

**VERY IMPORTANT!** Read And Understand These Steps Before Installation.

## REAR WHEEL SIMULATORS WITH ADJUSTABLE REAR BRACKETS FOR 16", 17.5", 19.5" IMPORT TRUCK WHEELS

#### **INSPECTION & RECOMMENDED CLEANING**

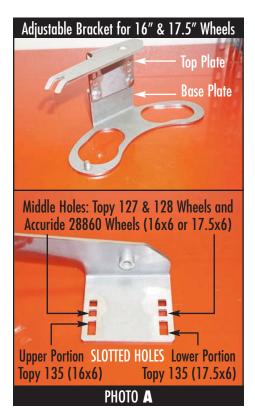
- Inspect all parts for shipping damage before installation. If any of the parts
  appear damaged or questionable, DO NOT INSTALL! Contact your dealer or our
  facility for a replacement part or assistance. Once a product is installed,
  it cannot be returned because of shipping damage.
- Before installing 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 through Friday 8am to 4:30pm CST at
  800-982-1180 or 847-662-7722.

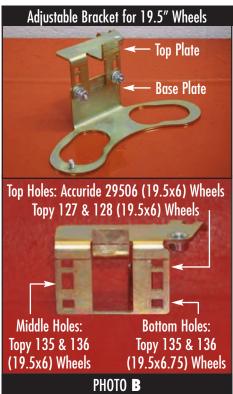
#### AFTER SIMULATORS HAVE BEEN INSTALLED

• 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 preformed. 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 with mild automotive car or truck wash soap and water.





**Note:** Your bracket design may differ slightly from photos shown at left.

**Note:** Most of our mounting brackets have the bracket part number etched into the bracket. Please refer to the number etched into the bracket for wheel simulator reference and bracket replacements.

**Note:** The Adjustable Bracket for 16" & 17.5" Wheels is shown in Photo A. The 19.5" bracket is shown in Photo B. Before assembling, identify the proper hole position for your wheels. (See Photos A and B). These square hole patterns are very close setting to the majority of Japanese wheels. However depending on the vintage of the vehicle, some sizes may vary. Despite some of these variations and whatever setting you use, it is very important that there is an 1/8" minimum gap between the back of the wheel simulator where it attaches and the top of the bracket top plate.



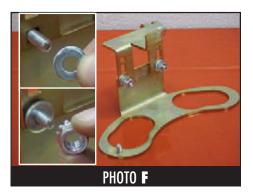
### **Bracket Assembly**

Once you've determined the proper holes to use, position the top plate (See Photo C) to the front of the base.



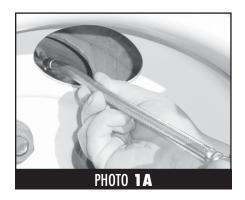


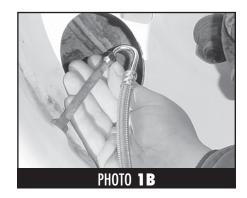
Insert the bolts provided. For the 16" and 17.5" Wheel Bracket, insert the bolts through the proper holes in the front of the bracket top plate and through holes in the base plate. (See Photo D) For the 19.5" Wheel Bracket, insert the bolts through the back of the bracket base plate and through the proper corresponding holes in the top plate. (See Photo E).

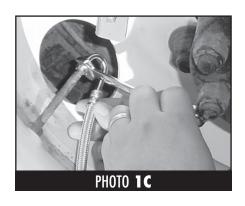


Securely tighten the two bolts with the nuts and washers provided (See Photo F).

Continued on next page







### **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 Photo 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 shaped end to the (outside wheel) valve stem and tighten. (See Photos 1B and 1C). After installation, check all fittings to insure there are no leaks.







**Note**: If you are using Air Valve Extensions, position brackets to allow extensions to comfortably reach integrated air valve tabs on brackets without stretching or crimping. In most cases the built in air valve tab on the bracket will be the one hand hole away from the hand hole with the air valve. (If the built in bracket air valve tab lines up to the hand hole with the air valve, it will be too close. Move the Turn & Lock Bracket to the next set of lug nuts.)

# **Step 2.** Installing Brackets

**Note:** Do not remove lug nuts. Larger openings of bracket base will clear lug nuts. Begin by placing the larger openings of bracket base over the lug nuts. (See Photos 2A & 2B) Then rotate the bracket counter-clockwise until the smaller openings of the bracket base lock under the tapered area of the lug nut. (See Photo 2C)







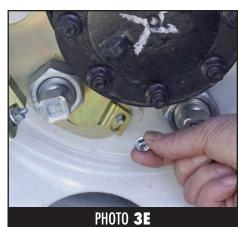
Repeat this process for the for second bracket directly across from the first bracket. Begin by placing the larger openings of bracket base over the lug nuts. (See Photo 2D) Then rotate the bracket counter-clockwise until the smaller openings of the bracket base lock under the tapered area of the lug nut. (See Photos 2D & 2E) **Note:** Photo 2F shows 16" and 17.5" Wheel Brackets for reference.

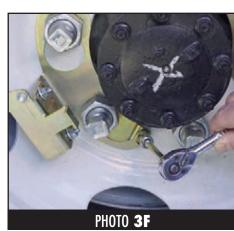






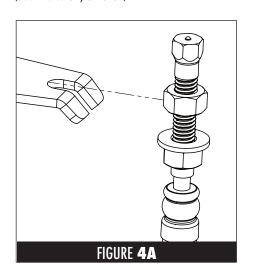


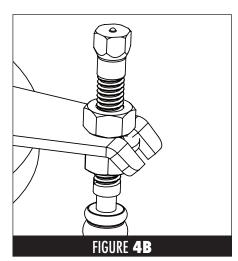


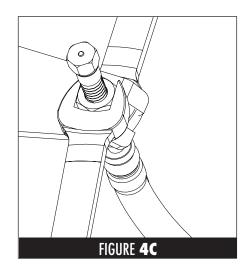


Step 3. Installing Bracket Locking Tabs

Insert one of the bracket locking tabs into the cavity of the bracket base with the treaded post. **Note:** Insert locking tab so tab is flush with bracket base. (See Photo 3A) Thread nut onto the threaded bolt and tighten using a 7/16" socket. (See Photos 3B & 3C) Repeat this process for the other bracket locking tab on the other bracket. (See Photos 3D, 3E & 3F)





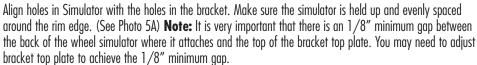


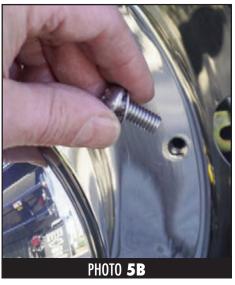
**STEP 4.** Attaching Air Valve Extentions to Air Valve Tabs (Optional)

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.

## **STEP 5.** Installing the Simulator onto the Brackets







Thread bolts with star washers (provided) through Simulator and into bracket holes. (See Photo 5B)



Then use a phillips head screwdriver to securely tighten the bolts. (See Photo 5C)



Repeat for the remaining wheel and you're finished. (See Photo 5D)