Weigh Safe WS6-2.5-KA

Weigh Safe Adjustable Trailer Hitch Ball Mount User Manual

Model: WS6-2.5-KA

For 2.5" Receivers with 6" Drop, 2 Piece Keyed Alike Lock Set

1. Introduction

This manual provides essential information for the safe and effective use of your Weigh Safe Adjustable Trailer Hitch Ball Mount. Please read all instructions carefully before installation and operation. Proper use ensures optimal performance and safety during towing.

The Weigh Safe Adjustable Trailer Hitch Ball Mount is designed to provide a secure and adjustable connection between your tow vehicle and trailer, featuring a built-in scale for accurate tongue weight measurement.



Image: Weigh Safe Adjustable Trailer Hitch Ball Mount, showcasing the brand and product.

2. Product Features

- **Proprietary Tongue Weight Scale:** A built-in, high-strength stainless steel scale provides instantaneous tongue weight measurements, aiding in proper weight distribution for enhanced safety and stability. This eliminates the

need for separate tongue weight scales.

- **Adjustable Ball Mount:** The hitch offers 6 inches of drop and adjusts in 1-inch increments, allowing for precise leveling of various trailer heights. It is designed for 2.5-inch receivers, commonly found on F-250/350+, Chevy 2500/3500+, and Ram 2500/3500+ vehicles.
- **Heavy-Duty Towing Capacity:** Constructed from 18 lbs of solid Aircraft Grade Billet Aluminum and Stainless Steel, this hitch has a Gross Trailer Weight (GTW) capacity of 18,500 lbs with the 2 5/16" ball, 8,000 lbs with the 2" ball, and a maximum tongue weight of 2,200 lbs.
- **Two Corrosion-Resistant Stainless Steel Hitch Balls:** Includes both 2" and 2 5/16" stainless steel balls, allowing for quick interchangeability. Both balls are designed for high strength and corrosion resistance.
- **Keyed Alike Lock Set:** Comes with a high-strength Dual Pin Lock to secure the trailer to the drawbar, and a Stainless Steel Locking Hitch Pin (WS05) for the receiver. Both locks are keyed alike for convenience and include custom-fitted dust covers.



Image: The Weigh Safe Adjustable Trailer Hitch Ball Mount, including the main assembly, two hitch balls, dual pin lock, and hitch pin, presented with its packaging.

3. Components Included

Verify that all components are present before proceeding with installation:

- Adjustable Ball Mount Assembly (Shank and Ball Mount Housing)
- 2 5/16" Stainless Steel Hitch Ball
- 2" Stainless Steel Hitch Ball
- Dual Pin Lock with Dust Cover
- Stainless Steel Locking Hitch Pin (WS05)
- Keys for Lock Set

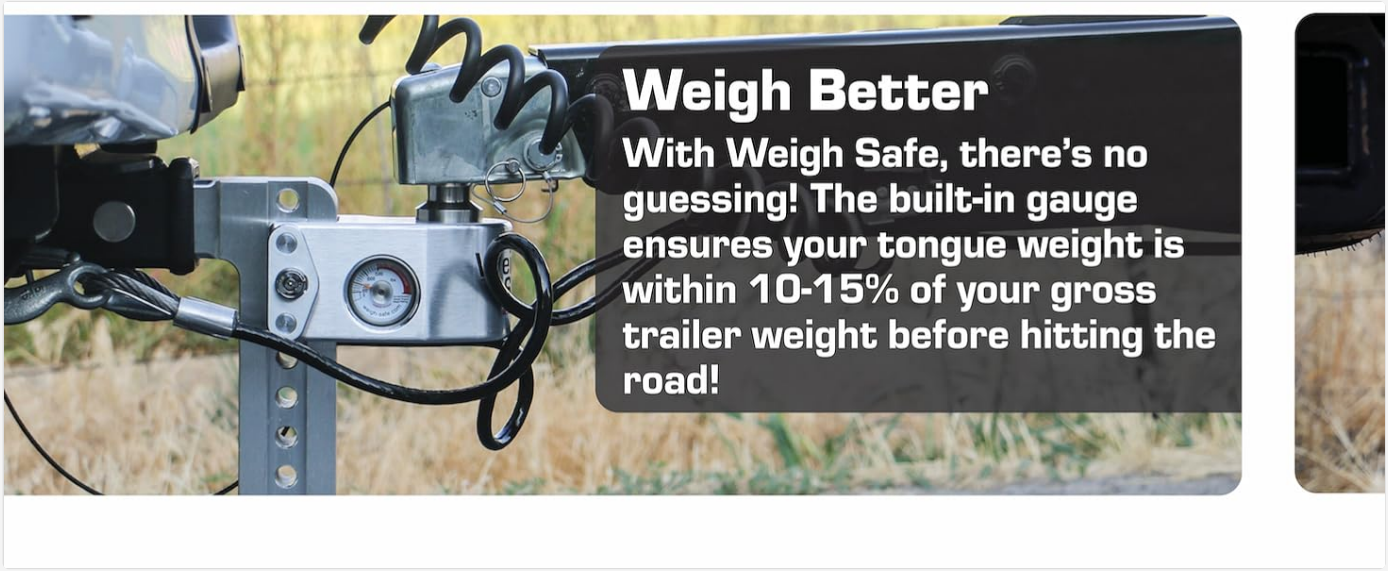


Image: All primary components of the Weigh Safe Adjustable Trailer Hitch Ball Mount, laid out for inspection.

4. Safety Information

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

- Always ensure your trailer's tongue weight is within the recommended range of 10-15% of the Gross Trailer Weight (GTW) for conventional trailers. Incorrect tongue weight can lead to trailer sway or instability.
- Never exceed the Gross Trailer Weight (GTW) or Tongue Weight (TW) ratings of your hitch, tow vehicle, or trailer, whichever is lowest.
- Ensure all pins and locks are securely engaged before towing.
- Regularly inspect the hitch for any signs of wear, damage, or corrosion. Do not use if damaged.
- Always use safety chains between the tow vehicle and trailer.
- Consult your vehicle and trailer owner's manuals for specific towing guidelines and capacities.

5. Setup and Installation

5.1 Determining Correct Drop Length

To ensure proper trailer leveling, measure the distance from the top inside of your vehicle's receiver to the ground. Then, measure the distance from the bottom of your trailer's coupler to the ground when the trailer is level. The difference

between these two measurements will help determine the required drop or rise for your hitch.

5.2 Installing the Hitch into the Receiver

1. Slide the shank of the adjustable ball mount into your vehicle's 2.5-inch receiver tube.
2. Align the pinholes on the shank with the pinholes on your receiver.
3. Insert the Stainless Steel Locking Hitch Pin (WS05) through the aligned holes and secure it.

5.3 Attaching the Hitch Ball and Adjusting Height

1. Select the appropriate hitch ball (2" or 2 5/16") for your trailer's coupler.
2. Insert the chosen hitch ball into the ball mount housing.
3. Slide the ball mount housing up or down the shank to achieve the desired height, ensuring the trailer is level. The hitch adjusts in 1-inch increments.
4. Align the pinholes on the ball mount housing with the corresponding holes on the shank.
5. Insert the Dual Pin Lock through the aligned holes to secure the ball mount housing to the shank. Ensure the lock is fully engaged and the dust cover is in place.



Image: A collage demonstrating the height adjustability of the hitch, showing it configured for different drop lengths and in a stowed position.



Image: Visual guide confirming the hitch's compatibility with a 2.5-inch receiver and noting other available receiver sizes.



Image: The adjustable hitch shown in a stowed position, indicating its compact storage capability when not in use for towing.

6. Operating Instructions

6.1 Measuring Tongue Weight

The integrated tongue weight scale provides a direct reading of your trailer's tongue weight. When you lower your trailer onto the hitch ball, the scale will display the weight. Ensure the trailer is fully resting on the ball for an accurate reading.



Image: The built-in scale on the hitch displaying a tongue weight reading while connected to a trailer, illustrating its function.



Image: A detailed view of the tongue weight gauge, showing the measurement dial and indicators for safe weight ranges.

6.2 Optimal Tongue Weight

For most conventional trailers, the recommended tongue weight is 10-15% of the Gross Trailer Weight (GTW). Maintaining this ratio is crucial for preventing trailer sway and ensuring stable towing. Adjust the load distribution within your trailer if the tongue weight falls outside this range.



Image: The hitch in use, accompanied by text highlighting the importance of maintaining 10-15% tongue weight for safe towing.

7. Maintenance

- **Cleaning:** Clean the hitch regularly with mild soap and water to remove dirt, salt, and road grime. Rinse thoroughly and dry.
- **Lubrication:** Periodically apply a light coat of grease to the hitch balls and the sliding surfaces of the adjustable shank to ensure smooth operation and prevent corrosion.
- **Inspection:** Before each use, inspect all components for signs of wear, cracks, bends, or corrosion. Pay close attention to the hitch balls, pins, and the integrity of the aluminum and stainless steel parts. Replace any damaged components immediately.
- **Lock Care:** Keep the dust covers on the locks when not in use to protect them from debris and moisture. Lubricate the lock mechanisms periodically with a graphite-based lubricant.

8. Troubleshooting

Problem	Possible Cause	Solution
Inaccurate Tongue Weight Reading	Trailer not fully resting on the ball; scale mechanism obstructed or damaged.	Ensure full weight is on the ball. Check for debris around the scale. If damage is suspected, contact customer support.
Hitch Rattles Excessively	Loose fit in receiver; pins not fully secured.	Ensure hitch pin and dual pin lock are fully engaged. Consider an anti-rattle device if excessive play persists.
Difficulty Adjusting Height	Dirt or corrosion on sliding surfaces; pins obstructed.	Clean and lubricate the shank and ball mount housing. Ensure pinholes are clear of debris.

9. Specifications

Specification	Detail

Specification	Detail
Model Number	WS6-2.5-KA
Drop Length	6 inches (adjustable in 1-inch increments)
Receiver Size Compatibility	2.5 inches
Material	Aircraft Grade Billet Aluminum, Stainless Steel
Item Weight	18 Pounds
Product Dimensions	14 x 9.25 x 4.25 inches
GTW (2 5/16" Ball)	18,500 lbs
GTW (2" Ball)	8,000 lbs
Max Tongue Weight	2,200 lbs
Vehicle Service Type	Most 3/4-Ton Pickups manufactured after 2008 (F-250, Chevy & Ram 2500+). Most Full-Ton Pickups manufactured after 2008 (F-350+, Chevy & Ram 3500+)

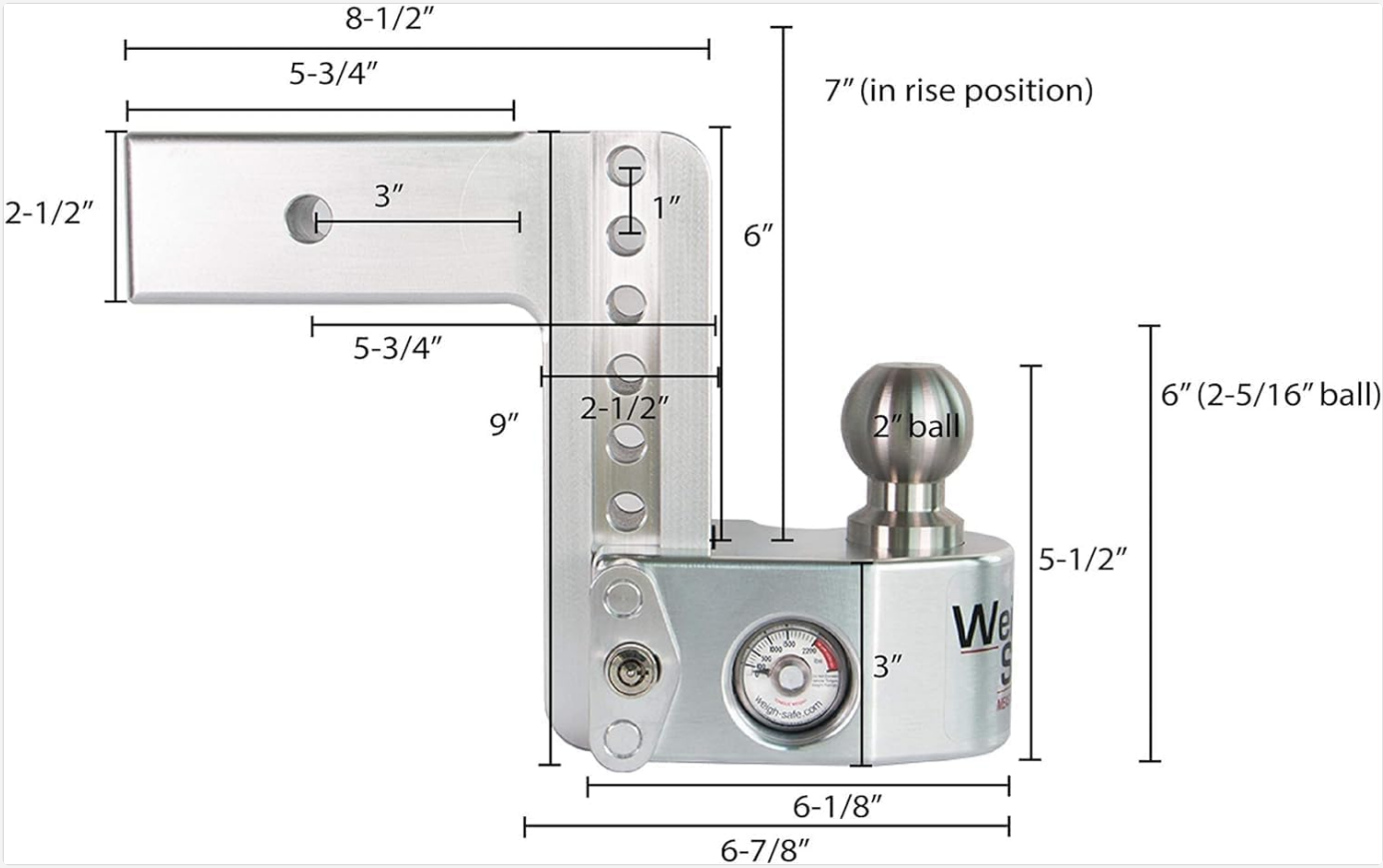


Image: Technical drawing of the hitch with precise measurements for all components and configurations.

10. Official Product Videos

The following videos provide additional visual guidance for the Weigh Safe Adjustable Trailer Hitch Ball Mount.

Weigh Safe Hitch Overview

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Video: An overview of the Weigh Safe Adjustable Trailer Hitch, demonstrating its key features and benefits, including the built-in tongue weight scale and adjustability.

How to Measure Tongue Weight with Weigh Safe

Your browser does not support the video tag.

Video: A demonstration on how to accurately measure your trailer's tongue weight using the integrated scale on the Weigh Safe hitch, ensuring proper load distribution.

11. Warranty and Support

For specific warranty details and customer support, please refer to the official Weigh Safe website or contact their customer service department directly. Information regarding product registration, troubleshooting assistance, and replacement parts can typically be found through these channels.
Visit the Weigh Safe Store for more information.

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