

ADJUSTABLE RING MOUNTING SYSTEM (RW2004-302AXK / RW2404-302AXK)



VERY IMPORTANT – DO NOT INSTALL SIMULATORS ON DAMAGED WHEELS.

Before installing, read our Wheel & Tire Inspection Guide (or scan QR Code) to determine if there are any issues with your wheels and tires.

BEFORE INSTALLATION

Inspection: Before installation, inspect all parts for shipping damage. If any of the parts appear damaged or questionable, DO NOT INSTALL! Contact your dealer or our facility for a replacement part or assistance. **Once a product is installed, it cannot be returned because of shipping damage.**

Cleaning: Before installing Simulators we recommend cleaning the wheels so the mounting bracket attaches to a clean surface.

Important: Read and understand all installation instructions prior to installation. If any part of the instruction seems unclear, contact our office for assistance. (Monday – Friday 8am to 4:30pm CST at 800-982-1180 or 847-662-7722)



DIGITAL INSTRUCTIONS

For a digital version of the instructions to be able to zoom in on photos, scan the QR code.

AFTER SIMULATORS ARE INSTALLED

After the Simulators have been installed, they should be inspected regularly, verifying they are tight and secured to the wheel. Every few weeks the simulators should be removed for inspection. **NOTE:** If there is damage to the lip of the simulator, the lip of the wheel may be damaged as well. Make sure to thoroughly inspect the wheel for any damage that could have occurred to the wheel (See our Wheel & Tire Inspection Guide). If any wheel is damaged do not reinstall the simulator until the damaged wheel is repaired or replaced. Also inspect the mounting brackets, make sure all screws and nut connections are tight. Check brackets for excessive wear, hair line cracks, etc. If braided stainless steel air valves are installed, they should be inspected for fraying and excessive wear, as well as secure connections with the rim air valves.

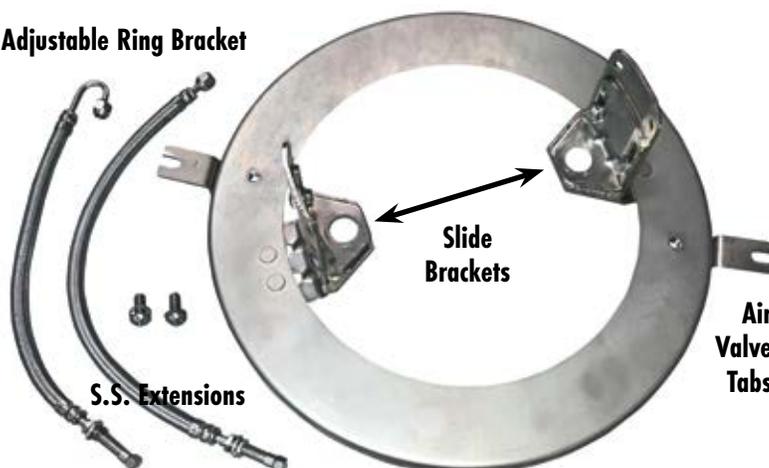
CARE & REQUIRED MAINTENANCE

Use of harsh chemicals and strong acid-based soaps should never be used. On a regular basis we recommend the Simulators be washed front and back with mild automotive car or truck wash soap and water. For added protection and shine it's recommended to periodically wax the polished front side of the simulators.

TOOLS NEEDED

- 1/2" and 7/16" Wrench • Phillips Screwdriver
- 15/16" Socket for 5/8" Studs or 1-1/8" Socket for 3/4" Studs

Adjustable Ring Bracket



PARTS

- Model RWUN2002: Stainless Steel Universal Simulator
- RW2304: Adjustable Ring Bracket with Air Valve Tabs
- RW1258-1S: 14" Straight Stainless Steel Braided Air Valve Extension
- RW1258-1H: 14" U-Shaped Stainless Steel Braided Air Valve Extension
- #159: Stainless Steel Phillips Head Bolts
- #3: Stainless Steel Star Washers



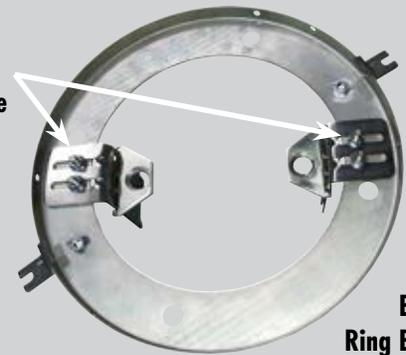
Adjustment Square Included (RW2304T)

Note: After installation, keep Adjustment Square in a safe place for future use when reinstalling bracket and simulator

ADJUSTING BOLT CIRCLE (IF NEEDED)

The mounting ring brackets are preset at the factory to a 7" bolt circle. If this 7" setting does not line up with your axle bolt circle, loosening the nuts on the "BACK" of the mounting ring allows adjustment of the bolt circle from 7 $\frac{1}{4}$ " to minimum of 5 $\frac{1}{4}$ ". Once correct adjustment is determined, retighten all nuts securely.

Loosen these nuts to adjust to accommodate your bolt circle



Back of Ring Bracket

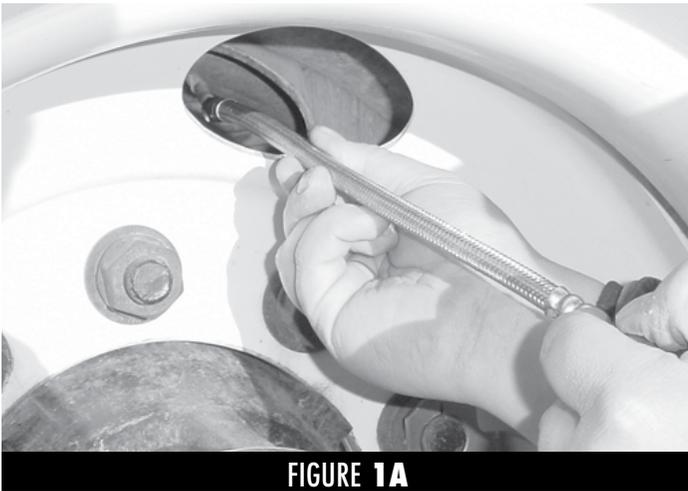


FIGURE 1A

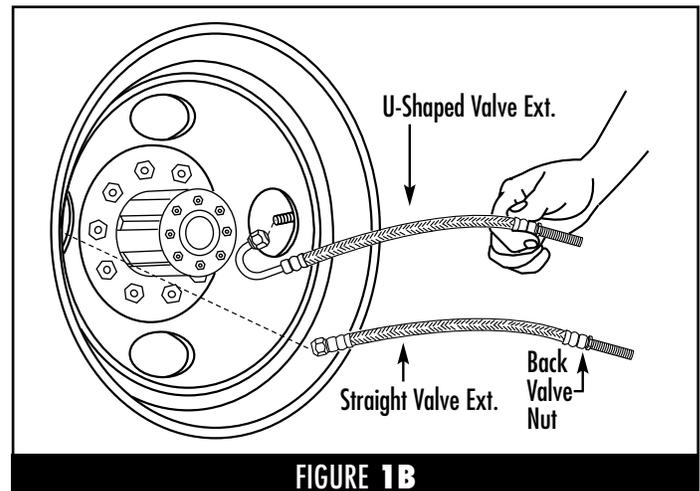


FIGURE 1B

Step 1. Installing Valve Extensions

Make sure to install the S.S. Braided Valve Extensions directly to the wheel air valves. Remove any existing solid valve extensions. Next, attach the air valve extension with the "straight fitting" to inner wheel first. (See Fig. 1A & 1B) This should be installed directly to the wheel air valve stem. **Note:** A small amount of air will escape during installation until valve seal is made.

Once air stops leaking, use a 1/2" wrench to snug hose to valve stem. One turn is all that is required. **The valve seal may be damaged if you overtighten.** Next, attach air valve extension with U-shape end to (outside wheel) valve stem. (See Fig. 1C & 1D) Once air stops leaking, use a 1/2" wrench to snug hose to valve stem. One turn is all that is required. **The valve seal may be damaged if you overtighten.**

After installation, check all fittings to insure there are no leaks.

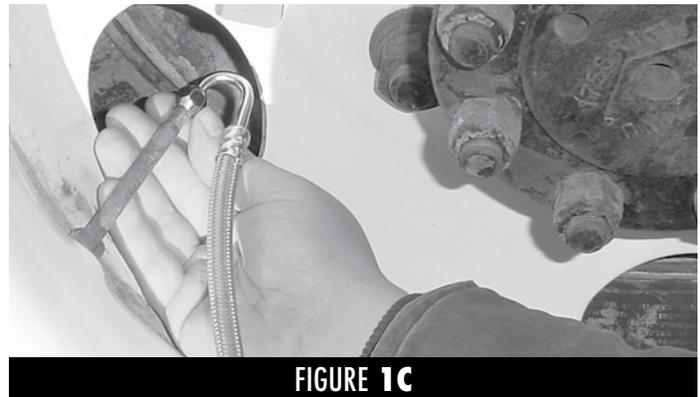


FIGURE 1C

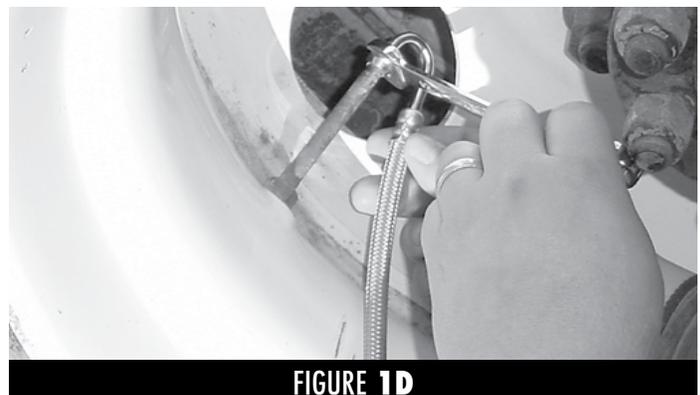


FIGURE 1D

Step 2. Installing Ring Bracket

Before removing any axle nuts, hold Ring Bracket up to axle end and rotate to determine optimal position of Ring Bracket in relation to air valve extensions. (See Figure 2A) Verify that the air valve extensions will reach the air valve tabs without stretching or crimping.

Note: If needed, one of the air valve tabs can be relocated to an alternate position. (See Figure 2C)

Now remove the two axle nuts that you identified above. (See Figure 2B) Place Ring Bracket over axle, so exposed axle studs pass through the holes on the slide brackets. (See Figure 2C)

Replace the two axle nuts and tighten them securely. (See Figure 2D)

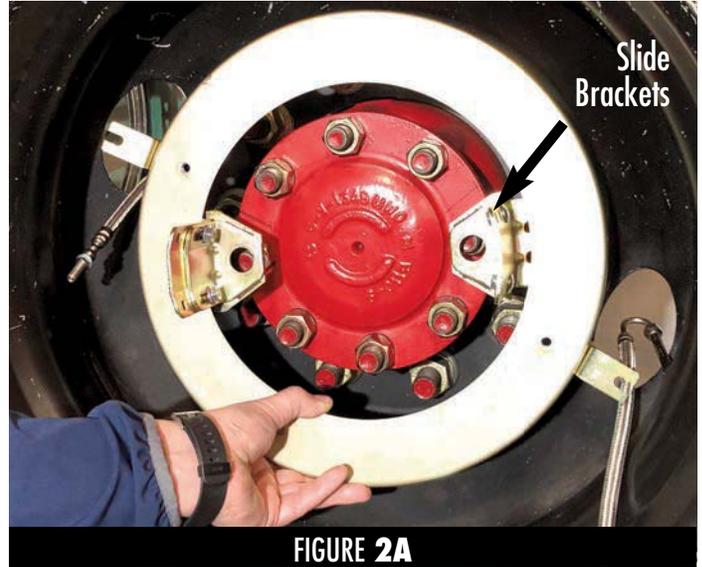


FIGURE 2A

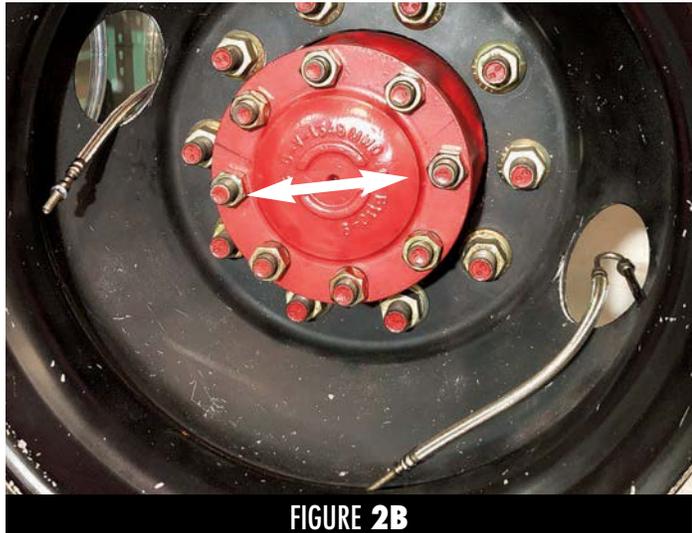


FIGURE 2B

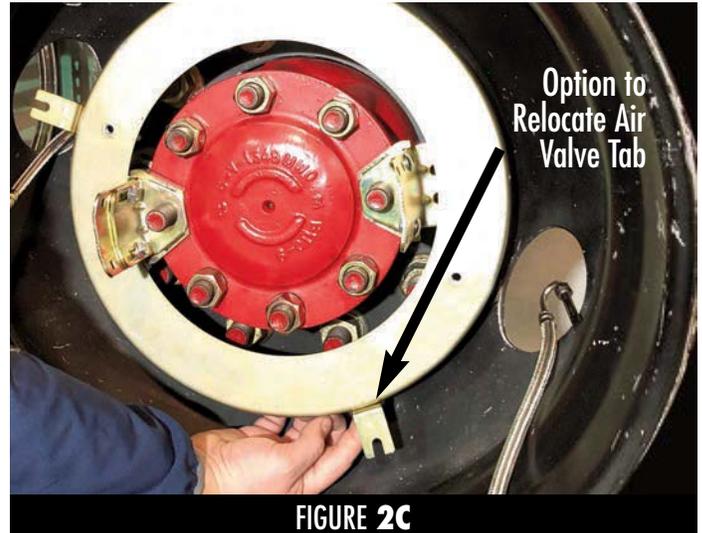


FIGURE 2C



FIGURE 2D

Step 3. Attaching Air Valve Extensions to Air Valve Tabs

Begin by loosening the two nuts on the braided SS air valve extension so they have a space between them. The split lock washer should be on the bottom nut. (See Fig. 3A)

Then place one of the braided SS extensions into the slot of the Air Valve Tab. (See Fig. 3B)

Next using two 7/16" wrenches, tighten the two nuts onto the Air Valve Tab. (See Fig. 3C)

Repeat process on opposite Air Valve Tab. (See Figure 3D)

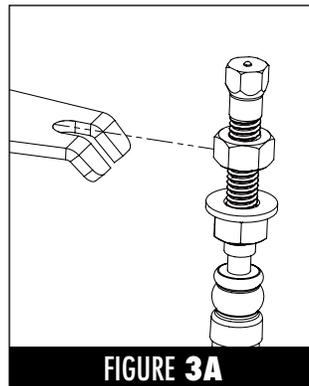


FIGURE 3A

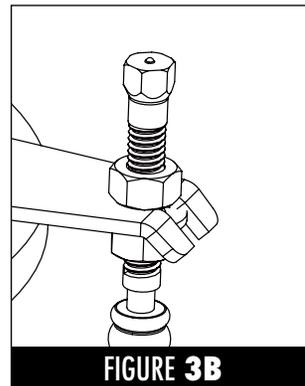


FIGURE 3B

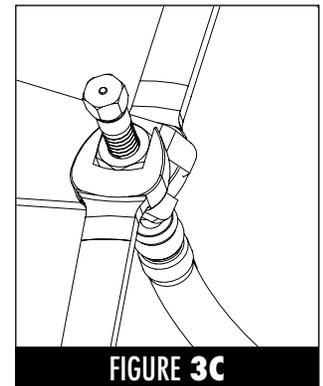


FIGURE 3C

Step 4. Adjusting Height of Slide Bracket (If needed)

The height of the slide brackets can be adjusted to increase or decrease the height of the ring bracket. Simply loosen, remove and reposition the two keps nut in the sides of each bracket to the set of holes the best accommodate your wheel. (See Figs. 4A & 4B) **Note:** You will only need to perform this step if the square in Step 5 will not level to the wheel rim and ring bracket.

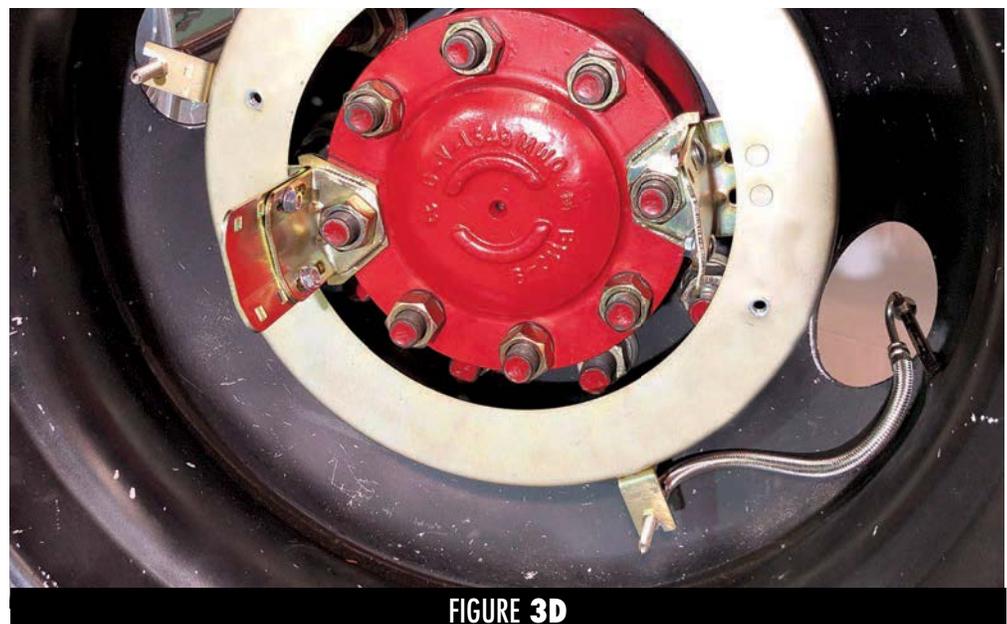


FIGURE 3D



FIGURE 4A

The height of the slide brackets can be adjusted to increase or decrease the height of the ring bracket.



FIGURE 4B



FIGURE 5B



FIGURE 5C



FIGURE 5D

Note: Using the Adjustment Square properly will provide approximately a 3/16" gap between the Ring Bracket top plate and the back of the 7" deep wheel simulator (as described in Step 6).



FIGURE 5E

Step 5. Adjusting Ring Bracket Height

The slide brackets are factory shipped semi-tight. If needed, loosen the keps nuts slightly to enable the slide brackets to move in the slots. (See Fig. 5A)

Using the square provided, rest the narrow end of the square against the wheel rim and the notched end of the square against the face and the inner radius of the Ring Bracket. (Extended part of notch should set along the inner edge of the ring bracket as shown in photos above.) Position the square on both sides of slide brackets, then all around Ring Bracket. Adjust Ring Bracket up or down until entire Ring Bracket is level with square. (See Figures 5B, 5C, 5D, and 5E) Then tighten the two (2) keps nuts on each bracket securely. (See Fig. 5F)

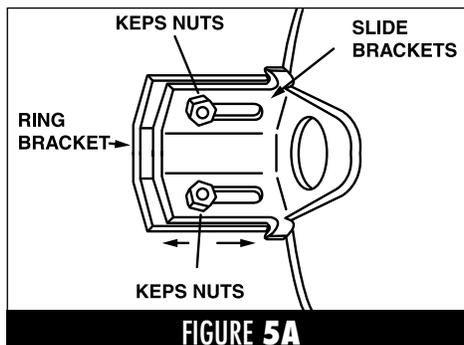


FIGURE 5A



FIGURE 5F

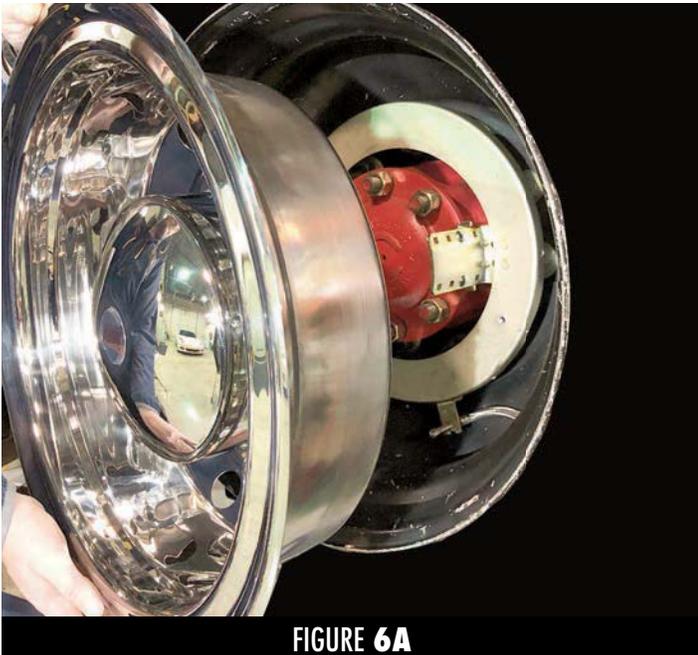


FIGURE 6A



FIGURE 6B

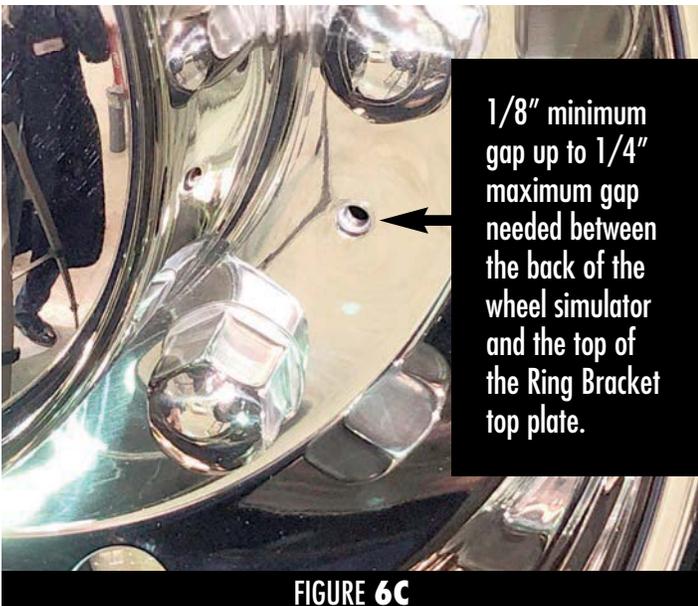


FIGURE 6C

1/8" minimum gap up to 1/4" maximum gap needed between the back of the wheel simulator and the top of the Ring Bracket top plate.



FIGURE 6D

Step 6. Installing the Simulator onto the Brackets

Align holes in Simulator with the holes in the bracket. Make sure the simulator is held up and evenly spaced around the rim edge. Simulator should seat on the edge of the wheel rim with no gaps between the edge of the wheel rim and the wheel simulator (See Figures 6A & 6B) **Note:** As you look through both of the bolt holes, it is very important that there is a gap (1/8" minimum gap up to 1/4" maximum gap) between the back of the wheel simulator and the top of the Ring Bracket top plate. (See Figure 6C) You may need to adjust bracket top plate to achieve the desired gap.

Thread the two bolts with star washers (provided) through Simulator and into bracket holes. Then use a phillips head screwdriver to securely tighten the bolts. (See Figure 6D)

Repeat for the remaining wheel and you're finished.

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