

## WORKSHEET #14 - WIDE SINGLE AXLE SCALE WEIGHT

Fifth Wheel Vehicles and Tow Vehicles

### INSTRUCTIONS

Position Tow Vehicle and Fifth Wheel Trailer so that axles are centered on the scale platform. This worksheet is used for scales that have sufficient room to allow you to reposition the Tow Vehicle and Trailer so that only half the Tow Vehicle and Trailer axles are on the scale platform at once. This will allow calculation of Vehicle weight by corner. Once a weight is established, move to the next axle. All weights recorded in pounds (lbs).

### TOW VEHICLE ONLY WEIGHT – CENTERED ON SCALE PLATFORM

Enter Steer Axle GAW.	1.
Enter Drive Axle GAW.	2.
Calculate Tow Vehicle GVW: $(1+2=3)$ .	3.

### TOW VEHICLE ONLY – HALF VEHICLE ON SCALE PLATFORM






LEFT	Enter appropriate side of Steer Axle on the scale. Subtract that value from line 1 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Steer Axle on the scale. Subtract that value from line 2 and enter the opposite side axle weight.	RIGHT

### COUPLED TOW VEHICLE - FIFTH WHEEL TRAILER ATTACHED CENTERED ON SCALE PLATFORM

Enter Steer Axle GAW.	4.
Enter Drive Axle GAW.	5.
Enter Fifth Wheel Trailer Axle One GAW:	6.
Enter Fifth Wheel Trailer Axle Two GAW:	7.
Enter Fifth Wheel Trailer Axle Three GAW:	8.
Calculate Coupled Tow Vehicle GVW. Add Steer Axle GAW (line 4) and Drive Axle GAW (line 5): $(4+5=9)$ .	9.
Calculate Fifth Wheel Pin Weight. Subtract Tow Vehicle GVW (line 3) from Coupled Tow Vehicle GVW (line 9): $(9-3=10)$	10.

### COUPLED TOW VEHICLE - FIFTH WHEEL TRAILER ATTACHED HALF ON SCALE PLATFORM

LEFT	Enter appropriate side of Steer Axle on the scale. Subtract that value from line 4 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Drive Axle on the scale. Subtract that value from line 5 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle One on the scale. Subtract that value from line 6 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle Two on the scale. Subtract that value from line 7 and enter the opposite side axle weight.	RIGHT

LEFT	Enter appropriate side of Trailer Axle Three on the scale. Subtract that value from line 8 and enter the opposite side axle weight.	RIGHT
<b>CALCULATIONS</b>		
Enter Tow Vehicle Steer Axle GAWR as indicated on the Tow Vehicle MWL.	11.	
Tow Vehicle Steer Axle GAW (line 1) and Coupled Tow Vehicle GAW (line 4) MUST each be less than Tow Vehicle Steer Axle GAWR (line 11).	 Verify	
Enter Tow Vehicle Drive Axle GAWR as indicated on the Tow Vehicle MWL.	12.	
Tow Vehicle Drive Axle GAW (line 2) and Coupled Tow Vehicle GAW (line 5) MUST each be less than Tow Vehicle Drive Axle GAWR (line 12).	 Verify	
Enter Fifth Wheel GAWR as indicated on the Trailer MWL.	13.	
Fifth Wheel GAW (line 6, line 7 and line 8) MUST each be less than Trailer Axles GAWR (line 13).	 Verify	
Enter Fifth Wheel Trailer GVWR as indicated on the Trailer MWL.	14.	
Calculate Fifth Wheel GTW: Add Fifth Wheel Pin Weight (line 10) and the Fifth Wheel Trailer GAW (line 6, line 7 and line 8): $(6+7+8+10=15)$ .	15.	
Fifth Wheel Trailer GTW (line 15) MUST be less than the Fifth Wheel Trailer GVWR (line 14).	 Verify	
Enter Tow Vehicle GCWR from the MWL.	16.	
Calculate GCW by adding Tow Vehicle GVW (line 3) to the Trailer GTW (line 15): $(3+15=17)$ .	17.	
GCW (line 17) MUST be less than the Tow Vehicle GCWR (line 16). If not, the Tow Vehicle and Fifth Wheel exceed their designed combined maximum weight rating and this MUST be resolved.	 Verify	