



ELITE 3-LOOP WINCH BAR

FITTING INSTRUCTIONS



MITSUBISHI TRITON 2019-2022

PK105FG1MT19E_RMB_UPMB ,PK105FG1MT19E_RMB_UP0
PK105FG1MT19E_RO_UPMB ,PK105FG1MT19E_RO_UP0
PK105FG1MT19E-B

Fitting Time : approx. 1.5 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.

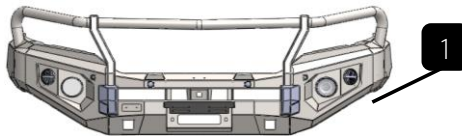
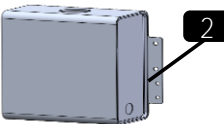
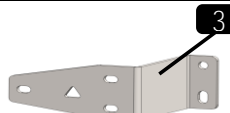
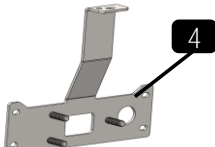
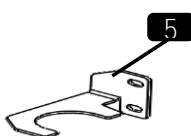
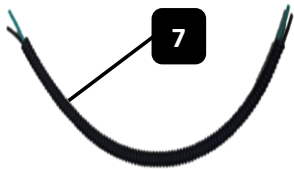
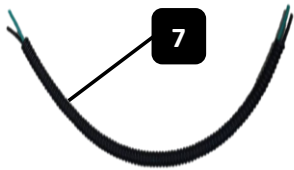

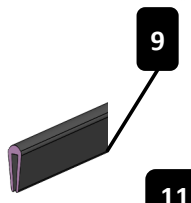
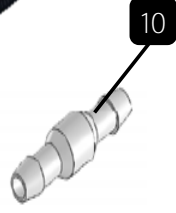

BY USING THIS PRODUCT YOU ACKNOWLEDGE AND AGREE THAT TO THE EXTENT PERMITTED BY LAW PIAK WILL NOT ACCEPT LEGAL OR OTHER LIABILITY FOR ANY LOSS, INJURY OR DAMAGE CAUSED BY INCORRECT OR INAPPROPRIATE INSTALLATION OR USE OF THE PRODUCT.

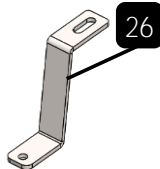
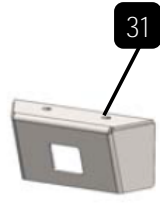

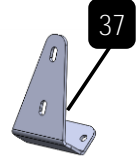
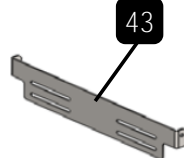
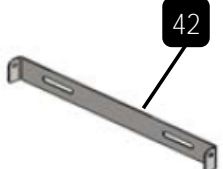
TOOLS REQUIRED

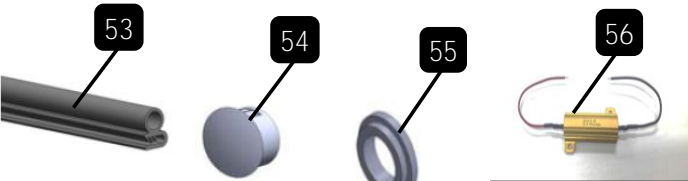
1. Metric socket and spanners
2. Phillips and flat head screw driver
3. Torque wrench
4. Marking pen
5. Cutter
6. 2" Masking tape
7. Drill and metric drill bits
8. Test lamp or multi-meter

PARTS LIST

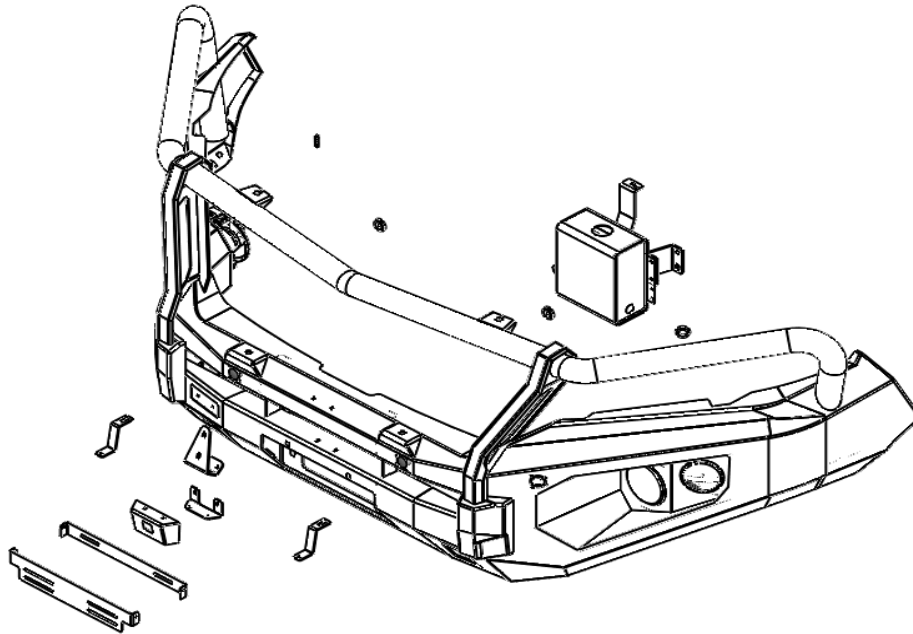
⚠ Important : Check contents of fitting kit before commencing fitment and report any discrepancies.

Steel Bull bar			
Item	Component Name	Q'ty	Remarks
1	3 Loop Winch Bull bar	1	
Windshield Washer Reservoir Bracket			
Item	Component Name	Q'ty	Remarks
2	PIAK Aluminium_Windshield Washer	1	
3	Windshield Washer Bracket A_MT19	1	
4	Windshield Washer Bracket B_MT19	1	
5	Motor pump windshield washer reservoir bracket	1	
6	Additional Windshield Water Tank Hose (ID 34,24 X L110 mm.)	1	
7	Wiring harness (L=450 mm.)	1	
8	rubber tube Black (L= 300 mm.)	1	
9	Pinch Weld Edge 3 mm. (L 400mm.)	1	
10	Plastic joints	1	
11	Cable Tie (L=150 mm.)	4	
12	Flat Washer M8	3	
13	Flange Nut M8x1.25	3	
14	Hex Bolt M6x20x1.0	4	
15	Flat Washer M6 OD14	8	
16	Spring Washer M6	4	
17	Flange Nut M6x1.0	4	
18	Button Head Bolt M6x20x1.0 EDP	1	
19	Spring Washer M6 EDP	1	

Windshield Washer Reservoir Bracket			
Item	Component Name	Q'ty	Remarks
20	Flat Washer M6 EDP	2	
21	Flange Nut M6x1.0 EDP	1	
22	Button Head Bolt M5x15x0.8 EDP	2	
23	Spring Washer M5 EDP	2	
24	Flat Washer M5 EDP	4	
25	Flange Nut M5x0.8 EDP	2	
Front Grill Bracket			
Item	Component Name	Q'ty	Remarks
26	Front Grill Bracket	2	
27	Button Head Bolt M6x20x1.0	2	
28	Flat Washer M6 OD14	4	
29	Spring Washer M6	2	
30	Flange Nut M6x1.0	2	
Camera bracket			
Item	Component Name	Q'ty	Remarks
31	camera bracket 1	1	 
32	camera bracket 2	1	
33	Button Head Bolt M5x0.8x15	6	
34	Flange Nut M5x0.8	6	
35	Flat Washer M5 OD12	12	
36	Spring Washer M5	6	
Winch Control Plate			
Item	Component Name	Q'ty	Remarks
37	Winch control plate	1	
38	Hex Bolt M6x20x1.0	2	
39	Spring Washer M6	2	
40	Flat Washer M6 OD20	4	
41	Flange Nut M6x1.0	2	
License Plate Bracket			
Item	Component Name	Q'ty	Remarks
42	License Plate Bracket (Inner)	1	 
43	License Plate Bracket (Outer)	1	
44	Hex Bolt M6x20x1.0	4	
45	Spring Washer M6	4	
46	Flat Washer M6 OD20	6	

License Plate Bracket			
Item	Component Name	Q'ty	Remarks
47	Button Head Bolt M6x20x1.0	2	
48	Nyloc Nut M6x1.0	2	
49	Nylon Washer M6	4	
50	Flat Washer M6 OD14	4	
51	Flange Nut M6x1.0	2	
52	Cage Nut M6x1.0x3T	2	
Accessories			
Item	Component Name	Q'ty	Remarks
53	Pinchweld rubber seal	2	
54	Sensor blanking plugs	4	
55	Sensor housing	4	
56	Load resistor (R-DROP)	2	

COMPONENTS OVERVIEW



TORQUE SETTING OF FASTENER

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

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

STEPS TO START INSTALLING

Installation has the following steps ;

1. Mounting Bracker
 - 1.1 Mounting Bracker Australia Version PK105/PK106MT19EAUS-M
 - 1.2 Mounting Bracker Asia Version PK105/PK106MT19EASIA-M
2. Bull Bar
 - 2.1 Post Type Elite Winch Bar PK105MT19E-B
 - 2.1 Non Loop Elite Winch Bar PK106MT19E-B
3. Under Protection Plate Center
 - 3.1 Under Protection Plate Center - Matte Black PK105/106MT19E-URPMB
 - 3.2 Under Protection Plate Center - Orange PK105/106MT19E-URPO
4. Wing Under Protection Plate
 - 4.1 Wing Under Protection Plate Australia Version PK105/PK106MT19EAUS-PS
 - 4.2 Wing Under Protection Plate Asia Version PK105/PK106MT19EASIA-PS

FITTING PROCEDURE

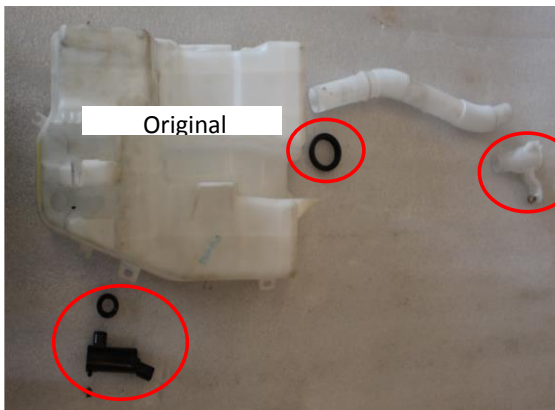


- 1 ****Complete PK105S/PK106S MT19AUS-M ,PK105/PK106 MT19ASIA-M installation first .

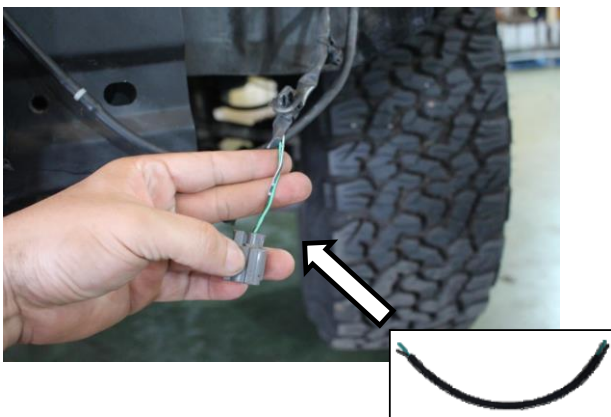
location of winch on the chassis mount bracket.



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

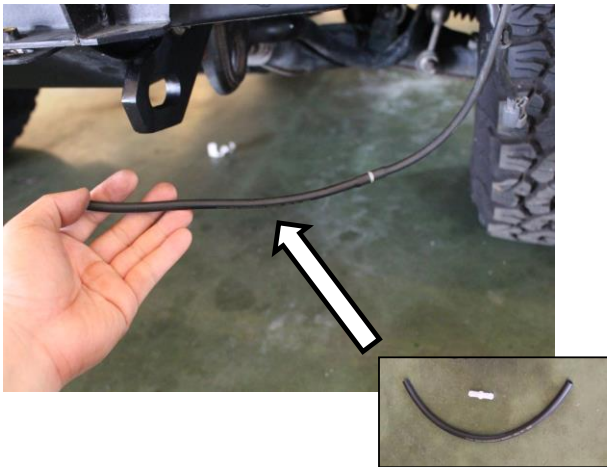


- 3 Remove the parts of original windshield washer reservoir as shown.

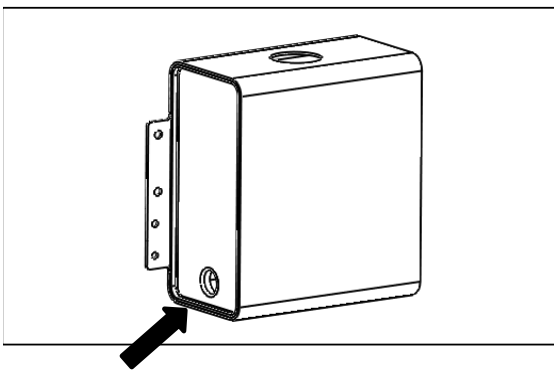


- 4 Using the L450 mm cable set Original motor cable to increase length

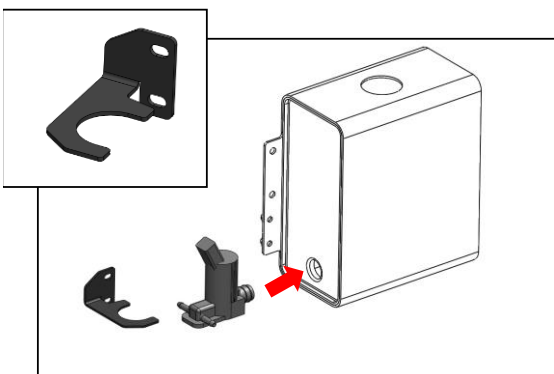
FITTING PROCEDURE



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



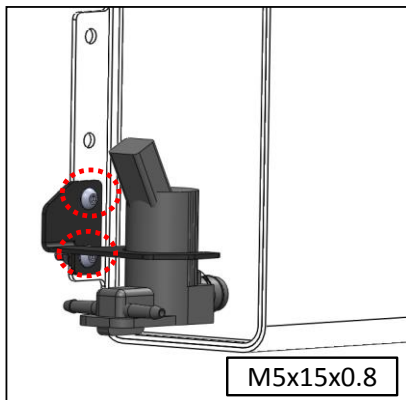
- 6** location at Motor pump Windshield Washer reservoir .



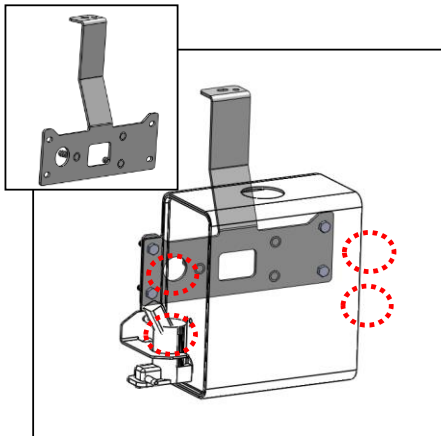
- 7** Re-install Motor pump Windshield Washer reservoir on the Windshield Washer Bottle. as shown.

Do it carefully.

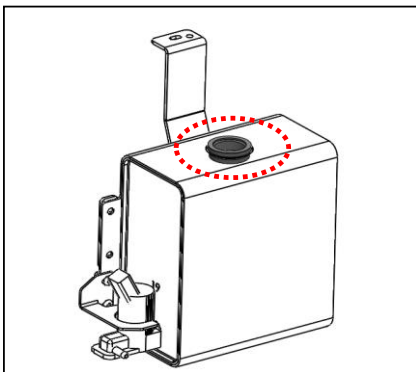
FITTING PROCEDURE



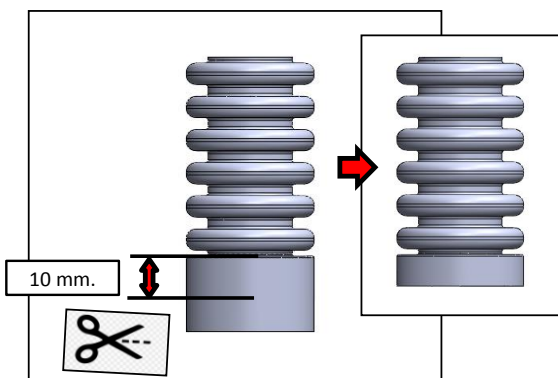
- 8** Fix Motor pump windshield washer reservoir bracket on to the Motor pump and PIAK Aluminium_Windshield Washer Bottle. Use two bolts M5x0.8x15, Spring Washer, Flat washers, and Flange nut.



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

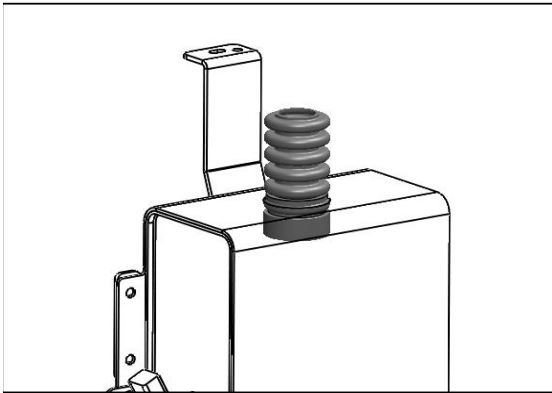


- 10** Assemble rubber water stop on the Windshield bottle as shown.

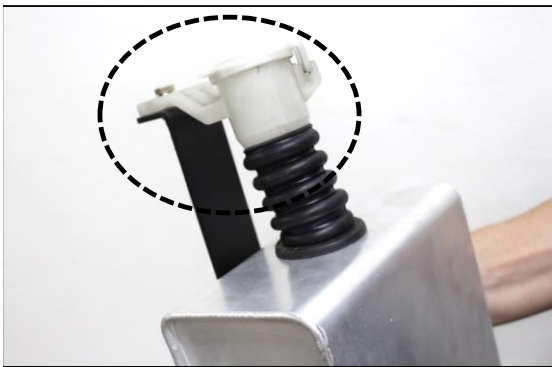


- 11** Cut Additional Windshield Water Tank Hose as the picture.

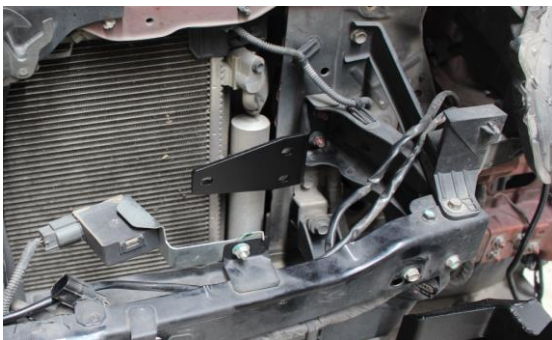
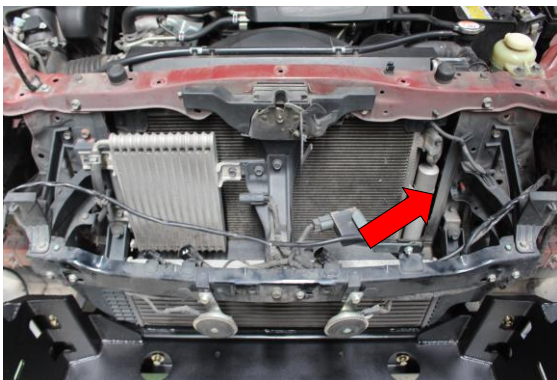
FITTING PROCEDURE



- 12 Assemble Additional Windshield Water Tank Hose as the picture.



- 13 Fix lid Windshield Washer Bottle and on to the Windshield Washer Plate B. Use Button Head Bolt M6x1.0x20 ,Flat washer and Flange nut.

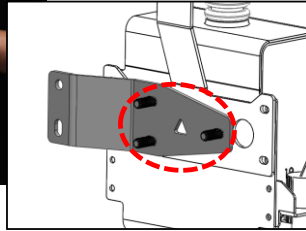


- 14 Fix Windshield Washer Bracket A on the body car. Using tow original bolts. as shown.

FITTING PROCEDURE



- 15** Fix Windshield Washer Bracket B on the Windshield Washer Bracket A . Using three M8 flange nut and Flat washer .as shown.



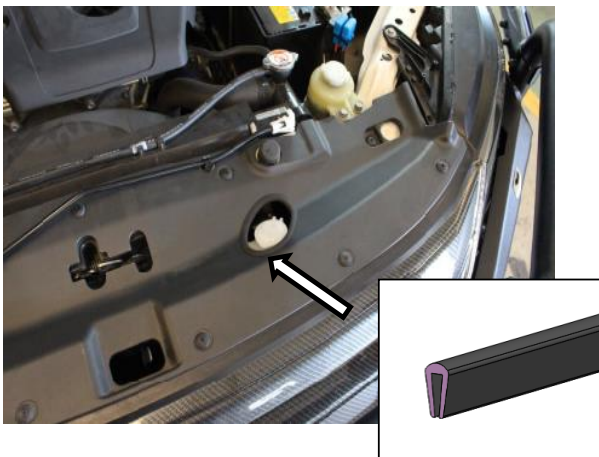
- 16** Re-fitment the upper bumper and sketch the circles to match the lid Windshield Washer Bottle for drilling.



FITTING PROCEDURE

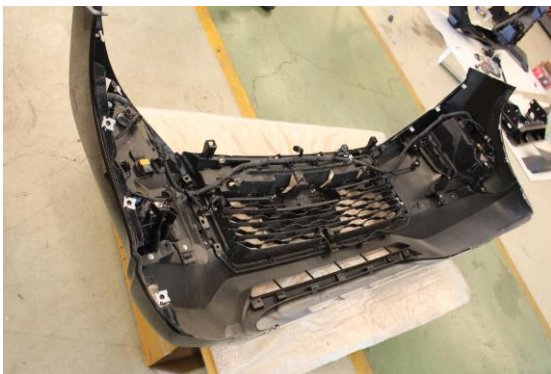


- 17 Cut into holes. For opening the lid to put water.



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

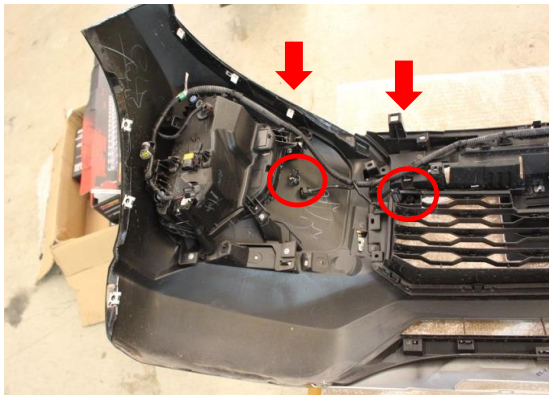
Use the Pinch Weld Edge 3 mm. to place at the edge of the cut.



- 19 Remove the fog light loom and parking sensor loom (where fitted) from the bumper bar.



FITTING PROCEDURE

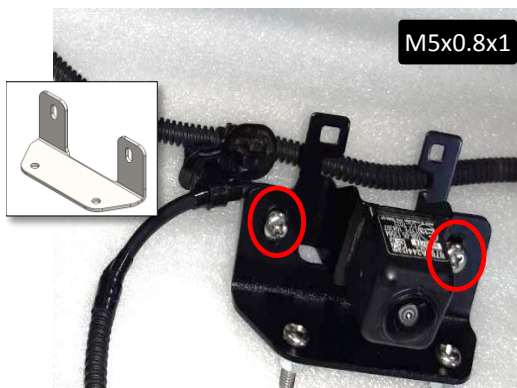


- 20** If fitted, remove the parking sensors from the bumper bar.

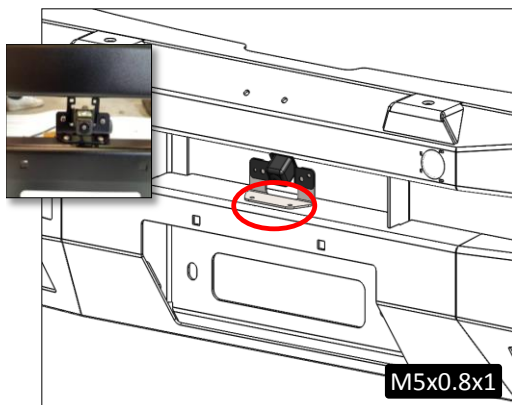
Note the location of each parking sensor. The parking sensors .



- 21** If fitted, remove the parking sensors from the bumper bar.

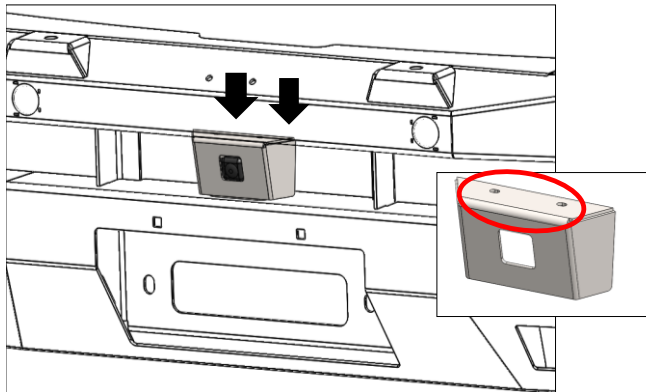


- 22** Fit the front camera to the (camera bracket 2) as shown.Using tow Button head M5x0.8x15 ,Spring Wash,Flat Washer and Flange Nut.

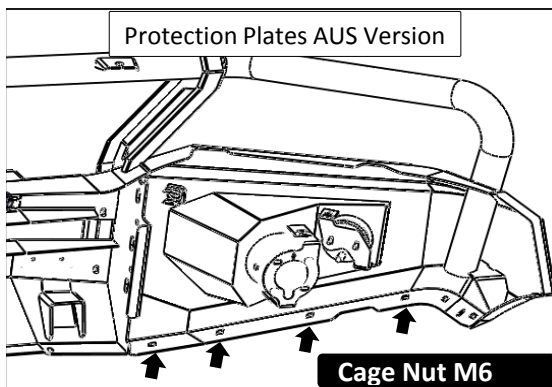


- 23** Fit the camera bracket 2 to the Bar as shown.Using tow Button head M5x0.8x15 ,Spring Wash,Flat Washer and Flange Nut.

FITTING PROCEDURE

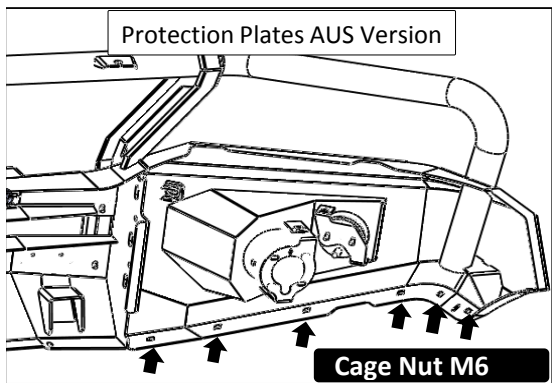


- 24** Fit the camera bracket 1 to the Bar as shown. Using two Button head M5x0.8x15, Spring Wash, Flat Washer and Flange Nut.



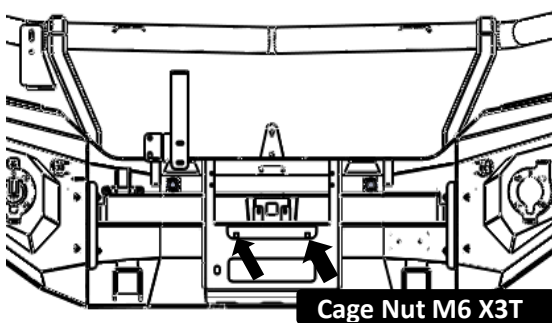
- 25** Insert eight M6x1.0x3T cage nuts onto the bullbar as indicators.
Use the Wing Protection Plates AUS screw set.

*****FITTING INSTRUCTIONS
PK105/PK106 MT19AUS-P.**



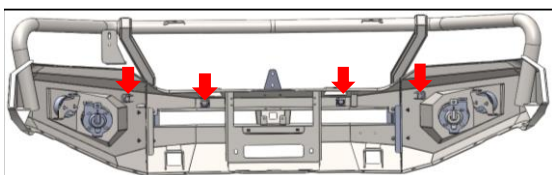
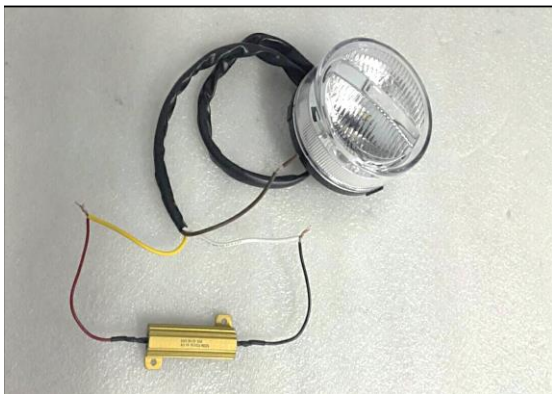
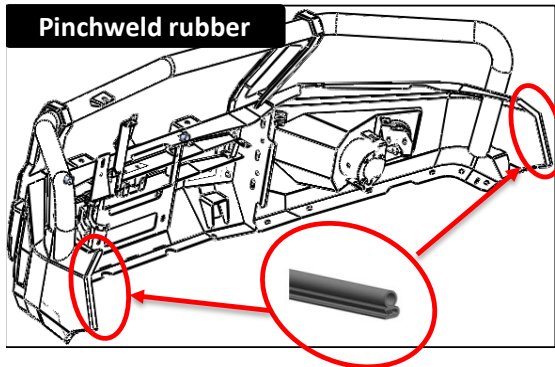
- 26** Insert twelve M6x1.0x3T cage nuts onto the bullbar as indicators.
Use the Wing Protection Plates ASIA screw set.

*****FITTING INSTRUCTIONS
PK105/PK106 MT19ASIA-P.**



- 27** Insert two M6x1.0x3T cage nuts onto the bullbar as indicators. for License Plate Bracket.

FITTING PROCEDURE



28 Insert pinchweld rubber seal Put the end RH&LH as shown.

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

30 Due to the "CAN bus" wiring system of the vehicle a "LED Load Resistor" supplied with kit must be wired in, see resistor pack ageing for wiring details. Both sides.

PIAK LED Harness codes

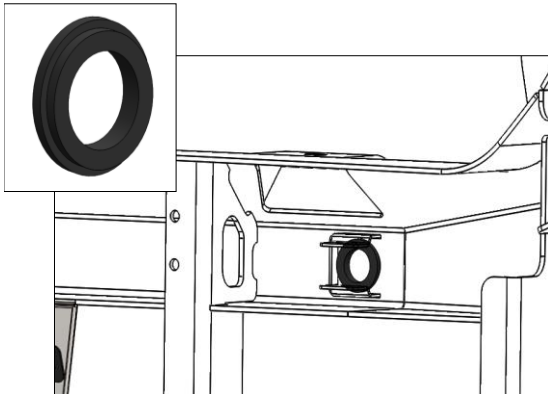
- Indicator Yellow
- Park brown
- Earth White

Repeat for the opposite side.

31 Re-install the parking sensors to the bull bar.

Fit parking sensors, noting orientation, ensuring that each one "snaps" into place.

FITTING PROCEDURE



Sensor housing

32 Insert Sensor housing on the bull bar.

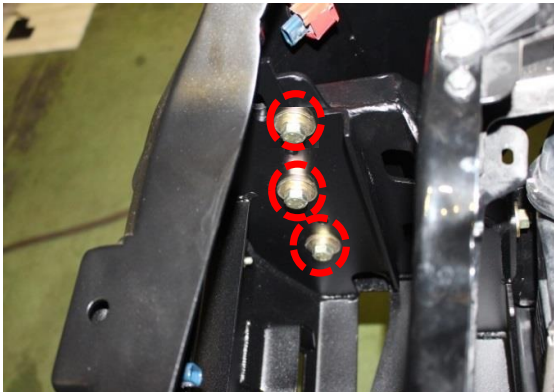


33 Un-wrap and Extend outer sensor harness (both sides) Apply conduit and re-wrap with electrical tape & secure with cable ties.



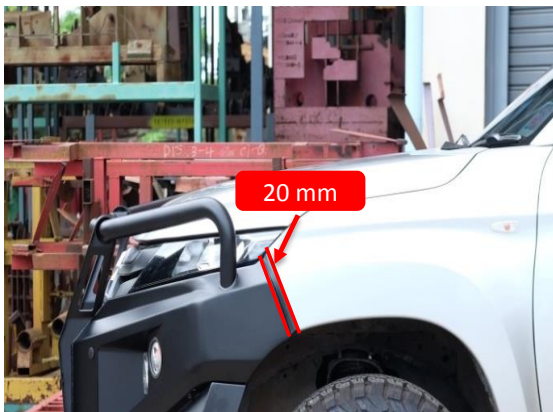
34 Lift the bullbar onto the chassis of the vehicle.

FITTING PROCEDURE



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

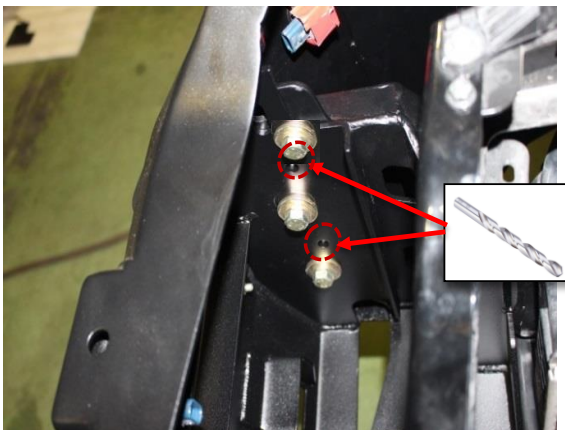
Repeat for the opposite side.



- 36** 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.

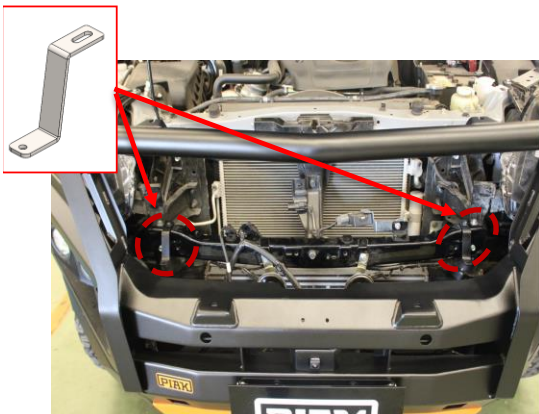


- 37** Drill two 10 mm holes through the chassis mount bracket by using holes on the bullbar as a guide.

Secure with two M10 bolts (M10x30x1.25) and flange nuts.

- 38** Install center protection plate by looking at **FITTING INSTRUCTIONS PK105/PK106 MT19-PC.**

Repeat the opposite side.



- 39** location of Front grille bracket (RH&LH). Secure front grill bracket onto the vehicle by using original bolt.

FITTING PROCEDURE



- 40 Re-install Front grille . Mark front grill by using template on the brackt.



- 41 Drill front grill(D 6mm) by using template on the brackt as a guide to fit the another side of front grill bracket to the front grill.



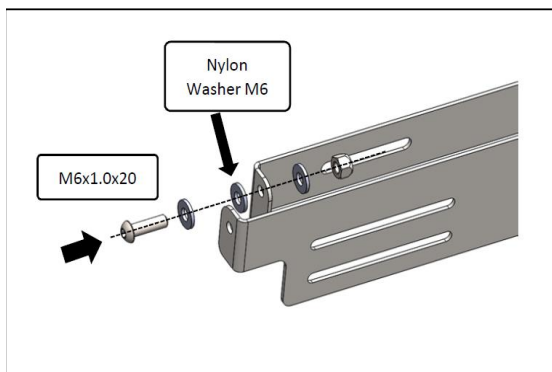
- 42 Fit Front grille bracket (RH&LH) on the front grill using tow M6 Button Head Bolt (M6x20x1.0), flat washers and Flange Nut.



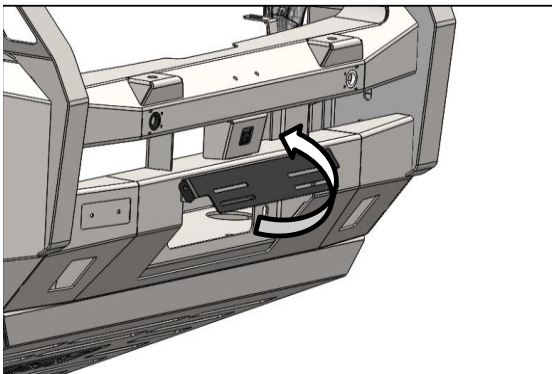
FITTING PROCEDURE



- 43 Re-install the OEM Plastic radiator cover to the vehicle.



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



- 45 Install wing protection plate by looking at

FITTING INSTRUCTIONS
PK105/PK106 MT19AUS-P,
PK105/PK106 MT19ASIA-P.

FITTING PROCEDURE

