

SHOCKER AIR TRAILER TONGUE MOUNT INSTALLATION INSTRUCTIONS

INSTALLATION - VERTICAL CHANNEL AIR TONGUE MOUNT

SH-HD4000 | SH-4000

TOOLS REQUIRED

- Impact Driver with 15/16" - 15/16" Wrench
- Torque Wrench (capable of 100 ft-lbs)

HARDWARE REQUIRED

- 5/8"-11 x 4-1/2" Grade 8 Hex Bolts (Qty 4)
- Do Not reuse hardware that is bent, damaged, corroded, worn or undersized**

Step 1: Existing Coupler Removal

- **Level Surface:** Ensure the vehicle and the trailer are parked on a level surface.
 - Measure the front and back of the trailer and adjust if needed to make level.
- **Measure:** Take two measurements and write them down or remember them
 - Measure from the ground to the top of the ball on the truck
 - Measure from the ground to the bottom of the coupler on the trailer (Figure 1).
 - Remember the measurements to stay level after installation
- **Unbolting:** Remove bolts from the existing coupler with an Impact Driver using a 15/16" socket and a 15/16" wrench on the nut.
- **Remove Existing Coupler:** Remove the existing coupler from the Vertical Channel.

Step 2: Install Coupler in Air Tongue Mount

- **Install Attachment:** Refer to the bottom of Page 2 for the Bolt-On Pintle Ring or refer to the top of Page 3 for the Bolt-On Demco and Wallace Forge Couplers.

Step 3: Check Height Measurement

- **Align and Insert:** Align the Air Tongue Mount in the channel and insert TWO 5/8"-11 x 4-1/2" bolts in the top and bottom holes (Figure 4).
- **Measure:** Take a measurement from the ground to the bottom of the coupler and ensure the measurement matches the original measurement taken in Step 1.
 - If the measurement from the ground to the bottom of the coupler does not match, move the Air Tongue Mount up or down on the channel based on the measurement you are trying to achieve.
 - Once the measurement is consistent with the original, move on to Step 4.

Step 4: Install Tongue Mount Hitch in Trailer Vertical Channel

- **Insert Bolts:** Insert the remaining TWO 5/8"-11 x 4-1/2" bolts through the Vertical Channel adapter and the Air Tongue Mount Hitch.
- **Add Hardware:** Hand thread FOUR 5/8"-11 Nylock Hex Nuts onto the protruding threads and hand tighten.
- **Torque Tongue Mount Bolts:** Torque the vertical channel bolts to 100 ft-lbs using a



Figure 1: Measure from the ground to the bottom of the trailer coupler

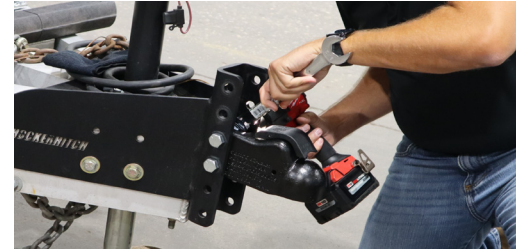


Figure 2: Remove existing coupler from the vertical channel adapter



Figure 3: Installing attachment



Figure 4: Air Tongue Mount inserted and ready to measure



Figure 5: Torque Vertical Channel bolts to 100 ft-lbs

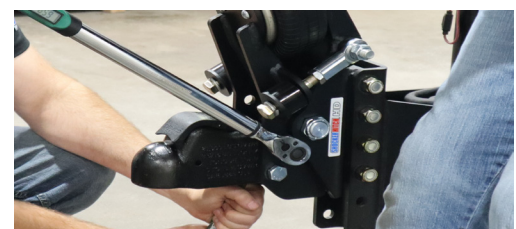


Figure 6: Torque attachment bolts to 100 ft-lbs

INSTALLATION - BOLT-ON AIR TONGUE SQUARE MOUNT

SH-HD4500 | SH-4500

TOOLS REQUIRED

- Impact/ratchet w/ 15/16" socket
- 15/16" wrenches (Qty 2)
- Torque Wrench (capable of 100 ft-lbs)

HARDWARE REQUIRED

- Reuse existing hardware
- Do Not reuse hardware that is bent, damaged, corroded, worn or undersized**

Step 1: Existing Coupler Removal

- **Unbolting:** Remove bolts from the existing coupler with an Impact Driver or ratchet using a 15/16" socket and a 15/16" wrench on the nut.
- **Remove Existing Coupler:** Remove the bolts from the coupler and remove the coupler entirely (Figure 7).

Step 2: Install Air Tongue Mount Hitch

- **Insert Bolts:** Take the existing bolts from the coupler and insert them through the trailer square mount so the threaded end sticks out the front of the trailer (Figure 8).
- **Align and Insert:** Take the Bolt-On Air Tongue Square Mount Hitch and align the holes with the protruding bolts from the trailer. Insert the hitch over the bolts until the plate is flush with the trailer.
- **Add Hardware:** Using the existing nuts, hand thread a nut onto each bolt (Figure 9).
- **Tighten:** Use two 15/16" wrenches to tighten the hardware, one on the bolt head, and one on the nut.

Step 3: Install Coupler on Air Tongue Mount Hitch

- **Install Attachment:** Refer to the bottom of this page for the Bolt-On Pintle Ring or refer to the top of Page 3 for the Bolt-On Demco or Wallace Forge Couplers.
- **Torque Tongue Mount Bolts:** Torque Tongue Mount bolts to 100 ft-lbs with a torque wrench using a 15/16" socket on the nut and a 15/16" wrench on the bolt head.
- **Measure:** Take the following measurements on a level surface:
 - Measure from the ground to the top of the ball on the truck
 - Measure the front and the back of the trailer and adjust if needed to make level
 - Measure from the ground to the bottom of the coupler on the trailer
- **Determine:** If the measurements from the ground to the couplers do not match, adjust the height of the ball on the truck based on the measurement you are trying to achieve.



Figure 7: Remove existing coupler



Figure 8: Bolts inserted through inside of trailer



Figure 9: Hand threaded nuts onto bolts for mounting

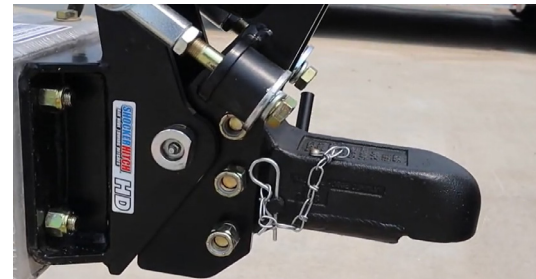


Figure 10: Hand threaded nuts onto bolts for coupler

INSTALLATION - BOLT-ON PINTLE RING

HARDWARE REQUIRED

- 5/8"-11 x 4-1/2" Grade 8 Hex Bolts (Qty 2)
- 5/8-11 Nylock Hex Nuts (Qty 2)

- **Align and Pin:** Align the Bolt-On Pintle Ring with the holes in the Air Tongue Mount and insert TWO 5/8"-11 x 4-1/2" Hex Bolts through the Air Tongue Mount and Pintle Ring. Use the bottom two holes on the Air Tongue Mount for the Pintle. (Figure 11).
- **Add Hardware:** Hand thread TWO 5/8"-11 lock nuts onto the threaded end of the bolt until snug (Figure 12).
- **Torque Bolts:** Torque the bolts to 100 ft-lbs with a torque wrench using a 15/16" socket on the nut and a 15/16" wrench on the bolt head once the Air Tongue Mount hitch has been fully installed and torqued (Figure 13).



Figure 11: Bolt on Pintle pinned in place



Figure 12: Nuts hand threaded onto bolts



Figure 13: Bolts torqued to 100 ft-lbs

INSTALLATION - BOLT-ON DEMCO COUPLER

HARDWARE REQUIRED

• 5/8"-11 x 1-1/2" Grade 8 Hex Bolts (Qty 4) • 5/8-11 Nylock Hex Nuts (Qty 4)

- **Align and Pin:** Align the Bolt-On Demco Coupler attachment with the holes in the Air Tongue Mount and insert FOUR 5/8"-11 x 1-1/2" Hex Bolts - TWO through each side of the Air Tongue Mount. Use the bottom two holes on the Air Tongue Mount for the Demco Coupler (Figure 14).
- **Add Hardware:** Hand thread FOUR 5/8"-11 lock nuts onto the threaded end of the bolt until snug (Figure 15).
- **Torque Bolts:** Torque the bolts to 100 ft-lbs with a torque wrench using a 15/16" socket on the nut and a 15/16" wrench on the bolt head once the Air Tongue Mount hitch has been fully installed and torqued (Figure 16).



Figure 14: Bolts inserted into Demco Coupler

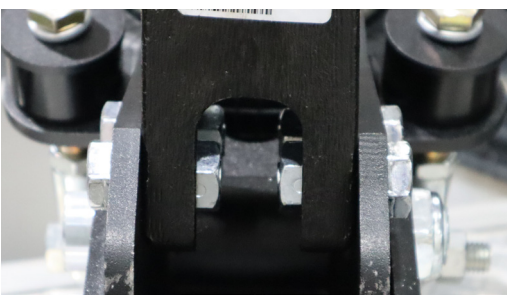


Figure 15: Nuts hand threaded onto bolts

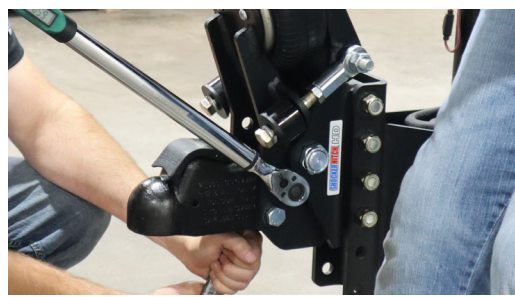


Figure 16: Bolts torqued to 100 ft-lbs

INSTALLATION - BOLT-ON WALLACE FORGE

HARDWARE REQUIRED

• 5/8"-11 x 4-1/2" Grade 8 Hex Bolts (Qty 3) • 5/8-11 Nylock Hex Nuts (Qty 3)

- **Align and Pin:** Align the Bolt-On Wallace Forge attachment with the holes in the Air Tongue Mount and insert THREE 5/8"-11 x 4-1/2" Hex Bolts through the Air Tongue Mount and Wallace Forge Coupler (Figure 17).
- **Add Hardware:** Hand thread TWO 5/8"-11 lock nuts onto the threaded end of the bolt until snug (Figure 18).
- **Torque Bolts:** Torque the bolts to 100 ft-lbs with a torque wrench using a 15/16" socket on the nut and a 15/16" wrench on the bolt head once the Air Tongue Mount hitch has been fully installed and torqued.



Figure 17: Bolts inserted into Wallace Forge Coupler



Figure 18: Nuts hand threaded onto bolts

WEIGHT RATINGS & SAFETY:

Never exceed the lowest-rated component in the complete towing system

The Shocker Hitch Air Tongue Mount is rated up to 25,000 lbs GTW / 2,500 lbs TW for SH-HD4000 and SH-HD4500 models, and 14,000 lbs GTW / 1,400 lbs TW for SH-4000 and SH-4500 models. The lesser rating of the mount used with the Shocker Hitch Air Tongue Mount is the max towing capacity for the hitch. NEVER exceed the towing capacity of the Shocker Hitch Air Tongue Mount or your vehicle.

- W25625-B: Wallace Forge Heavy Duty Ball Coupler | 2-5/16" coupler rated at 25,000 lbs
- W25620-B: Wallace Forge Medium Duty Ball Coupler | 2-5/16" coupler rated at 20,000 lbs
- D15791-81-B: Demco Heavy Duty Ball Coupler | 2-5/16" coupler rated at 21,000 lbs
- P20000-B: Shocker Pintle Ring | 3" pintle ring rated at 20,000 lbs
- D14040-B: Demco Heavy Duty Cast Ball Coupler | 2-5/16" coupler rated at 21,000 lbs
- W20012-B: Wallace Forge Medium Duty Ball Coupler | 2" coupler rated at 12,000 lbs

OPERATION, AIR SETUP & MAINTENANCE

Before Towing:

1. Park the tow vehicle on level ground whenever practical.
2. Confirm the Air Tongue Mount, coupler, ball/pintle connection, safety chains, trailer, tires, and tow vehicle are all v and properly rated for the intended load.
3. Ensure the coupler is fully engaged and locked on the correct hitch ball or approved pintle connection.
4. Before towing, slowly turn the tow vehicle fully in both directions. Verify that the safety chains, breakaway cable, electrical wiring, coupler or Pintle Ring and Air Tongue Mount have adequate clearance without binding, stretching or contacting the trailer.
5. Raise and secure the jack properly and completely.
6. Inspect the Air Tongue Mount, coupler, mounting bolts, air spring bag, and trailer tongue for damage, missing hardware, looseness, cracks or excessive corrosion.
7. Verify that all mounting and coupler fasteners are torqued to the specification in this guide: **100 ft-lbs**

Setting Air Pressure:

1. Load the trailer and secure the cargo.
2. Couple the trailer to the tow vehicle on level ground.
3. Add air to the air spring bag until the black bump stops contact the black painted tabs on the hitch frame, or until the split lock washers are compressed flat.
4. When towing in strong headwinds or unusually demanding conditions, a small pressure increase may improve support and stability.
5. Do not exceed **100 PSI** in the air spring bag. Exceeding this pressure may damage the air spring bag

Important: Do not use air pressure to compensate for an overloaded trailer, inadequate tongue weight, improper trailer loading or an incorrectly rated towing connection.

Routine Maintenance Schedule:

Step 1: Lubrication Schedule

- **Coupler:** Lubricate the coupler and hitch ball before each hook-up to reduce friction, wear, and noise. Clean dirt, rust, and old contaminated grease from hitch ball after use.
- **Main Pivot Bolt:** Apply grease through the grease zerk located on the main pivot bolt. Grease regularly to reduce pivot wear and maintain smooth movement of the Air Tongue Mount.
- **Frequency:** Lubricate all applicable grease points every 2-3 months, or more often in heavy-use, off-road, wet, or dusty conditions

Step 2: Air Spring Inspection

- **Air Spring Bag Condition:** Inspect the rubber bellow for rubbing, cuts, cracking, abrasion, leaks, debris, or loose fittings.
- **Air Pressure:** Check air pressure with the trailer loaded as it will be towed. Do not exceed **100 PSI** in the air spring bag.

Air Tongue Mount with Weight Distribution:

1. Load the trailer and secure the cargo as it will be towed
2. Park the tow vehicle and trailer on level ground
3. Couple the trailer to the tow vehicle
4. Add air to the Air Tongue Mount's air spring bag (follow the Setting Air Pressure guide)
5. Connect the tension and weight distribution spring bars
6. Continue adding air until the desired ride and towing behavior are reached
7. Recheck the tow vehicle and trailer, weight distribution adjustment, and Air Tongue Mount position
8. Verify adequate clearance for the weight distribution bars, brackets, safety chains, breakaway cable, and electrical wiring

Never exceed the weight rating of the any of the components

REPLACEMENT PARTS



SH-204 Shocker air spring bag
Bag - Fits 20K HD Tongue Mount



SH-202-X Shocker Air Spring bag
Bag - Fits 14K Tongue Mount



SH-490 Replacement Pivot Bolt
Kit for Shocker Air Tongue Mount



SH-1170 Replacement Air Tongue
Mount Bump Cushion Kit

ADDITIONAL INFO - SCAN QR CODES



Tongue Mount Installation Guide



Air Pressure Guide



Warranty Registration