



Model CVA Installation Instructions

**WARNING: ALARMS WILL NOT PROPERLY SOUND IF THE GONG IS OBSTRUCTED.
BE SURE TO CHECK FOR THE FOLLOWING:**

- Keep internal and external mechanisms clear of all dirt, snow, materials, etc., which may interfere with its proper operation.
- Keep hammer and spring in adjustment to ensure proper striking.

Application Notes:

- As received, your Model CVA (Construction Vehicle Alarm) will sound **BACKING UP** when mounted on the **RIGHT** side of the vehicle and **FORWARD** when installed on the **LEFT** side.
- The Model CVA will accommodate wheel lug bolt patterns with 4, 8 or 12 lugs with bolt circles from 2 to 13 inches. For 3, 5, 6 and 10 bolt lug patterns use the Universal Mounting Plate adaptor Model CVAUMP.

Installing the Short Mounting Brackets (A) to the existing wheel hub (Fig. 1 and Fig. 2)

- Select & remove four lug nuts on the wheel hub that are spaced 90-degrees apart. See Fig. 1.
- Mount the Short Mounting Brackets (A) following Fig. 1. These brackets will accommodate $\frac{3}{4}$ " diameter lug bolts as is. If you have $\frac{1}{2}$ " lug bolts, use Clamping washer (C) and Filler washer (D). See Fig. 2.
- Replace and hand tighten the lug nuts to lightly hold the Short Mounting Brackets (A) in place.

Installing the Long Mounting Brackets B to the Model CVA (Fig. 1 and Fig. 3)

- Remove the Model CVA gong shell.
- Lightly tighten the four Long Mounting Brackets (B) to the slotted guides in the Model CVA Mounting Plate using the screws (F) nuts (E) and flat washers (G) provided. See Figs. 1 & 3.

NOTE: The Long Mounting Brackets have a long and a short leg to accommodate the lug spacing of many different wheel hubs. Fig. 1 shows the CVA alarm mounted with the Long Mounting Brackets OUTBOARD of the face of the wheel hub. These brackets can also be mounted on the INBOARD face of the wheel hub if the lug spacing is smaller (not shown).

Final assembly, alignment, and test (Fig. 1 and Fig. 5)

- Lightly secure the Long Mounting Brackets of the alarm assembly to the Short Mounting Brackets (installed to the wheel hub detailed above) using the $\frac{3}{4}$ " Screws (F), washers (G) and nuts (E) as shown in Fig. 1.
- Move the mounting plate of the Model CVA alarm so it is visually centered over the wheel hub.
- Confirm the alarm is centered by rotating the wheel of the vehicle. Minimize run-out (wobble) for proper operation.
- Fully tighten all lug nuts, nuts and screws.
- Replace the gong shell and gong shell nut and tighten fully. See Fig. 5 for a complete assembly drawing.
- Confirm the Model CVA operates properly before placing the vehicle in service. (See Adjustments, below).
- Periodically confirm proper operation of the Model CVA on the vehicle.

Adjustments (Fig. 4). Leaf springs are used to allow the hammer to strike the gong and then rebound for a clear ringing sound, and have been pre-adjusted at the factory. However disassembly or prolonged use may make readjustment necessary.

Clanking noises (not a clear ringing gong sound) come from a hammer resting on the gong after striking. The leaf spring is too far toward the gong shell. Use long bent-nosed pliers to gently bend the spring back toward the center. Over adjustment will result in failure to ring. (See Fig. 4).

No ringing is caused when the hammer coming to rest short of gong. The leaf spring is bent too far toward the center. Use long bent-nosed pliers to gently bend the spring away from the center. Over adjustment will result in the clanking sound referred to above.

Fig. 1

Model CVA Attachment Detail
(2 of 4 attachment arms shown)

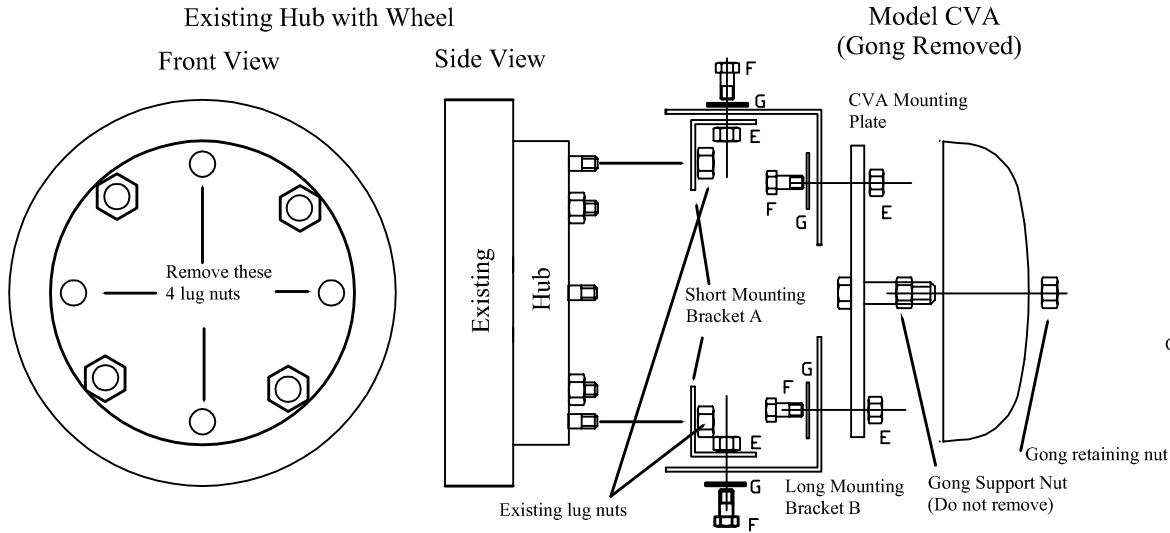


Fig. 2

First mount Wheel Lug Bracket to lug bolts
(Use a Filler Washer D with a Clamping Washer C for 1/2" diameter lug bolts as shown)

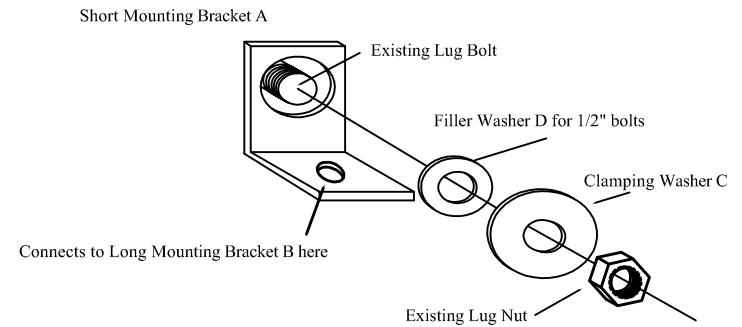


Fig. 3

Connect Long Mounting Brackets B to CVA mounting plate (one shown)

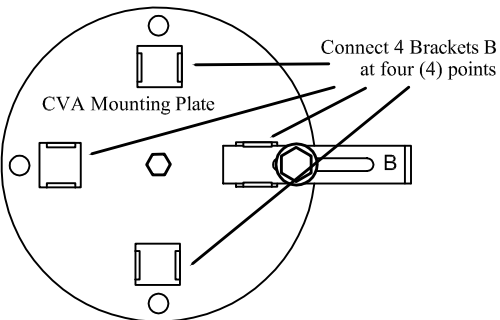


Fig. 4

Hammer Spring Adjustment

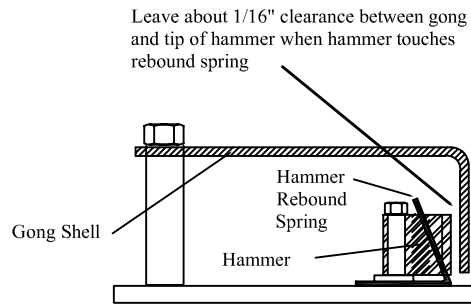
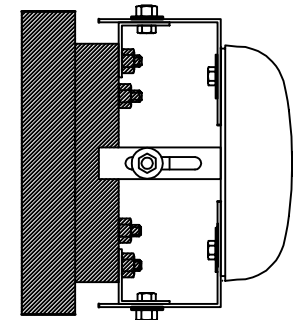


Fig. 5

Completed assembly



Parts List

Part #	Description	QTY	Symbol
100721	Short Mounting Bracket	4	A
100722	Long Mounting Bracket	4	B
320100	Clamping Washer	4	C
320255	'Filler' Washer-1/2" lugs	4	D
310311	1/4 Stop Nut	8	E
300512	1/4 x 3/4 screw	8	F
320216	1/4 x 5/8 Flat Washer	8	G