

**INSTALLATION OF RW2004-301AXK REAR 22.5" AND RW2404-301AXK REAR 24.5" WHEEL SIMULATORS WITH WEDGE LOCK BRACKETS FOR 33MM HUB PILOTED LUG NUTS** Page 1**INSPECTION & RECOMMENDED CLEANING**

Inspect all parts for shipping damage before installation. 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.

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

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

**AFTER SIMULATORS HAVE BEEN 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, thoroughly cleaned; and an inspection of the wheels, Simulators and mounting brackets should be performed. 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**

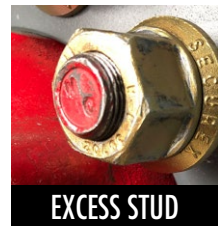
Use of harsh chemicals and strong acid based soaps should never be used. On a regular bases we recommend the Simulators be washed with mild automotive car or truck wash soap and water.

**TOOLS NEEDED:**

7/16" Socket/Wrench, Philips Head Screwdriver, 1/2" Wrench for braided valve extensions

**BEFORE YOU BEGIN**

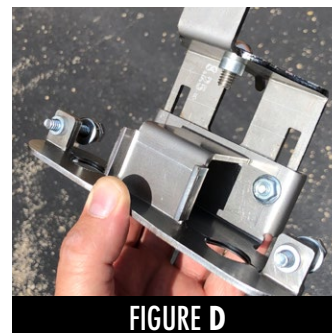
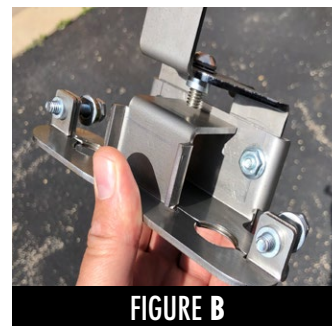
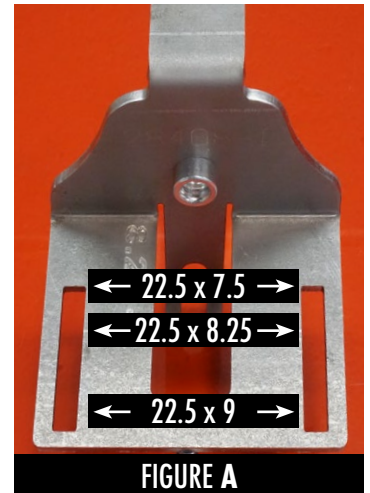
There Is **No Need** To Remove Any Lug Nuts For Installation. Hub Piloted wheels must have a minimum of 1/4" of excess stud sticking out past the wheel lug nuts.

**SETTING BRACKET DEPTH**

Brackets typically come preassembled and are set in the Center Position for 22.5 x 8.25 Wheels. If you need to adjust for wheel size and set bracket height accordingly:

- 22.5 x 7.5 — Lowest Position (Figures A & B)
- 22.5 x 8.25 — Center Position (Figure A & C)
- 22.5 x 9 — Highest Position (Figures A & D)

Then securely tighten the two nuts on the bracket.

**2 WHEEL KIT INCLUDES:**

(4) Wedge Lock Brackets (RW22301)  
and All Hardware



*Continued on page 2*

## Step 1. Installing Air Valve Extensions (Optional)

If you are using SS Braided Air Valve Extensions, begin by removing the valve caps off the wheel valves. Then install the straight SS Braided Extension onto the inner wheel air valve. (See Fig. 1A) **Note:** Make sure to install the SS Braided Valve Extensions directly to the wheel air valves. Remove any existing solid valve extensions. **Note:** A small amount of air will escape during installation until valve seal is made. Once the air stops leaking, a 1/2" wrench may be used to snug the extension to the valve stem. One full turn is all that is required. (**Important:** The valve seal may be damaged if you over tighten.) Next, attach the air valve extension with the U shape end to the (outside wheel) valve stem. After installation, check all fittings to insure there are no leaks. (See Figs. 1B & 1C). **Note:** See Fig. 1D for final position of Wedge Lock Brackets and Air Valve Extensions.



FIGURE 1A



FIGURE 1B

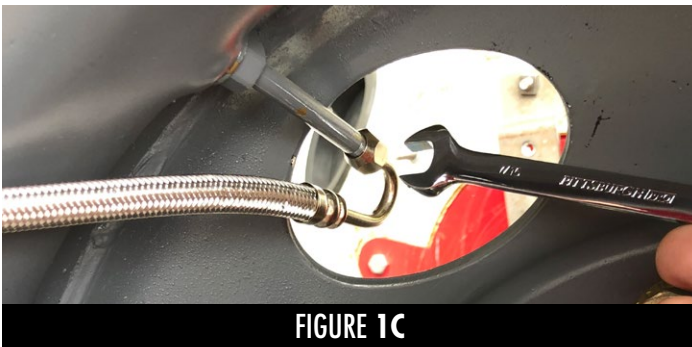


FIGURE 1C

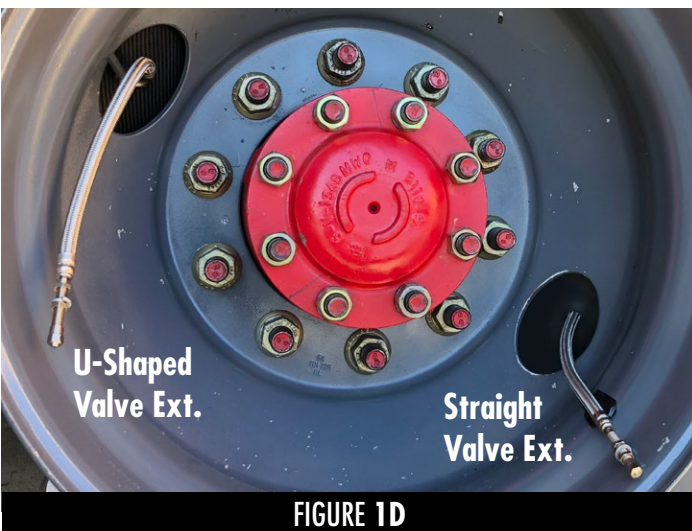
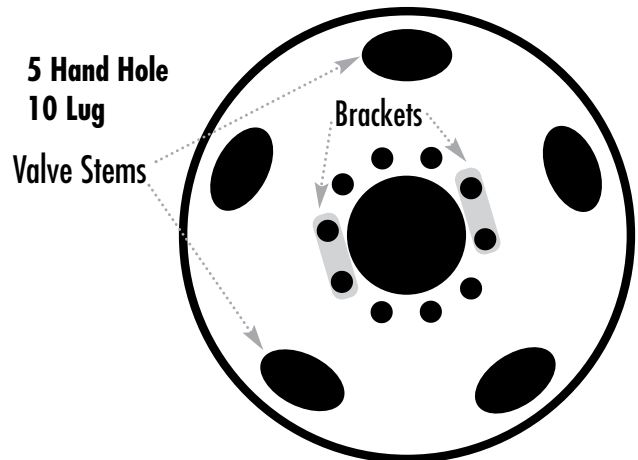
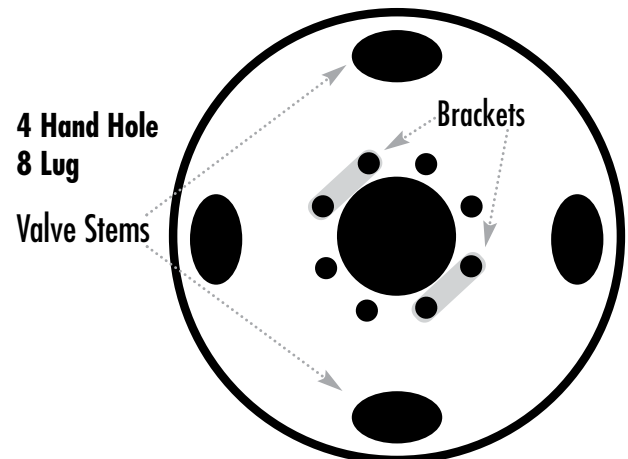
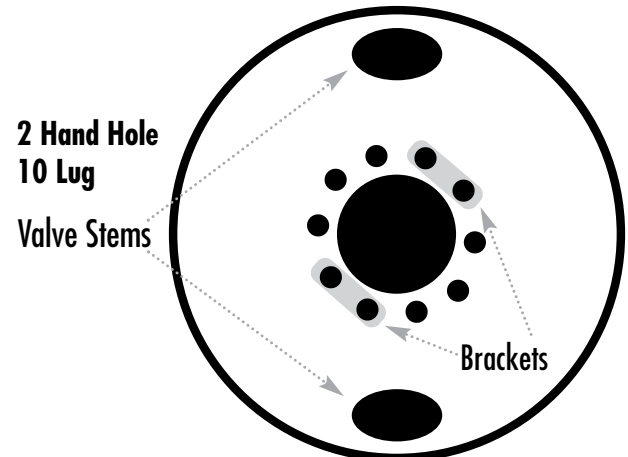


FIGURE 1D

## Step 2. Determine Location for Wedge Lock Brackets.

Before attempting to install the Wedge Lock Brackets and the simulators, look at your wheels to see where the valve stems are located. (See Fig. 2A) Once you locate the valve stems this will then determine which four wheel studs to attach the Wedge Lock Bracket to. (See Fig. 2A) **Note:** The Wedge Lock Brackets should be positioned as show in Figure 1A, this way the air valve tabs on the simulator will not be positioned too close or too far from the valve stems.

FIGURE 2A



Continued on page 3



## Step 3. Positioning Bracket On Hub Piloted Wheels

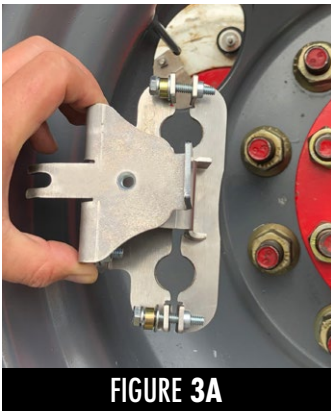


FIGURE 3A

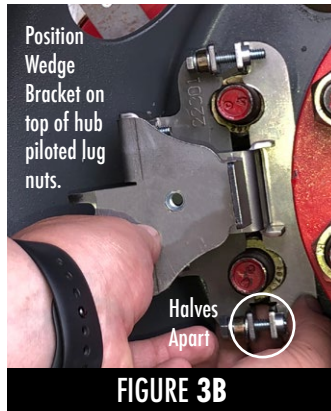


FIGURE 3B

Loosen the 5/16" bolt on the side of the Wedge Lock Bracket. The Hub Piloted Wedge Bracket will slide on top of hub piloted lug nuts (See Figs. 3A & 3B).



FIGURE 4A

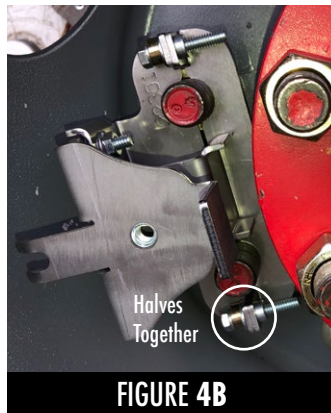


FIGURE 4B

## Step 4. Tightening Bracket On Hub Piloted Wheels

Push and hold against the bracket making sure it is firmly on top of the wheel lug nuts. (See Fig. 4A) Then hand tighten the 5/16" bolts to bring the two halves of the bracket closer together, and wedging itself into the excess thread of the studs.

**NOTE:** One side of the bracket may raise up a little depending what thread of the stud it wedges into, this is normal. Make sure the bracket is flat across the face and wedging into the threads of the wheel studs. Tighten the bolt until both halves are together, securing the bracket tightly. (See Fig. 4B) Repeat procedure for other side directly opposite. (See Fig. 4C)

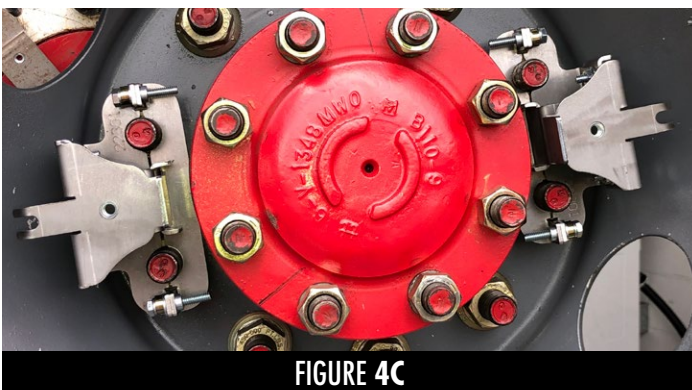


FIGURE 4C

## Step 5. Attaching Air Valve Extensions to Air Valve Tabs (Optional)

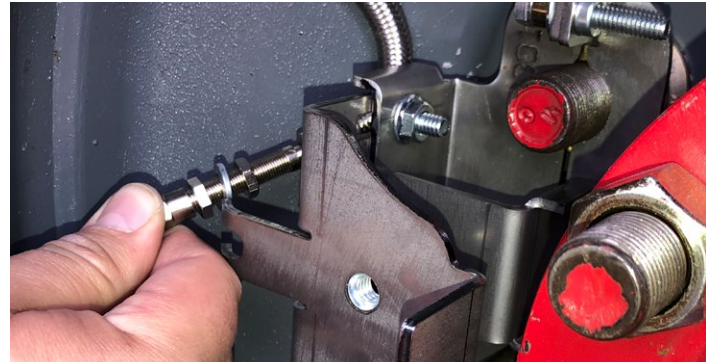


FIGURE 5A

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. 5A) Then place one of the braided SS extensions into the slot of the Air Valve Tab. Next using two 7/16" wrenches, tighten the two nuts onto the Air Valve Tab. (See Figs. 5B & 5C) Repeat process on opposite Air Valve Tab. (5D)



FIGURE 5B

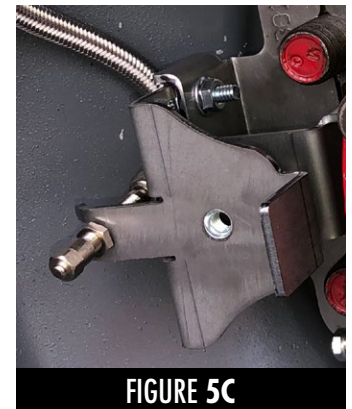


FIGURE 5C

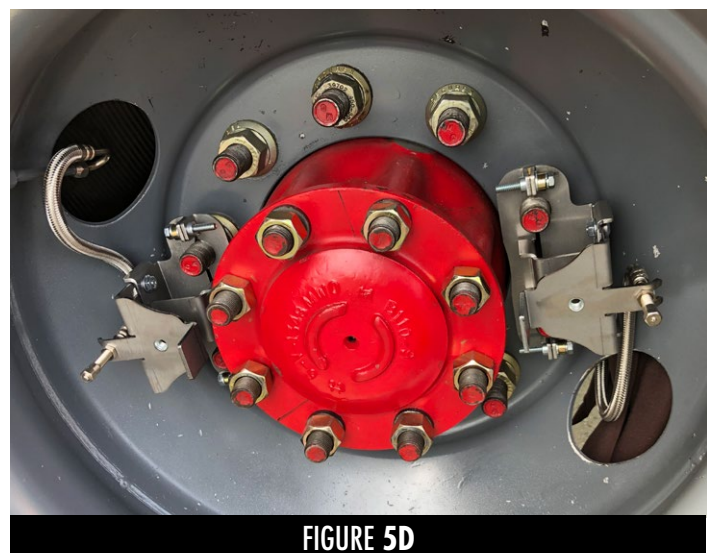
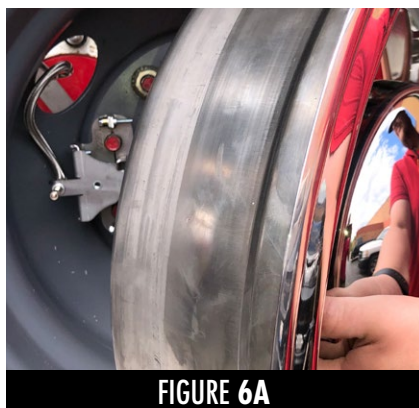
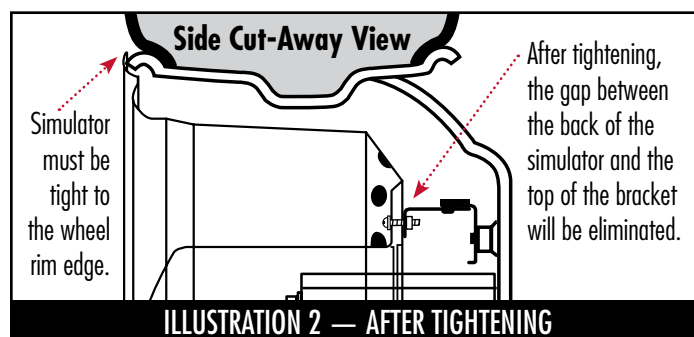
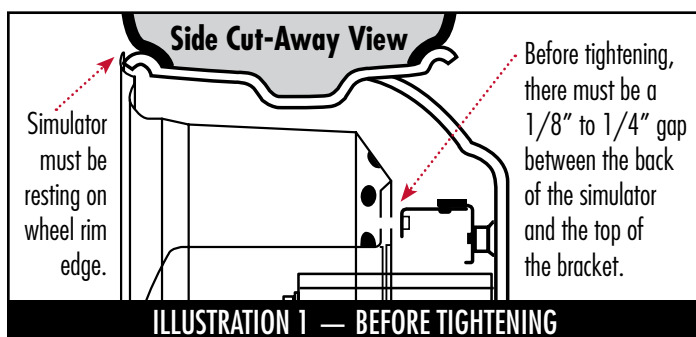


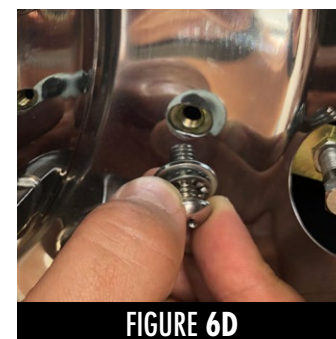
FIGURE 5D



## Step 6 Installing The Simulator Onto The Bracket And Wheel



Hold the simulator up to the wheel and align the holes in Simulator with the holes in the bracket. (See Figs. 6A & 6B)



Thread the two bolts with star washers and regular washers (provided) through Simulator and into bracket holes. (See Fig. 6C & 6D) Now make sure the simulator is held up and evenly spaced around the rim edge. Then use a phillips head screwdriver to securely tighten the bolts. (See Fig. 6E)

At this point, the simulator must be tight to the rim edge and true and even all the way around the rim edge. (See Fig. 6F) Repeat for the remaining wheel and you're finished.

**IMPORTANT:** We recommend that the wheel simulators are checked and inspected periodically to make sure that they are tight and secure to the wheels. If necessary retighten the mounting bolts.

