



PIAK GENESIS BAR WINCH BAR

FITTING INSTRUCTIONS



ISUZU MU-X 2021

PK106IM21G_RBO_URPMB
PK106IM21G_RBO_URPMG
PK106IM21G_RBO_URPBO

PK106IM21G_RMB_URPMB
PK106IM21G_RMB_URPMG
PK106IM21G_RMB_URPBO

Fitting Time : approx. 3 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 preventa-tive 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 | 8 Air saw | |

PARTS LIST



Steel Bull Bar			
Item	Component Name	Q'ty	Remarks
1	PIAK Genesis Bar	1	
Mounting Bracket			
Item	Component Name	Q'ty	Remarks
2	Chassis Mounting Bracket Center	1	
3	Chassis Mounting Bracket (RH)	1	
4	Chassis Mounting Bracket (LH)	1	
5	Recovery Point (RH)	1	
6	Recovery Point (LH)	1	
7	Support Bracket Inside (RH)	1	
8	Support Bracket Inside (LH)	1	
9	Shim plate 2.0 mm.	2	
10	Support Bracket outside (RH)	1	
11	Support Bracket outside (LH)	1	
12	Plate Nut M10 x 1.5P	4	
13	Plate Nut M12 x 1.5P (Gr 10.9)	2	
14	Plate Nut M10 x 1.5P	2	
15	Hex Bolt M10x35x1.5	8	
16	Spring Washer M10	16	
17	Flat Washer M10	28	
18	Hex Nut M10x1.5	4	
19	Hex Bolt M10x30x1.25 EDP	4	
20	Spring Washer M10 EDP	14	
21	Flat Washer M10 EDP	22	
22	Hex Bolt M10x35x1.5 EDP	10	
23	Hex Nut M10x1.5 EDP	8	
24	Hex Bolt M12x1.5x40 (Gr 10.9) EDP	2	

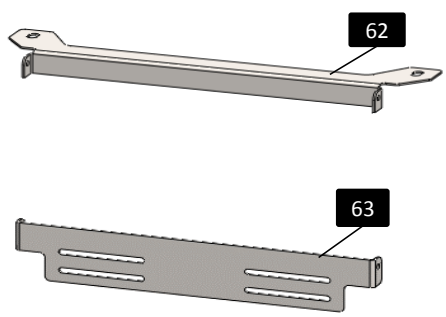
Mounting Bracket			
25	Hex Bolt M12x1.5x50 (Gr 10.9) EDP	4	
26	Spring Washer M12 EDP	6	
27	Flat Washer M12 OD33 EDP	10	
28	Hex Nut M12x1.5 (Gr 10.9) EDP	4	
29	Hex Bolt M10x35x1.5 (Gr 10.9)	8	
30	Hex Nut M10x1.5 (Gr 10.9)	8	

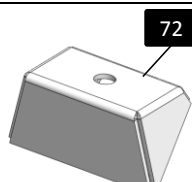
Bar to Mounting Bracket			
Item	Component Name	Q'ty	Remarks
31	Wing Bracket (RH)	1	
32	Wing Bracket (LH)	1	
33	Hex Bolt M10x1.5x35	4	
34	Spring Washer M10	4	
35	Flat Washer M10	8	
36	Hex Nut M10x1.5	4	

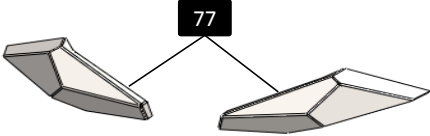
Bar to Mounting Bracket			
Item	Component Name	Q'ty	Remarks
37	Hex Bolt M12x1.5x35	6	
38	Spring Washer M12	6	
39	Flat Washer M12 OD33	12	
40	Hex Nut M12x1.5	6	
41	Hex Bolt M10x1.25x35	4	
42	Spring Washer M10	4	
43	Flat Washer M10 OD20	8	
44	Flange Nut M10x1.25	4	

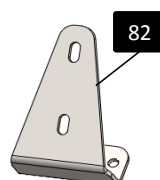
Protection Plate			
Item	Component Name	Q'ty	Remarks
45	Top Protection Plate center	1	
46	bottom Protection Plate center AUS Version	1	
47	bottom Protection Plate center ASIA Version	1	
48	Protection Plate (LH/RH)	2	
49	Hex Bolt M6x20x1.0	13	
50	Spring Washer M6	13	
51	Flat Washer M6	13	
52	Cage Nut M6x1.0x3T	13	
53	Hex Bolt M8x30x1.25	2	
54	Spring Washer M8	2	
55	Flat Washer M8	2	
56	Cage Nut M8x1.25x3.2T	2	
57	Hex Bolt M10x30x1.25	4	
58	Hex Bolt M10x30x1.5	5	

Protection Plate			
59	Spring Washer M10	9	
60	Flat Washer M10	12	
61	Hex Nut M10x1.5	3	

License Plate Bracket			
Item	Component Name	Q'ty	Remarks
62	License Plate Bracket (Inner)	1	
63	License Plate Bracket (outer)	1	
64	Hex Bolt M6x20x1.0	2	
65	Spring Washer M6	2	
66	Flat Washer M6	4	
67	Flange Nut M6x1.0	2	
68	Button Head Bolt M6x20x1.0 sus	2	
69	Nyloc Nut M6x1.0	2	
70	Nylon Washer M6	4	
71	Flat Washer M6 sus	4	

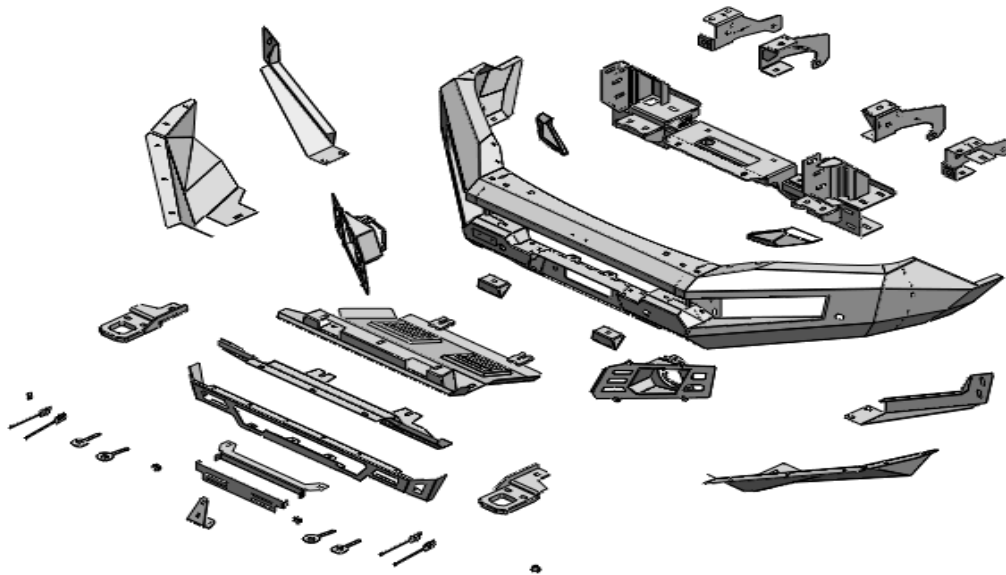
Spotlight Bracket			
Item	Component Name	Q'ty	Remarks
72	Spotlight Bracket	2	
73	Hex Bolt M8x20x1.25	4	
74	Spring Washer M8	4	
75	Flat Washer M8	4	
76	Cage Nut M8x1.25x3.2T	4	

Infill IM21G			
Item	Component Name	Q'ty	Remarks
77	Plate infilled RH/LH	2	
78	Hex Bolt M6x20x1.0	4	
79	Spring Washer M6	4	
80	Flat Washer M6	8	
81	Flange Nut M6x1.0	4	

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	

Accessories			
Item	Component Name	Q'ty	Remarks
87	Sensor Plug 20.6 mm.	4	
88	Cable Tie (L=150 mm)	6	

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 Locate the vehicle in a suitable position.

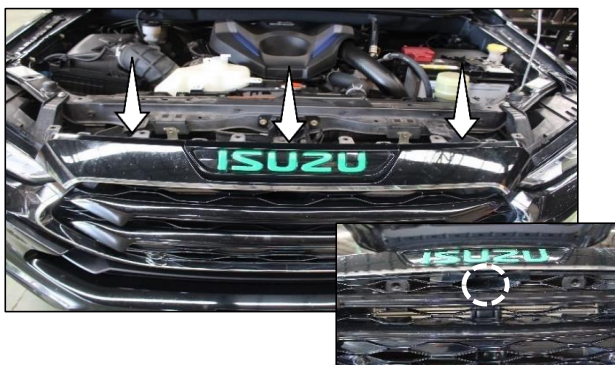


- 2 Remove the clips and the bonnet that retain the grille at the top.

***Keep for re-fitment of grille.**



- 3 Remove the OEM Plastic radiator cover the front of car.



- 4 Remove tree clips that retain the grille at the top as shown.

***Keep for re-fitment of grille.**

FITTING PROCEDURE



- 5 Remove and discard the screws retaining the lower section of the bumper.



- 6 Remove the screws retaining the bumper bar in the wheel arch (Both sides) .



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



- 8 Disconnect cable parking sensor and Fog light.

FITTING PROCEDURE



9 Remove the underbody OE .as shown.

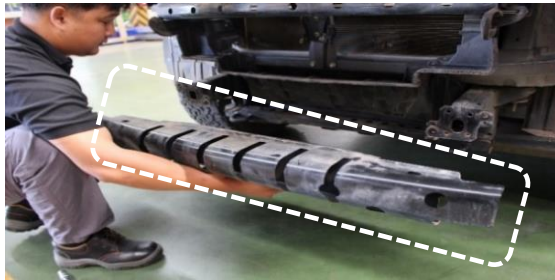


10 Remove and discard the bumper support brackets both sides . as shown.



11 Remove and discard the outer bumper clips from the front guards. as shown.

FITTING PROCEDURE



12 Remove and discard the impact beam . as shown.



13 Remove and discard the front plastic cover .as shown.



LH

14 Insert Plate Nut M10 x 1.5P on the hole of the chassis. Secure the chassis support bracket inside (LH) . Secure M10 bolt (M10x35x1.5), spring washer , flat washer and Plate Nut.

Secure M10 bolt (M10x35x1.5), spring washer , flat washer and hex nut.

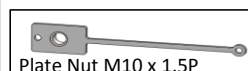
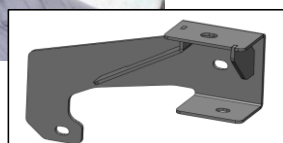
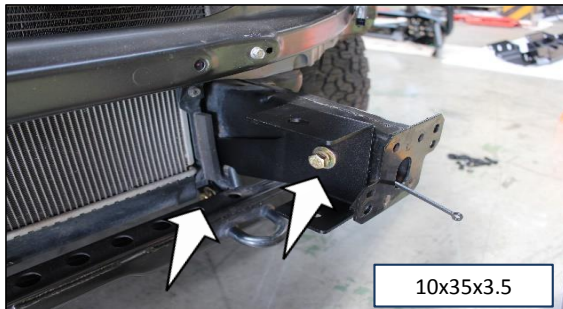


Plate Nut M10 x 1.5P

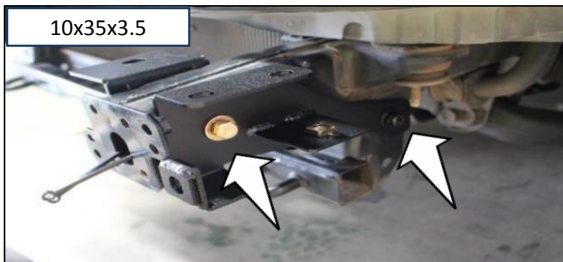
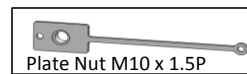
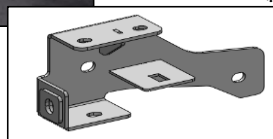
FITTING PROCEDURE



- 15** Insert Plate Nut M10 x 1.5P on the hole of the chassis. Secure the Chassis Support Bracket (LH) . Secure M10 bolt (M10x35x1.5), spring washer , flat washer and Plate Nut.

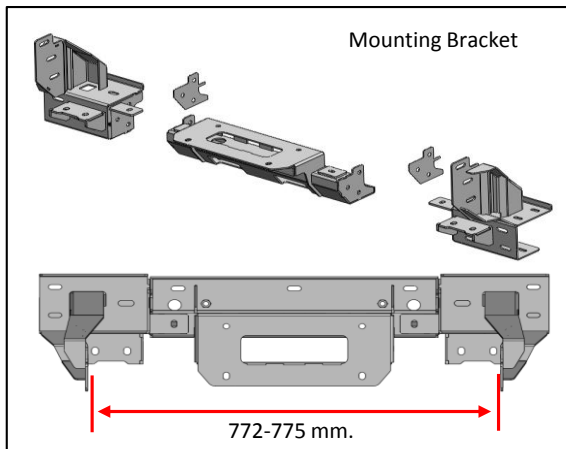
Secure M10 bolt (M10x35x1.5), spring washer , flat washer and hex nut.

***** Repeat for the opposite side**

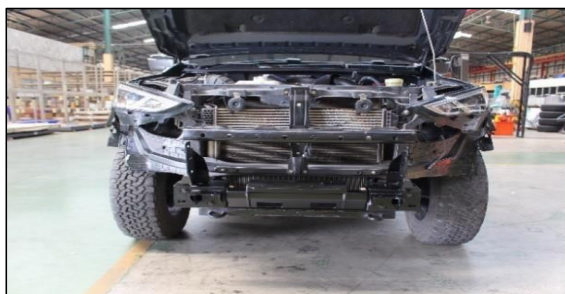
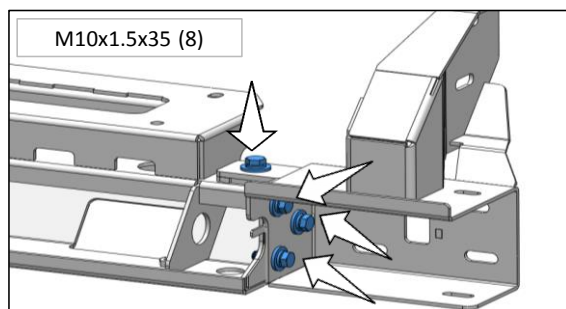


- 16** Already fit chassis support bracket (RH&LH) to the vehicle.

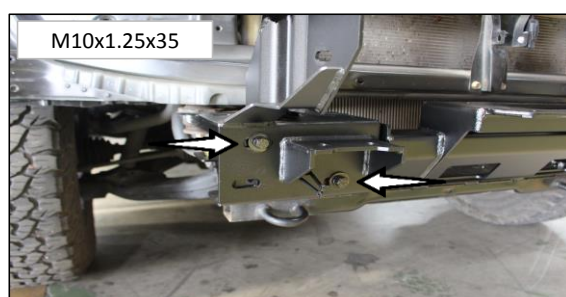
FITTING PROCEDURE



- 17** Assemble Mounting Bracket Center ,Mounting Bracket (RH&LH) and Shim plate together. Secure eight M10 bolt Gr 10.9 (M10x35x1.5), spring washer , flat washer and Hex nut.

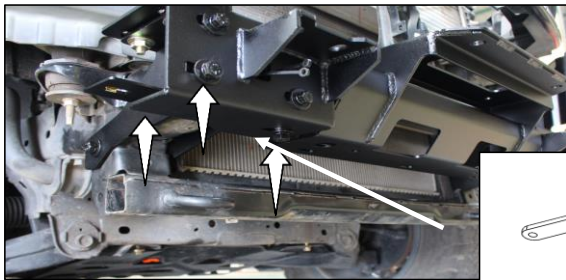


- 18** Lift the chassis mounting bracket onto the chassis of vehicle.

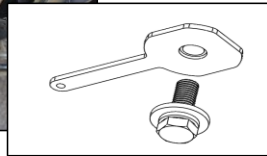


- 19** Secure with two M10 bolts (M10x35x1.25), spring and flat washers as shown.

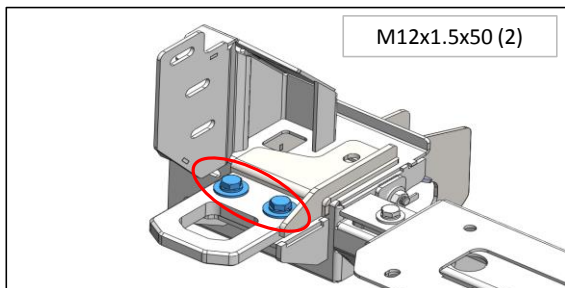
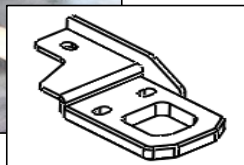
FITTING PROCEDURE



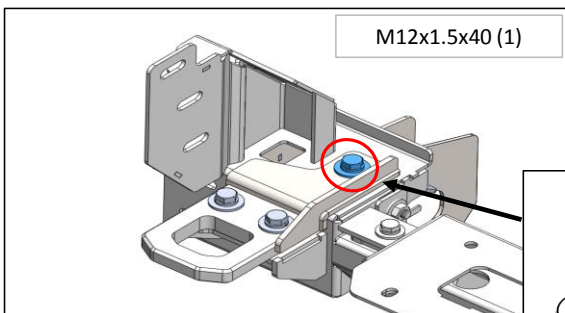
- 20** Secure with two M10 bolts (M10x35x1.25), spring flat washers and hex nut/Plate Nut as shown.



- 21** Secure the Recovery Point (RH) at location as shown.

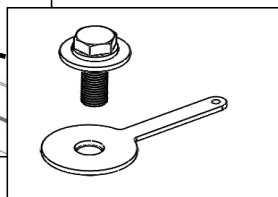


- 22** Secure with two M12 bolt Gr10.9 (M12x50x1.5), spring washer ,flat washer and hex nut as shown .

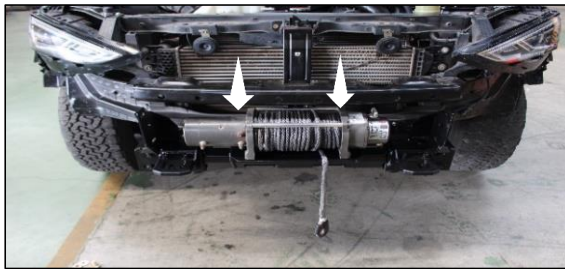


- 23** Secure with M12 bolt Gr10.9 (M12x40x1.5), spring washer ,flat washer and Plate Nut as shown .

***** Repeat for the opposite side**



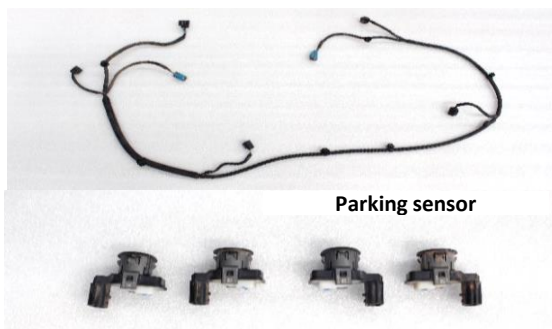
FITTING PROCEDURE



- 24** Location of winch on the chassis mount bracket.



- 25** The location of parking sensor wires (where fitted) at the bumper bar.



- 26** Remove parking sensor and wiring harness from the original bumper.

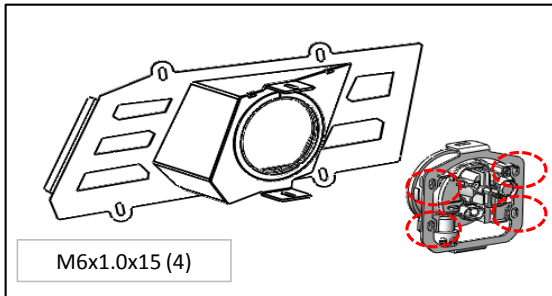
***Keep for re- fitment of bumper.
*Do it carefully**



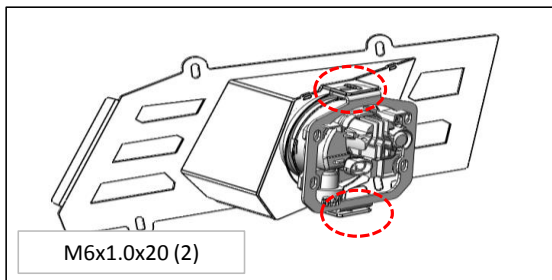
- 27** Remove Fog light from original bumper.

***Keep for re- fitment of bumper.
*Do it carefully**

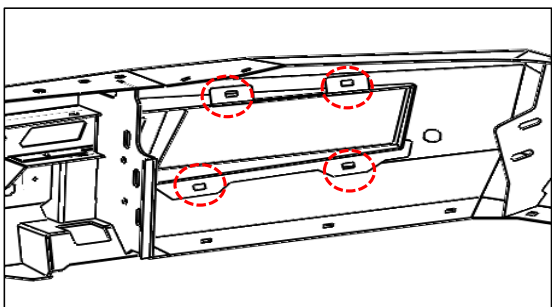
FITTING PROCEDURE



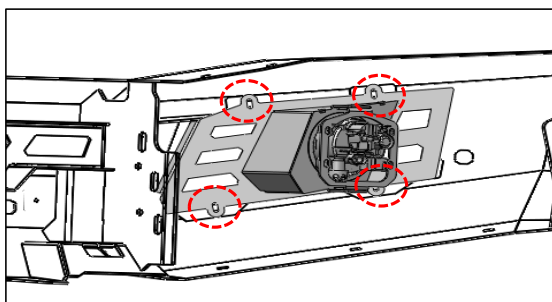
28 Fit Fog light on the Fog light Bracket. Using four M6 bolts (M6x1.0x15) flat washers and flange nuts as shown.



29 Fit Fog light on the Fog light Bracket. on bumper bar and using two M6 (M6x1.0x20) bolts flat washers and flange nut.

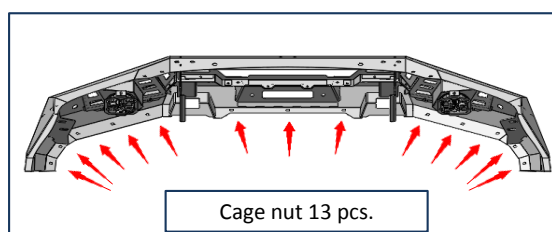


30 Insert four M6x1.0x3T cage nuts onto the bumper bar as shown. .



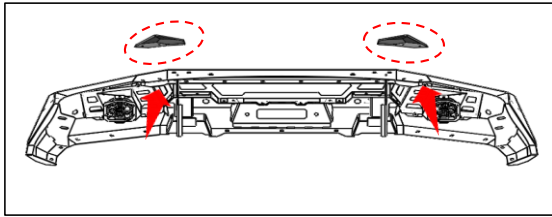
31 Fit light frame on the bumper bar. using four M6 (M6x1.0x20) bolts Spring Washer and flat washers .

***Repeat for the opposite side.**

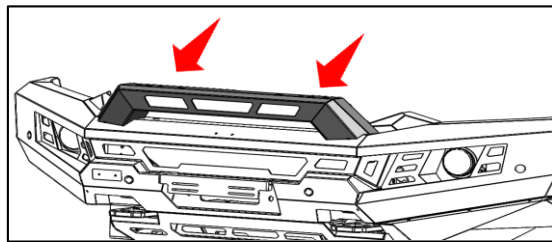


32 Insert M6x1.0x3T cage nuts onto the bumper bar as shown.

FITTING PROCEDURE

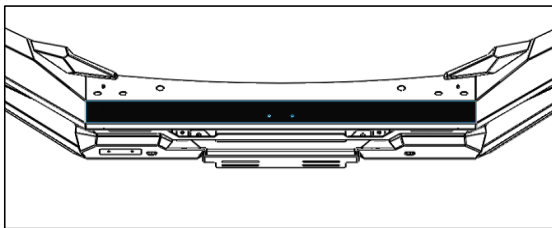


- 33** Fit the infill IM21 onto top of the bumper bar.



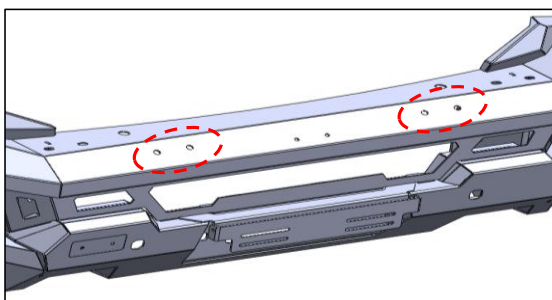
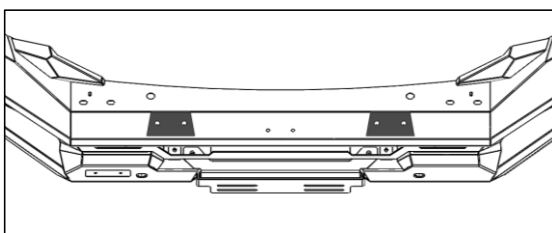
- 34** For install the Light Bar Hoop, please see the fitting instructions PKB-LBHMB-IM21G _Light Bar Hoop.

*****Do not install the spot light bracket when the Light Bar Hoop was installed.**



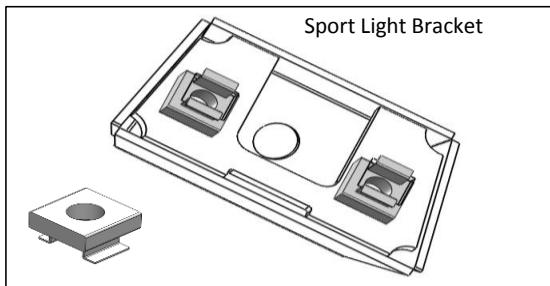
- 35** For install the driving light, please use the driving light mount template to mark out the position where the lights are desired to be on the front angle face of the bull bar.

If the driving lights not be installed, go to step 39.

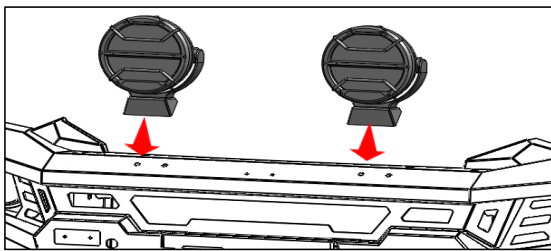


- 36** Using a 10 mm drill bit to drill a hole mark on bull bar. Deburr all holes and remove swarf then using a metal round file on a drilled hole. Spray all holes by rust inhibitor.

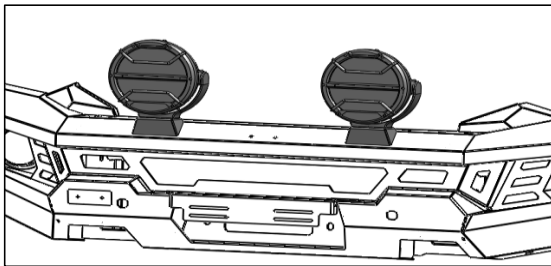
FITTING PROCEDURE



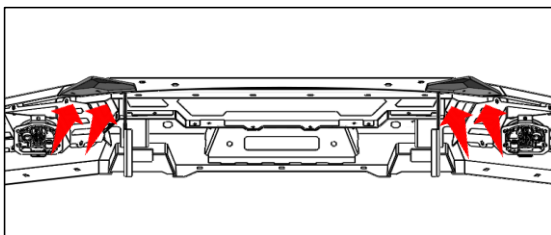
- 37** Insert M8x1.25x3.2T cage nuts onto the Spot Light Bracket .



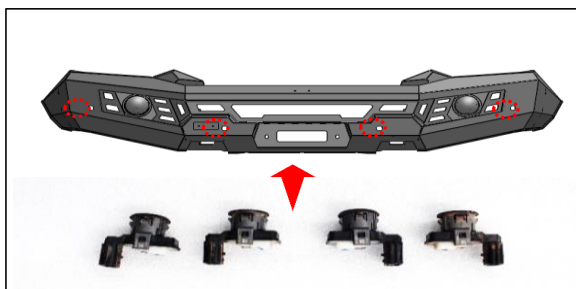
- 38** Fit the Spot Light onto the Spot Light Bracket and install onto Bull Bar.Using Hex nut M8x30x1.25, Spring Washer and Flat Washer.



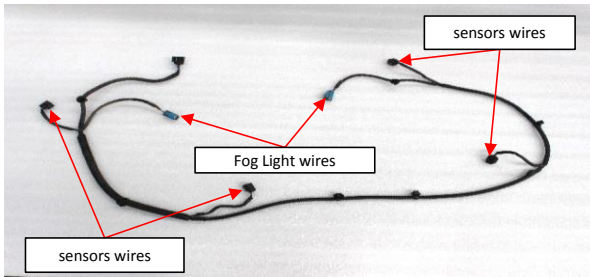
- 39** Secure with four M6 bolt (M6x20x1.0), spring washer, flat washer and flange nut as shown.



- 40** Re-install the parking sensors to the bumper bar.



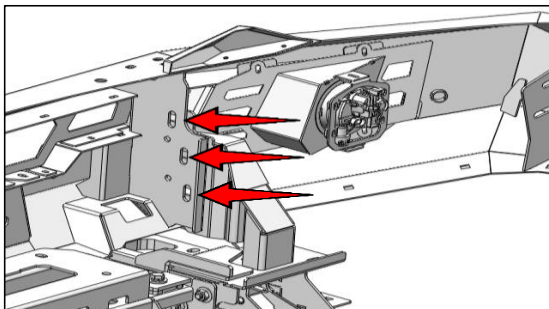
FITTING PROCEDURE



- 41** Re-install the parking sensor loom to the bull bar.



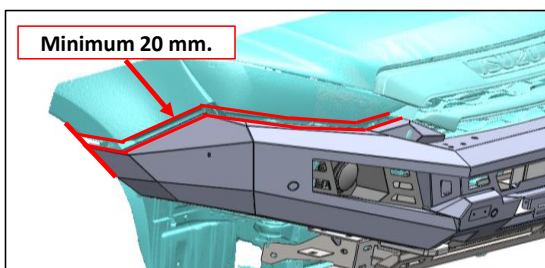
- 42** Lift the bumper bar onto the vehicle.



- 43** Secure bumper bar onto the chassis mounting bracket by using three M12 bolts(M12x1.5x35), spring washers, flat washers and hex nuts.

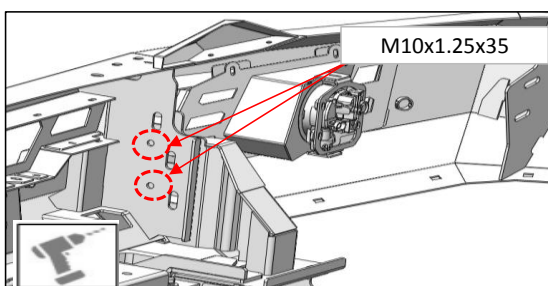
***Repeat for the opposite side.**

***Do not tighten.**



- 44** Position bar onto vehicle, make sure that it is located on center, parallel with the wheelarch and has a 20 mm. 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.

***Repeat for the opposite side.**



- 45** Drill two 10 mm holes through the chassis mount bracket by using holes on the bullbar as a guide and painted with rustproof paint.

Secure with two M10 bolts (M10x35x1.25) spring washers, flat washers and flange nuts.

***Tighten all bolts to the correct torque.**

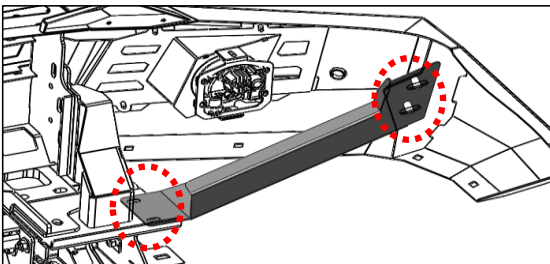
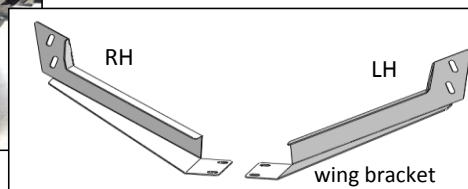
FITTING PROCEDURE



- 46 Connect cable parking sensor and Fog light .



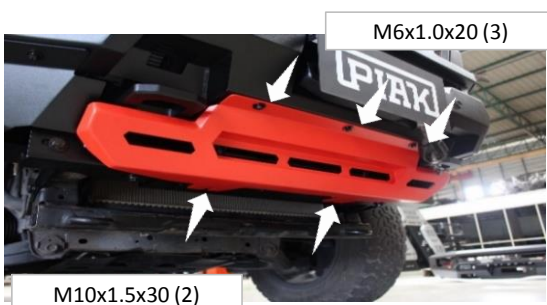
- 47 Place wing bracket (RH) to the bullbar.



- 48 Secure with four M10 bolt (M10x35x1.5), spring washer, flat washer and hex nut as shown.



- 49 Lift the the Top Protection Plate center onto the chassis of the vehicle as shown.

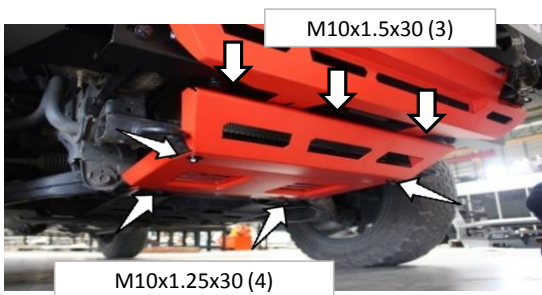


- 50 Secure three M6 bolts (M6x1.0x20), Spring washers and flat washers. two M10 bolts (M10x1.5x30), Spring washers and flat washers as shown.

FITTING PROCEDURE



51 Lift the the bottom Protection Plate onto the chassis of the vehicle as shown.



52 Secure three M10 bolts (M10x1.5x35), Spring washers, flat washers and hex nuts .Four M10 bolts (M10x1.25x35), Spring washers and flat washers as shown.



53 Mark the location on the fenders as shown.

***Repeat for the opposite side.**



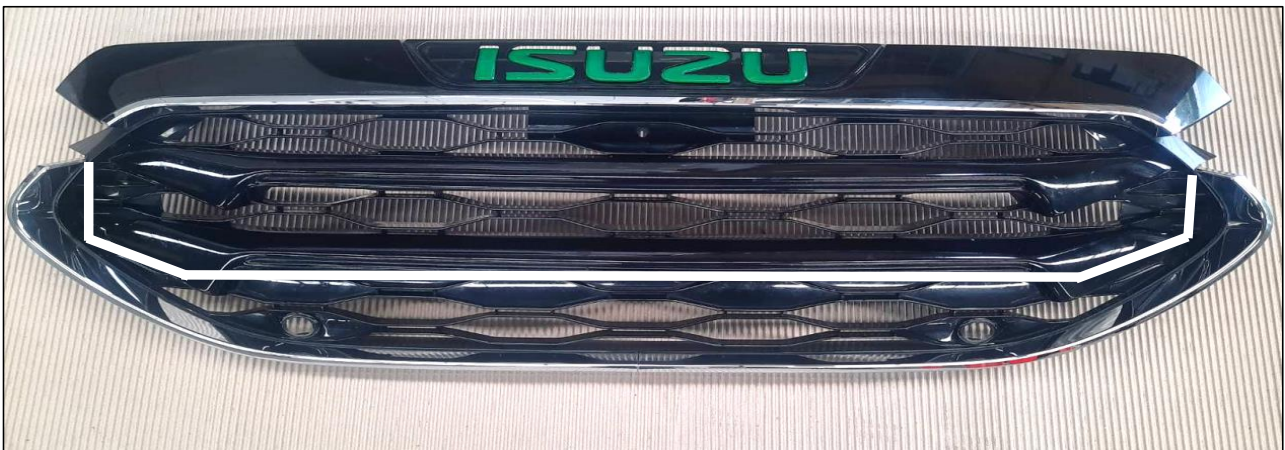
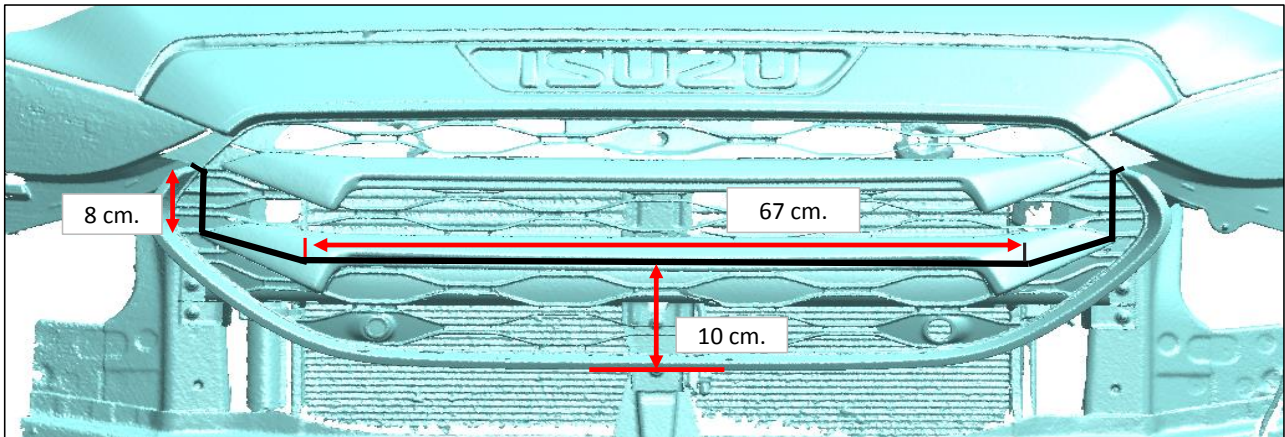
54 Secure five M6 bolts (M6x1.0 x20), Spring washers and flat washers as shown.

Secure M8 bolts (M8x1.25 x20), Spring washers and flat washers as shown.

***Repeat for the opposite side.**



FITTING PROCEDURE



- 55** Measure the front grill according to the distance shown in the picture and mark it. Cut the front grill along the marked cutting line using air saw.



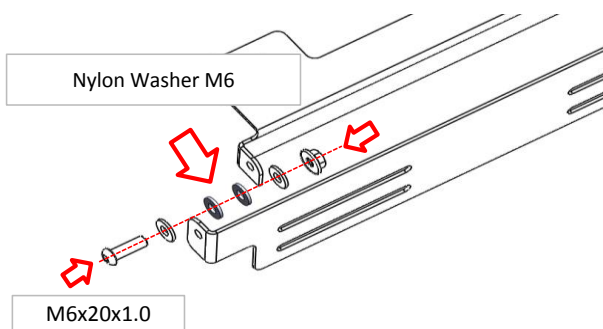
- 56** Re-install the front grill to the vehicle by using original bolts.



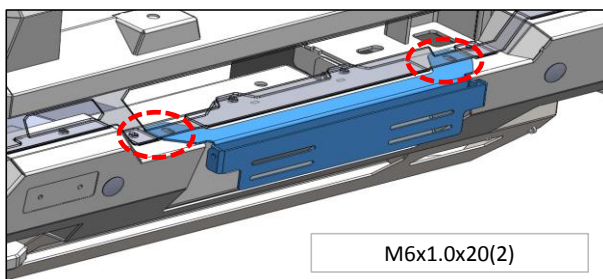
FITTING PROCEDURE



- 57 Re-install the clips to the OEM Plastic radiator cover.



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



- 59 Fit an assembled License plate bracket to the bullbar. using M6 bolts (M6x20x1.0), spring washer, flat washer and flange nut.



Sport Light Bracket Template Isuzu Mu-x 2021
Part Number:PK106IM21G
Size : A4
Unit :mm.
Revision :00_06-SEP-2023

