

Trailer Towing Calculator

Weight Carrying vs Weight Distribution Hitches

<https://www.ajdesigner.com/apprailertow/weightdistributionhitch.php>

Assumptions

Greater research; door stickers, conversation with KIA dealer needed to increase accuracy

Approximate GCWR'

Ford Motor Company, the GCWR is calculated by adding the following weights together:			
The vehicle's listed curb weight, allowable payload, driver and passenger weight and trailer weight			
	gvwr	5700	
	curb	4,200	Approx: gvwr - payload
	payload	550	1.200 – tongue (350)-passemgers(300)
	passenger	300	2x person
	trailer	5,000	max TV rating
	GCWR	10,050	

TaB 400 and Kia Information

	400		
	gross	3,900	
	tongue dry	320	
	dry	2,876	
	payload	1,000	
	60% loaded	3,500	
	loa	219	inches
	Axle-hitch	133	inches
	TV GAWR-R	3,200	approx
	TV GAWR-F	2,800	guess
	TV Axle-hitch	30	inch est

Set-up Used on Calculator

Enter Tow Vehicle Ratings/Dimensions								
GVWR:	5700	lb	GCWR:	10500	lb	FGAWR:	2800	lb
RGAWR:	3200	lb	Max Loaded Trailer Weight:	5000	lb	Wheelbase:	114	in
Rear Axle to Ball Length:	30	in						
Enter Tow Vehicle Weights								
GWW:	5400	lb	Front/Rear Distribution:	50	%	FGAW:	2700	lb
RGAW:	2700	lb						
Enter Hitch and Ball Ratings								
WC Max Trailer Weight:	5000	lb	WC Max Tongue Weight:	351	lb	WD Max Trailer Weight:	5000	lb
WD Max Tongue Weight:	351	lb	Ball GTW Rating:	5000	lb			
Enter WD Hitch Specs								
Tension (Total):	1000	lb	Bar Length:	30	in			
Enter Trailer Ratings/Dimensions								
GVWR:	3800	lb	GAWR:	3900	lb	Axle to Ball Length:	133	in
Enter Trailer Weights								
GWW or GTW:	3500	lb	Tongue-Axle Weight %:	10	%	Tongue Weight:	350	lb
GAW:	3150	lb						

blank space

Results

WC = standard hitch

WD = weight distribution hitch

