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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 the following 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 (Figure 2).
- **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 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 torque wrench with a 15/16" socket on the nut and a 15/16" wrench on the bolt (Figure 5).



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

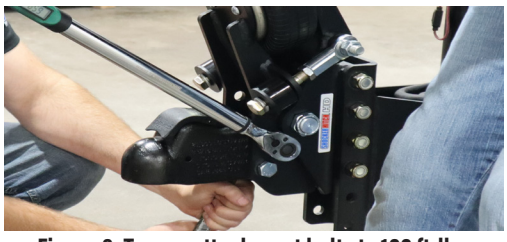


Figure 6: Torque attachment bolts to 100 ft-lbs

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).



Figure 7: Remove existing coupler

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 ends stick out the front of the trailer.
- **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.



Figure 8: Bolts inserted through inside of trailer

Step 3: Install Coupler on Air Tongue Mount Hitch

- **Install Attachment**: Refer to the bottom of Page 2 for the Bolt-On Pintle Ring or the top of Page 3 for the Bolt-On Demco and 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 coupler do not match, adjust the height of the ball on the truck based on the measurement you are trying to achieve.



Figure 9: Hand threaded nuts onto bolts for mounting

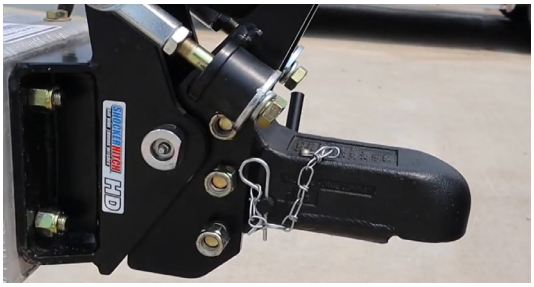


Figure 10: Hand threaded nuts onto bolts for coupler

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 Ringwith 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 using a torque wrench, a 15/16" socket on the nut, and a 15/16" wrench on the bolt head (Figure 13).



Figure 11: Bolt on Pintle pinned in place



Figure 12: Nuts hand threaded onto bolts

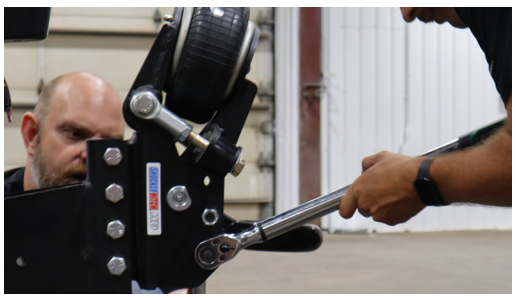


Figure 13: Bolts torqued to 100 ft-lbs

DEMCO COUPLER - HARDWARE-INCLUDED SHOCKER KITS

SH-D15791-81-B (metal handle) / SH-D14040-81-B (cast): FOUR bolts and FOUR locknuts.

Use four 5/8-11 x 1-1/2-inch Grade 5 hex bolts and four 5/8-11 Nylock nuts. Align the coupler in the Air Tongue Mount bottom mounting holes; insert two bolts through each side. Hand-thread all four nuts until snug. Torque to 100 ft-lb using a 15/16-inch socket on the nut and wrench on the bolt. These are attachment bolts, separate from the Grade 8 trailer-channel mounting bolts.



Figure 14: Bolts inserted into Demco Coupler

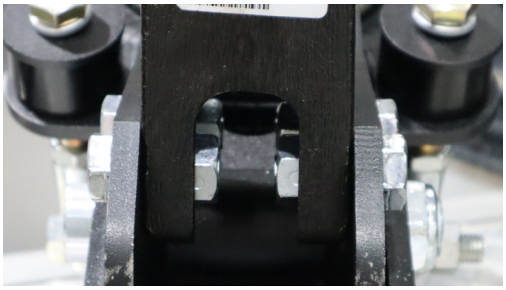


Figure 15: Nuts hand threaded onto bolts

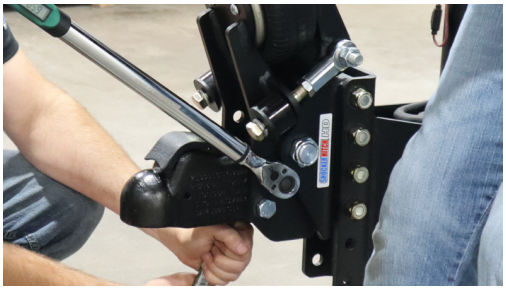


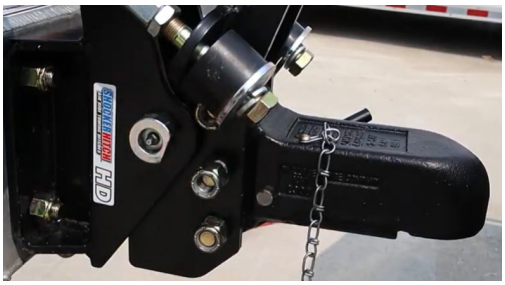
Figure 16: Bolts torqued to 100 ft-lbs

WALLACE FORGE - MATCH THE EXACT SHOCKER KIT

SH-W25625-B - 25K, 2-5/16-inch ball: THREE bolts and THREE locknuts.
SH-W25620-B - 20K, 2-5/16-inch ball: TWO bolts and TWO locknuts.
SH-W20012-B - 12K, 2-inch ball: TWO bolts and TWO locknuts.

For these kits, use the included 5/8-11 x 4-1/2-inch Grade 8 bolts and matching Nylock nuts in the quantity specified above. Align the attachment holes, insert every required bolt and hand-thread all matching nuts. Torque to 100 ft-lb. The photos below show the THREE-bolt 25K configuration; do not apply its bolt count to the 20K or 12K coupler.





PINTLE RING AND OTHER ATTACHMENTS

SH-P20000-B - 20K pintle ring: TWO 5/8-11 x 4-1/2-inch Grade 8 bolts and TWO Nylock nuts. Use the bottom two attachment holes and torque to 100 ft-lb. See page 2 for the illustrated procedure.

Other styles or brands: follow that attachment manufacturer's specified bolt count, size, grade, mounting positions and torque. Verify compatibility with the Air Tongue Mount; do not apply the kit counts or 100 ft-lb torque above to an unspecified attachment.

WEIGHT RATINGS & SAFETY

Towing capacity is limited by the lowest-rated component. Current SH-HD4000 / SH-HD4500 mounts: up to 25,000 lb GTW / 3,500 lb TW. SH-4000 / SH-4500: up to 14,000 lb GTW / 1,400 lb TW. A mount rating does not increase an attachment, vehicle, trailer or legacy-unit rating.

Attachment GTW: SH-W25625-B 25,000 lb; SH-W25620-B 20,000 lb; SH-W20012-B 12,000 lb; SH-D15791-81-B and SH-D14040-81-B 21,000 lb; SH-P20000-B 20,000 lb. Check every component's actual GTW and TW ratings. Kit part numbers above include mounting hardware.

OPERATION, AIR SETUP & MAINTENANCE

Before Towing:

1. Park the tow vehicle on level ground whenever practical.
2. Confirm that 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 any of the components

REPLACEMENT PARTS



SH-204 Shocker Air Spring Bag
Bag - Fits 25K HD Tongue Mount



SH-202-X Shocker Air Spirng
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