

## WORKSHEET #15 – WIDE SINGLE AXLE SCALE WEIGHT

Travel Trailer and Tow Vehicle

### INSTRUCTIONS

Position Tow Vehicle and Travel 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. Weight data will be collected with WDH disconnected and connected. 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 WEIGHT HALF OF 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 Drive Axle on the scale. Subtract that value from line 2 and enter the opposite side axle weight.	RIGHT

### COUPLED TOW VEHICLE - TRAVEL TRAILER WEIGHT DISTRIBUTING HITCH NOT CONNECTED CENTERED ON SCALE PLATFORM

Enter Steer Axle GAW.	4.
Enter Drive Axle GAW.	5.
Calculate Coupled Tow Vehicle GVW: $(4+5=6)$	6.
Enter Travel Trailer Axle One GAW.	7.
Enter Travel Trailer Axle Two GAW.	8.
Enter Travel Trailer Axle Three GAW.	9.
Calculate Trailer Total GAW: $(7+8+9=10)$	10.

**COUPLED TOW VEHICLE - TRAVEL TRAILER ATTACHED  
WEIGHT DISTRIBUTING HITCH NOT CONNECTED  
HALF ON SCALE**

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 7 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle Two on the scale. Subtract that value from line 8 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle Three on the scale. Subtract that value from line 9 and enter the opposite side axle weight.	RIGHT

**COUPLE TOW VEHICLE - TRAVEL TRAILER  
WEIGHT DISTRIBUTING HITCH CONNECTED  
CENTERED ON SCALE PLATFORM**






Enter Steer Axle GAW.	11.
Enter Drive Axle GAW.	12.
Calculate Coupled Tow Vehicle GVW: (11+12=13)	13.
Enter Travel Trailer Axle One GAW.	14.
Enter Travel Trailer Axle Two GAW.	15.
Enter Travel Trailer Axle Three GAW.	16.

**TOW VEHICLE - TRAVEL TRAILER ATTACHED  
WEIGHT DISTRIBUTING HITCH CONNECTED  
HALF ON SCALE**

LEFT	Enter appropriate side of Steer Axle on the scale. Subtract that value from line 11 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Drive Axle on the scale. Subtract that value from line 12 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle One on the scale. Subtract that value from line 14 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle Two on the scale. Subtract that value from line 15 and enter the opposite side axle weight.	RIGHT
LEFT	Enter appropriate side of Trailer Axle Three on the scale. Subtract that value from line 16 and enter the opposite side axle weight.	RIGHT

**CALCULATIONS**

Enter Tow Vehicle GAWR for the Steer Axle as indicated on the Tow Vehicle MWL.	17.
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Tow Vehicle Steer Axle GAW (line 1, Line 4 and line 11) MUST each be less than Steer Axle GAWR (line 17).	 Verify
Enter Tow Vehicle GAWR for the Drive Axle as indicated on the Tow Vehicle MWL.	18.
Tow Vehicle Drive Axle GAW (line 2, Line 5 and Line 12) MUST each be less than Drive Axle GAWR (line 18).	 Verify
Enter Trailer GAWR as indicated on the Trailer MWL.	19.
Travel Trailer GAW (line 7, line 8, line 9, line 14, line 15, and line 16) MUST each be less than the Trailer GAWR (line 19).	 Verify
Enter Trailer GVWR as indicated on the Trailer MWL.	20.
Calculate Trailer Tongue Weight. Subtract the Tow Vehicle GVW (line 3) from the Coupled Tow Vehicle GVW (line 6): $(6-3=21)$	21.
Calculate GTW. Add Trailer Total GAW (line 10) and Trailer Tongue Weight (line 21): $(21+10=22)$	22.
GTW (line 22) MUST be less that the Trailer GVWR (line 20).	 Verify
Enter Tow Vehicle GCWR from the Tow Vehicle MWL.	23.
Calculate GCW. Add Coupled Tow Vehicle GVW (line 6) and Trailer Total GAW (line 10): $(6+10=24)$	24.
The CGW (line 24) MUST be less than the GCWR (line 23). If not, the Tow Vehicle and Travel Trailer exceed their designed combined maximum weight rating and this MUST be resolved.	 Verify