

Caravan Weight & Balance Spreadsheet Instructions

Enter the data on your iPad from your van or camper on the “**Setup**” page of the Spreadsheet. Once this is done you won't need to revisit the setup page unless you change your van or camper.

1. Enter this distance in mm. This is the distance from the centre of the Axle, or midway between both axles if Tandem wheels (Pivot), to the Towball.
2. This is the weight on wheels *only*. If you only have a Tare Weight as on your compliance plate, subtract the Ball Weight from the Tare Weight & enter here.
3. Enter the ball weight.

Note: You cannot enter the Total weight of Van as this cell is Locked & has the formula which adds the Wheel Wt & Ball Wt, Only enter “Wheel Weight” & “Ball Weight” as above.

4. Enter the storage positions in mm. This is the distance from the Pivot (axle centre, see above) to where the item is loaded in the van. To make it easy, place a piece of masking tape on the floor of the van at the pivot point then measure fore & aft to the storage positions.

Important Note: Remember forward of the pivot is + & rear of pivot is -

5. Describe each position for ease of filling out spreadsheet. These positions appear on the “Van Weights” page after they are entered on the “Setup” page.

6. Enter Weight Limits ATM & GTM (from Compliance Plate). If any of these weights are exceeded after entry of item weights, a message “**Overloaded**” will appear beside these weights.

7. Enter Max Ball Weight (Tow Bar Limitation or Vehicle Limitation)

Continue to measure the storage positions & place a description in the first column as in items 4 & 5. For the water tanks just measure from the pivot (axle center or midway between axles) to the centre of the tank.

Note: All the Empty Weights & Weight Limits will appear on the “Van Weights” page after they are entered in the “Setup” page.

Tip: Easy way to weigh items is to use a bathroom scale, weigh yourself & then weigh again holding the items & subtract your weight. Alternative is to use portable baggage scale.

On the “Van Weights” page (Main Page), enter the weights in kg's of the items placed in each storage area. Once all the data on the “Setup” page is completed you only need to enter item weights to get the following results.

Total Van Weight (to check ATM)

Total Weight on Wheels (to check GTM)

New Ball Weight (To ensure below towbar or vehicle GVM limits)

Total Payload

Downforce Percentage (to ensure enough downforce for stable towing 7% to 15%)

Please keep a master copy saved with a different file name in case the any data is deleted from the spreadsheet if you are using Apple Numbers.

All distances are in MM & all weights in KG.

This Spreadsheet was created on MS Excel & Apple Numbers (iPad). No trials have been attempted on the Android system.

To be used only as a guide on loading to assist in keeping your van or camper properly balanced.

SETUP Page

Van Weights		Setup
Caravan Loading Data		
Empty Weight on Wheels	2200	Empty Weight on Wheels (Tare Wt - Empty Ball Wt) (2)
Empty Ball Weight	200	Empty Ball Wt (3)
Empty Van Weight (Tare)	2400	Axle - Ball Dist (1)
		Distance from Axle Center to Ball (1)
		Empty Van weight (Wheel Wt + Ball Wt)
Gas	3500	Distance from Axle Center to Storage position (4)
Position 1	3200	Storage Position Name (5)
Position 2	3000	
Position 3	3000	
Position 4	1500	
Fwd Water Tank	1500	
Position 5	500	
Center of Axles	0	
Position 6	-400	
Position 7	-1000	
Aft Water Tank	-1000	
Position 8	-1000	
Position 9	-2000	
Position 10	-2500	
Weight Limitations		
ATM	2700	Weight Limitations (6) (Compliance Plate)
GTM	2500	
Max Ball Wt.	250	Ball Weight Limitations (7) (Tow Bar or Vehicle Limit)

Van Weights Page

Van Weights		Setup
Caravan Loading Chart		
Empty Weight on Wheels	2,200	
Empty Ball weight	200	
Tare Weight	2,400	
Enter Item Weights in Green Boxes Only		
Item Name	Add Weights Kg	Ball Wt. Change
Gas	18	13
Position 1		0
Position 2	20	12
Position 3	20	12
Position 4		0
Fwd Water Tank	80	24
Position 5		0
Center of Axles		0
Position 6		0
Position 7	30	-6
Aft Water Tank	80	-16
Position 8	20	-4
Position 9		0
Position 10		0
		Ball weight Change
Total Payload	268	35
Total Weight on Wheels	2,433	GTM 2500
Loaded Ball weight	235	Max Ball Weight 250
Total Van weight	2,668	ATM 2700
Ball Downforce %	8.8%	