SHOCKER HITCH
AIR RIDE TOWING HITCHES
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# QUICK AIR® 5TH WHEEL TO GOOSENECK CONVERSION KIT & SAFETY CHAIN INSTALLATION GUIDE

Patent #'s 11,370,257 B1 & D898,628 - More Pending

## INSTALLATION - QUICK AIR PIN BOX

**TOOLS REQUIRED**
• Impact Driver with 15/16" • 15/16" Wrench

SH-RVGC-4405 | SH-RVGC-4410 | SH-RVGC-4415

### Step 1: Existing Pin Box Removal

- **Level Surface**: Ensure the vehicle and the trailer are parked on a level surface.
- **Unbolting**: Remove the bolts from the existing pin box on the camper/trailer in a star-like pattern using an impact wrench with 15/16" socket on the bolt head and 15/16" wrench on the nut (Figure 1).
- **Remove Existing Pin Box**: With assistance, remove the existing pin box from the camper/trailer.

### Step 2: Install Quick Air Pin Box

- **Lubricate**: It is recommended to use spray grease/lubricant on the pin box bracket to help with installation
- **Insert and Align**: With assistance, slide the Quick Air Pin Box into camper/trailer pin box bracket. Align the holes of the pin box bracket with the holes on the Quick Air Pin Box.
- **Add Hardware**: Using the existing hardware from the original pin box, insert all bolts and washers from the outside of the bracket into the holes on the Quick Air Pin Box.

### Step 3: Tighten and Torque

- **Tighten**: Use an impact wrench with 15/16" socket on the bolt head and 15/16" wrench on the nut and tighten bolts (Figure 2 & 3).
- **Torque:** Torque bolts to 120ft-lbs using a torque wrench (or refer to trailer manufacturer specs) (Figure 4).

**Important**: **DO NOT** overtighten bolts as this can lead to premature wear and potential failure of the pin box. It is recommended to use additional washers on the inside of the pin box to reduce wear.



Figure 1: Unbolt existing pin box

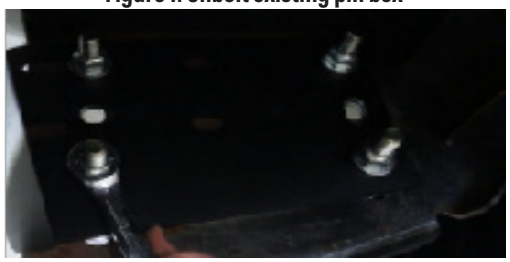

Figure 2: Tightening hardware



Figure 3: Tightening hardware


Figure 4: Torque bolts to 120 ft-lbs

## INSTALLATION - QUICK AIR GOOSENECK SURGE

**TOOLS REQUIRED**
• 1-1/8" Wrench • 3/4" Wrench • Air Compressor

4RND-STR-SL-CA | 4RND-STR-DEM-CA

### Step 1: Installing Gooseneck Surge

- **Insert Hitch**: With assistance, insert the stem on the Gooseneck Surge into the outer tube of the trailer (Figure 5).
- **Align and Pin**: Insert the 3/4" gooseneck through pin through the desired hole and secure using a cotter pin clip.

### Step 2: Measuring and Adjustment

- **Measure:** Take a measurement from the bed of your vehicle to the ground and record the measurement.
- **Adjust**: Measure from the bottom of the Gooseneck Surge Coupler to the ground and adjust the height of the Gooseneck Surge to match the measurement taken from the bed to the ground

### Step 3: Orientation and Alignment

- **Airbag Orientation**: For the Quick Air Gooseneck Surge, the airbag must face the rear towards the trailer (Figure 6).
- **Verify Alignment**: **DO NOT** tow if hitch is crooked, ensure hitch is straight and parallel with the trailer
- **Correction**: If the hitch is crooked, readjust at the stem or the trailer pin
- **Tighten Set Bolt(s):** Using a 3/4" wrench, tighten the set bolt on the trailer to lock the hitch into place. Then tighten the jam nut using a 1-1/8" wrench.


Figure 5: With assistance, insert Quick Air Gooseneck Surge Hitch



Figure 6: Airbag must be facing the rear towards the trailer

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# INSTALLATION - GOOSENECK STEM & COUPLER

**TOOLS REQUIRED**
- 1-1/8" Wrench
- 3/4" Wrench

**SL-4RND-STR-CA | DEM-4RND-STR-CA**

### Step 1: Installing Gooseneck Stem & Coupler

- **Insert Hitch**: With assistance, insert the stem into the outer tube of the trailer (Figure 7).
- **Align and Pin**: Insert the 3/4" gooseneck through pin through the desired hole and secure using a cotter pin clip.

### Step 2: Measuring and Adjustment

- **Measure:** Take a measurement from the bed of your vehicle to the ground and record the measurement.
- **Adjust**: Measure from the bottom of the Coupler to the ground and adjust the height of the Stem and Coupler to match the measurement taken from the bed to the ground

### Step 3: Orientation & Final Tightening

- **Orientation:** The Stem and Coupler can be installed with the latch facing the cab or the trailer.
- **Tighten Set Bolt:** Using a 3/4" wrench, tighten the set bolt on the trailer to lock the hitch into place. Then tighten the jam nut using a 1-1/8" wrench. Tighten the jam nut after tightening the set bolt.

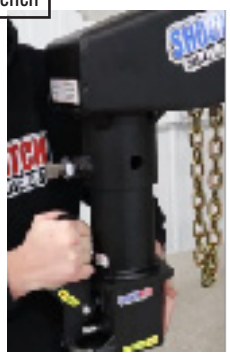


**Figure 7: With assistance, insert the Gooseneck Stem & Coupler**



**Figure 8: Orientation of Gooseneck Stem & Coupler**

# INSTALLATION - SAFETY CHAIN KIT

**TOOLS REQUIRED**
- Impact Driver with 3/4" Socket
- 3/4" Wrench

**ALWAYS USE SAFETY CHAINS WITH GOOSENECKS AS IT IS REQUIRED BY LAW**

## New Version Gooseneck Pin Box (2024-Newer):

### Step 1: Inserting Chains

- **Feed Chain**: Take the open end of the chain and feed it through the cross cut out on the Quick Air Pin Box to the desired length (chains should not be tight, maintain loose fit).

### Step 2: Install and Tighten Hardware

- **Add Hardware**: Insert provided 1/2" bolt through the short section of the cross, and hand thread a nut onto the protruding end of the bolt on the inside of the Quick Air Pin Box.
- **Tighten**: Use an impact wrench with 3/4" socket on the bolt head and 3/4" wrench on the nut and tighten bolts (Figure 9).




**Figure 9: Chain Kit installed correctly (New Version)**

## Old Version Gooseneck Pin Box (2023-Older):

### Step 1: Install Chain Brackets

- **Bracket Installation**: Before putting on your Quick Air Pin Box, install the Chain Bracket on the top two holes on either side that the Quick Air Pin Box will fit into and use existing hardware to install the bracket (Figure 10).
- **Feed Chain**: Take the open end of the chain and feed it through the cross cut out on the Quick Air Pin Box to the desired length (chains should not be tight, maintain a loose fit, and not bind or stretch during a right or left turn)

### Step 2: Install and Tighten Hardware

- **Add Hardware**: Insert provided 1/2" x 1-1/2" bolt through the short section of the cross, and hand thread a nut onto the protruding end of the bolt on the inside of the Quick Air Pin Box. Do this for the other side as well.
- **Tighten**: Use an impact wrench with 3/4" socket on the bolt head and 3/4" wrench on the nut and tighten bolts (Figure 11).



**Figure 10: Install safety chain bracket onto pin box frame**




**Figure 11: Chain Kit installed correctly (Old Version)**

## Safety Chain Hook-Up (Old and New Version):

- **Ideal Location:** Best safety chain hook-up location is slightly rearward of the ball centerline and 6" to 12" left or right apart from the ball laterally. Safety chain hook up should not be directly inline with the ball and NEVER attached forward of the gooseneck ball (Figure 12).

**Safety Notice:** Safety chain kit is rated to 24,000 lbs. DO NOT exceed maximum weight as it can damage the safety chains or the Shocker Hitch. Ensure chains are Grade 70 transport NACM V-19.

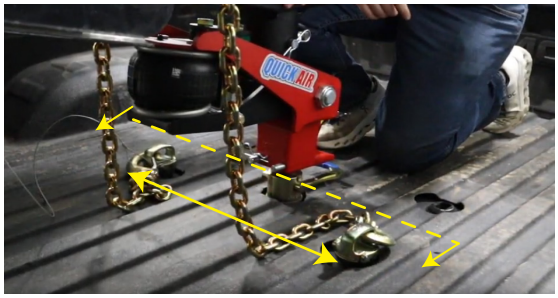



**Figure 12: Ideal safety chain location rearward of the ball and 6" to 12" left and right apart from the ball laterally**

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# HOW TO USE SHIFT LOCK® COUPLER FOR 2-5/16" GOOSENECK BALL

- **To Connect:** Move the handle to the unlocked position (Figure 13). Lower the trailer onto the ball (Figure 14). Move the handle to the locked position and insert quick clip pin (Figure 15).
- **Check Lock:** U-Bolt must stick out approximately 1" from the coupler rear when locked.
- **Manual Option:** If the handle is damaged, use the manual lock pin on the driver's side of the U-Bolt (Figure 16).

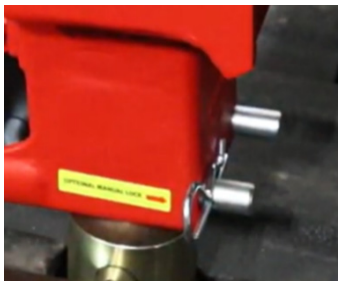


Figure 13: Shift Lock Coupler in unlocked position; lower hitch onto gooseneck ball



Figure 14: Shift Lock Coupler lowered onto gooseneck ball


Figure 15: Shift Lock Coupler in correct locked position; 1" of the U-Bolt stick out


Figure 16: Optional manual lock pin on back of U-Bolt (driver's side)

# HOW TO USE DEMCO COUPLER FOR 2-5/16" GOOSENECK BALL

- **To Connect:** The Demco EZ-Latch is a self-latching system. Lower the coupler onto the ball until the latch snaps into the locked position (Figure 17-19).
- **To Release:** Pull the Demco EZ-Latch handle up and forward to release the ball (Figure 20).



Figure 17: Demco coupler EZ-Latch lowering hitch onto gooseneck ball



Figure 18: Demco coupler lowered onto gooseneck ball



Figure 19: Demco coupler locked onto gooseneck ball

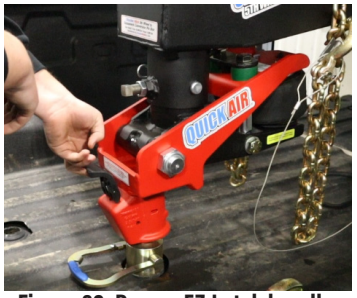


Figure 20: Demco EZ-Latch handle lifted to release gooseneck ball

# CLEARANCE FOR AIR SPRING BAG & RECESSED FLAT BED PICKUPS

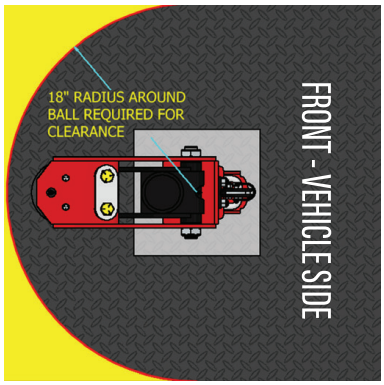


Figure 21: Standard hitch must have an 18" clear radius around the ball to prevent contact with items in truck bed

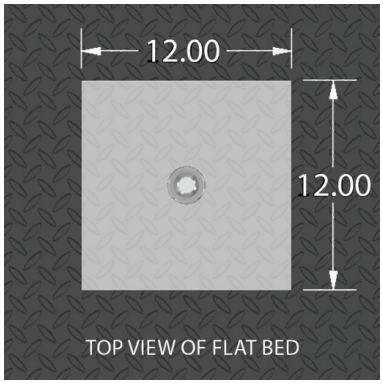


Figure 22: Top View: Recommended that Shift Lock & Demco coupler have a minimum clearance of 12" x 12"

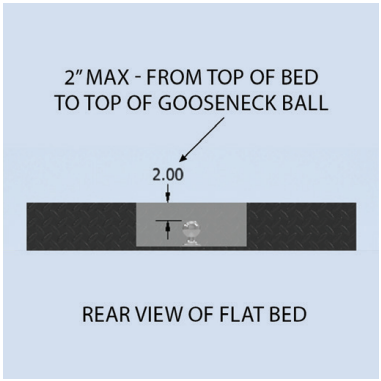


Figure 23: Recommended that the distance from the top of the bed to the ball be a maximum of 2" for Shift Lock & Demco coupler

# MAXIMUM WEIGHT RATING FOR QUICK AIR 5TH TO GOOSENECK PIN BOX

**Safety Notice:** Towing capacity is limited by its lowest rated component. DO NOT exceed Gross Vehicle Weight Rating or Shocker Hitch weight ratings. The Quick Air Pin Box is rated for 24,000 LBS GTW and 6,000 lbs TW. Any modification to the hitch or pin box voids warranty and is done so at your own risk. Manufactured at Shocker Hitch USA in Jamestown, ND.

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# ROUTINE MAINTENANCE SCHEDULE

### Step 1: Lubrication Schedule

- **Hitch Ball & Coupler**: Lubricate the coupler, Shift Lock U-Bolt and gooseneck ball before every hook-up to prevent friction wear. Clean your hitch ball after each use to reduce wear and improve coupler lifespan.
- **Main Pivot Bolt**: Apply grease to the pivot bolt via grease zerk located at the base of the stem.
- **Stem Threads (Crank Models)**: For crank handle models, ensure the stem threads stay generously greased for easy adjustment.
- **Frequency**: It is recommended to grease all points every 2-3 months, or more frequently with heavy use.

### Step 2: Hardware & Air System Inspection

- **Torque Check**: Periodically verify that all trailer set bolts are torqued to your trailer manufacturer's specifications.
- **Air Spring Bag Integrity:** Inspect the air spring bag for any debris or rubbing.
- **Coupler Pin:** Ensure the safety snapper pin is in good condition and always used during transit.

# GOOSENECK BALLS WE RECOMMEND

- **Recommended:** We highly recommend using gooseneck hitch balls that are completely spherical or have a flat top on the gooseneck hitch ball. This is to ensure the coupler lasts as long as possible (Figure 24).
- **Not Recommended:** We strongly advise against using a Puck/Pop-In style ball due to the sharp edges of the clip grinding the inside of the coupler, which reduces the life of your coupler (Figure 24).



**Figure 24:**
- **GREEN marks show Gooseneck Hitch Balls we DO recommend**
- **RED marks show Gooseneck Hitch Balls we DO NOT recommend**

# HOW TO USE

### Step 1: Hook Up Trailer

- **Lowering Trailer**: Lower your trailer onto the gooseneck ball and lock the coupler into place (See coupler specific instructions for **Shift Lock** or **Demco** models).
- **Safety Chains**: Securely hook your safety chains to the anchor points in the bed of the truck.
- **7-Way Plug**: Plug your trailer's electrical cord into the socket in the truck bed to enable lights and brakes.

### Step 2: Setting Air Pressure

- **Fill Air Spring Bag**: After loading your trailer, fill your hitch's air spring bag starting at 15 PSI (Ensure bump cushions are compressed).
- **Adjustment:** Test drive and adjust in 5 PSI increments until optimal ride quality is achieved.
- **Note:** When towing trailers with high wind resistance it may be necessary to increase air pressure in the air spring bag. NEVER EXCEED 100 PSI, as this will damage the air spring bag.
- **Important:** When weight is added or removed, it can shift more weight to the tongue or to the rear of the trailer. Always try to keep your load distributed evenly on the trailer with the majority of the weight over the tires. When adjusting weight, always adjust your air pressure for the best ride.

# PRE-TOW CHECKLIST

### Hitch & Coupler Security:

- **Coupler Engaged:** Ensure trailer is fully lowered onto the ball and the coupler is locked
- **Stem Hardware Tight**: Confirm the set bolts on the trailer are securely tightened and the jam nut is locked down. Confirm the gooseneck through pin is secure with cotter pin clip.

**Alignment Check:** Visually verify the hitch is straight and parallel with the trailer; do not tow if hitch is crooked.

### Air System and Suspension:

- **Minimum Air Pressure:** Ensure the air spring bag has a starting pressure of at least 15 PSI and the bump cushions are compressed.
- **Maximum Air Limit:** Verify the air pressure does not exceed the absolute maximum of 100 PSI.

**Visual Inspection**: Check the air spring bag to ensure there is no debris or physical rubbing.

### Clearances and Safety Chains:

- **Safety Chains Secured:** Verify safety chains are hooked up to the anchor points (rearward of the ball and 6" to 12" apart). Ensure they have enough slack to turn without binding.
- **Turning Clearance:** Confirm there is an 18" clear radius around the ball to prevent the hitch from contacting items in the truck bed during turns

# REPLACEMENT PARTS



Shocker Air Spring Bag - Fits Quick Air 5th Wheel
SH-203: without air tank valve
SH-203-SH-90294: includes air tank valve



SH-930 Shift Lock Handle Assembly for 2-5/16" ball



DEM-6288 EZ Latch Demco Coupler Replacement Kit



SH-GNS-UPIN-256 & SH-GNS-UPIN-3 Replacement U-Pin



SH-970 Replacement 30K Green Bump Stop Cushions

# ADDITIONAL INFO - SCAN QR CODES

5th to Gooseneck Install Page

Air Pressure Guide

Warranty Registration