

# Instruction Manual

## Specifications

Application	Fits 2"x 2" Receivers; Class III Rise: 3-3/4" to 8-1/4" Drop: 5" to 9-1/2"
Maximum Capacity	5,000 Lbs. Gross Trailer Weight; 500 Lbs. Tongue Weight*
Hitch Pin required to attach Ball Mount shank to tow vehicle's receiver	5/8" Diameter Steel with R-Shaped Safety Clip - both not included
Hitch Ball Opening	1" Diameter; Hitch Ball sold separately

### **WARNING**

\*Tongue Weight is the static force the trailer tongue exerts on the hitch ball. Loading a trailer correctly to maintain a proper trailer tongue weight is critical for towing safety and good trailer handling. Do not exceed 500 Lbs. Tongue Weight Capacity while using this Adjustable Ball Mount. Read additional instructions on Page 5 for determining the tongue weight of your loaded trailer.

### **WARNING**

Too much tongue weight exerted on the hitch ball can lower the tow vehicle in the back and overload tow vehicle's rear tires, resulting in traction, steering and braking problems.

Not enough weight on the trailer tongue can reduce tow vehicle's rear traction, resulting in instability, swaying or jackknifing.

Do not exceed the maximum weight ratings shown in the Specification table above.

Do not exceed the rating of the lowest rated component in the vehicle/trailer set-up.

Safety chains between the towing vehicle and the trailer are always required.



**Read and understand this entire manual before assembling, installing, operating, or servicing this product.**

## SAVE THIS MANUAL

Copyright: 2024 by AVITEC. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of AVITEC. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and maintenance may not be included.




## Adjustable Ball Mount


Model 110242





## IMPORTANT SAFETY INFORMATION

This is a **SAFETY ALERT** symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

 **DANGER** indicates a hazardous situation which, if not avoided, will result in death or injury.

 **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

 **NOTICE** indicates important information which, if not followed, may cause damage to equipment.

## SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions. The manual offers important information on how to assemble, use and maintain this product.

Write the product's model number and purchase date on the cover page of this manual.


Keep this manual (and your purchase receipt) in a safe place.


## UNPACKING

The shipment should be thoroughly inspected as soon as it is received. The signed "bill of lading" is acknowledgement by the carrier of receipt in good condition or shipment covered by our invoice. For your own protection, if any of the goods called for on the bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods.


**Notify AVITEC immediately if any hidden loss or damage is discovered after receipt.**

## Definition of Symbols

 **WARNING** concerning Risk of Eye Injury. Wear ANSI approved eye protection.


 **WARNING** concerning Risk of Hearing Loss. Wear hearing protection.


 **IMPORTANT SAFETY INSTRUCTIONS**

1.  **Read and understand all safety warnings and instructions.** Failure to follow the warnings and instructions may result in serious injury or death. Save all warnings and instructions for future reference.

2. **Personal and Work Area Safety**

A.  **Always wear ANSI approved safety goggles.**

B.  **Always wear hearing protection when working in noisy environments.** Prolonged exposure to high intensity noise can cause hearing loss.

C.  **Use safety equipment.** Safety shoes, hard hat and work gloves must be used for applicable conditions.

D. **Dress appropriately.** Never wear loose fitting clothing or jewelry when working. Contain long hair, and keep hair, clothing and gloves away from moving parts.

E. **Use common sense when working.** Stay alert and concentrate when setting up and using the Adjustable Ball Mount. Never work while under the influence of alcohol, drugs or medications.

## Personal and Work Area Safety (continued)

F. **While setting up and using the Adjustable Ball Mount keep work area clean and well lighted. Keep spectators and children out of the work area.**

### 3. Use of the Adjustable Ball Mount


A. Do not exceed the Adjustable Ball Mount's maximum weight capacity ratings (see Specification chart on cover page).

B. Always make sure that the tow vehicle's engine is turned off, with emergency brake on, before attempting to connect the trailer. Take safety precautions to prevent unsafe movement of the trailer as it is being connected to the towing vehicle. Make sure trailer wheels are chocked before attempting to hook the trailer to the tow vehicle.

C. Make sure that the Adjustable Ball Mount is securely connected to the tow vehicle's receiver. Use of a 5/8" diameter steel hitch pin and R-Shaped safety clip (both not included) are required for this connection. Make sure safety clip is fully engaged.

D. **Only use an appropriately sized hitch ball (1" diameter shank) with this Ball Mount. Read and adhere to all instructions and safety warnings provided by the manufacturer of the hitch ball being used.**

E. Safety chains between the towing vehicle and the trailer are always required. Safety chains must operate freely around the hitch. If the chains are too tight, they can become entangled with the height adjustment pins, possibly shearing off the head of a pin; this would allow the pin to fall out and would result in the trailer separating from the tow vehicle.

F.  **WARNING** It is critical that the connection between the trailer's hitch coupler, the hitch ball, the safety chains, and this

Adjustable Ball Mount be made correctly. If this connection is not solid and adjusted properly, the ball mount could loosen while the vehicle/trailer is on the road, resulting in serious property damage, personal injury or death.

G. The trailer and the towing vehicle must be level before attempting to install the Adjustable Ball Mount.

H. Always keep arms, feet and legs away from under the trailer when setting up the Adjustable Ball Mount and when hitching, unhitching or moving the trailer. Keep spectators away when setting up and using this product. Children should always be kept away from the work area.

I. Product assembly and set-up is required before using this product. If you are not experienced or capable of doing this type of work safely, the Adjustable Ball Mount should be set up by a qualified service technician.

J. **Be aware of the danger of "dynamic loading"**. This situation arises when a load is dropped onto the Adjustable Ball Mount/trailer tongue, resulting in a short term excessive load. Dynamic loading can result in damage and failure of the Adjustable Ball Mount and/or trailer tongue, and personal injury to people nearby.

K. Before each use, check the Adjustable Ball Mount, hitch ball, trailer hitch, trailer tongue, safety chains and receiver hitch to make sure all hardware is tightly secured. Check for damaged or worn parts; never use the Adjustable Ball Mount if it is damaged.

L. It is the responsibility of the owner of this product to make sure that everyone using the Adjustable Ball Mount reads and understands the warnings and instructions contained in this instruction manual.

M. Save packaging information, warnings and this manual. They contain important information and must always remain readable. Contact AVITEC for replacements.

**Keep in mind that the warnings previously discussed cannot cover all possible conditions or situations that could occur. It is important that the person setting up and using this product understand that common sense and caution are factors which cannot be built into this product, and must be supplied by the person(s) using this product.**

**AVITEC is not responsible for the attachment or the installation of this product. The attachment of this product is critical and beyond the control of AVITEC. It neither guarantees, nor will it be liable for any damage resulting from the attachment or improper use.**

#### Limited Warranty

AVITEC warrants to the original retail purchaser that the product is free of defects in material and workmanship at the time of shipment. This Adjustable Ball Mount is warranted for 90 days from the date of purchase. This warranty is expressly in lieu of all other warranties, express or implied. Proof of purchase is required for warranty transactions; a copy of the original invoice or sales receipt is required.

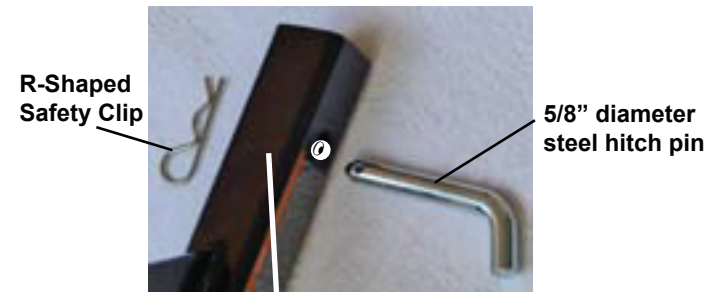
#### Setting Up the Adjustable Ball Mount



Always wear ANSI approved safety goggles and heavy duty work gloves.

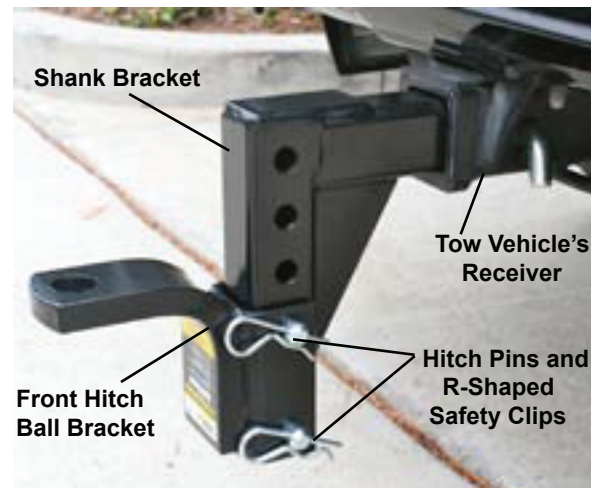
1. Read all Personal and Work Area Safety Warnings on pages 2, 3, and above on this page before setting up and using this product.

2. A 5/8" diameter steel hitch pin and matching R-Shaped safety clip (both not included) are needed to secure the Adjustable Ball Mount's shank to the tow vehicle's receiver. See photo below.



Adjustable Ball Mount's shank

3. To gain the required rise/drop needed, the front hitch ball bracket can be positioned up or down the shank bracket. The shank bracket can be reversed 180 degrees for additional hitch ball adjustability. See photo below.



4. Always use the included 2 Hitch Pins and 2 R-Shaped Safety Clips to secure the Front Hitch Ball Bracket and Shank Bracket together. The R-Shaped Safety Clips must be fully engaged.

5. Only use an appropriately sized hitch ball (1" shaft diameter) with this Ball Mount. Hitch ball is not included. Read and adhere to all instructions and safety warnings provided by the manufacturer of the hitch ball being used.

6. Read and adhere to all safety warnings and instructions provided by the trailer's manufacturer.

7. **Safety Chains:** Always use a pair of safety chains (not included) attached between the towing vehicle and the tongue of the trailer. **Regardless of the length of the trip, safety chains must be used.**

The correct way to attach safety chains: cross one chain over the other underneath the trailer coupler. Crisscrossing the two chains in this manner provides an extra measure of safety if the trailer becomes unattached from the vehicle during transit. The crossed safety chains will act as a cradle, catching the trailer coupler as it falls and keeping it from scraping the ground as the vehicle comes to a stop.

**The working load limit of each safety chain must exceed the maximum gross trailer weight.**

8. Do not exceed the maximum weight capacities shown in the Specification chart on cover page of this manual.

#### 9. **WARNING** Determining Tongue Weight of the loaded trailer:

It is critical that you know the tongue weight of your loaded trailer. Tongue Weight is the static force the trailer tongue exerts on the hitch ball. Loading a trailer correctly to maintain a proper trailer tongue weight is critical for towing safety and good trailer handling.

A load correctly placed on the trailer is critical to a proper tongue weight and a safely towed load. As a guideline, approximately 60 percent of the load should be evenly centered on the front half of the trailer. The load should also be evenly distributed on the left and right sides of the trailer. Always secure the load to prevent sliding during transit.

**Use of a public vehicle scale is a good way to verify a properly balanced load and determine an accurate tongue weight (see suggested steps below):**

With trailer loaded and hitched to the tow vehicle, drive tow vehicle onto the scale (all tow vehicle tires on the scale). Do not pull the trailer tires onto the scale. The weight noted on the scale is the "combined weight".

Next, pull off the scale and disconnect the trailer. Re-weigh the tow vehicle. The weight noted is the "solo weight".

**Now subtract "solo weight" from the "combined weight" to determine the "tongue weight".**

If you are not experienced in making this determination of tongue weight, or not able to properly balance a load, assistance should be provided by a qualified service technician.

#### Maintaining the Adjustable Ball Mount

1. The general condition of this product should be checked before each use. Make sure that all hardware is tight. Safety Clips must be fully engaged with Hitch Pins. Hitch ball must be securely tightened to the Hitch Ball Bracket.

2. If cracks or other damage occur to the Adjustable Ball Mount, it should be replaced and not repaired.

3. Keep the product clean and free of grease and oil.

4. No replacement parts are available.

Manufactured and Distributed by:  
Avitec Towing and Garage Equipment  
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