

PIAK

ELITE 3-LOOP WINCH BAR

FITTING INSTRUCTIONS



MITSUBISHI TRITON 2015-2018

PK105FG1MT15EAUS_RMB

PK105FG1MT15EAUS_RO

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.

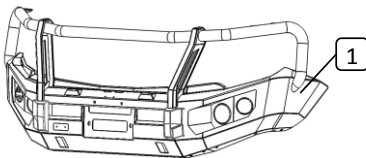
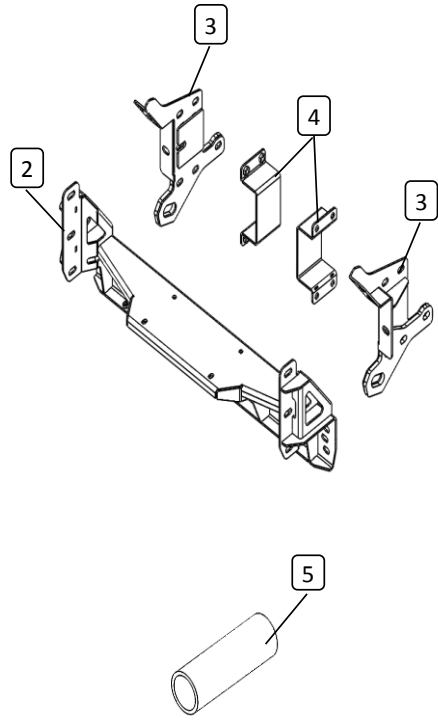
BY USING THIS PRODUCT YOU ACKNOWLEDGE AND AGREE THAT TO THE EXTENT PERMITTED BY LAW PIAK WILL NOT ACCEPT LEGAL OR OTHER LIABILITY FOR ANY LOSS, INJURY OR DAMAGE CAUSED BY INCORRECT OR INAPPROPRIATE INSTALLATION OR USE OF THE PRODUCT.

TOOLS REQUIRED

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

PARTS LIST

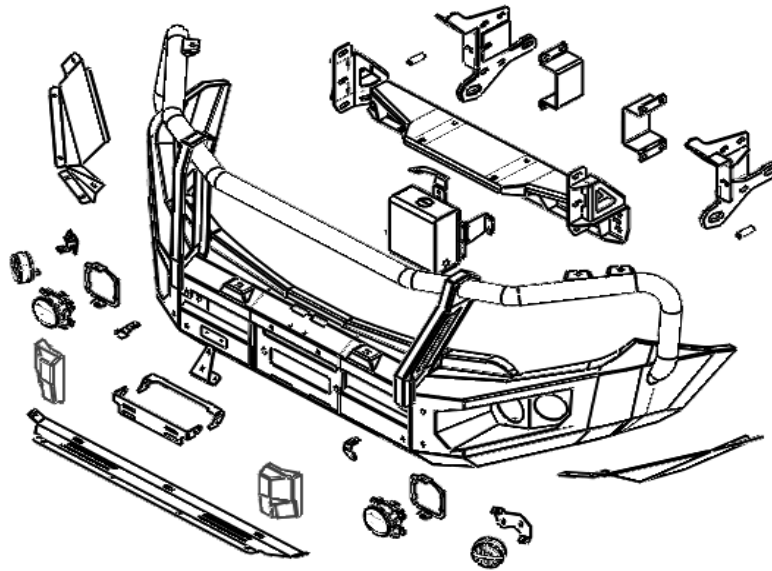
⚠ Important : Check contents of fitting kit before commencing fitment and report any discrepancies.

Steel Bull bar			
Item	Component Name	Q'ty	Remarks
1	Bull bar	1	
Chassis Mounts to Vehicle			
Item	Component Name	Q'ty	Remarks
2	chassis mount bracket	1	
3	Chassis support bracket & Recovery (LH&RH)	2	
4	Chassis support bracket inside	2	
5	Crush Tube $\varnothing 16 \times 48\text{mm}$	2	
6	Hex Bolt M8x30x1.25	4	
7	Spring Washer M8	4	
8	Flat Washer M8	8	
9	Flange Nut M8x1.25	4	
10	Hex Bolt M10x30x1.25	10	
11	Hex Bolt M10x35x1.5	4	
12	Hex Bolt M10x40x1.5	4	
13	Hex Bolt M10x80x1.5	2	
14	Spring Washer M10	20	
15	Flat Washer M10	26	
16	Hex Nut M10x1.5	2	
17	Flange Nut M10x1.25	4	
18	Hex Bolt M12x35x1.5	8	
19	Spring Washer M12	8	
20	Flat Washer M12	16	
21	Hex Nut M12x1.5	8	

Protection Plates to Bar			
Item	Component Name	Q'ty	Remarks
22	Center Protection Plate	1	
23	Protection Plate RH	1	
24	Protection Plate LH	1	
25	Hex Bolt M6x20x1.0	16	
26	Spring Washer M6	16	
27	Flat Washer M6	16	
28	Cage Nut M6x1.0x2T	2	
29	Cage Nut M6x1.0x3T	14	
30	Hex Bolt M8x30x1.25	3	
31	Spring Washer M8	3	
32	Flat Washer M8	3	
Windshield Washer Reservoir			
Item	Component Name	Q'ty	Remarks
33	PIAK Aluminium windshield washer Bottle OD 21 mm. 2.3l	1	
34	Windshield Washer Bracket A_MT15	1	
35	Windshield Washer Plate B	1	
36	motor pump windshield washer reservoir bracket	1	
37	Additional Windshield Water Tank Hose (ID 34.24 X I 110 mm.)	1	
38	Wiring harness (L=450 mm.)	1	
39	rubber tube Black (L= 300 mm.)	1	
40	Plastic joints	1	
41	Pinch Weld Edge 3 mm. (L 400mm.)	1	
42	Cable Tie (L=150 mm.)	4	
43	Hex Bolt M6x20x1.0	6	
44	Flat Washer M6 OD14	8	
45	Flat Washer M6 OD20	4	
46	Spring Washer M6	6	
47	Flange Nut M6x1.0	6	
48	Button Head Bolt M6x20x1.0 EDP	1	
49	Spring Washer M6 EDP	1	
50	Flat Washer M6 OD14 EDP	2	
51	Flange Nut M6x1.0 EDP	1	
52	Button Head Bolt M5x15x0.8	2	
53	Spring Washer M5	2	
54	Flat Washer M5	4	
55	Flange Nut M5x0.8	2	

Winch Control Plate			
Item	Component Name	Q'ty	Remarks
56	Winch Control Plate	1	
57	Hex Bolt M6x20x1.0	2	
58	Spring Washer M6	2	
59	Flat Washer M6	4	
60	Flange Nut M6x1.0	2	
License Plate Bracket			
Item	Component Name	Q'ty	Remarks
61	License Plate Bracket (Inner)	1	
62	License Plate Bracket (Outer)	1	
63	Hex Bolt M6x20x1.0	4	
64	Spring Washer M6	4	
65	Flat Washer M6	6	
66	Cage Nut M6x1.0x3T	2	
67	Flange Nut M6x1.0	2	
68	Button Head Bolt M6x20x1.0	2	
69	Flat Washer M6	4	
70	Nylon Washer M6	4	
71	Nyloc Nut M6x1.0	2	
Front Grill Bracket			
Item	Component Name	Q'ty	Remarks
72	Front Grill Bracket (LH&RH)	2	
Accessories			
Item	Component Name	Q'ty	Remarks
73	Pinch Weld (#1/ 3 mm.) L300	2	
74	pinchweld rubber seal (OD15x1500)	1	
75	Cable Tie (L=150 mm)	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.)
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. Rest the bullbar on a surface that will not scratch the bar.

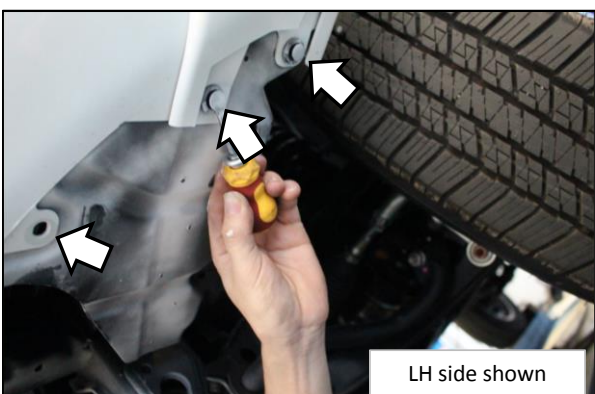


- 2 Remove the clips that retain the grille at the top. Keep for re-fitment of grille.



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

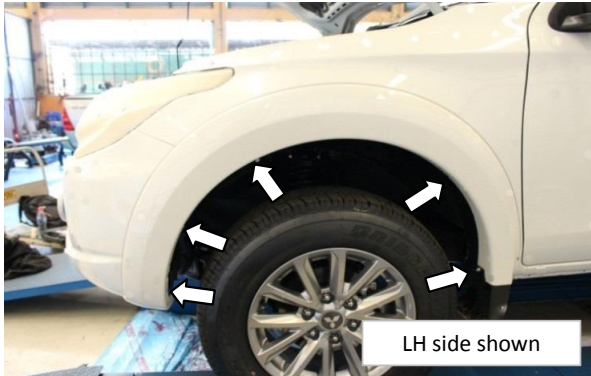
Notice- Refer to vehicle repair manual for correct removal procedure.



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

LH side shown

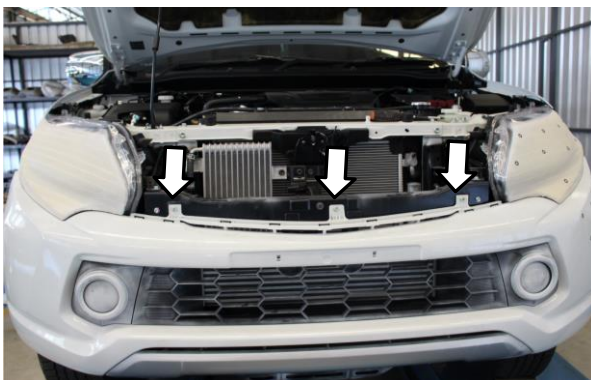
FITTING PROCEDURE



- 5 Remove the screws securing the bumper to the inner guard.



- 6 Carefully unclip the flares from the bumper.
Repeat in step 4-6 for the opposite side.

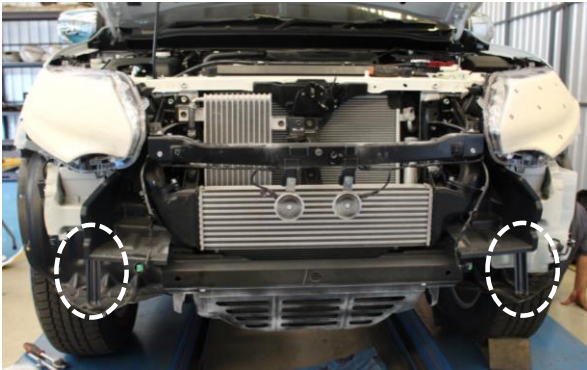


- 7 Remove and retain the screws securing the bumper as shown.

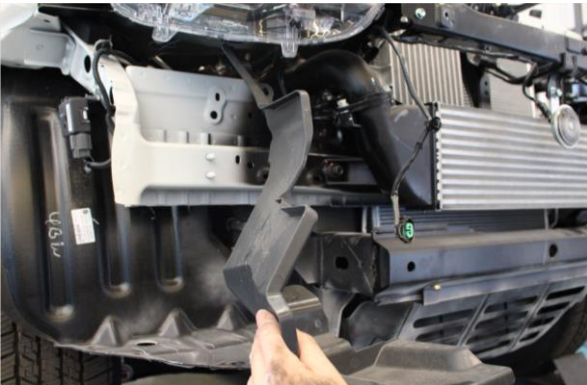


- 8 Carefully remove the bumper from the vehicle.
If unsure about bumper removal refer to the workshop manual.

FITTING PROCEDURE



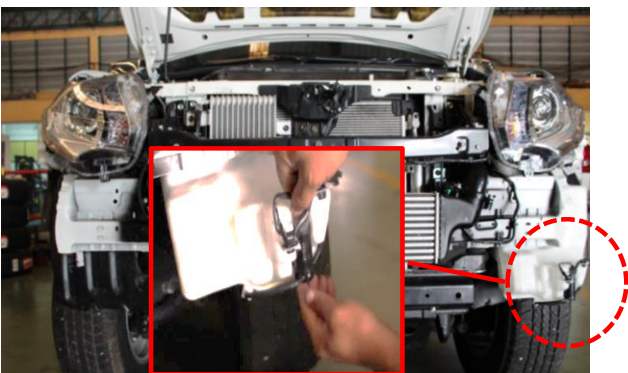
- 9** Remove and discard the RH and LH bumper support brackets.



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

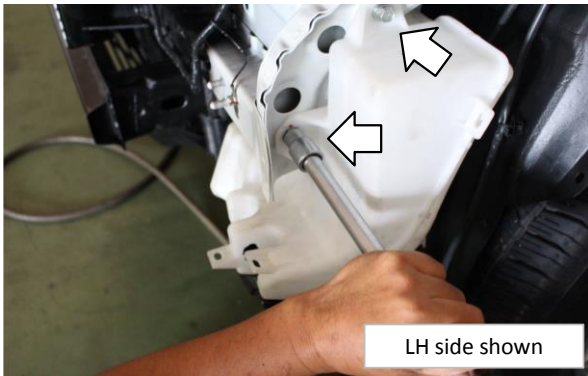


- 11** Remove and discard the outer bumper clips from the front guards.



- 12** Carefully unclip windshield washer reservoir from the hose.

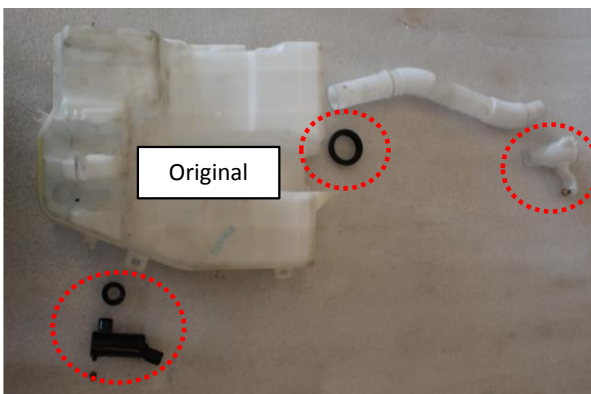
FITTING PROCEDURE



- 13** Remove and retain two screws securing the windshield washer reservoir to vehicle at beside .

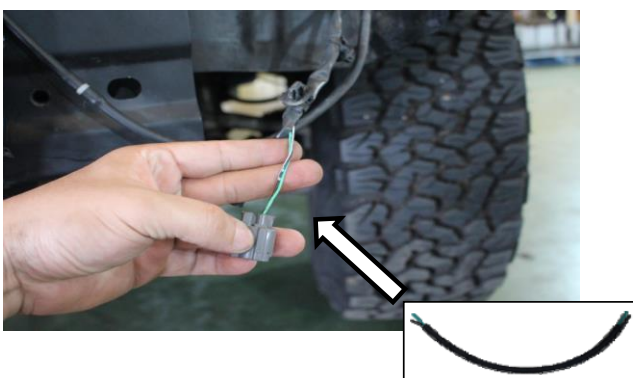


- 14** Remove and retain screw securing the windshield washer reservoir to vehicle at top.



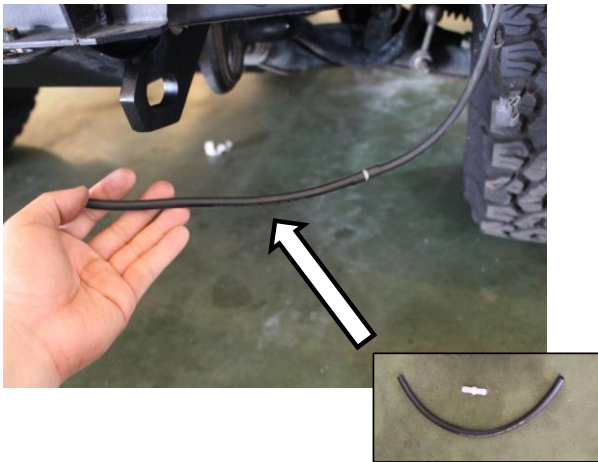
- 15** Remove the parts of original windshield washer reservoir as shown.

- 16** Replace supplied windshield washer bottle to original components.

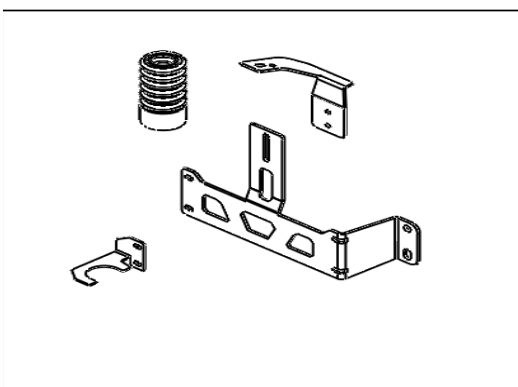


- 17** Using the L450 mm cable set Original motor cable to increase length

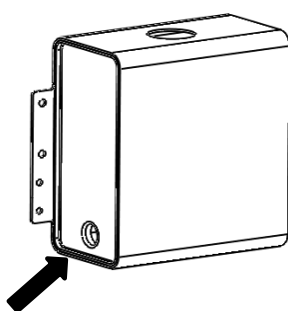
FITTING PROCEDURE



- 18** Wear the connector with a hose to increase the length.

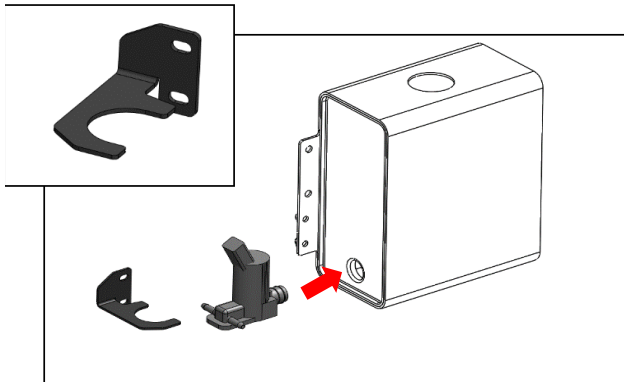


- 19** Set windshield washer bracket and Additional Windshield Water Tank Hose (ID 34 X L110 mm.).



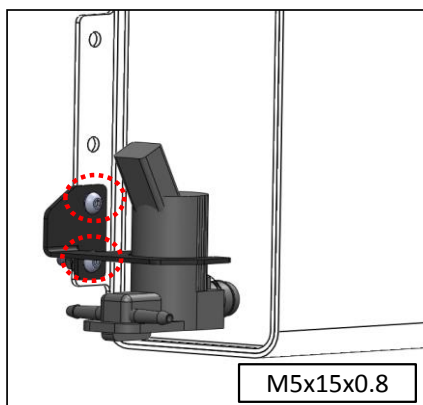
- 20** location at Motor pump Windshield Washer reservoir .

FITTING PROCEDURE

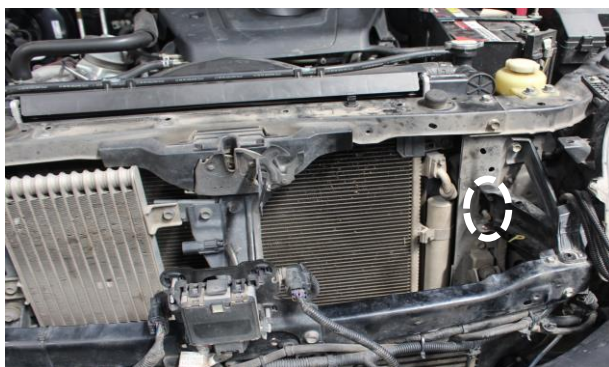


- 21** Re-install Motor pump Windshield Washer reservoir on the Windshield Washer Bottle. as shown.

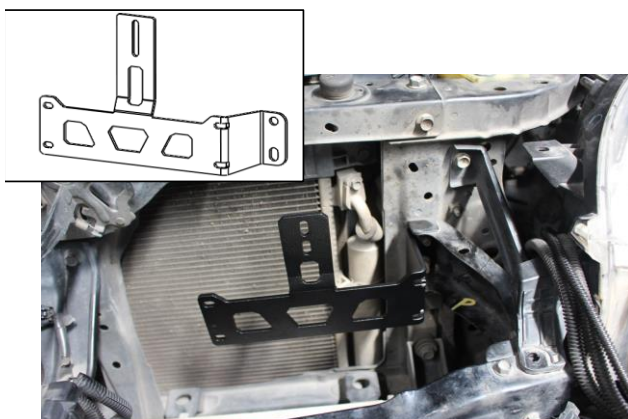
Do it carefully.



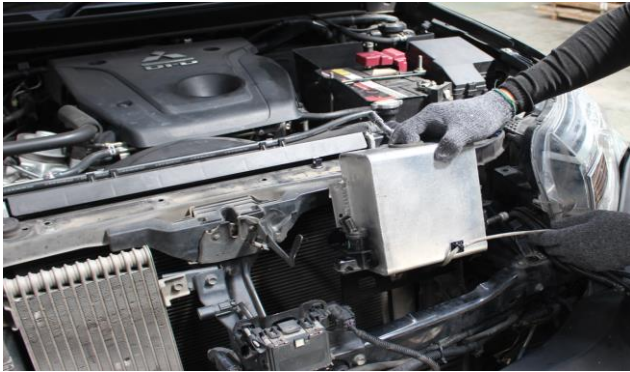
- 22** Fix Motor pump windshield washer reservoir bracket on to the Motor pump and PIAK Aluminium Windshield Washer Bottle. Use two bolts M5x0.8x15, Spring Washer, Flat washers, and Flange nut.



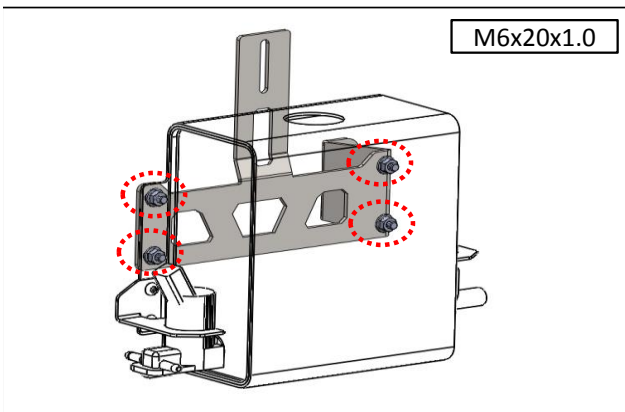
- 23** Fix Windshield Washer Bracket A on the body car. Using tow original bolts as shown use two original flange nut M8x1.25 .as shown.



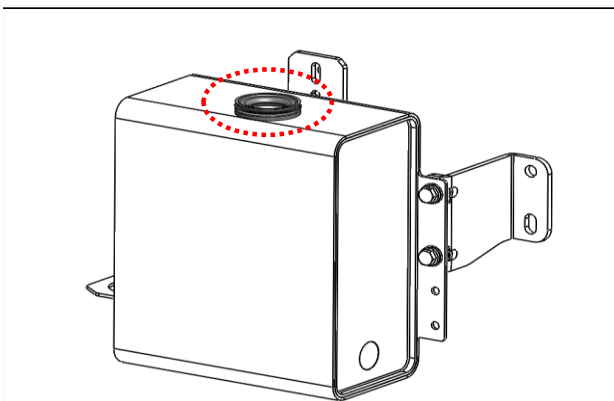
FITTING PROCEDURE



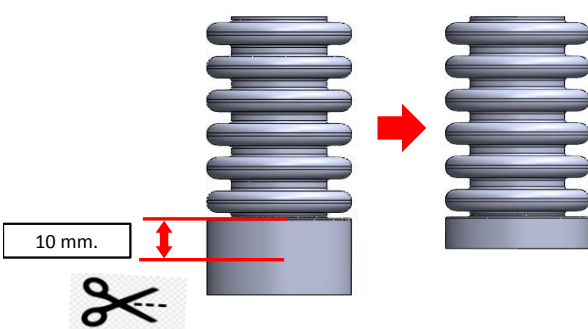
- 24** Fix PIAK Aluminium_Windshield Washer Bottle on to the Windshield Washer Bracket
A. Use four bolts M6x1.0x20, Spring Washer, Flat washers, and Flange nut, as shown.



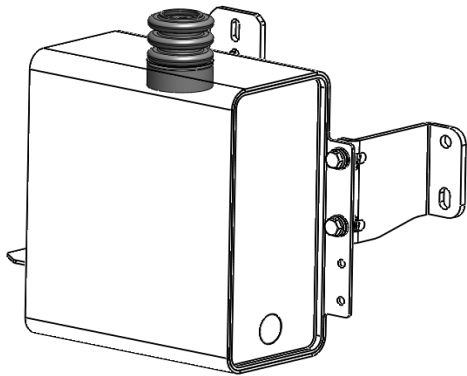
- 25** Assemble rubber water stop on the Windshield bottle as shown.



- 26** Cut Additional Windshield Water Tank Hose as the picture.



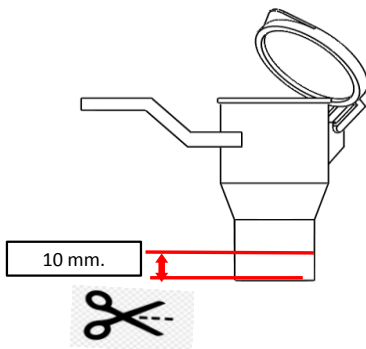
FITTING PROCEDURE



- 27** Assemble Additional Windshield Water Tank Hose as the picture.



- 28** lid Windshield Washer Bottle and Windshield Washer Plate B.

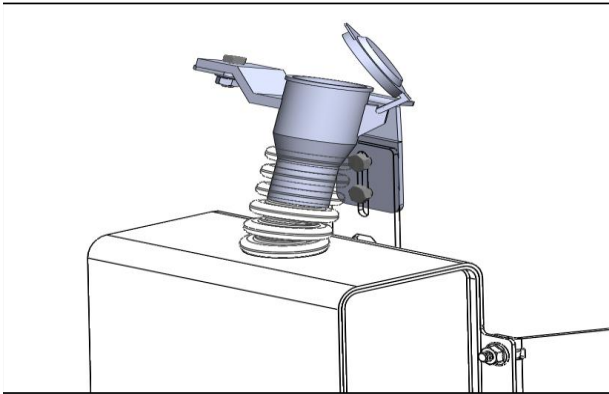


- 29** Cut lid Windshield Washer Bottle 10 mm. as the picture.



- 30** Fix lid Windshield Washer Bottle and on to the Windshield Washer Plate B. Use hex bolt M6x1.0x20 ,Flat washer and Flange nut.

FITTING PROCEDURE



- 31** Fix set lid Windshield Washer Bottle and on to the Windshield Washer Bracket A. Use two hex bolts M6x1.0x20 ,Flat washers and Flange nuts.



- 32** Re-fitment the upper bumper and sketch the circles to match the lid Windshield Washer Bottle for drilling.



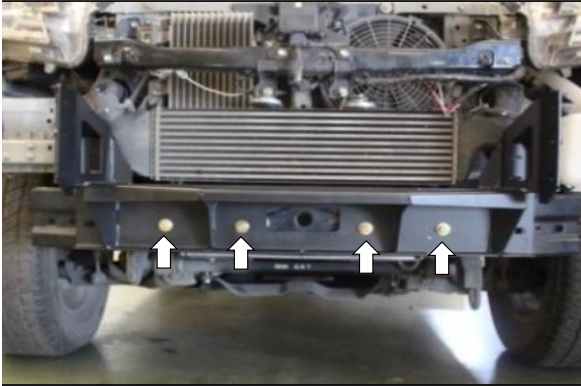
- 33** Cut into holes. For opening the lid to put water.



- 34** The drilled hole to use for open-close the lid Windshield Washer Bottle.

Use the Pinch Weld Edge 3 mm. to place at the edge of the cut.

FITTING PROCEDURE

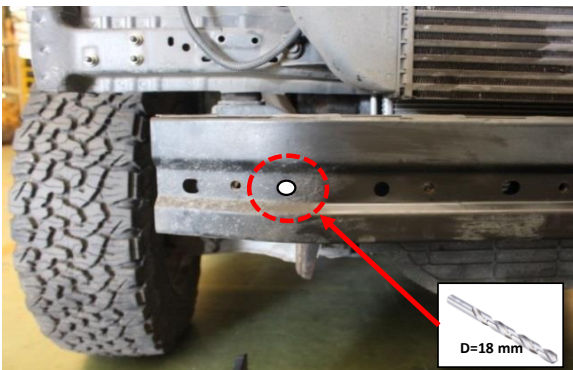


- 35** Lift the chassis mounting bracket onto the chassis of vehicle.

Using four M10 x 1.25 x 35mm hex bolts, M10 spring and flat washers loosely fit the chassis mount bracket.



- 36** Mark the locations of the front holes. Remove the brackets.



- 37** Drill a pilot hole through both sections of the intrusion beam . Using a step drill or similar, enlarge the holes to 18mm.



- 38** Insert two Crush Tube $\varnothing 16 \times 48$ mm into the front intrusion beams.

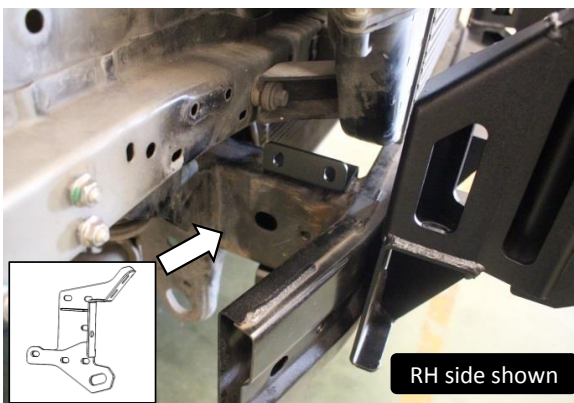
FITTING PROCEDURE



39 Lift the chassis mounting bracket onto the chassis of vehicle. Using four M10 x 1.25 x 35mm hex bolts, M10 spring and flat washers



40 Place the inner support bracket over the inside of the chassis rails.

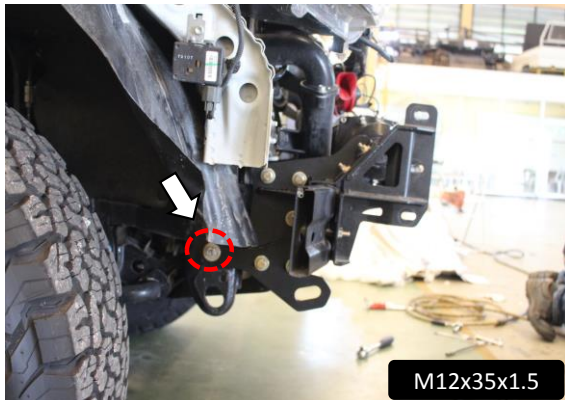


41 Connect Chassis support bracket & Recovery onto the chassis mount and insert wire bolt through the hole of bracket.



42 Secure with one M10 bolt (M10x35x1.25), spring and flat washer as shown.

FITTING PROCEDURE



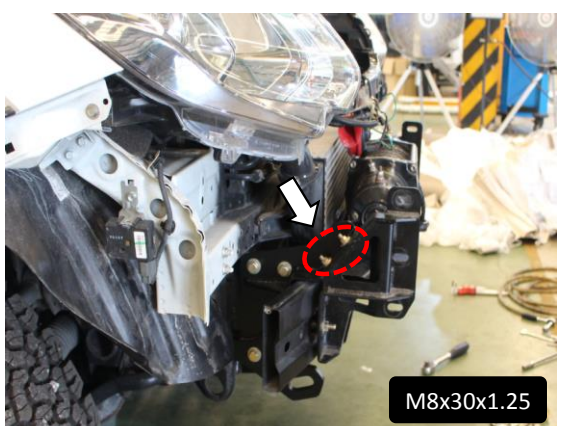
- 43 Secure with one M12 bolt (M12x35x1.5), spring and flat washer and hex nut as shown.



- 44 Secure with Tow M10 bolts (M10x35x1.5), spring and flat washers as the circles.



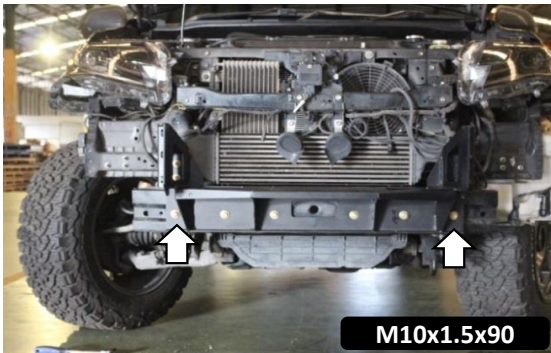
- 45 Secure with Tow M10 bolts (M10x40x1.5), spring and flat washers as the circles.



- 46 Secure chassis support bracket with chassis mount bracket by using M8 bolt (M8x30x1.25), spring and flat washers and Flange nut .

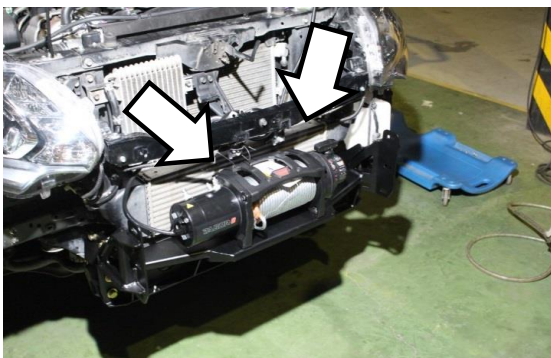
Repeat in step 36-42 for the opposite side.

FITTING PROCEDURE



- 47** Secure the chassis mount bracket to the chassis support assembly with two M10 x 1.5 x 80mm hex bolts, M10 spring and flat washers

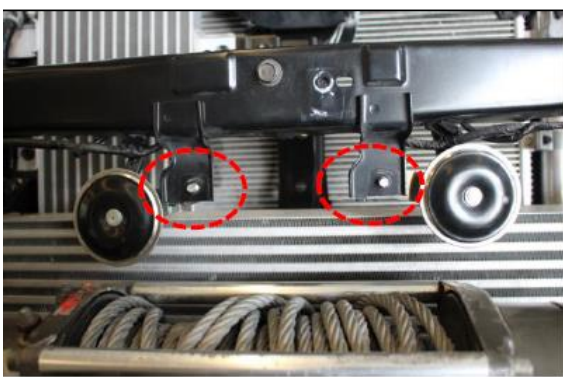
Do not tighten.



- 48** location of winch on the chassis mount bracket.



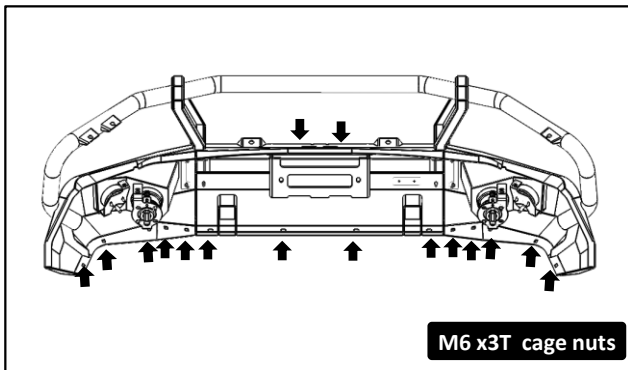
- 49** If a winch is being fitted remove the RH & LH horn of vehicle.



- 50** Re-fit the horns to the rear of bracket to avoid the fitment of winch.

Fit the winch follow the instructions supplied with the winch for fitment.

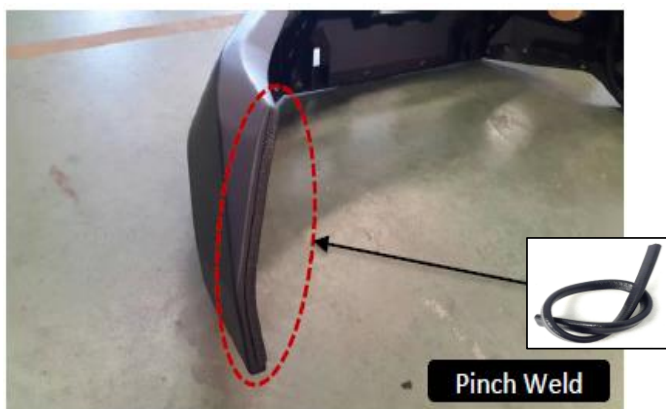
FITTING PROCEDURE



51 Insert thirteen M6 cage nuts onto the bullbar as indicators.



52 Insert pinchweld rubber seal Put at the center as shown.



53 Insert Pinch Weld Put at the end RH&LH as shown.



54 Using masking tape, mark a line parallel with top of the bumper to the line cut edge of bumper as a guide to either side.

FITTING PROCEDURE



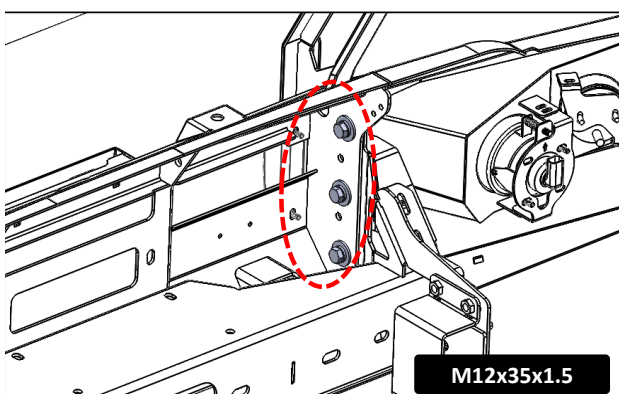
55 Using a suitable saw carefully cut the flares.



56 Re-attach the flares to the vehicle by using the screws removed earlier.



57 Lift the bullbar onto the chassis of the vehicle.



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

Repeat for the opposite side.

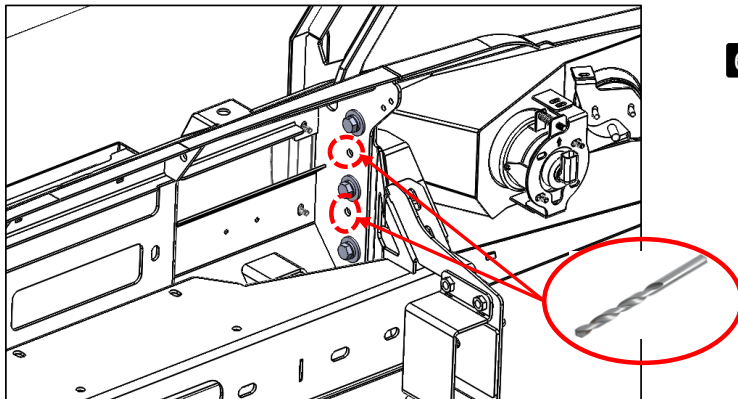
FITTING PROCEDURE



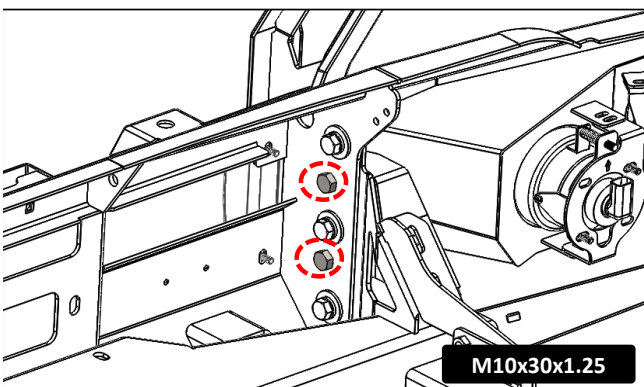
- 59** Align the bar so there is a 20mm gap between the car and wing return of the bar and the end of the wing is in line with the wheel arch.

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.



- 60** Drill a pilot hole through both sections of the intrusion beam . Using a step drill or similar, enlarge the holes to 10mm.

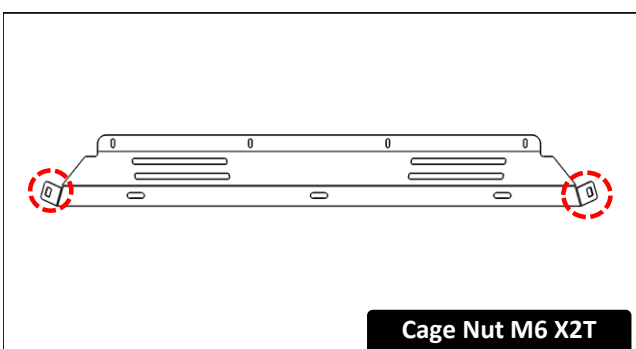


- 61** Using tow using M10 bolt (M10x30x1.25) and Flange nut . as shown.

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

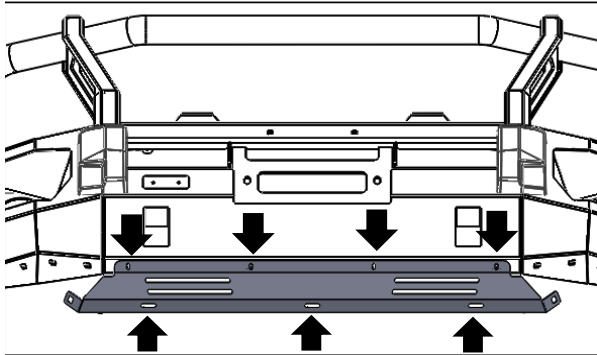
PIAK LED Harness codes

- Indicator Yellow
- Park brown
- Earth White



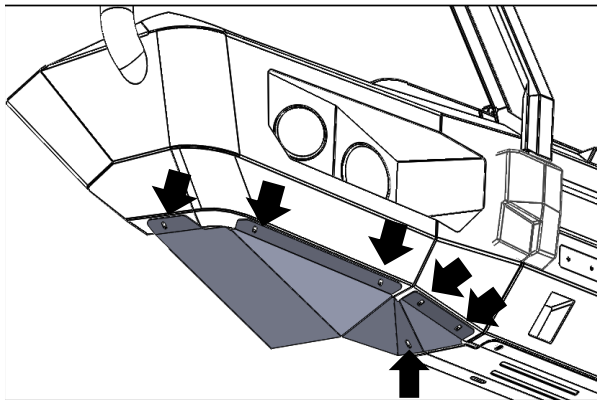
- 62** Insert tow M6x1.0x2T cage nuts onto the center protection plate as indicators.

FITTING PROCEDURE



- 63** Secure the rear of center protection plate and side protection plate through mounting bracket by using three M8 bolts (M8x20x1.25), spring washer .

Fit center protection plate onto the vehicle by securing three M6 bolts (M6x20x1.0), spring washers and flat washers as indicators.

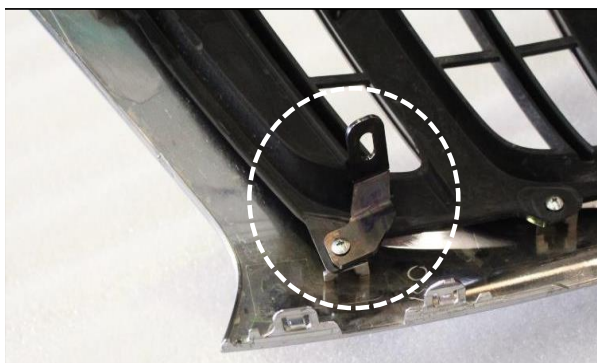


- 64** Fit RH protection plate onto the bull bar and secure with five M6 bolts (M6x20x1.0), spring washers and flat washers.

Repeat for the LH side.

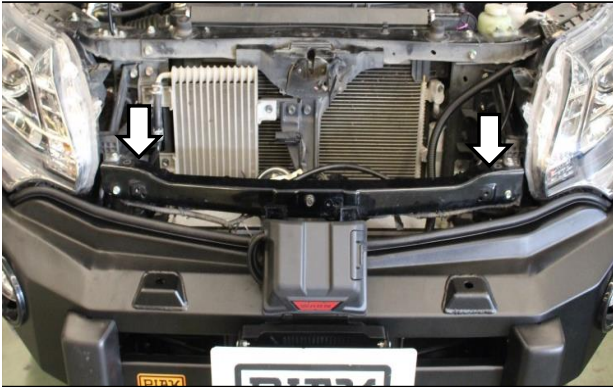


- 65** location of Front grille bracket (RH&LH) .



- 66** Attach the Front grille bracket to the grille using the tek screws that are at the back of the grille.

FITTING PROCEDURE



67 location of Front grille bracket (RH&LH) .

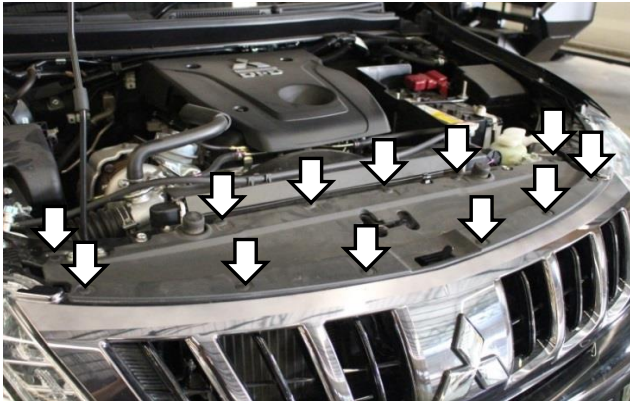


68 Re-install the front grill removed earlier to the vehicle .using tow original bolts.

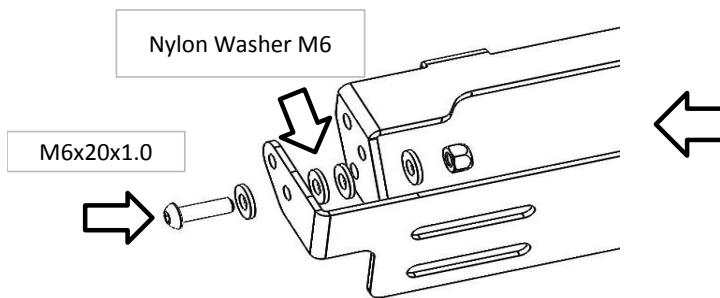


69 Re-install the bonnet that retain the grille at the top

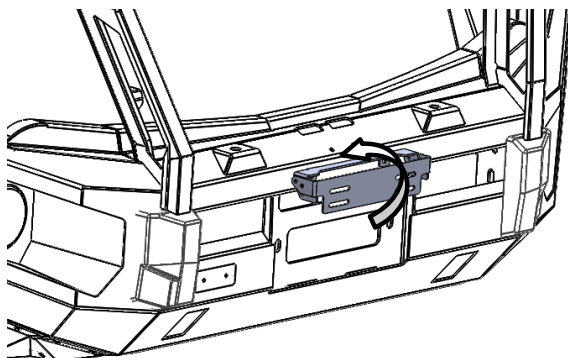
FITTING PROCEDURE



70 using twelve clips that removed earlier .



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



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

FITTING PROCEDURE

