

Vehicle parameters

All the **YELLOW** cells are the parameters you need to supply the calculator in order to get the results required. You will see in the second screenshot there are 6 distance measurements as this affects rear axle calculations. There is also the empty axle weights as per the weighbridge. You can also select either Diesel or Petrol. Diesel has a specific gravity of 83.2% and Petrol has a specific gravity of 77.0 %.

Vehicles										
Vehicle	Tare	Kerb Weight	Max Payload including TBD	Max TBD	Max % TBD	Max Fuel - litres	Diesel / Petrol	Max Fuel - kilograms	Max GVM	Max tow mass (Braked trailer)
MU-X LS-T	2194	2240	510	300	10.00	65	Diesel	54	2750	3000

Max GCM	Max allowed GTM	Wheelbase	Distance between Front axle and Front bumper	Distance between Front axle and Front seat	Distance between Front axle and Rear seat	Distance between Front axle and Boot	Distance between Front axle and Fuel tank	Distance between Rear axle and Tow ball	Max Front axle	Max Rear axle	Empty Front axle	Empty Rear axle
5750	3000	2845	900	1330	2110	3150	2095	1380	1350	1600	1254	1006

In the following images on the next two pages, all the **YELLOW** cells are the parameters you need to supply the calculator in order to get the results required. You can see for the vehicle, I have provided options of People, Luggage, Tools and Accessories. This is simply so you can identify things though it does not affect the calculations. Additionally, you can put payload in the Front seat, Rear seat, Boot or Front bumper (as in a winch) etc. This is where the Distance measurements in the above screenshots come in to play.

Vehicle and caravan loading as per original post with 232 kg payload in the vehicle and 1600 kg rear axle weight

Note the distribution of the payload variables.

OPTION 3 - If you mix the load between the vehicle and the caravan																
Vehicle - (Actual weighed by owner)																
Vehicle	Tare	Weight location	People	Luggage	Tools	Accessories	Actual LITRES of Fuel	Actual Payload excluding TBD	Actual TBD	Actual % TBD	Actual Payload including TBD	Actual GVM	Actual GCM	Can increase payload	Actual Rear Axle Loading	GVM to GTM ratio
MU-X LS-T	2194	Front	145				65	232	275	9.92	507	2746	5242	3	1600	10.0
		Rear			35											
		Boot			30	22										
		Bumper														
Caravan - (Actual weighed by owner)																
Caravan	Tare	Water	Gas	Luggage	Tools	Accessories	Actual Payload	Actual TBD	Actual % TBD	Actual ATM	Actual GTM	Can increase payload	Can increase TBD			
Essential Signature Cruiser	2340	164	19	150	50	48	431	275	9.92	2771	2496	29	25			

Vehicle and caravan loading with 232 kg payload in the vehicle and 1592 kg rear axle weight

In this example, we still have the same payload though we have moved the Accessories from the Boot and put them on the Back seat. Note the improvement in rear axle weight.

OPTION 3 - If you mix the load between the vehicle and the caravan																
Vehicle - (Actual weighed by owner)																
Vehicle	Tare	Weight location	People	Luggage	Tools	Accessories	Actual LITRES of Fuel	Actual Payload excluding TBD	Actual TBD	Actual % TBD	Actual Payload including TBD	Actual GVM	Actual GCM	Can increase payload	Actual Rear Axle Loading	GVM to GTM ratio
MU-X LS-T	2194	Front	145				65	232	275	9.92	507	2746	5242	3	1592	10.0
		Rear			35	22										
		Boot			30											
		Bumper														
Caravan - (Actual weighed by owner)																
Caravan	Tare	Water	Gas	Luggage	Tools	Accessories	Actual Payload	Actual TBD	Actual % TBD	Actual ATM	Actual GTM	Can increase payload	Can increase TBD			
Essential Signature Cruiser	2340	164	19	150	50	48	431	275	9.92	2771	2496	29	25			

Vehicle and caravan loading with 232 kg payload in the vehicle and 1612 kg rear axle weight

In this example, we still have the same payload though we have moved the Tools from the Back seat and added them to the Tools already in the Boot. Note the rear axle weight is now overloaded.

OPTION 3 - If you mix the load between the vehicle and the caravan																
Vehicle - (Actual weighed by owner)																
Vehicle	Tare	Weight location	People	Luggage	Tools	Accessories	Actual LITRES of Fuel	Actual Payload excluding TBD	Actual TBD	Actual % TBD	Actual Payload including TBD	Actual GVM	Actual GCM	Can increase payload	Actual Rear Axle Loading	GVM to GTM ratio
MU-X LS-T	2194	Front	145				65	232	275	9.92	507	2746	5242	3	1612	10.0
		Rear														
		Boot			65	22										
		Bumper														
Caravan - (Actual weighed by owner)																
Caravan	Tare	Water	Gas	Luggage	Tools	Accessories	Actual Payload	Actual TBD	Actual % TBD	Actual ATM	Actual GTM	Can increase payload	Can increase TBD			
Essential Signature Cruiser	2340	164	19	150	50	48	431	275	9.92	2771	2496	29	25			