	License Plate Bracke FR15/FE15	1	39				
42	Hex Bolt M6x20x1.0	4					
43	Spring Washer M6	4	()				
44	Flat Washer M6 OD20	6					
45	Button Head Bolt M6x20x1.0	2	40				
46	Nyloc Nut M6x1.0	2					
47	Nylon Washer M6	4					
48	Flat Washer M6 OD14	4					
49	Flange Nut M6x1.0	4	A1				
L		1					
·							
L							



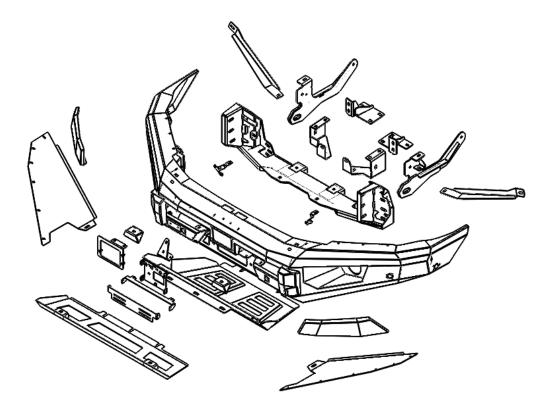
Fog Light Bracket						
Item	Component Name	Q'ty	Remarks			
50	Fog Light Bracket	2				
51	Hex Bolt M6x20x1.0	4	51			
52	Spring Washer M6	4				
53	Flat Washer M6 OD20	8				
54	Flange Nut M6x1.0	12				
55	Hex Bolt M6x15x1.0	8	0 0			
56	Flat Washer M6 OD14	16				
Adapt	tive cruise bracket For FR15					
Item	Component Name	Q'ty	Remarks			
57	FR15/FE15 Sonar Mounting Bracket	1				
58	FR15/FE15 Perspex Cover	1				
59	Hex Bolt M6x20x1.0	2				
60	Spring Washer M6	2				
61	Flat Washer M6 OD20	2	57 58			
62	Cage Nut M6x1.0x3T	2				
63	Button Head Bolt M6x40x1.0	3	•			
64	Flat Washer M6 OD14	6	•			
65	Flange Nut M6x1.0	3				
Adapt	tive cruise bracket For FR18					
Item	Component Name	Q'ty	Remarks			
67	FR18/FE18 Sonar Mounting Bracket	1	67			
68	Hex Bolt M6x15x1.0	4	7			
69	Hex Bolt M6x30x1.0	3				
70	Spring Washer M6	7				
71	Flat Washer M6	10				
72	Flange Nut M6x1.0	3				



Front	Front Grill Bracket (LH,RH)							
Item	Component Name	Q'ty	Remarks					
73	Front Grill Bracket FR15/FR18 (LH,RH)	2						
74	Front Grill Bracket FE15/FE18 (LH,RH)	2						
75	Hex Bolt M6x20x1.0	2	73 74					
76	Spring Washer M6	2						
77	Flat Washer M6 OD20	4						
78	Flange Nut M6x1.0	2						
79	Hex Socket Cap Head Self-Tapping Screw M5x12	4	\sim					
Senso	pr plugs							
Item	Component Name	Q'ty	Remarks					
80	Sensor housing D18.5x10	6						
81	Sensor housing D19.5x12	2	80 81 82					
82	Sensor blanking plugs D25.5x14.5 mm	6						
83	Cable Tie (L=150 mm)	10						
Winch Control Plate								
Item	Component Name	Q'ty	Remarks					
84	Winch Control Plate	1						
85	Hex Bolt M6x20x1.0	2	0 84					
86	Spring Washer M6	2	0					
87	Flat Washer M6	4						
88	Flange Nut M6x1.0	2						
Sport	Sport Light Bracket							
Item	Component Name	Q'ty	Remarks					
89	FRR18 Sport Light	2	89					
90	Hex Bolt M8x20x1.0	4						
91	Spring Washer M8	4						
92	Flat Washer M8 OD22	4						
93	Cage Nut M8x1.25x3.2	4						



COMPONENTS OVERVIEW



TORQUE SETTING OF FASTENER

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

Bolt Diameter	Class	\$ 8.8	Class 10.9		
(mm.)	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	









Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) 1

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



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

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



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

Repeat the opposite side.







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

5

4

Unclip and remove the grille from vehicle .

6

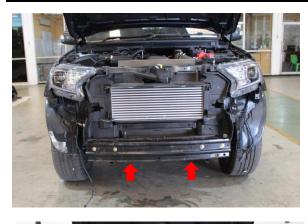
Remove four original bolts fitted to the front intrusion beam.

Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024)

7

Remove Adaptive cruise & Emergency braking.









8

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

Remove and discard the front intrusion beam.

10

9

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



Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024)



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

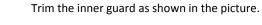




12

Installed Temperature sensor on plastic.





13

14



Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) 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.











Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) 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.

Lift the chassis witch 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

16

Attach mounting Bracket Support onto the chassis mounting bracket .

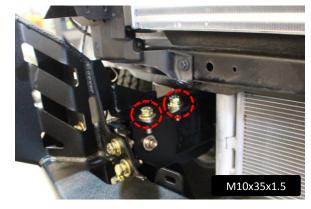


Secure the mounting Bracket Support to the chassis mounting bracket with two M10 x 1.5 x 35mmhex bolts, M10 spring , flat washers and hex nut.

Repeat the opposite side.











Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024)

19

20

Drill a 20 mm hole in the plastic as shown.

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.

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 .

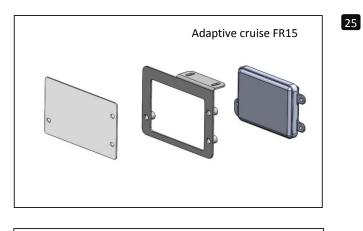






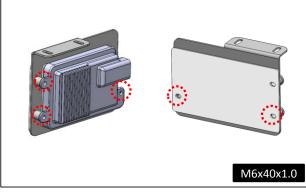
remove the original fog light from the bumper bar.





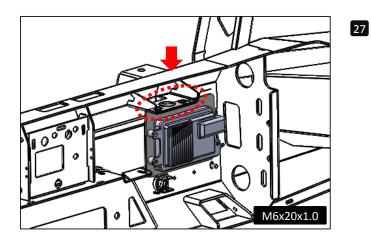
Adaptive cruise bracket For FR15 (Ford Ranger 2015-2017)

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.



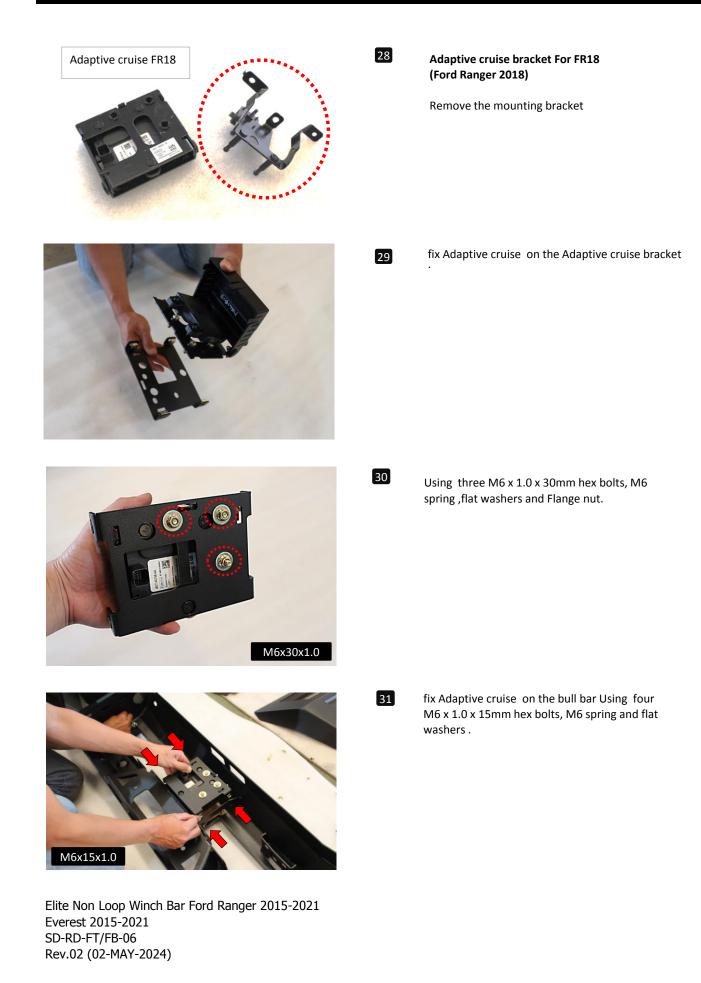
Insert tow M6x1.0x3T cage nuts onto the bullbar as indicators.

26

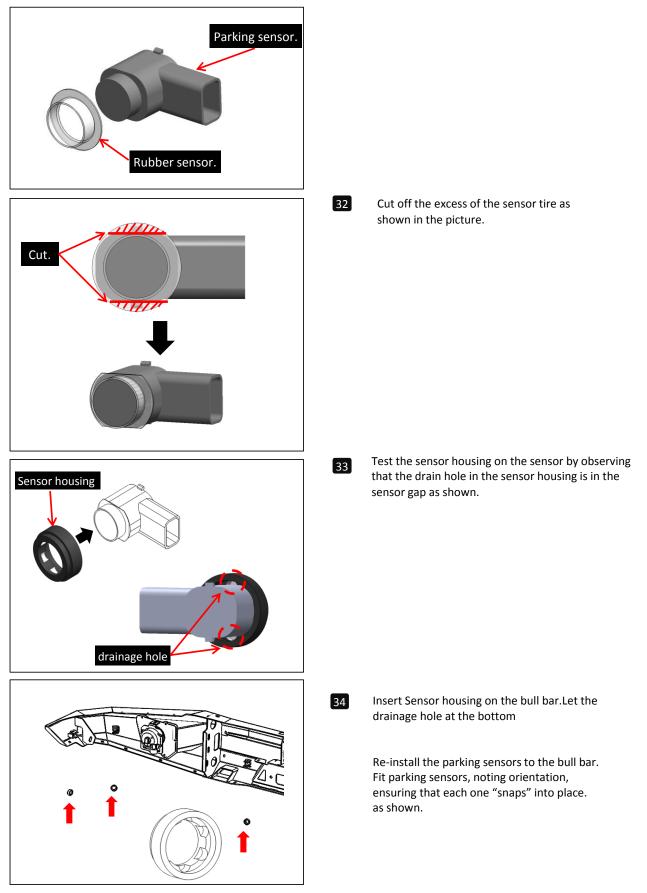


Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) fix Adaptive cruise on the bull bar Using four M6 x 1.0 x 20mm hex bolts, M6 spring and flat washers .

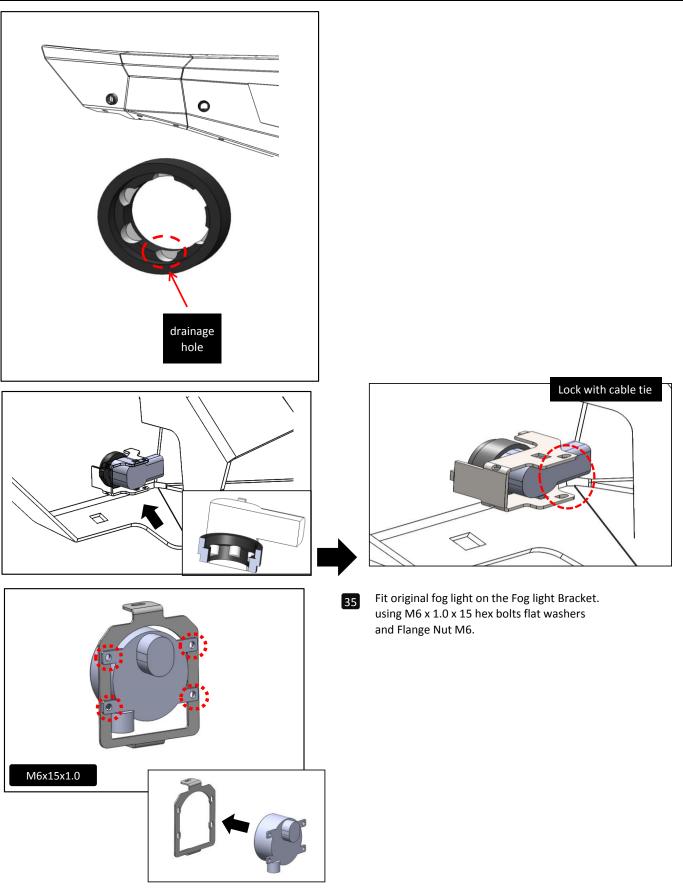




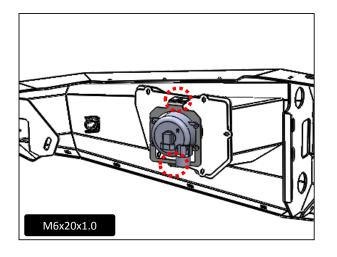










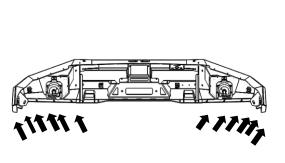


Fit Fog light Bracket on bar. using two M6 bolts flat washers and Flange nut.

Repeat the opposite side.

Insert twelve M6x1.0x3T cage nuts onto the

bullbar as indicators.

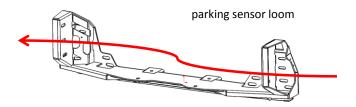


38

37

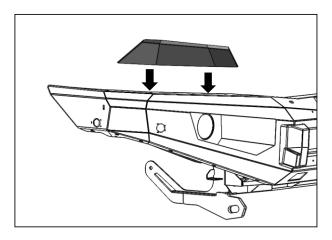
36

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



parking sensor loom

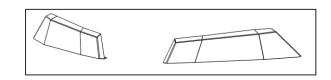




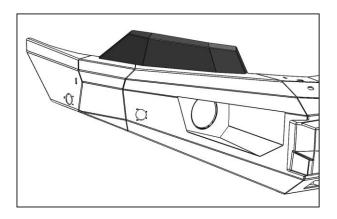
Install Elite Infill (Ranger 2015/2018 Elite Infill or Everest 2015/2018 Elite Infill - Head Lamp washer) as listed below.

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

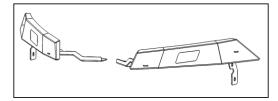
39

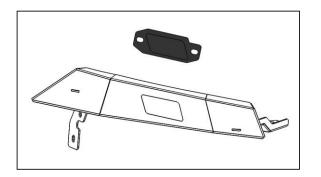


Fit plate infilled on the bull bar.using M6 x 1.0 x 15 hex bolts flat washers and Flange Nut M6.



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



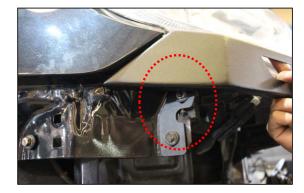


40 Remove Headlamp Washer plugs from the Elite Infill .











Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) 41

42

location of Elite Infill - Head Lamp washer .

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.











Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) 43

44

45

Reinstall the headlamp washer cover as shown.

Lift the bullbar onto the chassis of the vehicle.

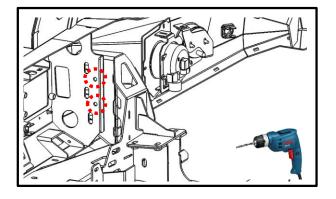
Secure bull bar onto the chassis mounting bracket by using three M12 bolts (M12x35x1.5), spring washers and flat washers

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

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













Elite Non Loop Winch Bar Ford Ranger 2015-2021 Everest 2015-2021 SD-RD-FT/FB-06 Rev.02 (02-MAY-2024) PK105S/106SFR15E/FR18E/FE15E/FE18E - I (Ranger 2015/2018 Elite Infill)

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

If the bar does not sit centrally across the front of the vehicle, loosen the chassismount and adjust accordingly. Tighten all bolts to the correct torque.

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.

47

48

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

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







49

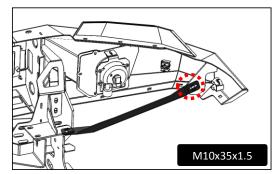
Fit Front Grill Bracket on the Front Grill .using Screw Phillips M5xL12.

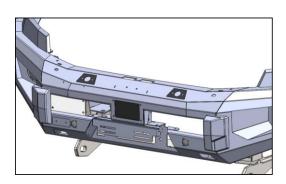


51

52

Place RH wing support bracket to the bullbar.



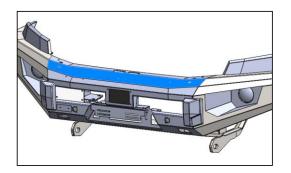


Secure wing support bracket to M10 bolt that fitted the outter mounting bracket by using flat washers and hex nut.

If driving lights are to be installed Loosely attach grille onto vehicle.

If no driving lights are to be installed, go to step 56





Use the light/aerial mount template to mark out the position of where the lights or aerial are desired to be on the front angle face of the bull bar.

54

56

53

Using a 35mm hole saw drill out the center hole and with a 9mm drill bit drill out the 2 outer holes. Deburr all holes and remove all swarf and metal filings from the bar. Coat all holes with rust inhibitor.



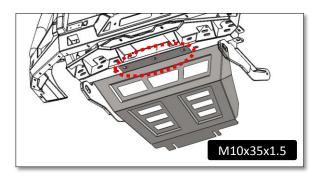
Insert tow M6x1.0x3T cage nuts onto the Sport Light Bracketon .

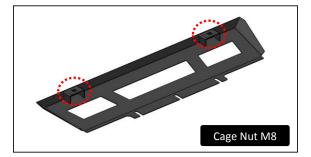
Fit Sport Light Bracketon bar. using two M8 bolts ,spring Washes and flat washers.

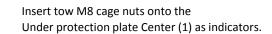


Place the center protection plate (2)onto the chassis mounting bracket by using three M10 bolts (M10x35x1.5), spring washer and flat washer as indicators.

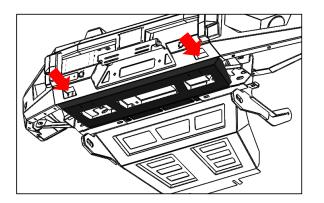










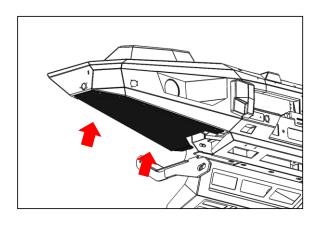




57

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





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

59

60

61

62

FR18/FE18 Sonar

Repeat the opposite side.



FR15/FE15 Sonar

 \cap

. 1

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.

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

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.

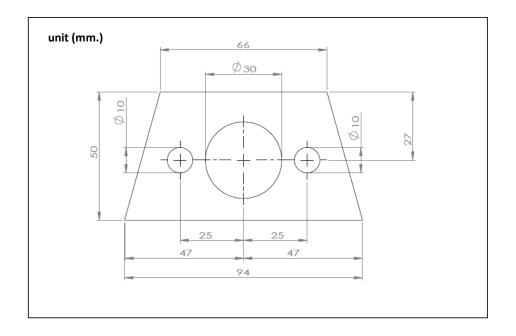
Secure the license plate to the bracket and place to the bar by using the supplied M6 bolt kits.





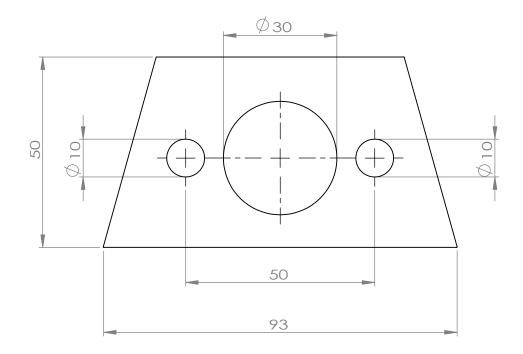


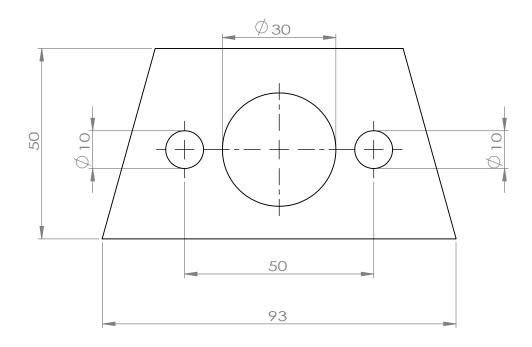
Light/Arial Mounting Bracket Template Size.





FR18_Light/Arial Mounting Bracket Template.





unit (mm.)