Technical Data for Body Builder's Manual- TRITON (C&C)

TRITON (C&C) BODY BUILDER'S MANUAL

This document compiles the technical data to prepare the body builder's manual.

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1 Summary of Vehicle Specifications

1.1 Weight Specifications

				R8-71	R8-85	R8-86
	DRIVE					
ITEM	BODY SHAPE				Single Cab	
	MODEL			KK4TENJMR8	KK1TEJUFPR8	KK1TELUFPR8
CURB WEIGHT O	F CAB & CHASSIS	TOTAL	kg.	1435	1570	1575
		FRONT	kg.	900	1000	1005
		REAR	kg.	535	570	570
CURB WEIGHT O		TOTAL	kg.	1585	1720	1725
(EQUIPED REAR	BODY)	FRONT	kg.	895	995	1000
		REAR	kg.	690	725	725
GVW		TOTAL	kg.	2720	2720	2720
		FRONT	kg.	965	1075	1080
		REAR	kg.	1755	1645	1640
MAX AXLE LOAD		FRONT	kg.	1260	1260	1260
		REAR	kg.	1840	1840	1840
MAX. TOWED TRA	AILER WEIGHT	W/ BRAKE	kg.	1800	2500	2500
		W/O BRAKE	E kg.	750	750	750
GROSS COMBINA	ATION WEIGHT		kg.	4435	5130	5130
TIRE SIZE		FRONT & REAR		205R16C 8PR 110/108R	205R16C 8PR 110/108R (OP : 245/65R17 111S)	205R16C 8PR 110/108R (OP : 245/65R17 111S)
TIRE CAPACITY		FRONT & REAR	kg.	1060 (at 4.5bar)	1060 (at 4.5bar) (OP : 1090 (at 3.4bar))	1060 (at 4.5bar) (OP : 1090 (at 3.4bar))

1 Summary of Vehicle Specifications

				S8-15	S8-16	S8-55
	DRIVE			4WD		
ITEM	BODY SHAPE			Doubl	e Cab	Club Cab
	MODEL			KL1TJJUFPR8	KL1TJLUFPR8	KL1TCJUFPR8
CURB WEIGHT O	F CAB & CHASSIS	TOTAL	kg.	1790	1795	1770
		FRONT	kg.	1103	1108	1105
		REAR	kg.	687	687	665
CURB WEIGHT O		TOTAL	kg.	1910	1915	1900
(EQUIPED REAR	BODY)	FRONT	kg.	1090	1095	1095
		REAR	kg.	820	820	805
GVW		TOTAL	kg.	2900	2900	2900
		FRONT	kg.	1125	1130	1140
		REAR	kg.	1775	1770	1760
MAX AXLE LOAD		FRONT	kg.	1260	1260	1260
		REAR	kg.	1840	1840	1840
MAX. TOWED TRA	AILER WEIGHT	W/ BRAKE	kg.	3100	3100	3000
		W/O BRAKE	E kg.	750	750	750
GROSS COMBINATION WEIGHT			kg.	5885	5885	5785
TIRE SIZE		FRONT & REAR		245/70R16 111S RF (OP1 : 265/60R18 110H (M&S)) (OP2 : 245/70R16 111S RF (ALL TERRAIN))	245/70R16 111S RF (OP1 : 265/60R18 110H (M&S)) (OP2 : 245/70R16 111S RF (ALL TERRAIN))	245/70R16 111S RF (OP1 : 245/70R16 111S RF (ALL TERRAIN))
TIRE CAPACITY		FRONT & REAR	kg.	1090 (at 3.4bar) (OP1 : 1060 (at 4.5bar)) (OP2 : 1090 (at 3.4bar))	1090 (at 3.4bar) (OP1 : 1060 (at 4.5bar)) (OP2 : 1090 (at 3.4bar))	1090 (at 3.4bar) (OP1 : 1090 (at 3.4bar))

1 Summary of Vehicle Specifications

				S8-56	S8-85	S8-86
	DRIVE				4WD	
ITEM	BODY SHAPE			Club Cab	Single	e Cab
	MODEL			KL1TCLUFPR8	KL1TEJUFPR8	KL1TELUFPR8
CURB WEIGHT O	F CAB & CHASSIS	TOTAL	kg.	1775	1675	1675
		FRONT	kg.	1110	1090	1095
		REAR	kg.	665	585	580
	F BASE VEHICLE	TOTAL	kg.	1905	1825	1825
(EQUIPED REAR	BODY)	FRONT	kg.	1100	1085	1090
		REAR	kg.	805	740	735
GVW		TOTAL	kg.	2900	2900	2900
		FRONT	kg.	1145	1165	1170
		REAR	kg.	1755	1735	1730
MAX AXLE LOAD		FRONT	kg.	1260	1260	1260
		REAR	kg.	1840	1840	1840
MAX. TOWED TR	AILER WEIGHT	W/ BRAKE	kg.	3000	3000	3000
		W/O BRAKE	E kg.	750	750	750
GROSS COMBIN	ATION WEIGHT		kg.	5785	5785	5785
TIRE SIZE		FRONT & REAR		245/70R16 111S RF (OP1 : 245/65R17 111S) (OP2 : 245/70R16 111S RF (ALL TERRAIN))	245/65R17 111S	245/65R17 111S
TIRE CAPACITY		FRONT & REAR	kg.	1090 (at 3.4bar) (OP1 : 1090 (at 3.4bar)) (OP2 : 1090 (at 3.4bar))	1090 (at 3.4bar)	1090 (at 3.4bar)

2.1 Notes regarding Cab Chassis variants

Mitsubishi Triton Cab Chassis variants are incomplete vehicles that have been granted compliance approval under the Road Vehicle Standards Act (2018) as partially completed vehicles. The cab chassis variants do not comply with the following Australian Design Rules requirements.

The "Position" requirements of ADR 13/00 for the following Lighting and Light Signalling devices:

- Reversing Lamp (ADR 1/00) as per ADR 13/00 Appendix A clause 6.4.4
- Rear Direction Indicators (ADR 6/00) as per ADR 13/00 Appendix A clause 6.5.4
- Rear Reflex Reflectors (ADR 47/00) as per ADR13/00 Appendix A clause 6.14.4
- Devices for Illumination of Rear Registration Plates (ADR 48/00) – as per ADR 13/00 Appendix A clause 6.8.4

- Rear Position (Side Lamps) (ADR 49/00) as per ADR 13/00 Appendix A clause 6.10.4
- Stop Lamps (ADR 49/00) as per ADR 13/00 Appendix A clause 6.7.4

Wheel Guards (Mudguards) for the rearmost wheels as per ADR 42/05 clause 17.2

Provision for rear Registration Plate as per ADR 61/03 clause 9.1.

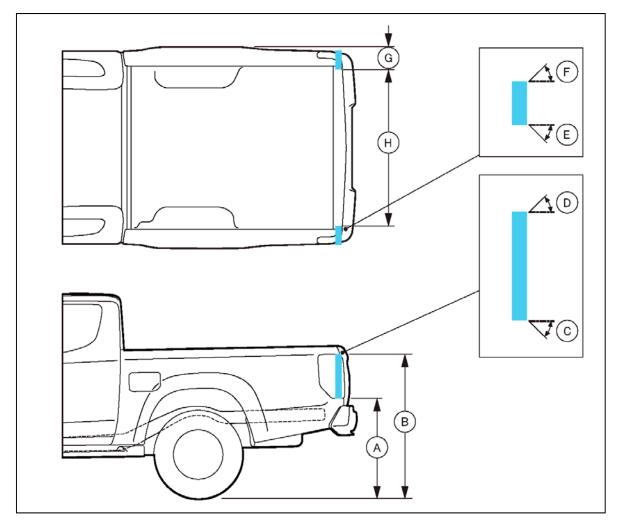
Triton cab chassis variants must not be driven on public roads or made available to the market until the vehicle is completed and bought into compliance with the abovementioned Australian Design Rules.

Guidance is provided below that will enable the above mentioned Australian Design Rule requirements be met.

2.2 Notes for the Installation of Equipment

(1) Installation of rear lamps

Mitsubishi Triton Cab Chassis vehicles are supplied with functioning rear tail lights positioned to assist in the safe movement of the vehicle prior to fitment of a rear body. The rear lamps must be repositioned onto a rear body according to the requirements of ADR 13/00 as nominated in section 2.1. This can be achieved by positioning the supplied lamps according to the following guide:



	Description					
А	Minimum distance from the ground to lower edge of supplied lamps	350mm				
В	Maximum distance from the ground to the upper edge of the supplied lamps	1200mm				
С	Minimum unobstructed visibility angle downwards of the lamp	15 ⁰				
D	Minimum unobstructed visibility angle upwards of the lamp	15 ⁰				
Е	Minimum outboard unobstructed visibility angle of the lamp	80 ⁰				
F	Minimum inboard unobstructed visibility angle of the lamp	45 ⁰				
G	Maximum distance from the widest point of the vehicle to the inner edge of the supplied lamps	400mm				
Н	Minimum distance between the inner edges of the lamps	600mm				

Where the supplied lamps are utilised it is not necessary to reuse the temporary bracket that temporarily mounted the lamps to the chassis for transportation purposes.

The harness that supplies electricity to the rear lamps must be fastened securely to the Frame, Cross member as required.

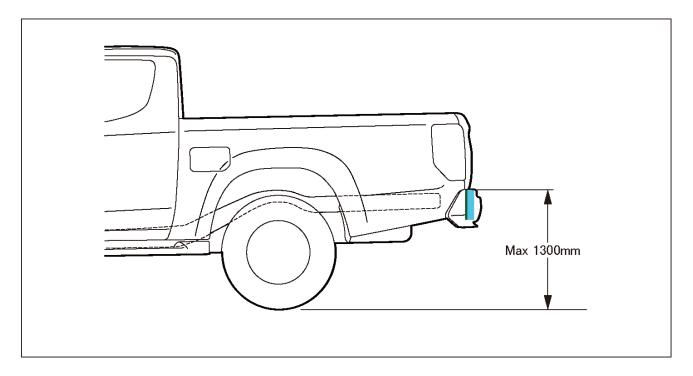
If the supplied rear lamps are not utilised, then the lamps installed must comply with the photometric requirements of the relevant ADR's nominated in section 2.1 in addition to the "Position" requirements nominated in ADR 13/00.

(2) Rear Registration Plate Holder, and Rear Registration Plate Lamps

The supplied Rear Registration Plate Holder (which incorporates rear registration plate lamps) must be positioned to meet the requirements of ADR 61/03, Clause 9.1.

This can be achieved by ensuring the holder is positioned to the rear of the body such that when a licence plate is attached to it, the top of the licence plate is not more than 1300mm from the ground.

No part of the vehicle can obscure visibility of the licence plate.



For vehicles not utilising the Rear Registration Plate Holder provided, the plate holder and lamp must comply with the following ADR and 'in use' requirements:-

- the Plate is able to be fitted in accordance with ADR 61/03, clause 9.1.
- the plate is not obscured by any part of the vehicle and
- the lamp(s) meet the requirements of ADR 13/00 and ADR 48/00.

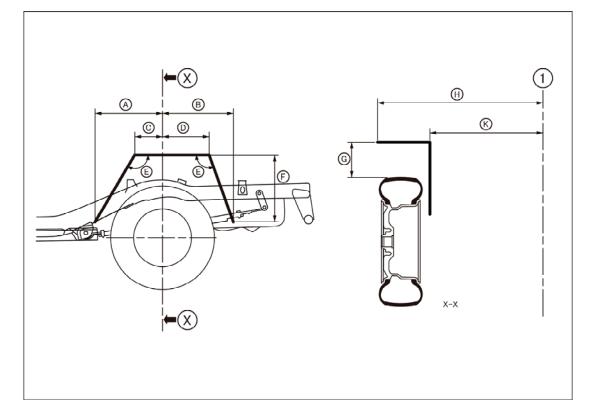
(3) Mud Guards

The rear body must be fitted with Wheel Guards (or Mud Guards) that comply with the requirements of ADR 42/05 clause 17.2

The following summarises the ADR requirements that apply to Triton (as an NA category commercial vehicle). The complete text of ADR 42/05 clause 17.2 must be consulted in order to ensure the rear body design is compliant.

The Wheel Guards must be designed to protect other road users against thrown-up stones, mud, ice, snow and water and to reduce for those users the dangers due to contact with the moving wheels.

The recommended dimensions for wheel guards on conversions are outlined in the following figure.



Hard Tray Wheel Guard Dimensions				
Dimension	205R16C, 245/70R16 and 245/65R17	Dimension	205R16C, 245/70R16 and 245/65R17	
А	429mm	F	428mm	
В	451mm	G*	199mm	
С	174mm	Н	919mm	
D	301mm	к	619mm	
E	Fr: 120 ⁰ , Rr: 110 ⁰			
I Centre line of vehicle				
X Section through Centre of Wheel Guard				
*Dimension G is to the bottom of the swage				

The wheel guards may consist of several components, provided that no gaps exist between or within the individual parts when assembled; and the wheel guards must be securely attached. However they may be detachable either as a unit or in parts.

(4) Electrical wiring

For safety of the electrical circuit, a fusible link is put in the harness near the positive battery terminal to prevent the circuit from causing a fire due to a short circuit at an accidental event.

- a) Extension of wiring
 - If it is necessary to extend the electrical wire, use a wire of the same cross-sectional area and colouring as those of the existing wire. Apply a protective covering such as a corrugated tube and a vinyl tube around the wire. The extension wire must be connected with an insulating material. If the connecting portion is exposed to the open air, provide waterproofing to the portion. Never connect the wires by twisting. The extension wire must be laid along on the stiff parts and the frame in such away as not to hang loose off

the stiff parts and touch any dangerous parts such as metal edges, the brake pipes, and the fuel lines.

- Clamp the wire down securely so as not to touch rotating parts, vibrating parts, or any sharp edges of the chassis and the equipment, and attach a grommet to the opening in the metal part where the wire passes through the plate to prevent the wire from short-circuiting due to damage in the wire covering.
- b) Wiring for power supplying to the rear body
 - If the power supply cable is attached directly on the battery terminal, fasten the cable carefully to the terminal in such a way as neither to damage the terminal nor to be loosened. Pay the closest attention to the insulation coverage around the wiring to prevent the lead cable from being damaged and put a fuse in the cable without fail to protect the wiring. Locate the fuse as close as possible to the battery. Capacity of the fuse must be selected appropriately for the rush current as well as the rated current of the electrical loads.
 - If the power supply is taken from the harness in the cab, use the wiring for the accessory socket. Never use other existing wiring because the capacity of the fuses in such wiring have little surplus.

Capacity of accessory socket:120W

(5) Clearance between the chassis parts and the installed equipment

- a) Around Engine
 - The clearance around the engine must be 25 mm or more.
 - If the airflow to the rear part, under part, and side part in the engine compartment is insufficient, the temperature in the engine compartment rises and may cause troubles such as engine malfunction and over-heating of the fuel supply system and the electrical wiring. Pay attention to the ventilation in the engine compartment.

- b) Around the transmission
 - When the transmission assembly is removed from the engine on the vehicle, it needs to be moved rearward in parallel with the mounting angle due to the removal of the fitting portion; therefore, any equipment must not be installed in the following moving range of the transmission assembly removal and installation.

6M/T: Rearward by about 100 mm 5M/T: Rearward by about 110 mm 5A/T: Rearward by about 100 mm

- The clearance around the transmission assembly must be 25 mm or more.
- c) Around the rear axle
 - The clearance around the rear axle must be 35mm or more.
 - Refer to Section 2.2 for the full bump position of the rear axle.
- d) Brake hose
 - Secure the clearance of at least 50mm around the brake hoses connected to the front and the rear wheels in all situations of full suspension stroke and full steering operation.
- e) Exhaust pipe and muffler
 - It is very important for safety to prevent the equipment from the thermal impact of the exhaust pipe and the muffler as well as interference with them. Secure at least the clearance specified in the table below between each part and the exhaust system:

Wire harness	150 mm
Rear body floor	100 mm
Frame	25 mm
Parking brake control cable	50 mm
Rear mudguard	50 mm

(6) Coating

a) Body colours

Name	Code	Number	Coating material supplier
White solid	W32	AC11032	Kansai Paint
White diamond	W85	CSW10085	Kansai Paint
Black mica	X37	CMX10037	Kansai Paint
Sunflare orange pearl	M08	CMM10008	Dai Nippon Toryo
Blue metallic	D23	CSD10023	Nippon Paint
Silver metallic	U25	CSU10025	Kansai Paint
Graphite grey metallic	U28	CSU10028	Nippon Paint
Quartz brown metallic	C06	CMC10006	Kansai Paint
Red solid	P63	CSP10063	Dainippon Paint

- b) Note for over-coating of cab
 - If applying different coating over the original standard colour coating, remove as much as possible the resin or the rubber parts beforehand in order to prevent these parts from being damaged.
- c) Note for curing of coating
 - Keep the temperature of the coated surface of other resin and the rubber parts at 80°C or less in order to prevent these parts from being damaged. If the surface temperature may exceed 80°C, apply a heat insulating treatment for those parts.

(7) Note for position of installed equipment

Where installing the rear body and the related equipment in the vehicles, it must be so constructed that weight distribution and the height of the centre of gravity must meet the following condition

$$\frac{Wr/W}{H/L} > 1.3$$

- Wr : Rear axle load
- W : Vehicle curb mass
- H : Height of the vehicle centre of gravity
- L : Wheelbase

(8) Restriction of rear overhang

The rear overhang must be as follows.

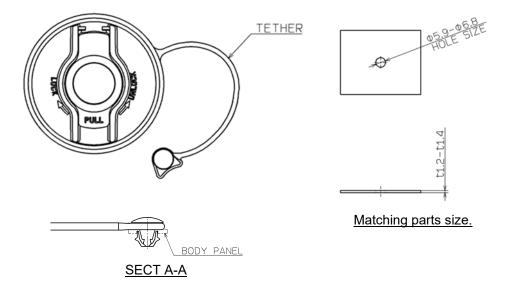
- Max. : 1/2 or less of wheelbase.
- Min. : Rear overhang without body work. (Refer to section 3.1 General Views)

(9) Fuel System

- a) Clearance from Fuel Tank or Other Fuel System Parts should be kept or more than 20mm.
- b) When Filler Neck is assembled, Filler Hose, Levelling Hose and Vapour Hose should be assembled without kink or twist.
- c) In use of clip to connect hose, connecting should be sure.
- d) Fit securely tether of fuel filler cap to body panel as below case A or B.

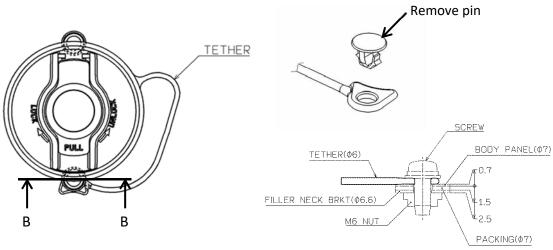
Case A

In case of fixing tether pin to body panel.





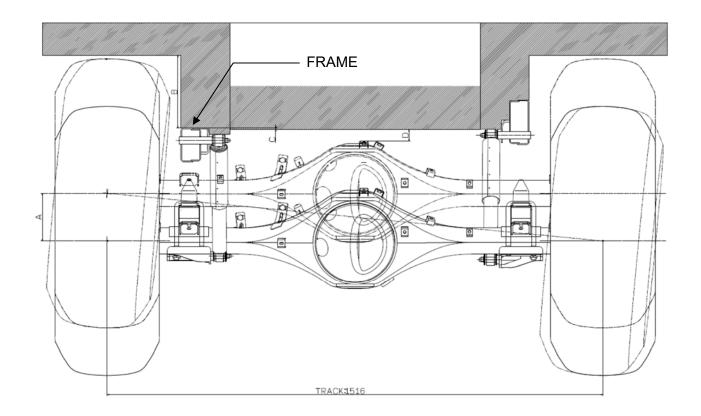
In case of fixing tether on filler neck brkt by screw.



SECT B-B

2.3 Rear Differential and Tire Bouncing Height

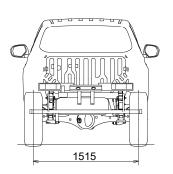
<In case of 4WD / 2WD HIGH RIDER>

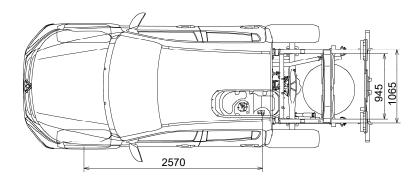


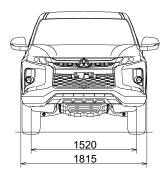
	Standard Suspension	Heavy Duty Suspension
А	145	135
В	221	211
С	5	15
D	35	35

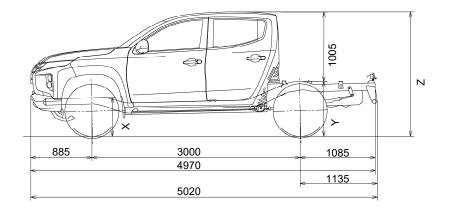
3.1 General Views

< 4WD Double Cab >









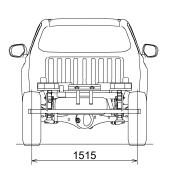
Maximum dimension of completed vehicle

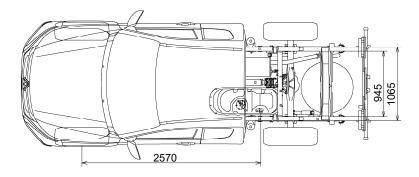
Overall length	:	5,225mm or less
Overall width	:	2,550mm or less
Overall height (unladen)	:	4,000mm or less

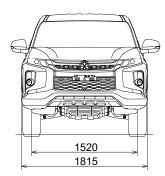
More details should be complied with "2. Procedure for installation of rear body".

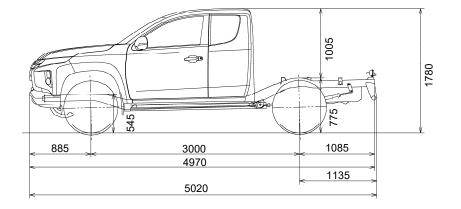
	245/70R16 111S RF	265/60R18 110H (M&S)
Х	545	560
Y	775	790
Ζ	1780	1795

< 4WD Club Cab >







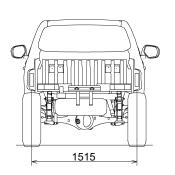


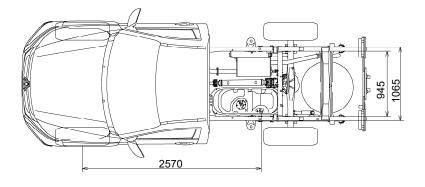
Maximum dimension of completed vehicle

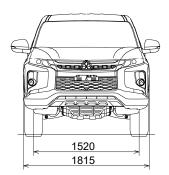
Overall length	:	5,220mm or less
Overall width	:	2,550mm or less
Overall height (unladen)	:	4,000mm or less

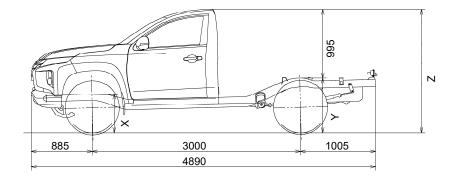
More details should be complied with "2. Procedure for installation of rear body".

< 4WD Single Cab & 2WD HIGH RIDER >









Maximum dimension of completed vehicle

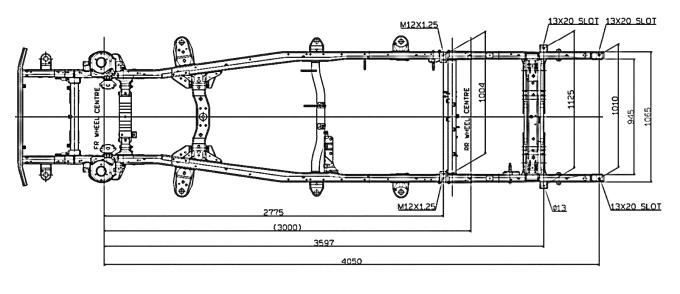
Overall length	:	5,360mm or less
Overall width	:	2,550mm or less
Overall height (unladen)	:	4,000mm or less

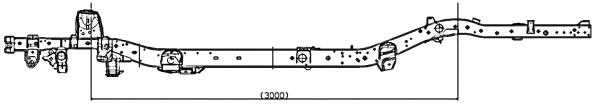
More details should be complied with "2. Procedure for installation of rear body".

	205R16C 8PR 110/108R	245/65R17 111S
Х	540	545
Y	770	775
Z	1765	1770

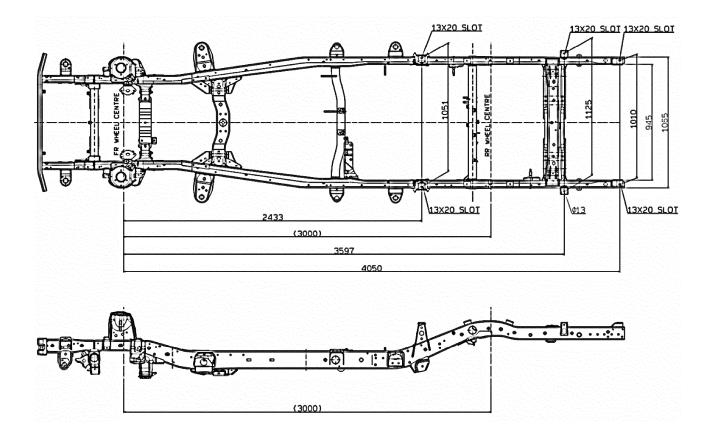
3.2 Frame Drawings

Double Cab (4WD)

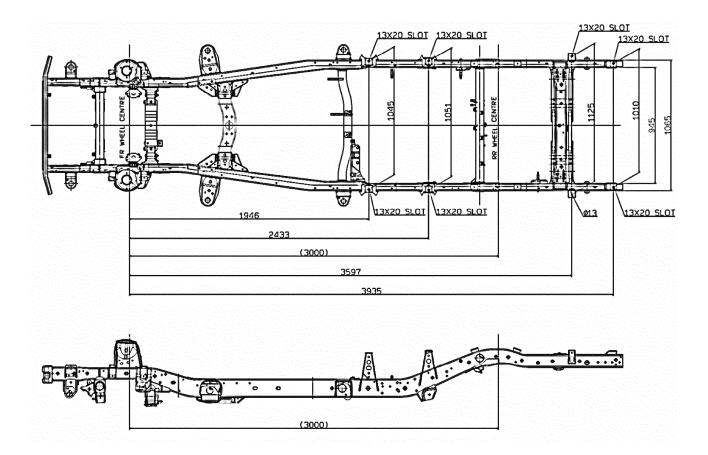




Club Cab (4WD)



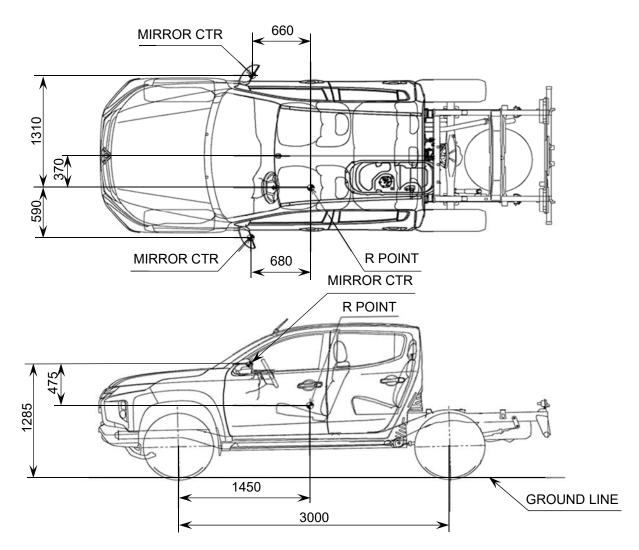
Single Cab (2WD HIGH RIDER)



3.3 Details of Rear View Mirrors

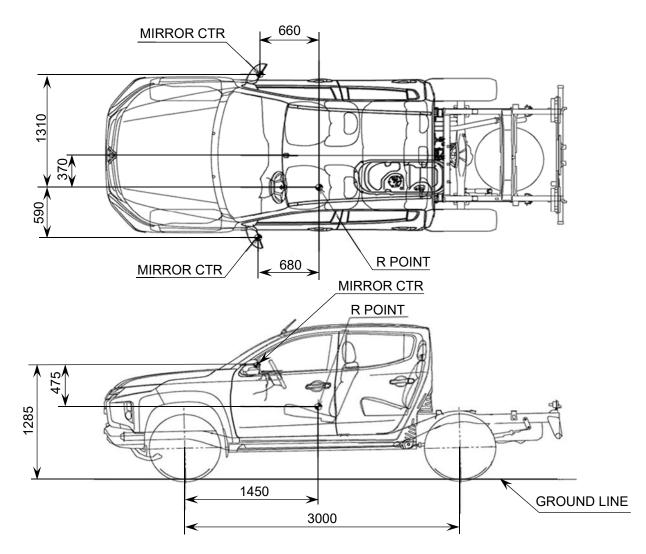
< 4WD Double cab Turn over Type >

Drive	Body Type	Model-Grade	Handle
4WD	Double Cab	KL1TJJUFPR8	RHD
		KL1TJLUFPR8	



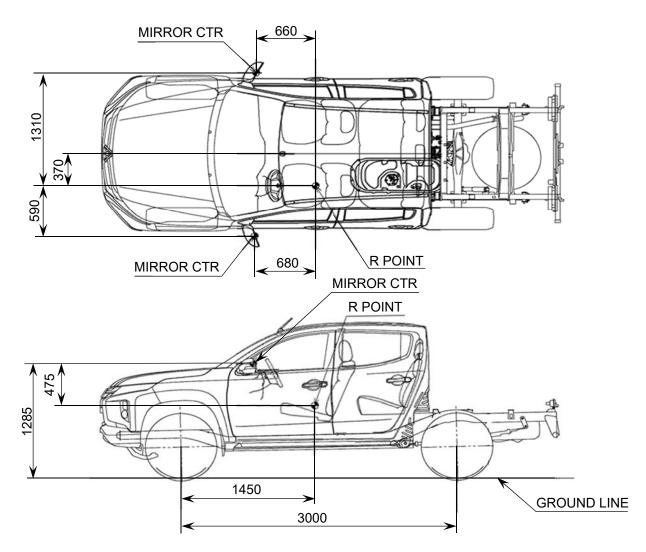
Drive	Body Type	Model-Grade	Handle
4WD	Single Cab	KL1TEJUFPR8	RHD
		KL1TELUFPR8	
	Club Cab	KL1TCJUFPR8	
		KL1TCLUFPR8	

< 4WD Single cab / Club cab Turn over Type >

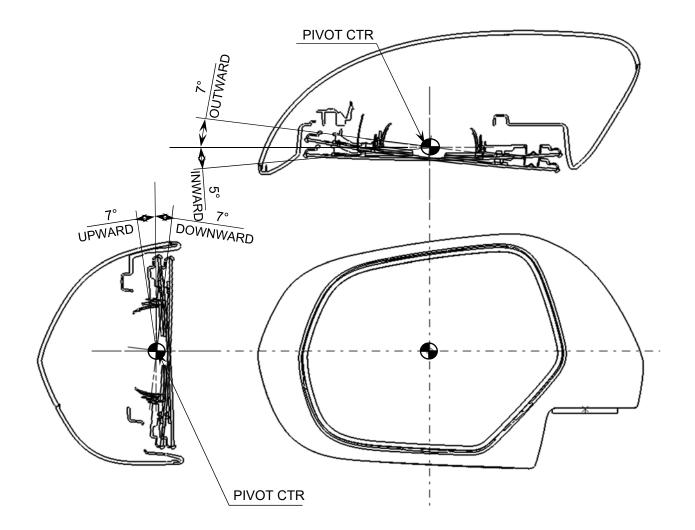


< 2WD Hi Rider Single cab >

Drive	Body Type	Model-Grade	Handle
2WD	Single Cab	KK4TENJMR8	RHD
		KK1TEJUFPR8	
		KK1TELUFPR8	



Detail of PIVOT

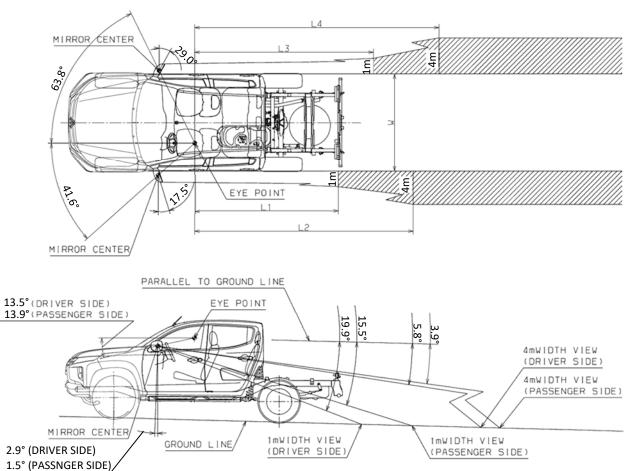


3.4 View Field of Rear View Mirrors

< 4WD Double cab Turn over Type >

Drive	Body Type	Model-Grade	Handle
4WD	Double Cab	KL1TJJUFPR8	RHD
		KL1TJLUFPR8	

LHD IS SHOWN, RHD IS SYMMETRICAL.



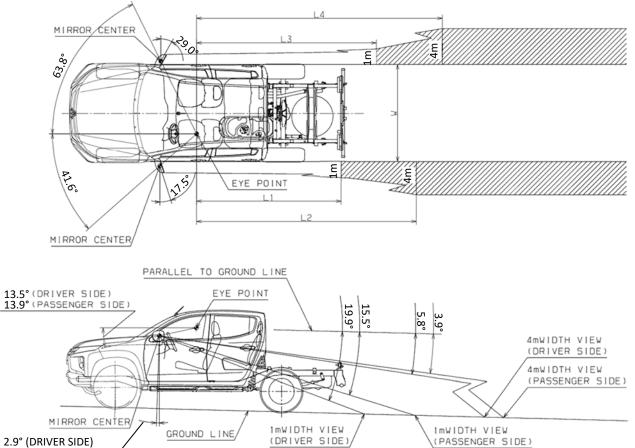
Rr Body Width W	L1	L2	L3	L4
1785mm	2.9m	12m	4m	18.1m
Regulation	4m or less	20m or less	4m or less	20m or less

It is allowed to move door mirror outward using a stay to satisfy low. In this case, the door mirror must not exceed one side 200mm from "W" width.

Drive	Body Type	Model-Grade	Handle
4WD	Single Cab	KL1TEJUFPR8	RHD
		KL1TELUFPR8	
	Club Cab	KL1TCJUFPR8	
		KL1TCLUFPR8	

< 4WD Single cab / Club cab Turn over Type >

LHD IS SHOWN, RHD IS SYMMETRICAL.



1.5° (PASSNGER SIDE)

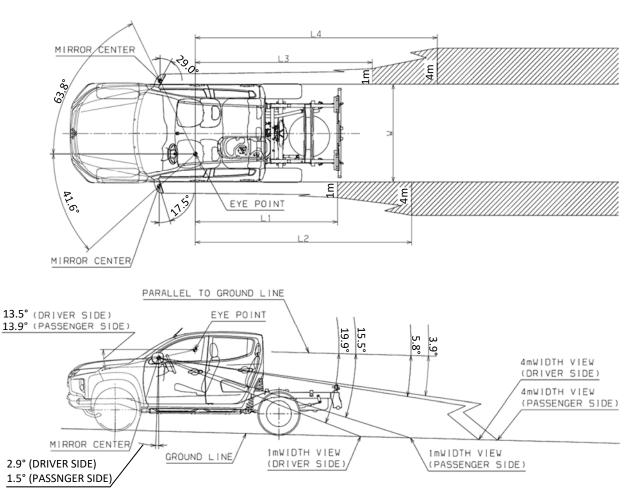
Rr Body Width W	L1	L2	L3	L4
1785mm	2.9m	12m	4m	18.1m
Regulation	4m or less	20m or less	4m or less	20m or less

It is allowed to move door mirror outward using a stay to satisfy low. In this case, the door mirror must not exceed one side 200mm from "W" width.

< 2WD Hi Rider Single cab >

Drive	Body Type	Model-Grade	Handle
2WD	Single Cab	KK4TENJMR8	RHD
		KK1TEJUFPR8	
		KK1TELUFPR8	

LHD IS SHOWN, RHD IS SYMMETRICAL.



Rr Body Width W	L1	L2	L3	L4
1785mm	2.9m	12m	4m	18.1m
Regulation	4m or less	20m or less	4m or less	20m or less

It is allowed to move door mirror outward using a stay to satisfy low. In this case, the door mirror must not exceed one side 200mm from "W" width.