

WARNING: Under no circumstances should the towing vehicle manufacturer's recommended vehicle towing capacity be exceeded. Failure to follow instructions for installation and use may cause property damage, injury or death.

READ ALL INSTRUCTIONS BEFORE STARTING THE INSTALLATION OR USE

94420 – 20k 5th Airborne

20,000lbs Rating
5,000 lbs. Max Pin Weight

Tools and Equipment Required to Install:

- Fastener kit 94621F (Included)
- 15/16" socket
- 15/16" wrench
- Torque wrench capable of going to 250 ft-lbs
- Lithium grease
- Air Compressor

SAFETY INSTRUCTIONS

- Equipment for lifting approximately 160 lbs

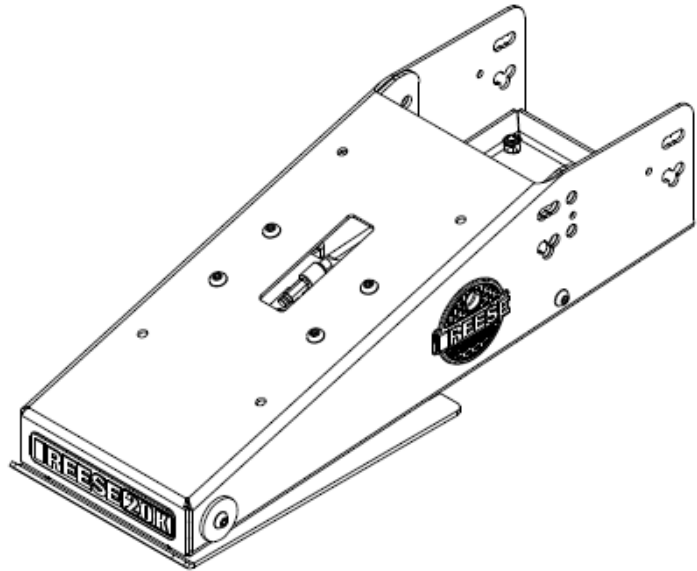


Figure 1

What's Included:

- 20k 5th Airborne
- Fastener Kit (94621F):
 - Hex Bolt – GR8 - 5/8" - 11x2.00" – QTY 8
 - Conical Washer – 5/8" – QTY 8
 - Flat Washer – 5/8" – QTY 8
 - Hex Nut – GR8 - 5/8" - 11 – QTY 8

NOTE: For any questions, please

- Scan QR code
- Visit <https://qr.towingproducts.net>
- Or call Technical Service at: 1-800-632-3290



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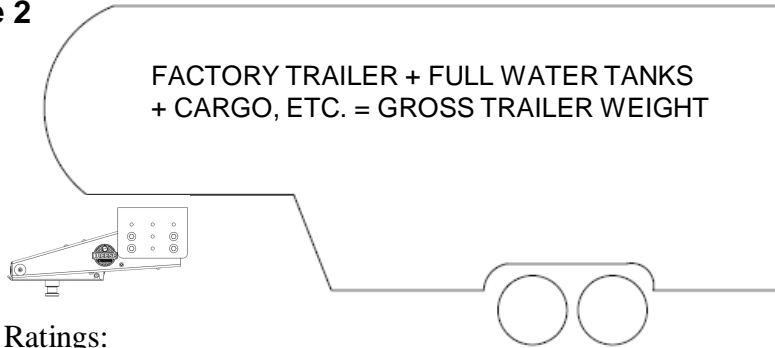
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Guidelines for Matching Tow Vehicle and Trailer



Failure to check and follow tow ratings could result in tow vehicle damage or truck and trailer separation while towing.

- Trailer and its contents together must not exceed truck, hitch and/or trailer tow ratings.
- Towing vehicle must have a manufacturer’s rated towing capacity equal to or greater than the gross trailer weight (dry weight of the trailer plus payload of the trailer) (Figure 2).
- Gross weight of trailer must not exceed 20,000 pounds for part number 94420.
- Kingpin vertical weight (Pin Weight) must not exceed 5,000 pounds for part number 94420. (Figure 3).

Figure 2

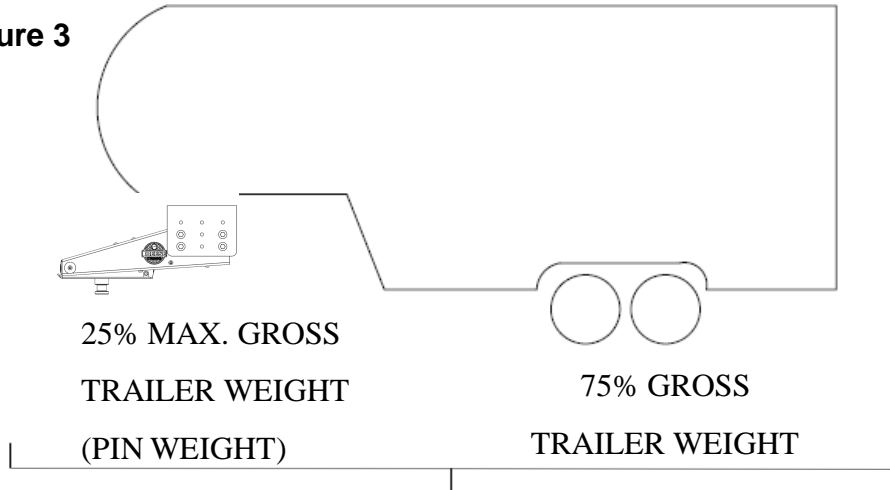
1. Check Tow Ratings:

Vehicle Tow Rating: _____.

5th Airborne Box Rating: 20,000lbs.

*Gross Trailer Weight (Figure 2): _____.

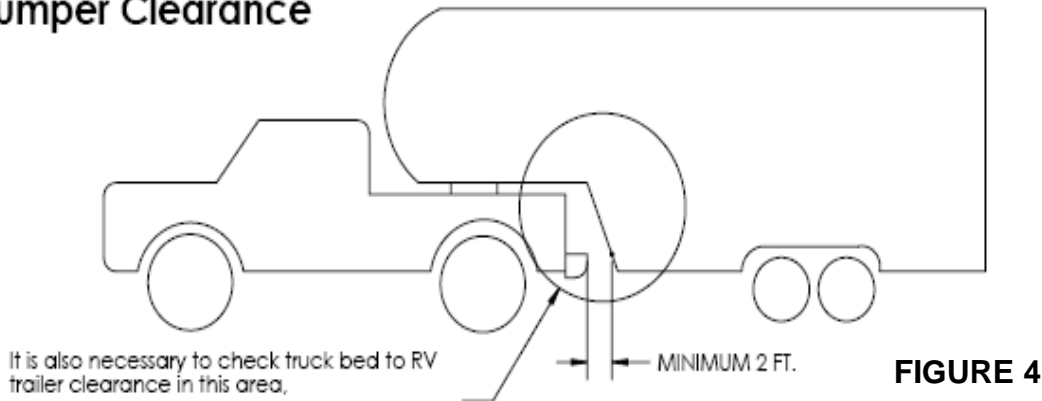
***Gross Trailer weight should be the lowest of these recorded ratings for safe towing conditions.**

Figure 3

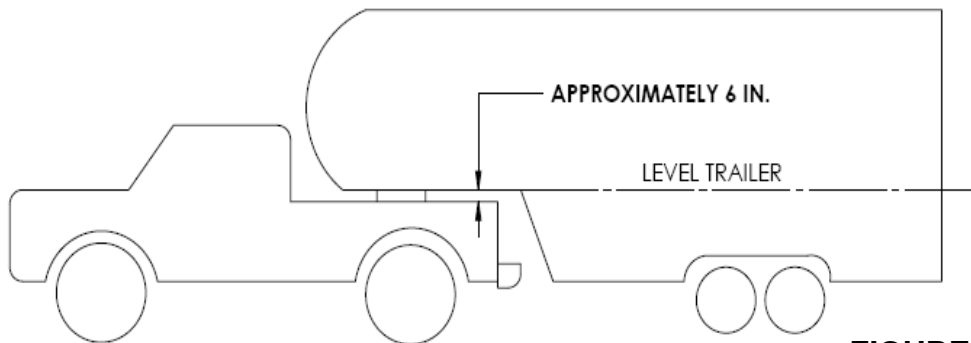
2. The 5TH Airborne is designed for a maximum of 25% Gross Trailer Weight on the Kingpin (Vertical Pin Weight) (Figure 3).

Guidelines for Matching Tow Vehicle and Trailer

Due to Vehicle and RV Trailer variations, it is necessary to check the rear bumper to trailer clearance. If the clearance is less than 2 ft., this check can be done after installation by making a slow turn, in a controlled driving environment (i.e. closed parking lot, grass field, etc.) with the aid of an observer to watch for interference.

II. Bumper Clearance

4. A minimum clearance between the bumper and trailer (Measured at the same height) of 2 ft. is recommended (Figure 4).



5. The height of the hitch and pin box should be adjusted so the trailer is approximately level as it is towed. Allow approximately 6 in. clearance between the top of the bedside and the underside of the front of the trailer for pitch and yaw of the trailer (Figure 5).

For off-road use, monitor closely and allow more clearance between pickup bedsides and trailer.



The measurements in Figures 4 & 5 are guidelines; if your measurements are close to these numbers, re-check clearances. If vehicle and/or trailer has any added vanity accessories (i.e. fairings, air dams, ground effects, bed rails, etc.) additional dimensioning and clearance checks must be made. Horizon Global is not responsible for damage incurred due to disregarding these clearance checks.

Product Pinch Points



The 5th Airborne Pinbox has multiple pinch points that can cause serious injury. Keep fingers and all other body parts away from any of the listed pinch points. Placing a body part or object anywhere else, except the air inflation valve could cause damage or serious injury

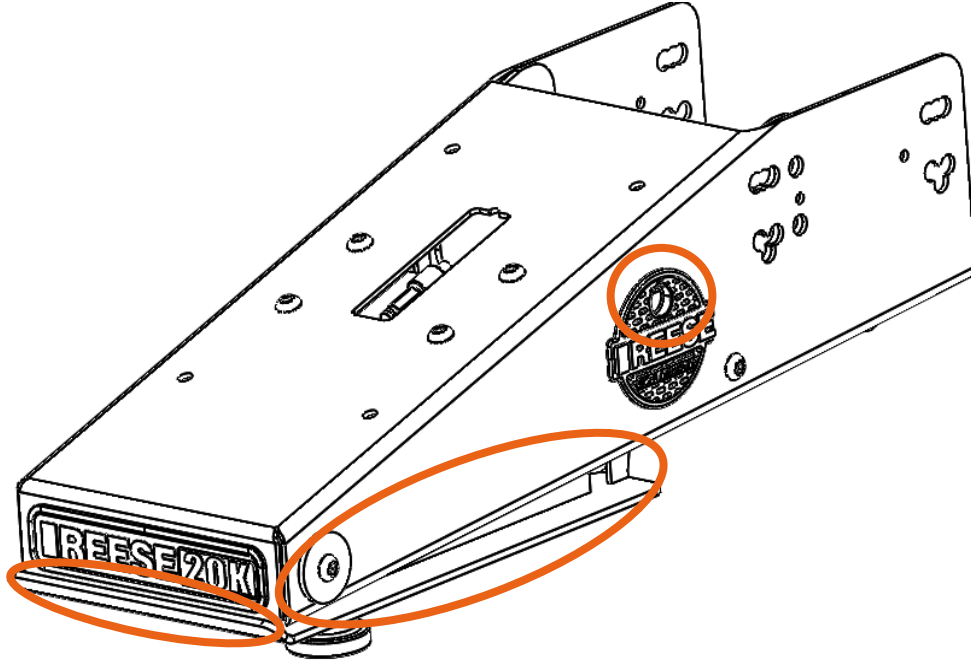


Figure 6

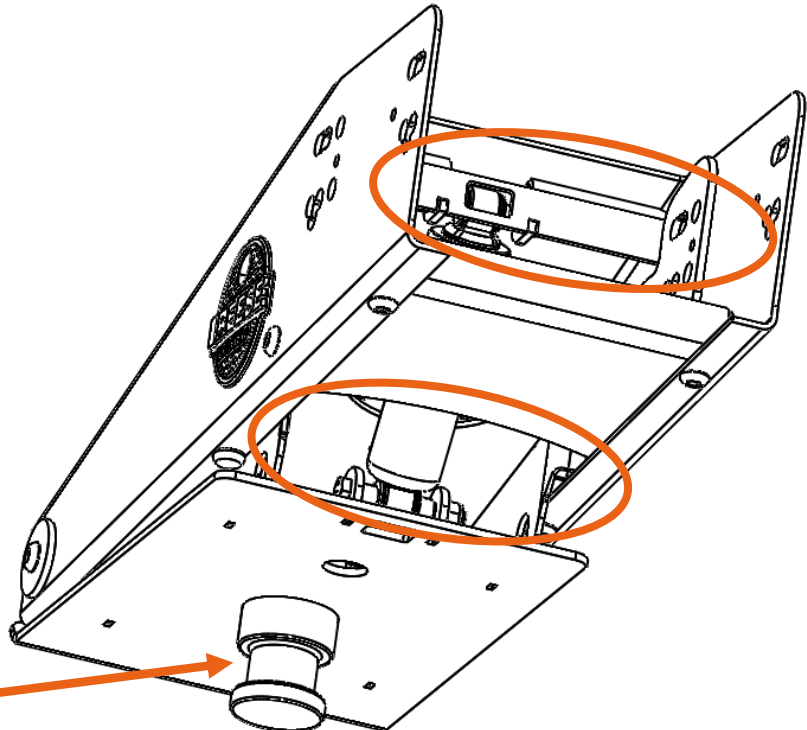


Figure 7

Recommendations for Safe Towing**SAFETY
INSTRUCTIONS**

- Fully understand the manufacture's tow ratings of the truck being used
 - Do not exceed these ratings
- Ensure rearview mirrors are properly adjusted
- Ensure brake controller is properly adjusted and operating correctly
- Take wide turns to ensure proper clearance between trailer and obstacles
- Ensure breakaway switch is securely mounted and free from obstructions
 - Cable should be free of snags through full turning radius
- Ensure the breakaway battery is fully charged.
- Ensure safety chains (if equipped) are securely mounted and free from obstructions
 - Chains should be free of snags through full turning radius
- All coupling surfaces should be clean of dirt and debris, and lightly greased
- Use E-rated tires
 - Ensure tires are properly inflated on truck and trailer.
- If tow vehicle is equipped with air bags, they should be inflated to the proper pressure
 - Truck should be level when trailer is attached and loaded per the trailer manufacture pin weight.
- Clearance between top of bed sides and underside of trailer nose should be approximately 6 in
 - Allow more clearance if using in off-road applications
- Truck and trailer should be loaded evenly and to not exceed manufacturer's rating
 - Do not load trailer heavier behind axle(s)
 - Overloading may result in serious personal injury or death, vehicle crash, and/or property damage.

**REESE 5th Airborne
IMPORTANT INFORMATION ON TOWING**

Failure to heed warnings and follow instructions may result in serious personal injury or death, vehicle crash, and/or property damage.

- **Do not modify.**
- **Do not tow one trailer behind another (Tandem Towing), this may cause loss of control.**

½ TON TRUCKS

In some applications with ½ ton trucks and application that the trailer is at a higher weight capacity of the tow vehicle, the system may feel unstable while towing. In this case, ensure trailer is properly loaded. It is also important to have E-rated tires. Airbags (if equipped) should not be filled above minimum pressure.

TOWING EQUIPMENT OWNERS

Make sure all operators of equipment read and understand this information before towing. Save for reference. This will help ensure proper use and maintenance of towing equipment. Refer to owner's manuals for tow vehicle, trailer and other parts of the towing system. Learn the capabilities and limitations of each part. GROSS TRAILER WEIGHT and PIN WEIGHT are the two most important items to consider.

THESE WEIGHTS MUST NEVER EXCEED THE LOWEST RATING OF ANY PART OF THE TOWING SYSTEM. GROSS TRAILER WEIGHT is the weight of the trailer plus cargo. Measure GROSS TRAILER WEIGHT by putting the fully loaded trailer on a vehicle scale. PIN WEIGHT is the downward force exerted on the 5th wheel head by the pinbox. Use a vehicle scale to measure PIN WEIGHT with the fully loaded trailer on a level surface and the pinbox at normal towing height.

TRAILER COUPLING

The kingpin and jaw should be smooth, clean and lightly lubricated. Adjust per manufacturer's instructions.

SAFETY CHAINS

Connect safety chains properly EVERY TIME YOU TOW. Leave only enough slack to permit full turning. Too much slack may prevent chains from maintaining control if other connections separate.

TRAILER LIGHTS, TURN SIGNALS, ELECTRIC AND BREAKAWAY SWITCH CONNECTIONS

Make these safety-critical connections EVERY TIME YOU TOW, no matter how short the trip. Check operation, including electric brake manual control, before getting on the road.

TIRE INFLATION

Check often. Follow tow vehicle and trailer manufacturer's recommendations.

CHECK YOUR EQUIPMENT/REPLACE WORN PARTS

Check kingpin, jaw, chains, and all other connections EVERY TIME YOU TOW. Re-check at fuel and rest stops.

NO PASSENGERS IN TRAILER!

NEVER allow people in the trailer while towing, under any circumstances.

TRAILER LOADING

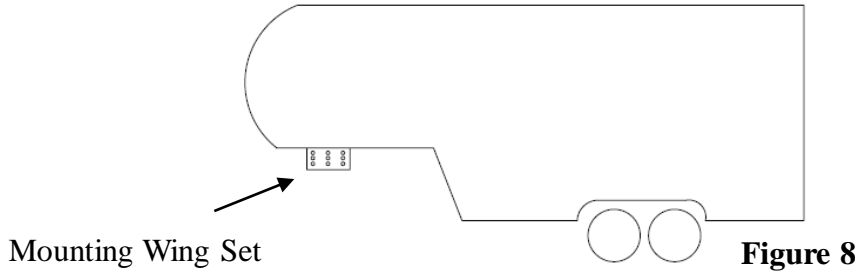
Place heavy objects on the floor ahead of the axle. Balance the load side-to-side. Secure it to prevent shifting. NEVER load the trailer rear heavy. **LOAD THE TRAILER HEAVIER IN THE FRONT, BUT NOT GREATER THAN PIN WEIGHT RATING.**

DRIVING

The additional weight of a trailer affects acceleration, braking and handling. Allow extra time for passing, stopping, and changing lanes. A 5th wheel trailer requires a large turning radius as the trailer tracks to the inside of turns. Severe bumps can damage towing vehicle, hitch and trailer. Drive slowly on rough roads. **STOP AND MAKE A THOROUGH INSPECTION IF ANY PART OF THE TOWING SYSTEM STRIKES THE ROAD. CORRECT ANY PROBLEMS BEFORE RESUMING TRAVEL.**

ASSEMBLY INSTRUCTIONS

1. Before removing the original pin box, take note of the number of bolts used attaching the existing pin box to the mounting wing set. Horizon Global recommends using at least the same number of bolts upon installation as removed from the original pin box. (Figure 8)

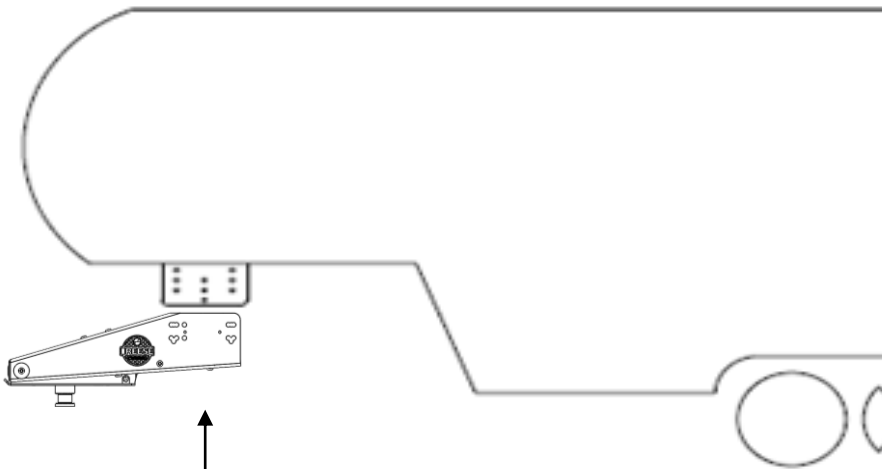


Mounting Wing Set

Figure 8

2. Remove the existing pin box, taking care to remove any necessary wiring and/or break away switch if attached to the pin box. (If removed, the break away switch must be reinstalled after installation is complete)

3. Install the 5th Airborne inside the mounting wings (Figure 9). Horizon Global recommends using the hardware kit included with the pin box. It is all grade 8 hardware. For a 20K application, install at least the hardware included as a minimum. (4 bolts per side, 2 front row & 2 rear row) Torque all bolts to the proper value listed in table 1.



Note: Installing the front bolts first may ease alignment.

Figure 9

The 5th Airborne pin box is heavy, take care to maintain adequate support under the 5th Airborne arm until at least 2 bolts per side are installed. Failure to do so may result in death or serious injury.

Bolt Diameter		Torque
5/8" Bolts	GR5	150 ft-lbs
5/8" Bolts	GR8	210 ft-lbs
3/4" Bolts	GR5	275 ft-lbs

Table 1



Failure to follow this instruction may result in kingpin being too high and coming to rest on top of closed jaws or not completely inside jaw. This could result in trailer separating from hitch. Trailer separation may result in death or serious injury if anyone is under the trailer or between truck and trailer when separation occurs.

HITCHING:

1. Place blocks (sometimes called “chocks”) firmly against front and rear of each trailer tire to prevent any possible forward or rearward motion. DO NOT REMOVE BLOCKS UNTIL EACH OF THE FOLLOWING STEPS AND THE PULL TEST HAVE BEEN COMPLETED. Lower tailgate if necessary. Clearance of the lowered tailgate to the trailer needs to be monitored during hookup as some manufacturer combinations of truck and trailer have little or no clearance.

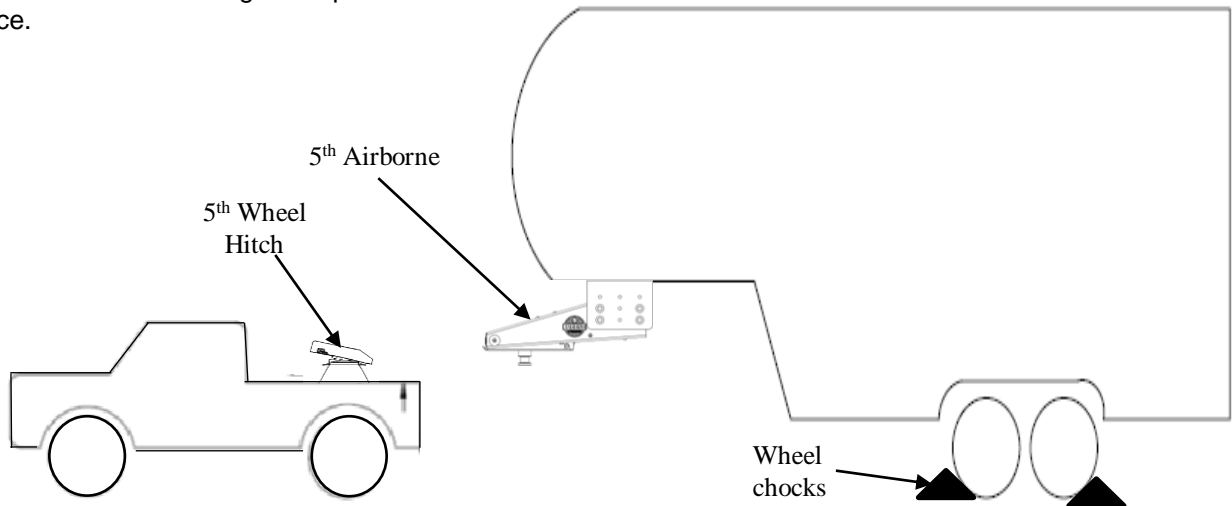


Figure 10

IMPORTANT: YOU ARE RESPONSIBLE FOR SAFE HITCHING AND UNHITCHING OPERATIONS. DO NOT RELY ON OTHERS TO PERFORM THESE DUTIES. YOU MUST PERSONALLY MAKE SURE THE FOLLOWING STEPS ARE PERFORMED IN THE FOLLOWING ORDER!

2. Using trailer jacks, adjust trailer height following the directions in the trailer manual so that bottom of trailer pin box (“A” in Figure 11) is ½ to 1 inch below skid plate (See “B” in Figure 11). During the hitching maneuver, the bottom of 5th Airborne should contact skid plate ramp (“C” in Figure 11).
3. Back Truck into trailer slowly, the 5th wheel hitch jaws should lock around the king pin of the 5th Airborne pinbox. Refer to your 5th wheel hitch product instructions to finalize the hitching procedure.

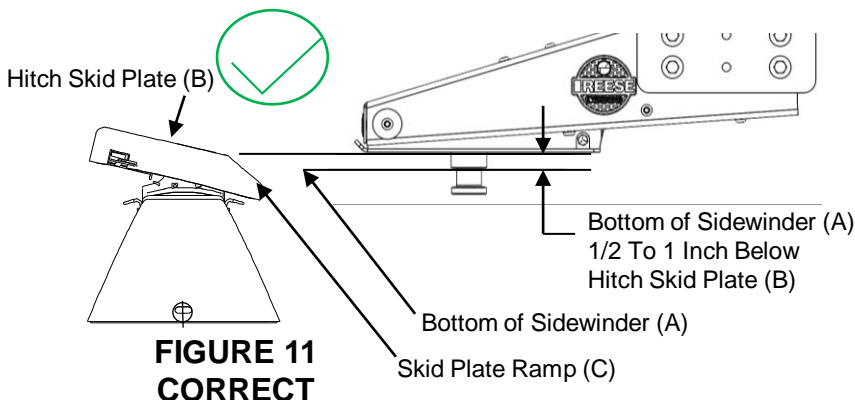


FIGURE 11
CORRECT

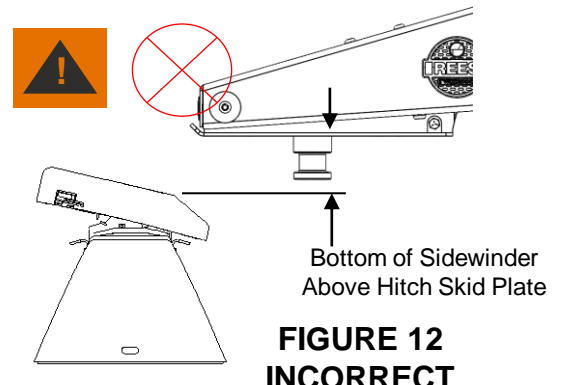


FIGURE 12
INCORRECT

Matching Wing Sets(Examples)

Lippert 1716 (1 mounting position)

*SPACER KIT P/N 68200 REQUIRED

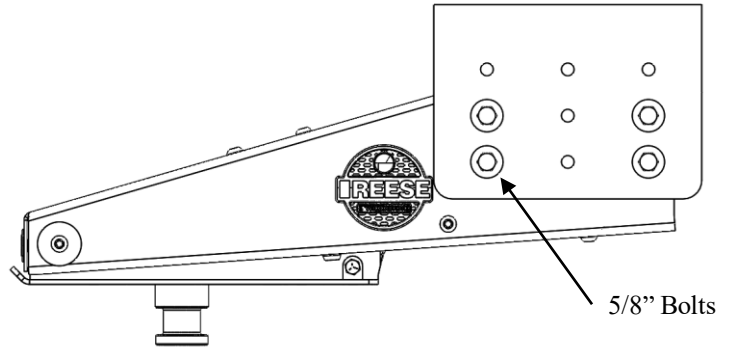
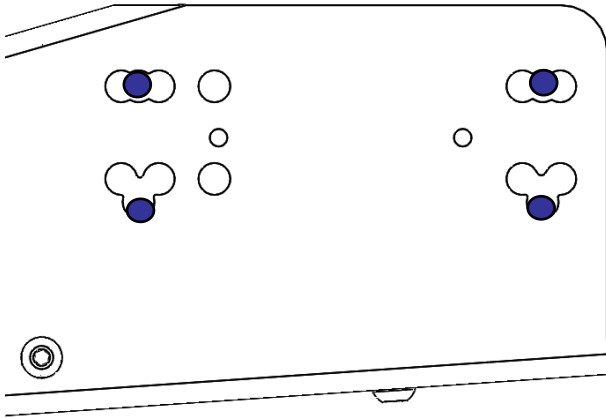
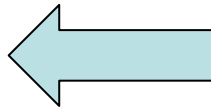


Figure 13:

Lippert 1716 Standard Mounting Position

Trailer Forward



Lippert Rhino (1 mounting position)

Rhino bolt hole application has a maximum load of 20,000 lbs

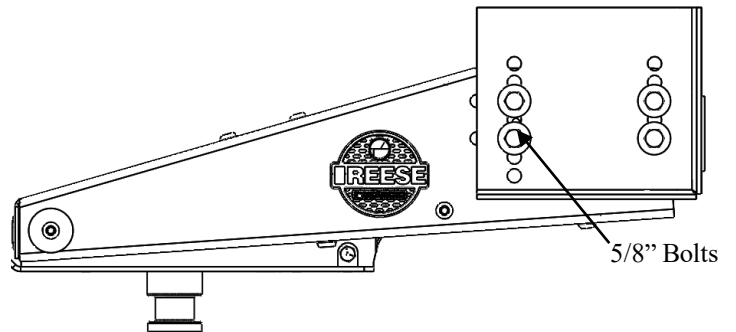
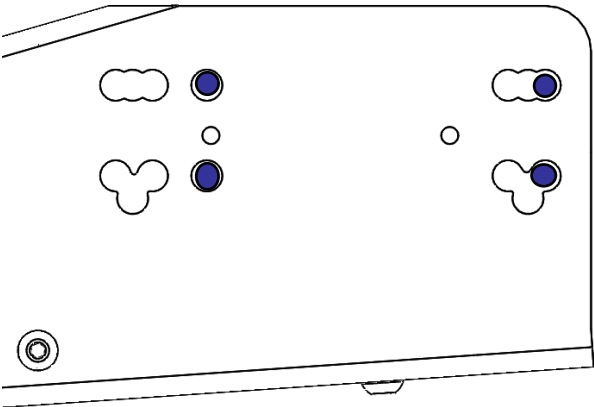
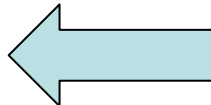


Figure 14:

Lippert Rhino Mounting Position

Trailer Forward



Note: For other wing sets, please

- Visit www.reeseprod.com/qr-product.aspx
- Or call Technical Service at: 1-800-632-3290

Matching Wing Sets

Lippert 1621 (2 mounting positions that provide 2 inches of adjustment)

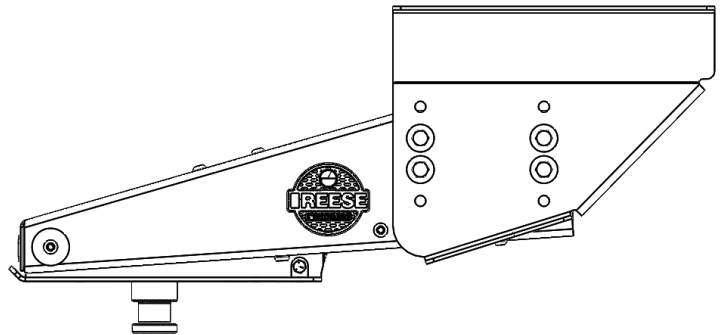
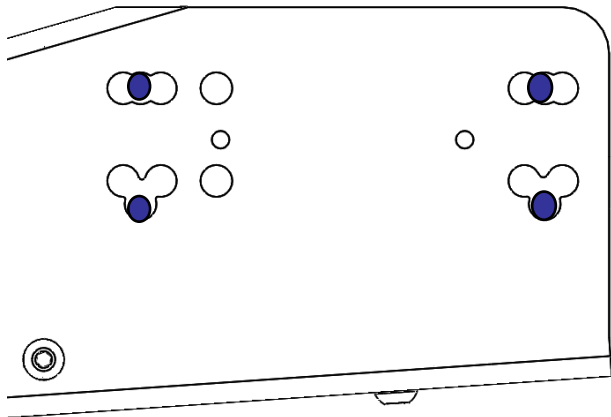


Figure 15:

Lippert 1621 lowest Mounting Position

Trailer Forward

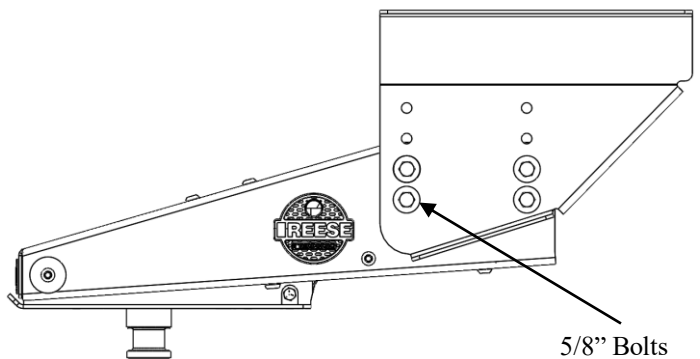
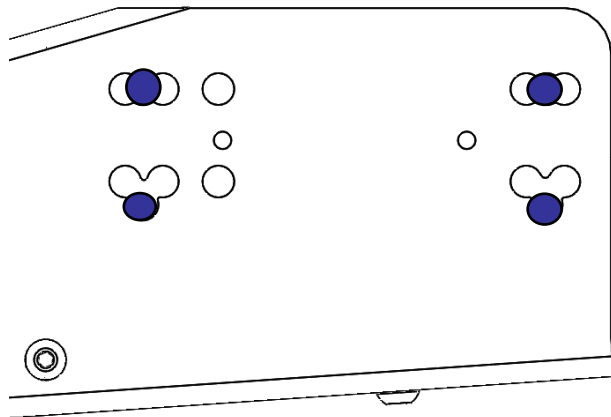
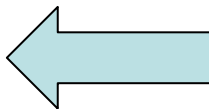
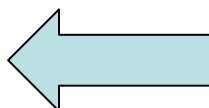


Figure 16:

Lippert 1621 Standard Mounting Position

Trailer Forward



Note: For other wing sets, please

- Visit www.reeseprod.com/qr-product.aspx
- Or call Technical Service at: 1-800-632-3290

Typical Bolting

Note: The Figure Shows a Typical Installation

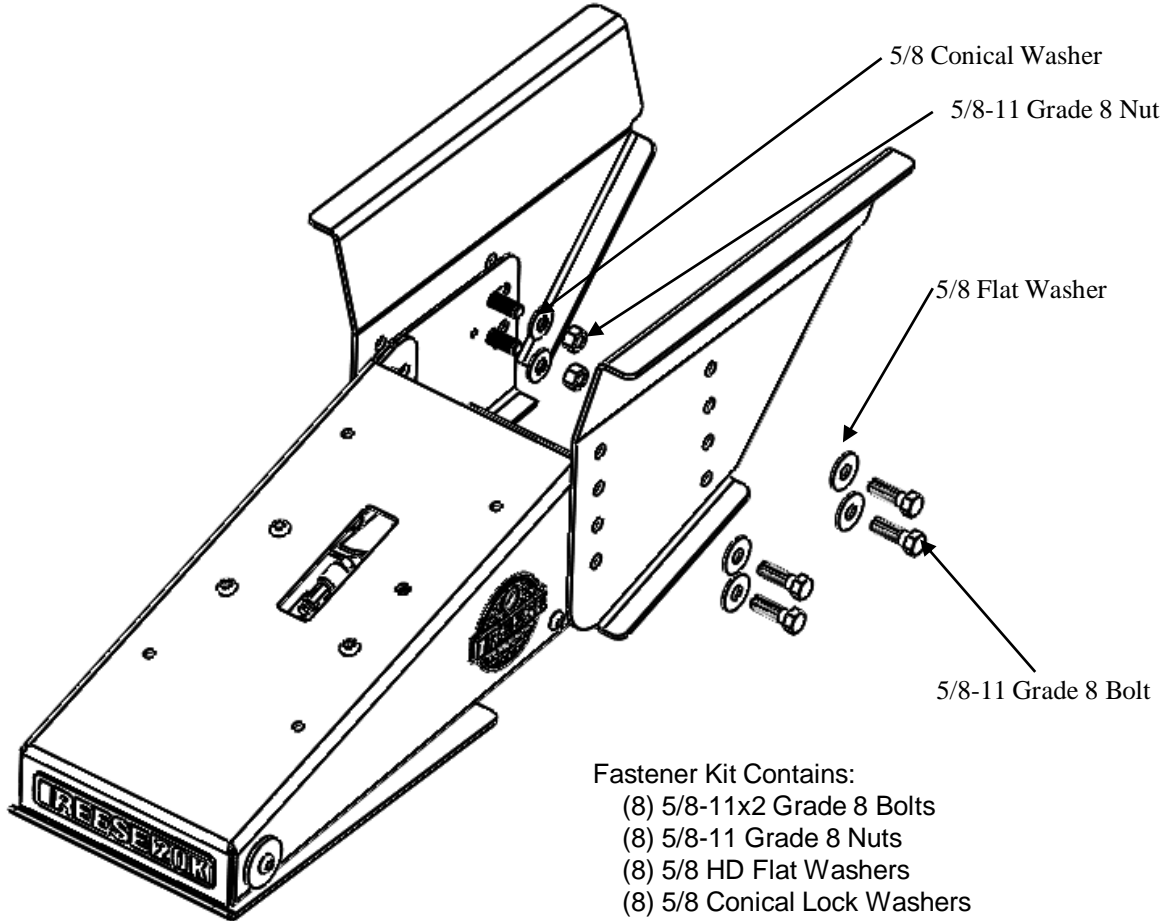


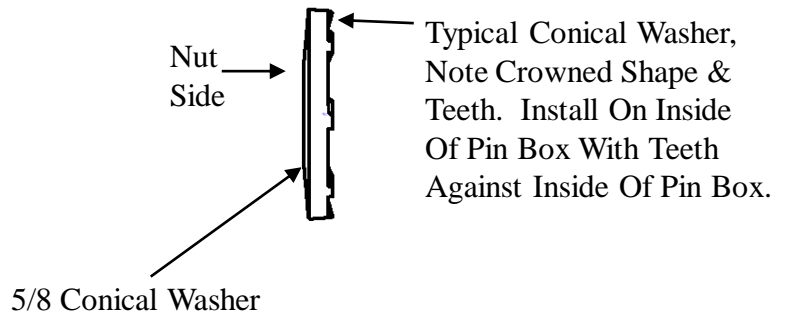
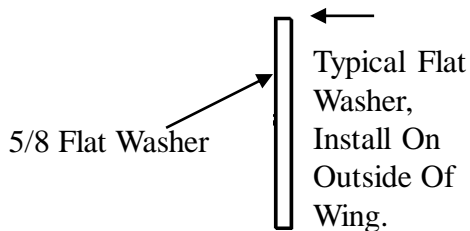
Figure 17



Bolts & Flat Washers Are Installed From The Outside, Conical Lock Washers and Nuts On the Inside.

Torque Bolts To 210 ft-lbs.

Note: For trailers with 12-1/2" wide wingsets, spacer kit 68200 will be required which is not included with product 94420. Consult 68200 instructions when installing units that require the spacer kit



Air Fill / Adjustment

Filling the 5th Airborne air system may require 2 people. One person will need to fill the system while the other watches the Air Inflation Visual Indicator. Horizon Global advises against filling the air system with only one person.

Before filling the air system, perform these safety steps and ensure:

1. Ensure that you are 100% coupled, 5th wheel latched and locked. Refer to your 5th wheel manufacturers installation manual for hitch and locking procedures.
2. Ensure that your trailer and tow vehicle are on level ground with your vehicle in park and the park brake applied.
3. Ensure that the tow vehicle and trailer are secured ie: have blocks (chucks) that are positioned firmly against front and rear of each towing vehicle and trailer tire to prevent any possible forward or rearward motion. **DO NOT REMOVE BLOCKS UNTIL EACH OF THE AIR FILL STEPS HAVE BEEN COMPLETED.**

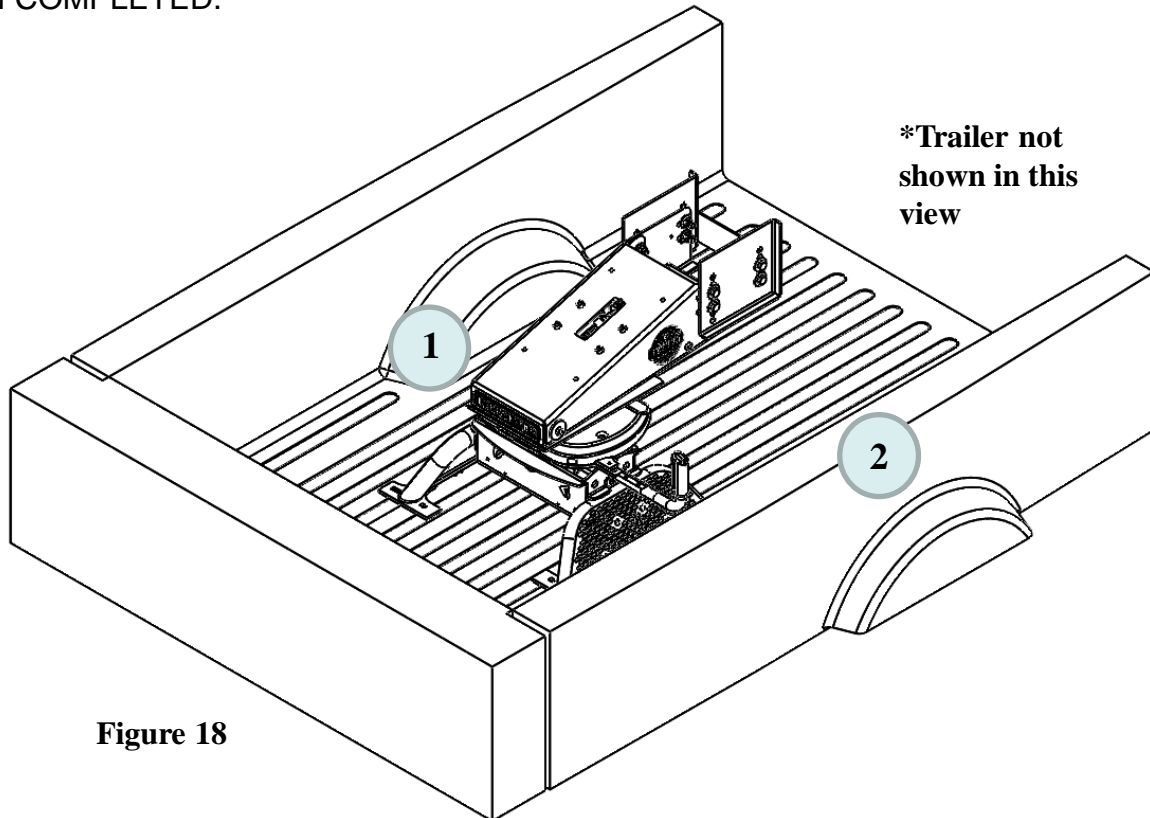


Figure 18

When filling the air system, 2 people may be required:

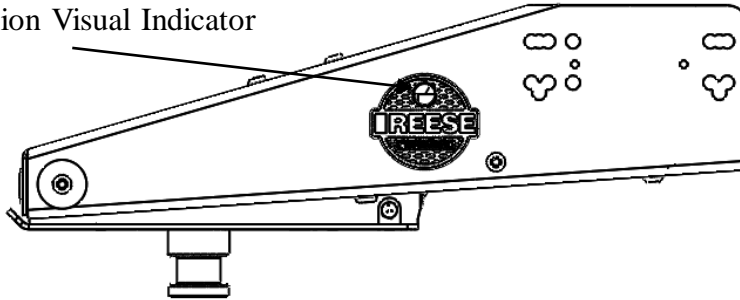
1. One person should be in the truck in order to fill the air valve (shown at position 1 of figure 18).
2. The second person should be standing outside of the truck watching the Air Inflation Visual Indicator. (Shown at Position 2 of figure 18).

Warning: DO NOT PUT ANYTHING IN THE INDICATOR.

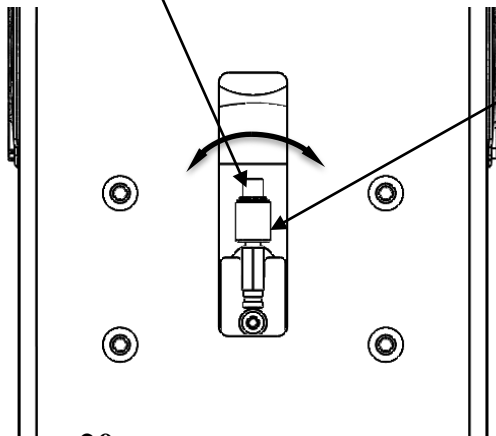


Air Fill / Adjustment

Air Inflation Visual Indicator

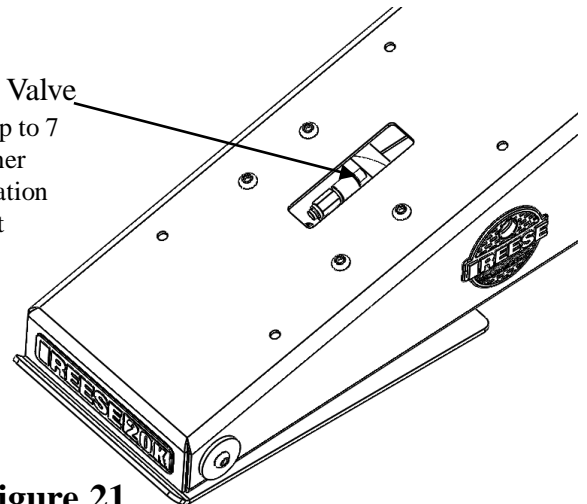
**Figure 19**

Inlet

**Figure 20**

Air Bag Fill Valve

*May rotate up to 7 degrees in either direction. Rotation does not affect functionality

**Figure 21****ADJUSTING THE AIR SPRING**

1. Perform the safety steps on page 11 before adjusting suspension air pressure, with the trailer loaded.
2. With trailer hitched to truck, 5th wheel hitch latched and locked and landing gear / jacks retracted, add air to the air bag fill valve inlet shown in (figures 20 and 21).
3. One person will fill the pinbox at the inlet. The second person will watch until it is at its nominal position (seen in the air inflation visual indicator) (Figure 19)
4. Recheck Air Inflation Indicator / inflate to desired ride comfort position.



Do not insert fingers or any body parts into the air inflation indicator. Doing so may result in serious injury. It is unsafe to put anything into the visual indicator.

Figure 22:
Nominal Air Position



Figure 23:
Maximum Air Position




Figure 24:
Low Air Position



Maintenance

Notice: Follow all maintenance and upkeep instructions to maximize the lifespan of your product. Failing to do so may reduce product lifespan, ride comfort, and or cause damage to your product and towing equipment.

MAINTENANCE:

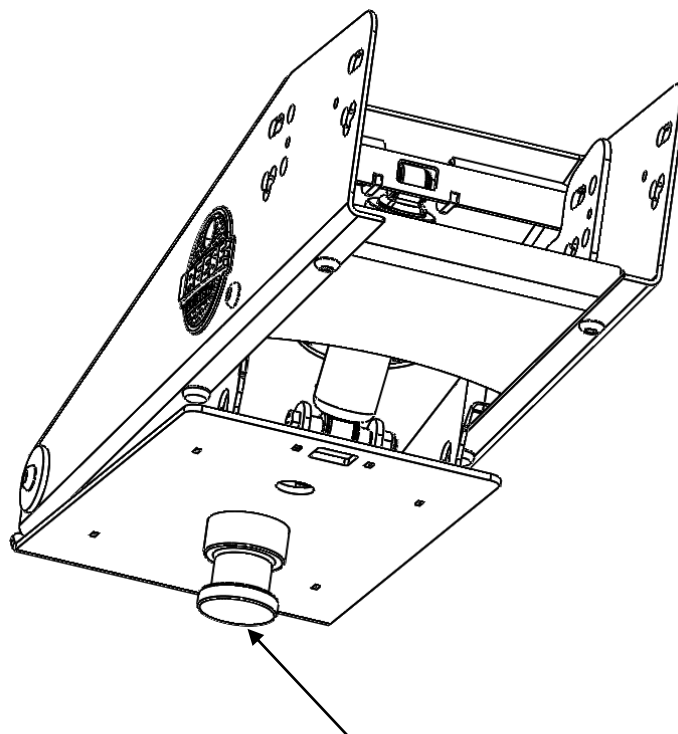
1. Inspect the 5th Airborne for any damage or excessive wear.
2. Wipe the kingpin & bottom surface of 5th Airborne clean
3. Apply new white lithium grease to the kingpin and 5th wheel hitch head for ease of hitching/unhitching to lessen wear and minimize noise of the system.
 - **NOTE:** Refer to your 5th wheel manufacturer's installation manual for information of the proper grease to use for your hitch head.
 - **NOTE:** Be careful when wiping old grease from Kingpin. The kingpin may develop sharp edges after usage. 
4. Once per season, fully deflate the airbag and then refill.

BEFORE EACH TRIP:

1. **CHECK YOUR EQUIPMENT:** Check the condition of all towing equipment and keep it in proper working condition.
2. Ensure that all bolts and nuts are properly tightened. (Refer to page 7 for proper bolt torque values)
3. Check that the airbag pressure is set for your vehicle and loaded trailer.

NOTE: The airbag can lose pressure with temperature changes when not in use. Be sure to screw the cap back on the air bag fill valve to prevent any air leakage

4. Ensure that the breakaway cable is secured to your 5th airborne pinbox.



Kingpin may have sharp edges



Product Instructions:

5th Airborne

NOTES:

Part Number Purchased:
 Place of Purchase:
 Date of Purchase:
 Part Manufactured Date (located on driver-side sticker):

**Register product by visiting our website: www.reeseprod.com/register-product*

LIMITED LIFETIME WARRANTY

- 1. Limited Lifetime Warranty** (“Warranty”). Horizon Global (“We” or “Us”) warrants to the original consumer purchaser only (“You”) that the product will be free from material defects in both material and workmanship for a period of lifetime of ownership, ordinary wear and tear excepted; provided that installation and use of the product is in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. This warranty is not transferable.
- 2. Limitations on the Warranty.** This Warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.
- 3. Obligations of Purchaser.** To make a Warranty claim, contact Us at 47912 Halyard Drive Suite 100, Plymouth, MI, 48170, 1-800-632-3290, identify the product by model number, and follow the claim instructions that will be provided. Any returned product that is replaced by Us becomes our property. You will be responsible for return shipping costs. Please retain your purchase receipt to verify date of purchase and that You are the original consumer purchaser. The product and the purchase receipt must be provided to Us in order to process Your warranty claim.
- 4. Remedy Limits.** Product replacement is Your sole remedy under this Warranty. We shall not be liable for service or labor charges incurred in removing or replacing a product or any incidental or consequential damages of any kind.
- 5. Assumption of Risk.** You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.
- 6. Governing Law.** This Warranty gives You specific legal rights, and You also may have other rights which vary from state to state. This Warranty is governed by the laws of the State of Michigan, without regard to rules pertaining to conflicts of law. The state courts located in Oakland County, Michigan shall have exclusive jurisdiction for any disputes relating to this Warranty.

Horizon Global America, Inc
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