

**SHERLINE
PRODUCTS**
INCORPORATED 1974

Fifth-Wheel Trailer Hitch Weight Scale

P/N LM5

About the Fifth-Wheel Trailer Hitch Weight Scale

We made this scale at the request of several of our customers who own fifth-wheel trailers. This scale is a modified version of our original Trailer Tongue Weight Scale. However, it is specifically designed to attach to most fifth-wheel trailer hitches. The piston has also been modified to accept the standard 2-13/16" diameter kingpin and the locating pin is for hitches that accept the standard 2-13/16" kingpin (See exploded view on Page 4, P/N 80035).

The scale uses a simple hydraulic principle to convert pressure into a reading in pounds and kilograms on the gauge. No delicate electronics, no batteries, and only one moving part. It comes with a 5000 lb. gauge since 5th-wheel trailers typically carry a larger percentage of the overall weight on the hitch.

The scale is machined from solid billet steel and aluminum. It has a 3.25" piston and body diameter, it has a 6" square by 1" thick aluminum base, and is about 6" high. Actual weight is 11 lb. Gauge diameter is 2.75". This scale comes with a one year guarantee.

Stop guessing and start towing safely. This scale is reasonably priced for individual trailer owners. It is great for travel clubs and trailer dealers too.

All gauges have a dual-scale gauge that reads in pounds on the outside of the ring and the kilogram equivalent on the inside. This feature has been requested by many trailer users outside the USA and has now been incorporated into all the scales. The 0-5000 lb gauge reads to 2250 kg.

Trailer Towing Guides and Tales

Click on the Instructions tab to download our Towing Guide, Care and Tips sheet, and cautionary tales of true trailer disasters.

Avoid Trailering Disaster!

If you tow a fifth-wheel trailer behind your truck or SUV and don't know for sure if the hitch weight is within the recommended range, you could be headed for a disaster. Too much weight and you could damage the hitch, causing fractures in the support frame and a catastrophic failure on the highway. Most fifth-wheel trailer hitches that are installed have a weight capacity that exceeds the weight

of the trailer. Where most people get into trouble is when their toys start to get bigger or their load increases as their trip around the states continues. The trailer and load that you started with were fine. It's the load that you end up with that becomes the problem. So, how can you be sure that you don't have excessive weight on your hitch?

To properly load and balance a trailer you must KNOW what your kingpin weight is, and the Sherline fifth-wheel trailer hitch weight scale offers an easy and inexpensive way to find out.

Using Your Sherline Fifth-Wheel Scale

This is best done as a two-person job.

1. First, and always, make sure that the trailer wheels are chocked so the trailer does not move.
2. Have your trailer hitched.
3. Then unhitch and pull your vehicle straight out.

NOTE: When you receive your fifth-wheel trailer hitch weight scale, the "locator pin" will be screwed into the top of the base for ease of shipping and storing. Unscrew the locator pin and screw it into the center hole in the bottom of the base.

4. Next, using the locator pin on the bottom of the fifth-wheel scale, drop the pin straight down into the hitch where the kingpin slides in. Make sure that the face of the gauge is facing the side of the truck that you are on so you can read it easily (See Figure 1).

NOTE: Do not lift the scale by the piston.

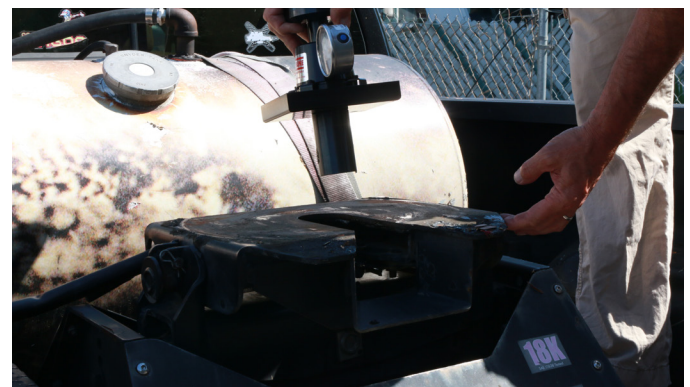


FIGURE 1

5. With the locator pin in place, your scale should be in the exact same position of the kingpin when your trailer is hooked up (See Figure 2).



FIGURE 2

6. Now adjust the trailer and the kingpin up using the landing gear on your trailer until the kingpin is 7" above the saddle of the hitch, one to two inches above the fifth-wheel scale (See Figure 3).



FIGURE 3

7. Then back your vehicle in as if you were hooking up the trailer. Stop when the kingpin is in what would be the "locked-in position" location on the hitch which should be directly above the scale piston.
8. The saddle is designed to pivot as the kingpin enters it. When you place the fifth-wheel scale on the saddle, the weight of the scale will generally be sufficient enough to make the saddle pivot into its horizontal position (See Figure 4).

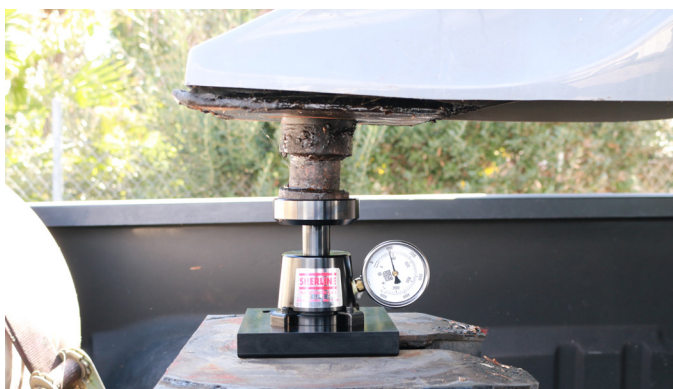


FIGURE 4

9. As the kingpin is lowered into the cup on top of the piston, the tow vehicle will begin to move under the weight exerted by the kingpin (See Figure 5).



FIGURE 5

10. You want the downward force of the kingpin to be parallel to the piston and on center. If the force of the kingpin is pushing off to one direction, you will need to raise the kingpin and move the tow vehicle slightly to adjust for the vehicle movement when under load. This will generally mean that you will need to pull the vehicle forward slightly (See Figure 6).



FIGURE 6

11. Because the kingpin is off-center when you start, you will have to adjust the saddle backward as you lower the kingpin into the piston cup, as shown in Figure 5 above. As the kingpin lowers, the scale will rotate to the horizontal position. Continue to lower the kingpin into the cup on the top of the piston until the full load of the trailer is on the scale. See what the weight reading is on the gauge. Because of the suspension of the tow vehicle, the fifth-wheel hitch is a moving surface. This means that the weight that is shown on the gauge is an approximate weight, not an exact weight, which you would get if the gauge was mounted to a non-moving surface. It will still give you a fairly accurate hitch weight so you will know when you are getting close to the maximum hitch weight (See Figure 7 on the following page).

NOTE: For an accurate reading the kingpin needs to be centered and parallel to the piston. If the load on the piston is at an angle your reading will not be accurate.



FIGURE 7—Gauge showing 3,000 lbs.

12. After you have checked your hitch weight, raise the trailer back up and remove the scale. At this time you can either adjust your load to lower your hitch weight or hook up your fifth-wheel (if the weight is good).

Additionally, if you know the trailer's empty weight and the weight of the items you have put in it, you can easily calculate the percentage resting on the tongue. You can also get a total weight measurement at a local drive-on scale to have a more accurate figure. Then you can drive in safety and confidence. This is particularly important for trailers that are loaded differently each time like cargo trailers, RV vehicle trailers, toy haulers, and the like. Toy haulers always have excessive tongue weight because of their axle location..

CAUTION: Do not store your scale on its side, or in temperatures under 32° F (0°C). Doing so may cause the O-ring seal to fail, causing air to enter into the hydraulic chamber.

Thank you,
Sherline Products

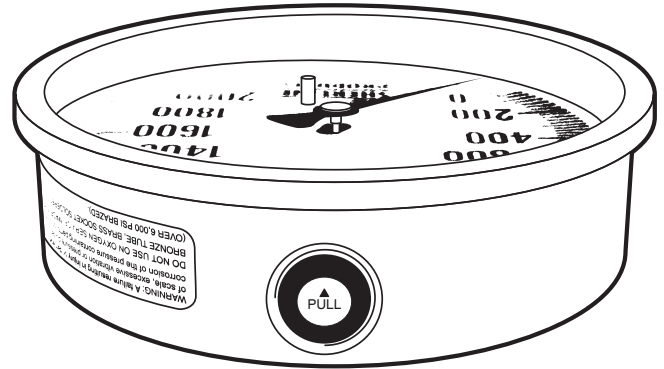
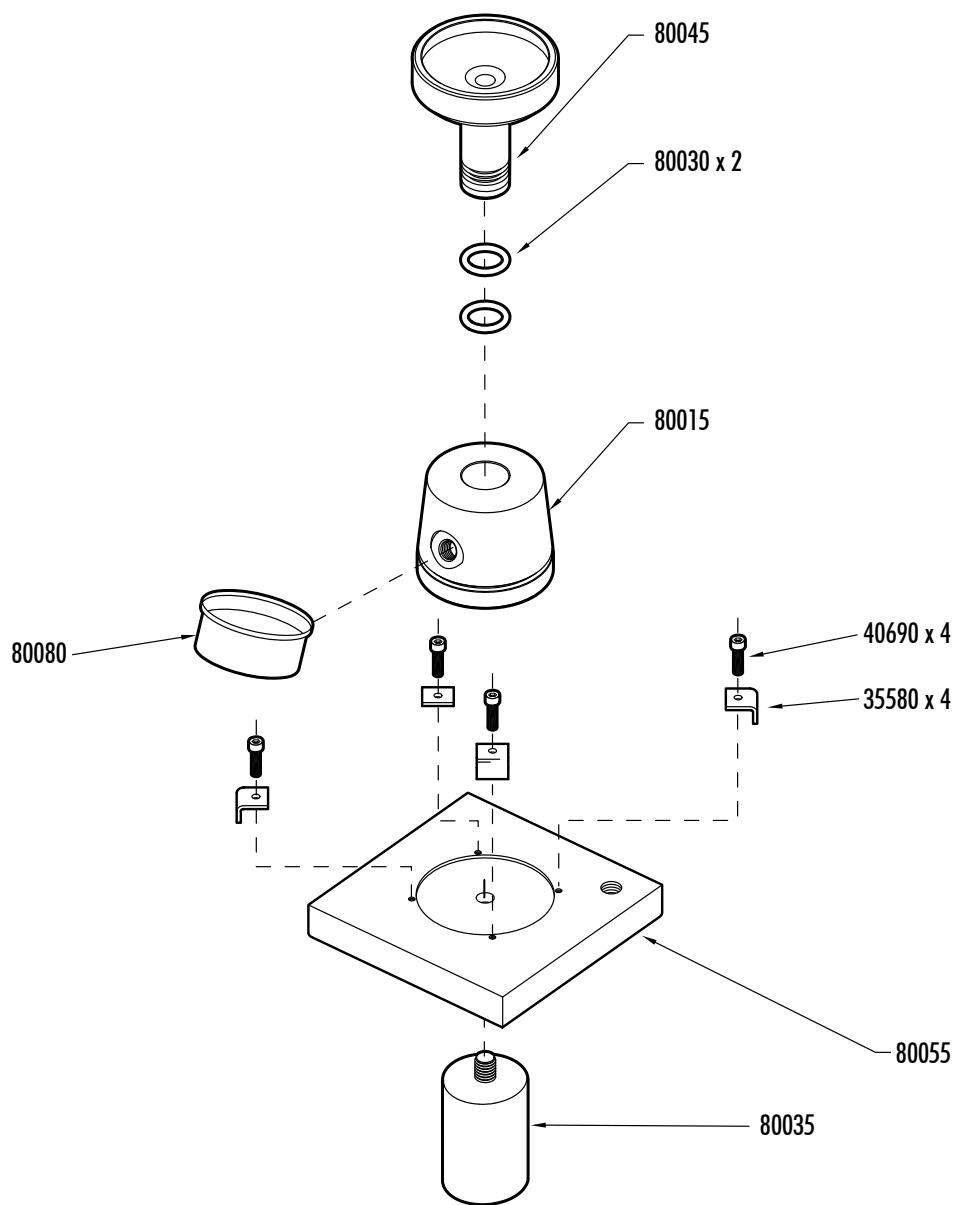


FIGURE 8—Shows the location of the blue, dust-cover button.

CAUTION: There is a blue button on the side of the gauge on your new scale that says “PULL.” DO NOT pull it. This is simply a dust cover for an access port that is used to fill the scale with glycerin from the factory. You should have no reason to add, or remove, any fluid from the scale.

5th Wheel Trailer Hitch Weight Scale, P/N LM5

Exploded View



Parts List

NO. REQ.	PART NO.	DESCRIPTION
1	80045	LM5 Piston
2	80030	O-Ring Seal
4	40690	10-32 x 3/4" Socket Head Cap Screw
4	35580	Hold-Down Clamp
1	80015	LM5 Body
1	80080	Gauge, 0-5000 lb. (0-2300 kg) Capacity
1	80055	LM5 Base Plate
1	80035	LM5 Locator Pin
1	40550	5/32" Hex Key (not shown)