



# ELITE 3-LOOP WINCH BAR

## FITTING INSTRUCTIONS



## TOYOTA FORTUNER 2015–2019

PK105FGLEDOELFTF15E\_RMB\_URPMB

PK105FGLEDOELFTF15E\_RMB\_URPBO

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**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.**

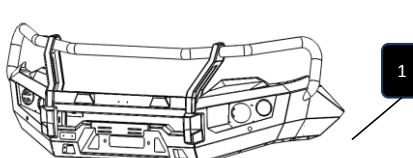
## TOOLS REQUIRED

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

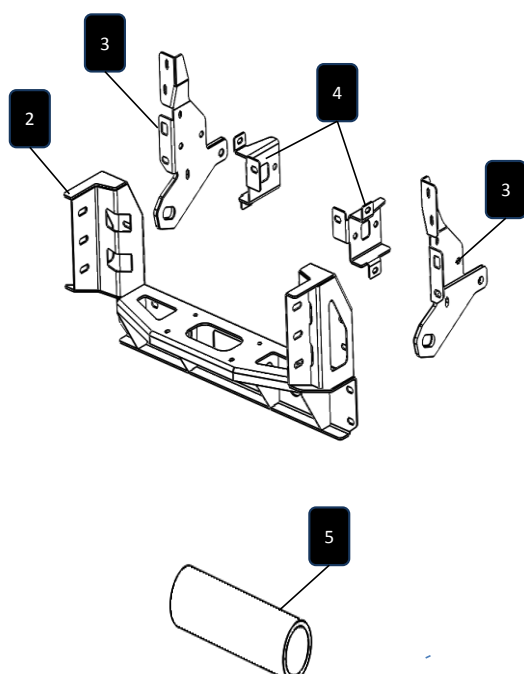
## PARTS LIST

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

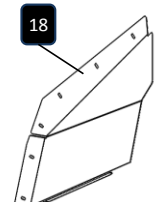
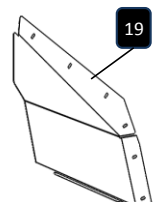
### Steel Bull Bar

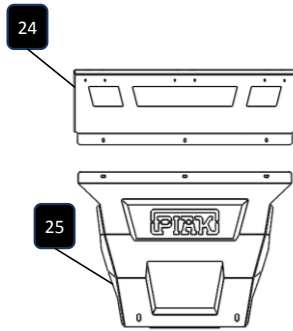
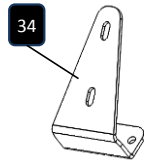
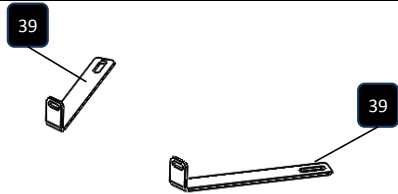
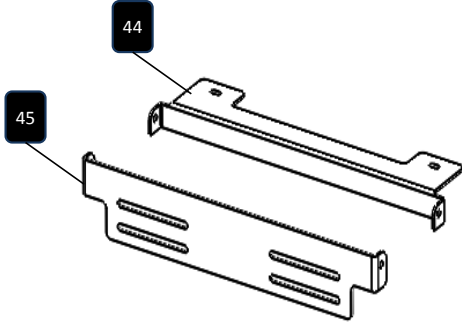
Item	Component Name	Q'ty	Remarks
1	Winch Bull Bar	1	

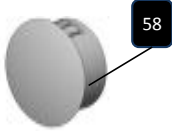
### Chassis Mounting Bracket

Item	Component Name	Q'ty	Remarks
2	Chassis Mount Bracket	1	
3	Chassis support bracket & Recovery (LH&RH)	2	
4	Inner mounting support bracket (RH&LH)	2	
5	Crush tube OD16x55 mm	4	
6	Hex Bolt M12x35x1.25	2	
7	Hex Bolt M12x35x1.5	6	
8	Flat Washer M12	14	
9	Spring Washer M12	8	
10	Hex Nut M12x1.5	6	
11	Hex Bolt M10x35x1.25	4	
12	Hex Bolt M10x35x1.5	14	
13	Hex Bolt M10x45x1.5	2	
14	Hex Bolt M10x90x1.5	4	
15	Flat Washer M10	44	
16	Spring Washer M10	24	
17	Hex Nut M10x1.5	20	

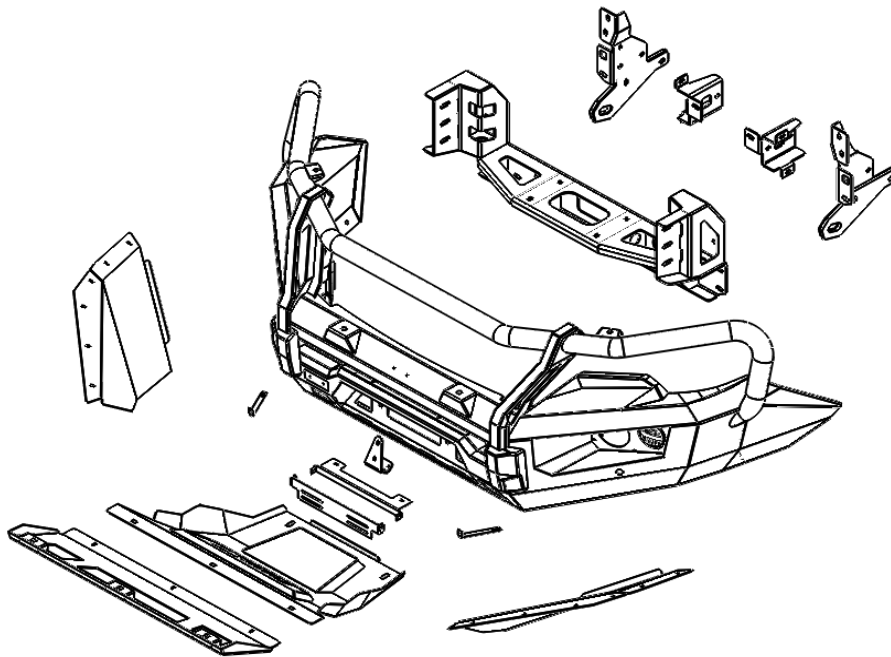
### Protection Plate (LH&RH)

Item	Component Name	Q'ty	Remarks
18	Protection Plate (RH)	1	 
19	Protection Plate (LH)	1	
20	Hex Bolt M6x20x1.0	12	
21	Flat Washer M6	12	
22	Spring Washer M6	12	
23	Cage Nut M6x1.0x3T	12	

Protection Plate Center			
Item	Component Name	Q'ty	Remarks
24	Protection Plate Center 01	1	
25	Protection Plate Center 02	1	
26	Hex Bolt M6x20x1.0	3	
27	Flat Washer M6	3	
28	Spring Washer M6	3	
29	Cage Nut M6x1.0x3T	3	
30	Hex Bolt M8x25x1.25	3	
31	Flat Washer M8	3	
32	Spring Washer M8	3	
33	Cage Nut M8x1.25x3.2T	3	
Winch Control Plate			
Item	Component Name	Q'ty	Remarks
34	Winch Control Plate	1	
35	Hex Bolt M6x20x1.0	2	
36	Spring Washer M6	2	
37	Flat Washer M6	4	
38	Flange Nut M6x1.0	2	
Grill Bracket (LH/RH)			
Item	Component Name	Q'ty	Remarks
39	Grill Bracket (LH/RH)	2	
40	Hex Bolt M6x20x1.0	2	
41	Flat Washer M6	4	
42	Spring Washer M6	2	
43	Flange Nut M6x1.0	2	
License Plate Bracket			
Item	Component Name	Q'ty	Remarks
44	License Plate Bracket (Inner)	1	
45	License Plate Bracket (Outer)	1	
46	Hex Bolt M6x20x1.0	4	
47	Flat Washer M6	8	
48	Spring Washer M6	4	
49	Flange Nut M6x1.0	2	
50	Button Head Bolt M6x20x1.0	2	
51	Nyloc Nut M6x1.0	2	
52	Nylon Washer M6	4	
53	Flat Washer M6	4	

Fog Light Bracket			
Item	Component Name	Q'ty	Remarks
54	Hex Bolt M6x20x1.0	8	
55	Flat Washer M6 OD14	8	
56	Spring Washer M6	8	
57	Flange Nut M6x1.0	8	
Sensor plugs			
Item	Component Name	Q'ty	Remarks
58	Sensor blanking plugs D19x10mm.	2	
59	Cable Tie (L=150)	4	

## Components Overview



## Torque Setting of Fastener

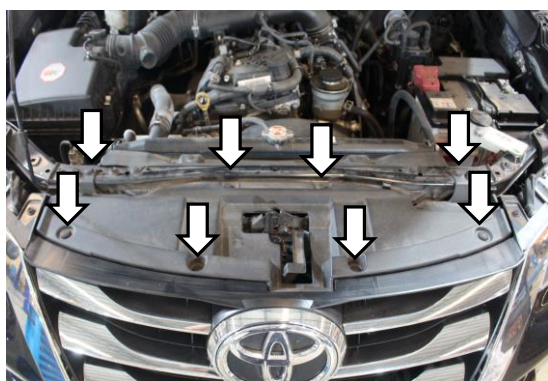
Mounting bolts must be tightened to torque's specified following ;

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

## FITTING PROCEDURE



- 1 Locate the vehicle in a suitable position.
- 2 Rest the bullbar on a surface that will not scratch the bar.



- 3 Remove the clips and the bonnet that retain the grille at the top. Keep for re-fitment of grille.



- 4 Remove the clips that retain the grille. Keep for re-fitment of grille



- 5 Remove and keep the original bolt either side that retain the grille.

## FITTING PROCEDURE

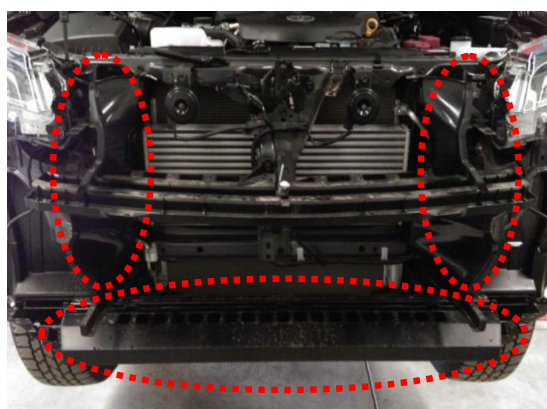


- 6** Remove and discard the screws retaining the bumper bar in the wheel arch.

Repeat for the opposite side



- 7** Remove and discard the plastic clips and bolts from the lower section of the bumper bar as indicators.



- 8** Carefully remove the bumper from the vehicle.  
If unsure about bumper removal refer to the workshop manual.

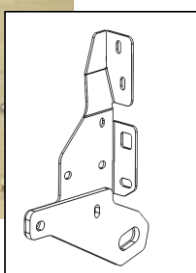
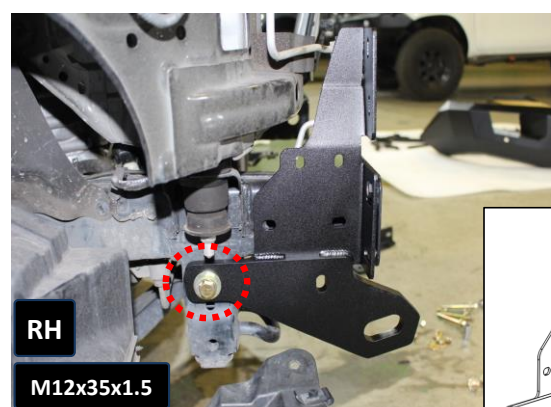
Remove and discard the upper air guides from both sides of the vehicle.

Remove and discard the front intrusion beam.  
Remove and discard the outer bumper clips from the front guards.



- 9** Remove and discard the outer bumper clips from the front guards.

## FITTING PROCEDURE



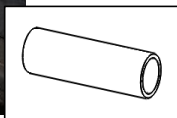
- 10** Lift the Chassis support bracket & Recovery onto the chassis of vehicle.

Secure with four M12 bolts (M12x35x1.5), spring and flat washers as indicator.

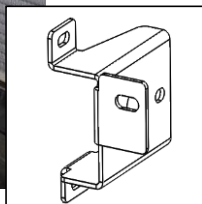
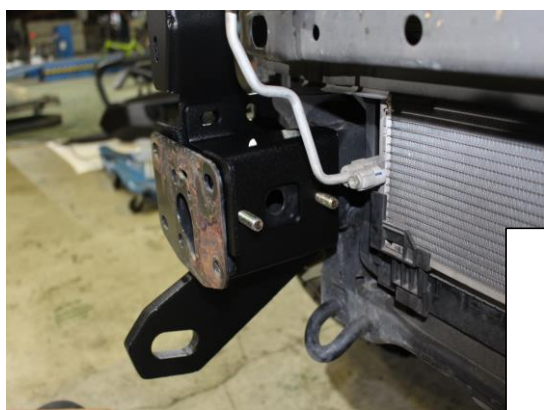


- 11** Place two M10 bolts (M10x90x1.5) into the outer mounting support bracket with two crush tubes .

## FITTING PROCEDURE

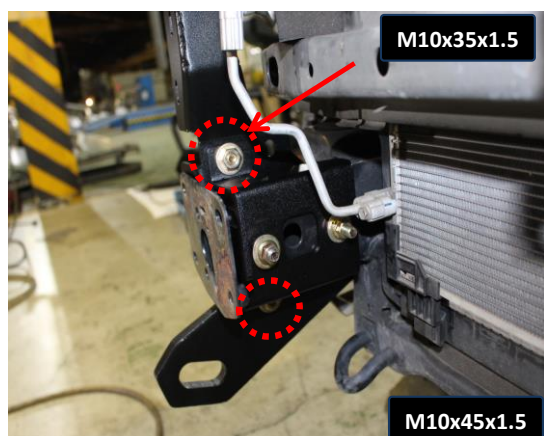


- 12** Fit into the mounting bracket through inner mounting support bracket and secure with spring, flat washers and hex nuts.



- 13** Secure the outer mounting bracket to Inner mounting support bracket by using one M10 bolts (M10x35x1.5), one M10 bolts (M10x45x1.5) spring , flat washers and hex nuts as shown at the circle.

Repeat for the opposite side.



- 14** Lift the chassis mounting bracket onto the chassis of vehicle. as shown.



## FITTING PROCEDURE



- 15 Secure with four M10 bolts (M10x35x1.25), spring and flat washers as shown at the circle.



- 16 Secure with four M10 bolts (M10x35x1.5), spring, flat washers and hex nuts as shown at the circle.

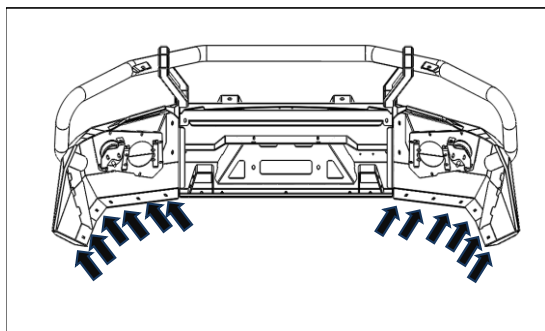


- 17 Secure with tow M10 bolt (M10x35x1.5), spring washer, flat washer and hex nuts as shown at the circle.

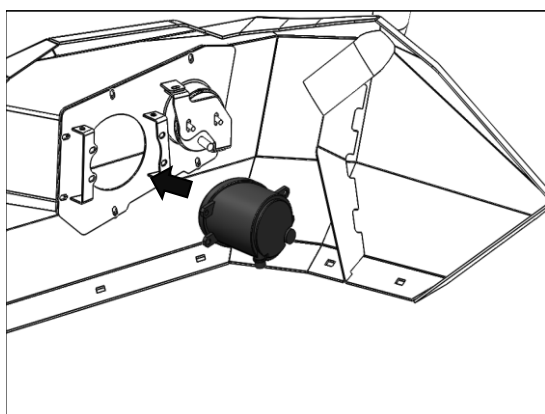


- 18 location of winch on the chassis mount bracket.

## FITTING PROCEDURE

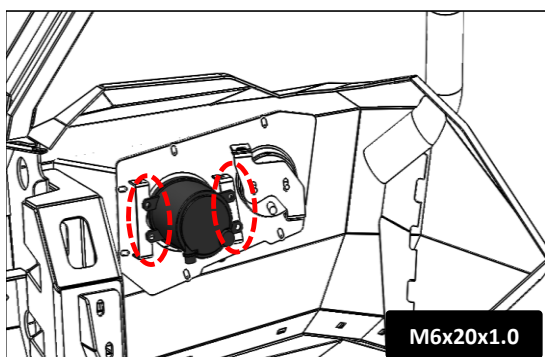


- 19 Insert twelve M6x1.0x3T cage nuts onto the bullbar as indicators.

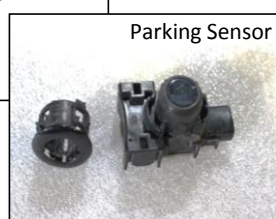
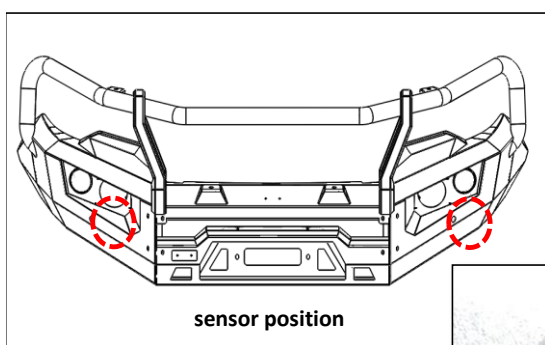


- 20 remove the original fog light from the bumper bar.

Fit original fog light on the Fog light Bracket. using M6 x 1.0 x 20 hex bolts flat washers and Flange Nut M6.



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

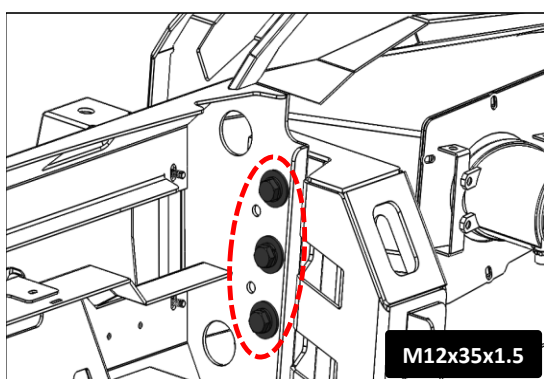


Parking Sensor

## FITTING PROCEDURE



- 22** Lift the bullbar onto the chassis of the vehicle.

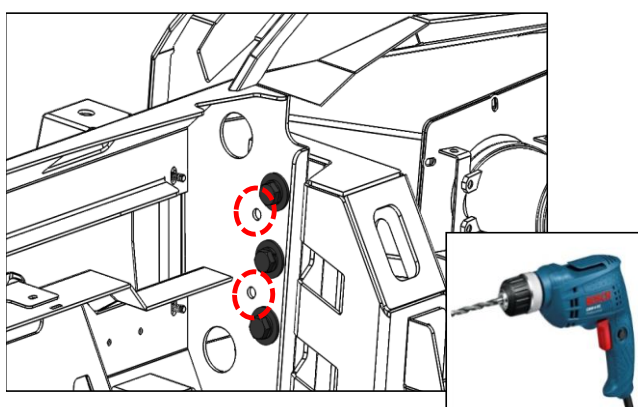


- 23** Secure bull bar onto the chassis mounting bracket by using three M12 bolts (M12x35x1.5), spring washers and flat washers.



- 24** 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.



- 25** 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.**

## FITTING PROCEDURE

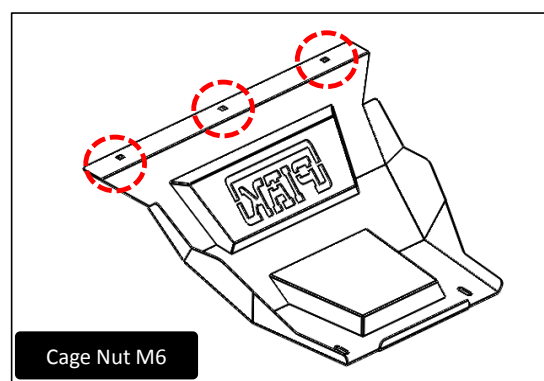


- 26 Connect the sensor wiring harness. fog light wiring.

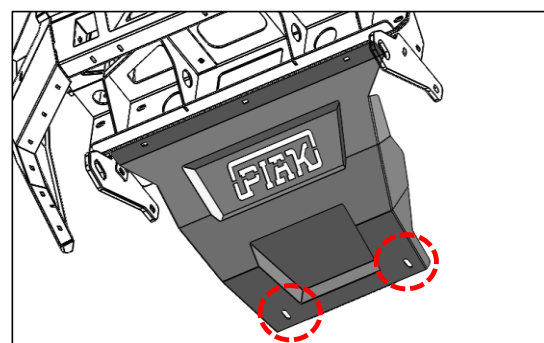
Using a LED test lamp or multi meter locate the "Parking Lights" wires. Wires are located behind the headlamp inside the engine bay.

### PIAK LED Harness codes

- Indicator Yellow
- Park brown
- Earth White

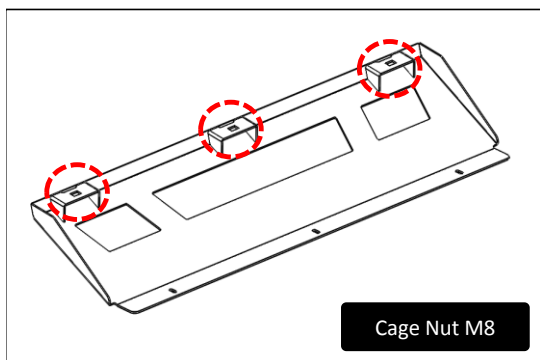


- 27 Insert three M6 cage nuts onto the Under protection plate Center (2) as indicators.

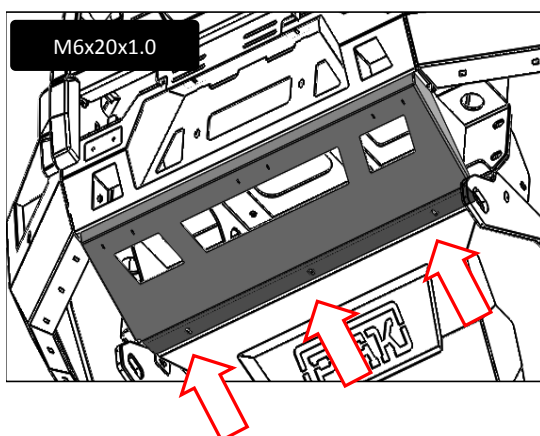


- 28 Place the center protection plate (2) onto chassis of vehicle. Use the original bolts.

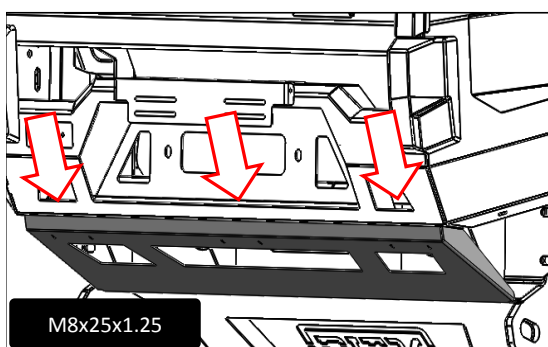
## FITTING PROCEDURE



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

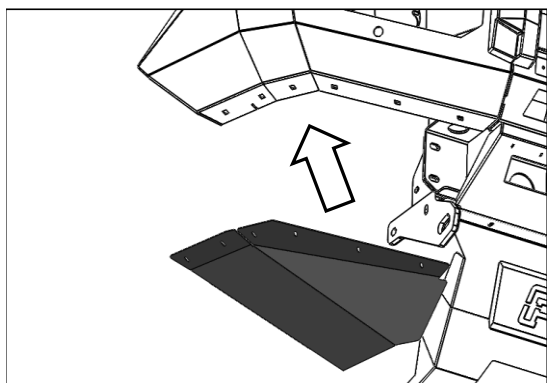


- 30 Fit the the Under protection plate Center (1) onto the Under protection plate Center (2) .Using three M6 x 1.0 x 20mm hex bolts, spring and flat washers.



- 31 Fit the the Under protection plate Center (1) onto bull bar .Using three M8 x 1.25 x 25mm hex bolts, spring and flat washers.

## FITTING PROCEDURE

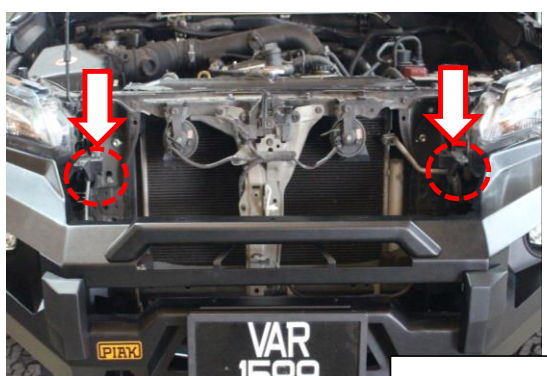


- 32** Fit the wing protection plate onto the bullbar. Using six M6 x 1.0 x 20mm hex bolts, spring and flat washers.

**Repeat the opposite side.**



- 33** Fit Front Grill Bracket on the Front Grill. Use the original bolts.



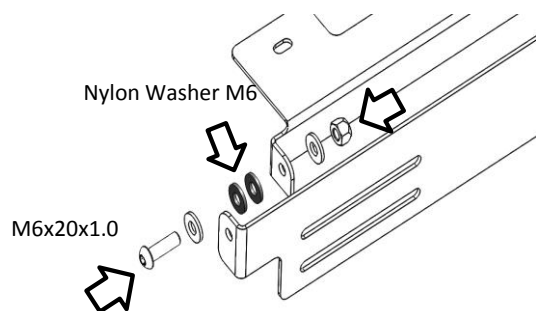
- 34** Fit Front Grill Bracket on the vehicle. Using M6 bolt (M6x20x1.0), spring washer and flat washer as shown at the circle.



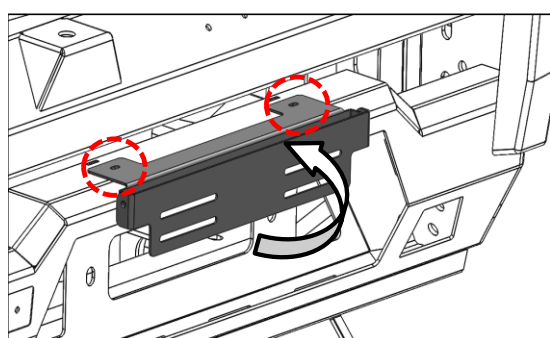
- 35** Re-fit the front grill by using the original bolts and clips removed earlier.

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

## FITTING PROCEDURE



- 36** Assemble License plate bracket by using two M6 button head, flat washer, Nylon Washer M6 and nyloc nut as shown. Do not fully tighten.



- 37** Assemble License plate bracket by using two M6 button head, flat washer, Nylon Washer M6 and nyloc nut as shown. Do not fully tighten.

Fit License plate bracket on the bull bar.using tow M6 bolt (M6x20x1.0), spring washer, flat washer and Flange Nut. as shown at the circle.

