

## INSTRUCTIONS FOR FIELD INSTALLATION OF JA AND 90 SERIES DAMPERS

TABLE 1 ORIGINAL LENGTH OF COVER	HOLE LOCATION
	The two centermost* louver rows are numbered below counting from left or right side of end of cover.

2 ft.	No. 3 and 4
3 ft.	No. 4 and 5
3 <sup>1</sup> / <sub>2</sub> ft.	No. 5 and 6
4 ft.	No. 6 and 7
5 ft.	No. 8 and 9
6 ft.	No. 10 and 11
7 ft.	No. 11 and 12
8 ft.	No. 13 and 14

\*Information in Table 1 is only for original cover length. If cover is cut, damper must also be cut so that the hole in cover matches lead screw nut in damper.

### PACKING LIST

Damper  
Lead screw  
Knob  
Bushing  
Nut  
Damper hinge: 2 required for dampers 3<sup>1</sup>/<sub>2</sub> ft. and shorter  
3 required for dampers 4ft. and longer  
Hole template

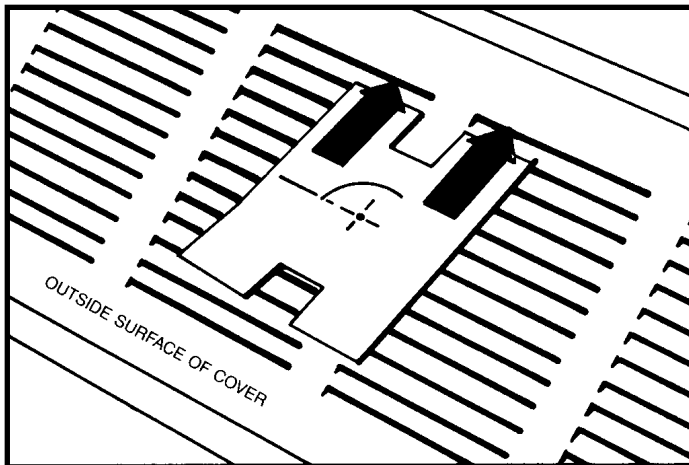


FIGURE 1

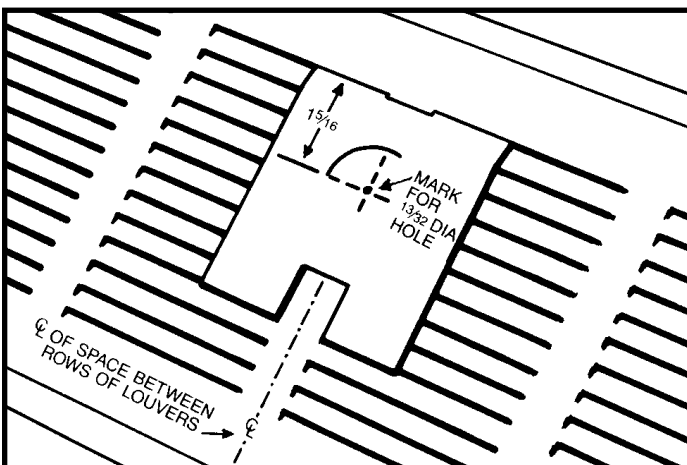


FIGURE 2

### DRILLING INSTRUCTIONS

1. Locate the space between the two centermost\* louver rows on the cover (see Table 1). As a check, this space is approximately equal in distance from the two ends of the cover. The hole must be made EXACTLY in the center of this SMALL SPACE between the two centermost rows of louvers. Find this location using the template supplied or from dimensions given on template and Figure 1.
2. **USE OF HOLE TEMPLATE** Center the template over the two centermost rows of louvers on the side of the cover facing the room. Slide two of the template legs into the uppermost louver openings as shown in Figure 1. The other two template legs should be placed over the two rows of louvers so that only the metal space between these two rows is visible through the slot between the two legs of the template. This is to assure that the template is squared off and so that the mark made on the cover through the hole in the template (A) will be centered between the two rows of louvers. Mark with pencil or scribe (Figure 2).
3. Drill or clean punch a <sup>1</sup>/<sub>32</sub>" diameter hole where marked. If drilling, you will find it easier to drill a smaller hole on that mark. Then open the hole to final <sup>1</sup>/<sub>32</sub>" diameter and deburr hole.

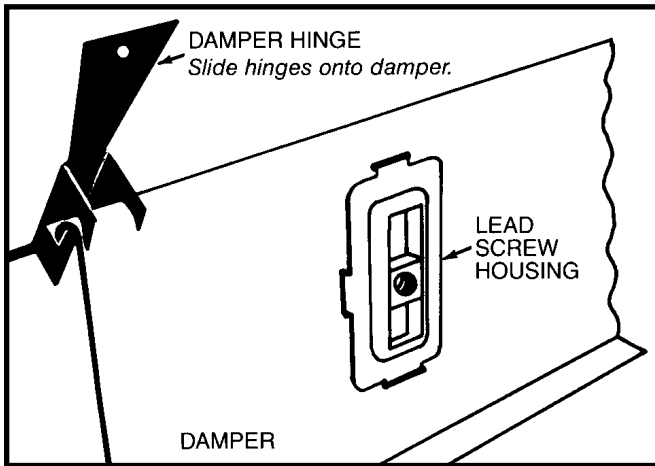


FIGURE 3

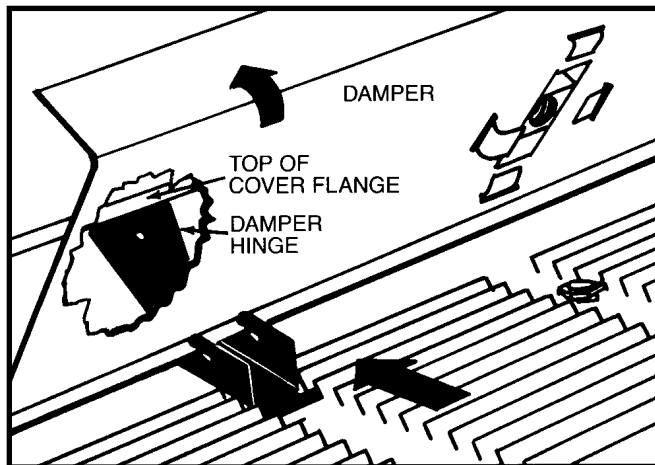


FIGURE 4

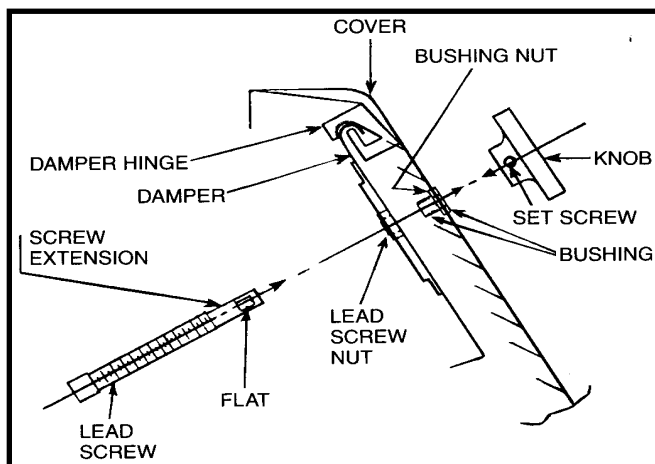


FIGURE 5

## BUSHING INSTALLATION

Install brass bushing in  $\frac{1}{8}$ " diameter hole by sliding threaded end of bushing through the cover from front of cover so that the threaded end of the bushing is entirely on the inside of the cover (see illustration of bushing in Figure 5). Fasten bushing with brass bushing nut supplied and tighten.

## DAMPER HINGE INSTALLATION

Slide damper hinges onto damper as illustrated in Figure 3. Two hinges are supplied with damper for covers  $3\frac{1}{2}$  ft. long and under, and three hinges are supplied for 4 ft. and over.

## ATTACHING DAMPER TO COVER

1. Place cover on workbench or floor with inside of cover up and top of cover away from you against a stop.
2. Center damper over inside of Multi/Pak 90 or JA cover, approximately lining up the lead screw nut housing in the damper over the bushing in cover.
3. Slide one damper hinge so that it lines up between the first and second row of louvers at each end of the cover. The third hinge (if cover is 4 ft. or over) should be lined up between the two centermost rows of louvers.
4. Position top of each damper hinge so that it presses against intersection of top of cover and cover top flange (see Figure 4).
5. Grasp damper firmly and lift as shown in Figure 4 and push damper towards the top of cover while rotating damper just enough to be able to snap bottom of damper hinge into space between the second and third louver blades of the first and second row of louvers.
6. Repeat for other damper hinges.

## DAMPER KNOB AND LEAD SCREW ASSEMBLY INSTRUCTIONS

1. Screw LEAD SCREW into LEAD SCREW NUT about 10 turns clockwise in direction shown.
2. Line up LEAD SCREW with BUSHING hole by sliding DAMPER left or right.
3. Swing DAMPER toward COVER and guide LEAD SCREW through BUSHING hole until beginning of SCREW thread is against BUSHING and SCREW EXTENSION protrudes through front of COVER. Hold in place and proceed to step 4.
4. Place KNOB onto SCREW EXTENSION and line up Allen head SET SCREW in KNOB with FLAT of SCREW EXTENSION and tighten set screw with an Allen wrench.