

INSTALLATION OF RW2004-300AXK REAR 22.5" AND RW2404-300AXK REAR 24.5" WHEEL SIMULATORS WITH BRIDGE BRACKETS FOR 33MM HUB PILOTED LUG NUTS



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

- 1-1/4" Socket/Wrench
- Phillips Head Screwdriver
- 1/2" Wrench & (2) 7/16" Wrenches for braided valve extensions

2 WHEEL KIT INCLUDES:

(4) Bridge Brackets and All Hardware

Depending on the size of the Wheel Simulator, the Bridge Bracket may look different. All Bridge Brackets install the same way.



Continued on page 2

BEFORE YOU BEGIN—ASSEMBLE BRACKET AND SET BRACKET DEPTH

These adjustable mounting brackets adjust for 3 different wheel sizes 22.5 x 7.50, 22.5 x 8.25, and 22.5 x 9.00. These adjustable brackets typically come preassembled and are set at the factory in the Center Position for 22.5" x 8.25" wheels. However, depending on the height of your 33mm lug nuts the height of these adjustable brackets may need to be adjusted slightly, up or down so you have the proper gap between the back of the simulator and the top of the mounting bracket before tightening. See cut-away illustrations on page 4.

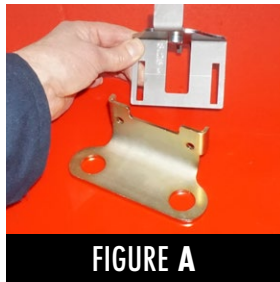


FIGURE A



FIGURE B

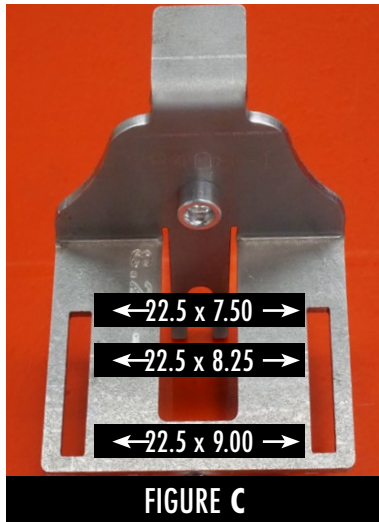


FIGURE C

- 22.5 x 7.50—Lowest Position (Figures C & D)
- 22.5 x 8.25—Center Position (Figure C & E)
- 22.5 x 9.00—Highest Position (Figures C & F)

Then securely tighten the two nuts on the bracket.

33MM LUG NUT HEIGHT



There are various 33mm lug nut heights in the industry. The most common lug nut heights measure 1 1/4" and 1 1/16" tall.

Depending on the height of your lug nuts the adjustment of the mounting bracket for these rear simulators may vary. It's very important the simulator when installed properly is tight to the lip of the rim, and does not have any movement.



FIG. D 22.5 X 7.5—LOWEST POSITION

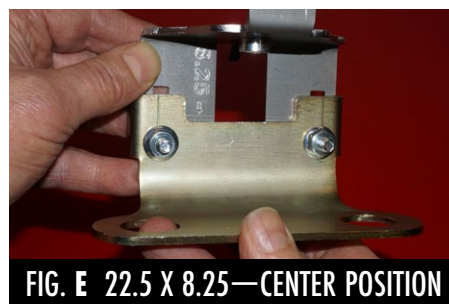


FIG. E 22.5 X 8.25—CENTER POSITION

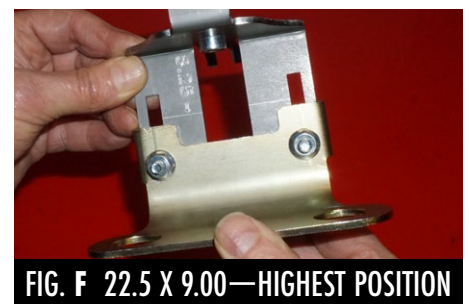


FIG. F 22.5 X 9.00—HIGHEST POSITION

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.

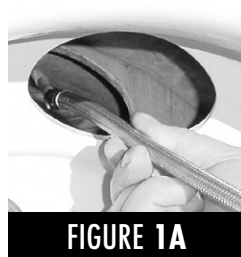


FIGURE 1A

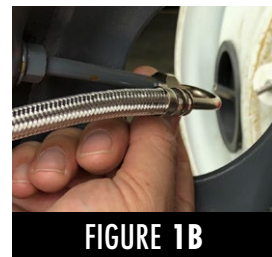


FIGURE 1B

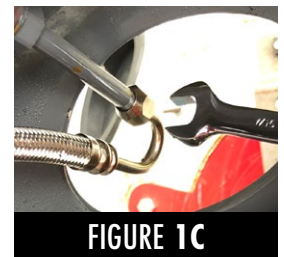


FIGURE 1C

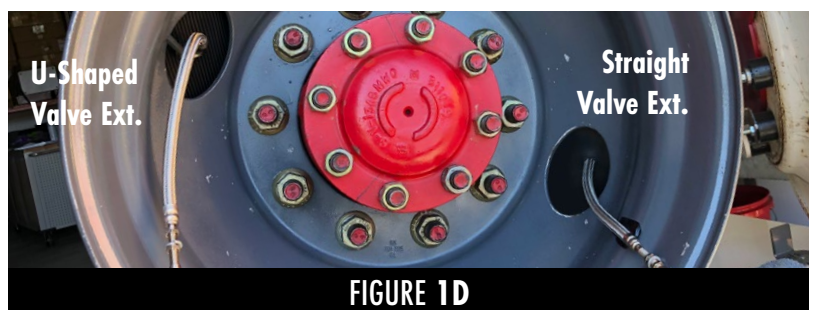
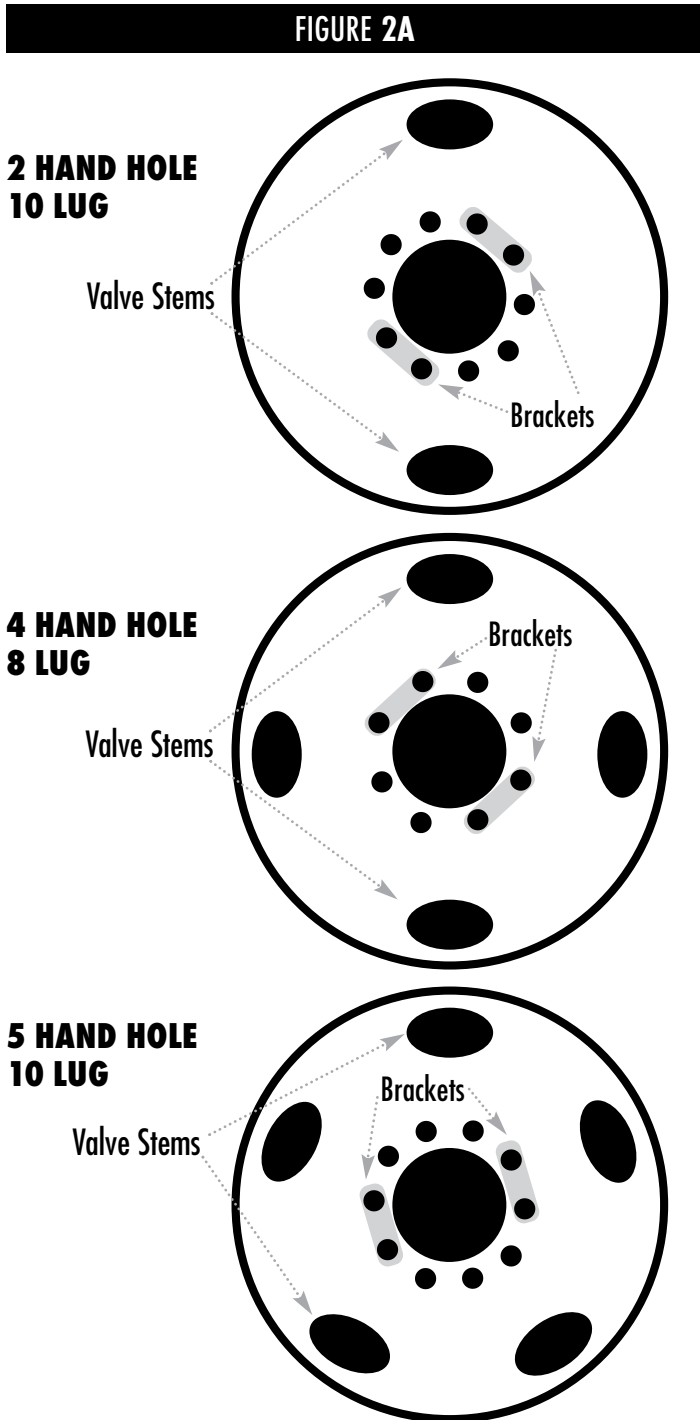


FIGURE 1D

STEP 2. DETERMINE LOCATION FOR BRIDGE BRACKETS

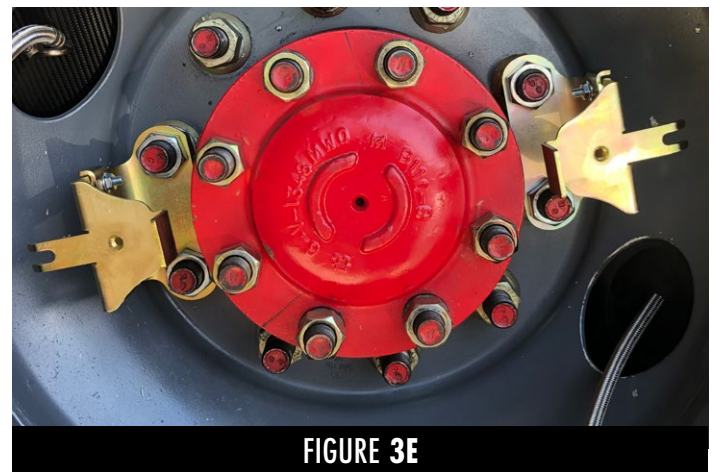
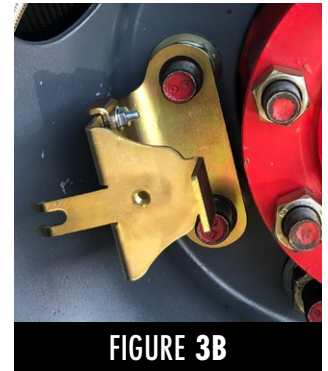
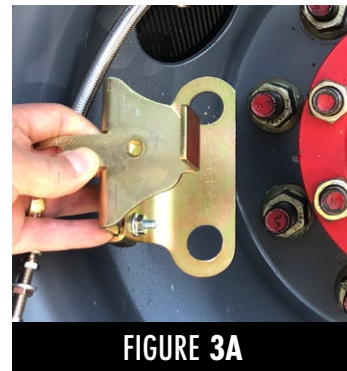
Before attempting to install the Bridge Brackets and the simulators, look at your wheels to see where the valve stems are located. (See Fig. 2A) Once you locate the valve stems this will then determine which four wheel studs to attach the Bridge Bracket to. (See Fig. 2A) **NOTE:** The Bridge Brackets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



STEP 3. INSTALLING THE BRIDGE BRACKETS

Place each of the rear bridge brackets on top of two lug nuts directly across from each other. If you have installed air valve extensions, position brackets so extensions will reach air valve tab on bracket. (See Figs. 3A & 3B)

IMPORTANT: Position brackets as shown with air valve tabs facing out toward the wheel. Next, thread two jam nuts over each of the brackets onto the wheel studs. (See Fig. 3C) Tighten all four jam nuts securely with a 1-1/4" socket. (See Fig. 3D)



STEP 4: ATTACHING AIR VALVE EXTENTIONS TO AIR VALVE TABS (OPTIONAL)

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. 4A) Then place one of the braided SS extensions into the slot of the Air Valve Tab. (See Fig. 4B) Next using two 7/16" wrenches, tighten the two nuts onto the Air Valve Tab. (See Fig. 4C) Repeat process on opposite Air Valve Tab. (See Fig. 4D)



FIGURE 4A

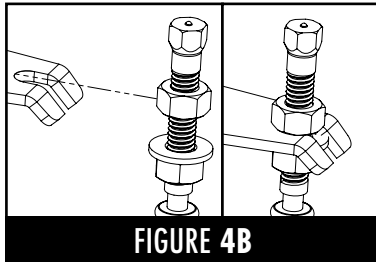


FIGURE 4B

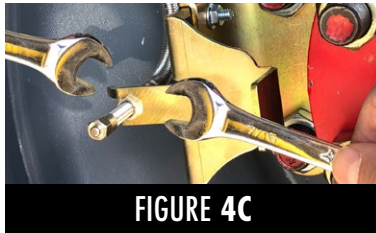


FIGURE 4C

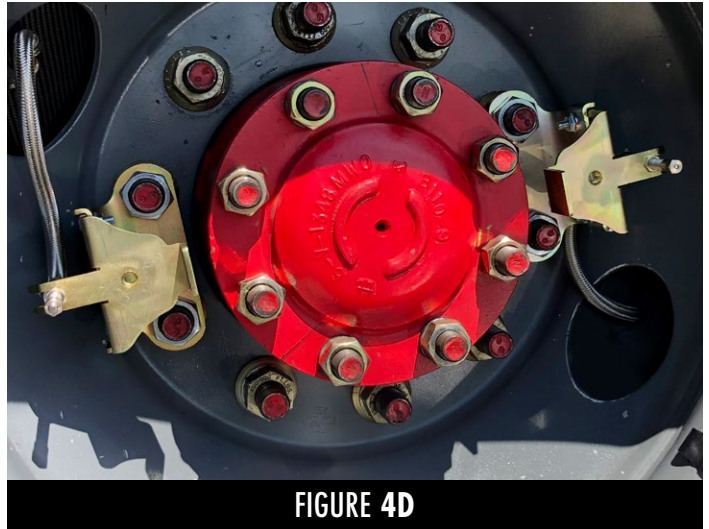


FIGURE 4D

STEP 5: 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 Fig. 5A) Continue Step 5 on next page.

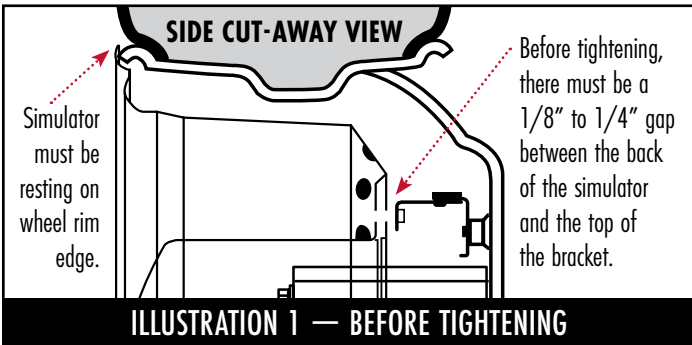


ILLUSTRATION 1 — BEFORE TIGHTENING

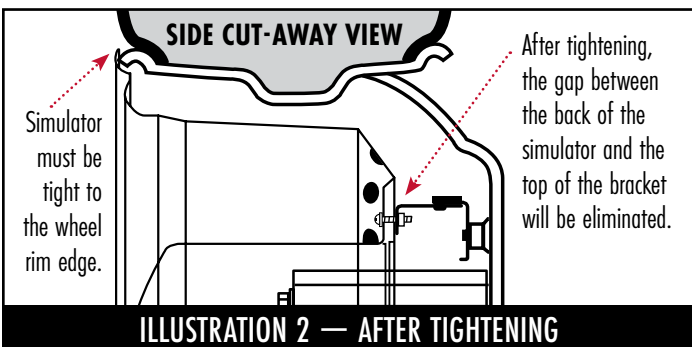


ILLUSTRATION 2 — AFTER TIGHTENING



FIGURE 5A

STEP 5: INSTALLING THE SIMULATOR ONTO THE BRACKET AND WHEEL CONTINUED

Thread the Philips head screws with star washers (provided) through Simulator and into the threaded bracket holes. (5B & 5C) 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 screws. (See Fig. 5D) **IMPORTANT:** Refer to cut-away illustrations when tightening. At this point, the simulator must be tight to the rim edge and true and even all the way around the rim edge. Repeat for the remaining wheel and you're finished. (5E)

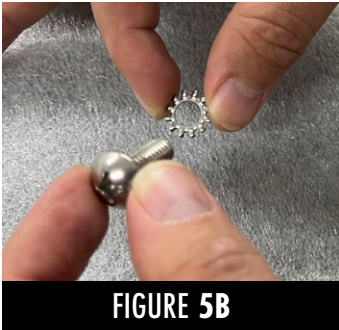


FIGURE 5B



FIGURE 5C

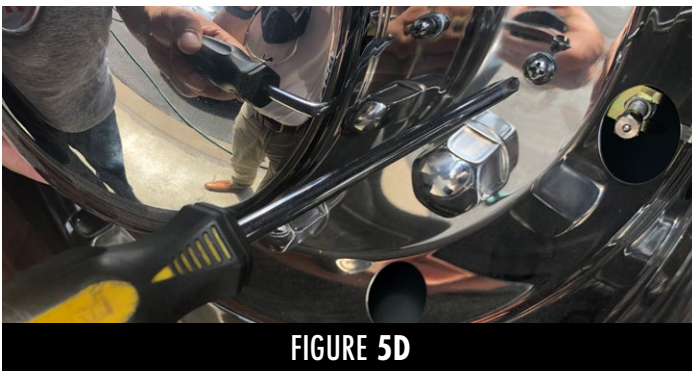


FIGURE 5D

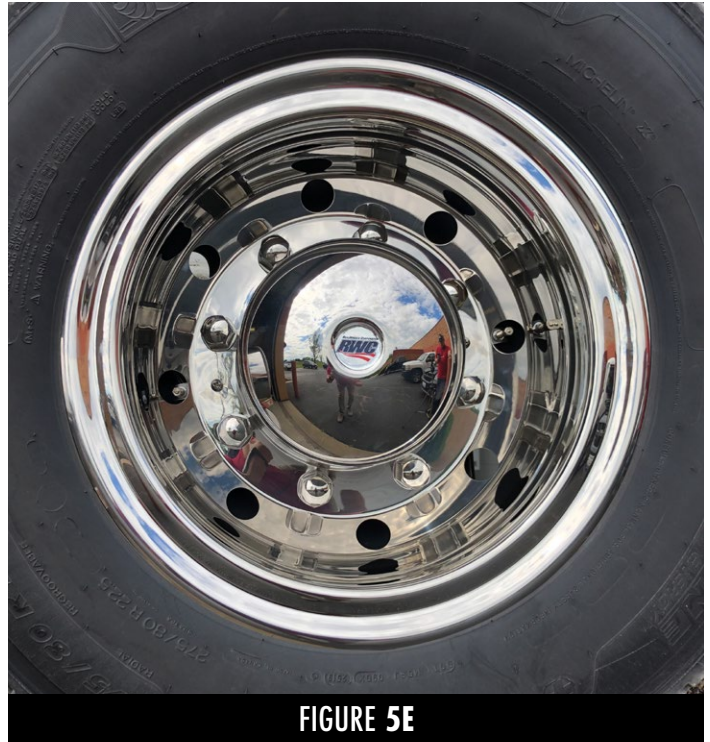


FIGURE 5E