PIAK OFFTRACK NUDGE BAR

FITTING INSTRUCTIONS



MITSUBISHI TRITON 2019 ON PK101MT19_AUS Fitting Time : approx. 1.5-2 hours



BULL BAR SAFETY NOTICE:

INSTALLATION SHOULD ONLY BE DONE BY APPROPRIATELY QUALIFIED OR EXPERIENCED PERSONS IN ACCORD- ANCE 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 manufac- turer.

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 as- sist" 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 characteris-tics cannot be anticipated, *the driver remains responsible at all times for properly controlling the vehi- cle, 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 experi- enced 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 pub- lic 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 visi- bility 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 inju-ry, 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.



6. Adhesive Tape

7. Masking Tape

9. Fine sandpaper

8 Jig saw

TOOLS REQUIRED

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

PARTS LIST

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

Front Nudge bar					
Item	Component Name	Q'ty	Remarks		
	Main Nudge bar Assy {MT19}				
Chassis	Mounts to Vehicle				
Item	Component Name	Q'ty	Remarks		
2	Inner bracket (RH & LH)	1			
3	Chassis mount (RH & LH)	1	3		
4	Hex bolt M10x1.5xL35	8	2		
5	Hex bolt M10x1.25xL30	2	3		
6	Hex bolt M10x1.25xL90	2			
7	M10 Spring washer	12			
8	M10 Flat washer OD26x2T	14			
9	Flange Nut M10x1.25				
	Bar to Chassis Mount		Descede		
Item	Component Name	Q'ty	Remarks		
10	Socket head M10x1.5xL35	4			
11	M10 Flat washer OD28x3T	8			
12 13	M10 Spring washer Flange nut M10x1.5	4			



License Plate Bracket MT19						
Item	Component Name	Q'ty	Remarks			
14	License Plate Bracket	1				
15	Hex bolt M6x1.0xL20	4				
16	Flange nut M6x1.0	4	14			
17	M6 Flat washer OD14	8				
18	M6 Spring washer	4				
19	SENSOR BLANKING PLUG_Dia 25mm	2				



TORQUE SETTING OF FASTENER

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

Bolt Diameter (mm.)	Torque (Nm)	Torque (ft.lb)
M6	9	7
M8	22	16
M10	44	32
M12	77	57

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FITTING PROCEDURE



- 1 Locate vehicle in a suitable area.
- 2 Rest bullbar face down on a surface that will not scratch the bar. Remove the vehicle's grille prior to fitting other components.



3 Remove and retain the clips securing the plastic cover between the grille and radiator support panel.



- 4
- Remove the upper bumper from the front car.



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





6 Remove and retain lower chrome applique (Both sides).



- 7 Remove and retain M5 hex-head bolt. Both sides.
- 8 Repeat for the opposite side.



9 Remove the license plate holder.



10 Remove the plastic clip from lower onter edge of each side behind the grille , return for re fitment and remove grille.





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



Remove three t clip that retaian the outer edge of the bumper . Keep for re- fitment of bumper. 12



Repeat for the opposite side.



- 14
 - Remove and retain the remaining three bolts securing the bumper to the bumper support beam.



15 Unclip the wiring looms And Camera, Sensor coming from behind the bumper bar.





16 Carefully remove the bumper from the vehicle and place it where it won't be damaged. and Remove and discard the inner guard support brackets from both sides of the vehicle.







Trim plastic right & left air deflectors, (Left air deflector shown on Picture).

18

Attact Mount bracket and the inner bracket over the inside of the chassis rails.





19 Fit the Chassis mount into the inner Brackets, ,using the supplied M10x1.5x35, M10 Spring washer ,Flat washer M10.



- 20 Ensure the inner Brackets are aligned against the inner faces of the chassis rails, using the supplied M10x1.25x90 and fully tighten.
- 21 Repeat for the opposite side.



22 Fit the Chassis mount at bottom, using , Hexbolt M10x1.5 L35, M10 Spring washer , M10 Flat washer



23 Repeat step 17-21 for the opposite side.





- 24 remove the parking sensors and parking sensor surrounds from the bumper bar.
 - Repeat for the opposite side
 - **Note **Replace by suppliled sensor plug





Remove the front camera from the bumper bar and run the wire through the hole of front grille.



27 Re-install the front bumper and place the chassis mounting bracket through out the bumper as show.



28 Fit the sensor housing into the nudge bar bracket.



Repeat for the opposite side







30 Place sensors in the nudge bar bracket ,Carfully locate the sensors and bracket into the bar correct orientation same with original in bumper.



31 Front view after attact sensors and bracket on front nudg bar.



Lift the Nudge Bar fit to the chassis mount ,Align the Nudge Bar to the desired position, and fully tighten the Chassis Mounting Bolts. by using four M10 Socket head (M10x1.5x35), spring washers, flat washers and flange nuts.



33 Repeat for the opposite side.





Align the Nudge Bar to the desired position, and Reconnect Parking sensors on either side of the front bar.



35 Reconnect the harnesses on either side of the front bumper .



- **36** F P
 - Fit the front camera into the License Plate Bracket as shown.



37 Assemble License plate bracket by using M6 x L 20, M6 Flat washer, M6 Spring washer, Flange nut M6 and fully tighten.





38 Re-install the front grille to the vehicle.



39 Check Parking Sensor Compatibility. Now that Nudge Bar is centred, ensure that it is not interfering with the front parking sensors. You may need to adjust the sensor housing if you have any issues.

NOTE : The parking sensors are very sensitive and if the sensor is off-centre by even a few mms, it can cause the sensors to pick up the bar. If you're having trouble, be sure the Parking sensor are installed correctly.



PIAK NUDGE BAR NOW FULLY INSTALLED



FASTENERS • Check fastener tightness regularly and tighten if required. We recommend checking fasteners after every large off-road trip.