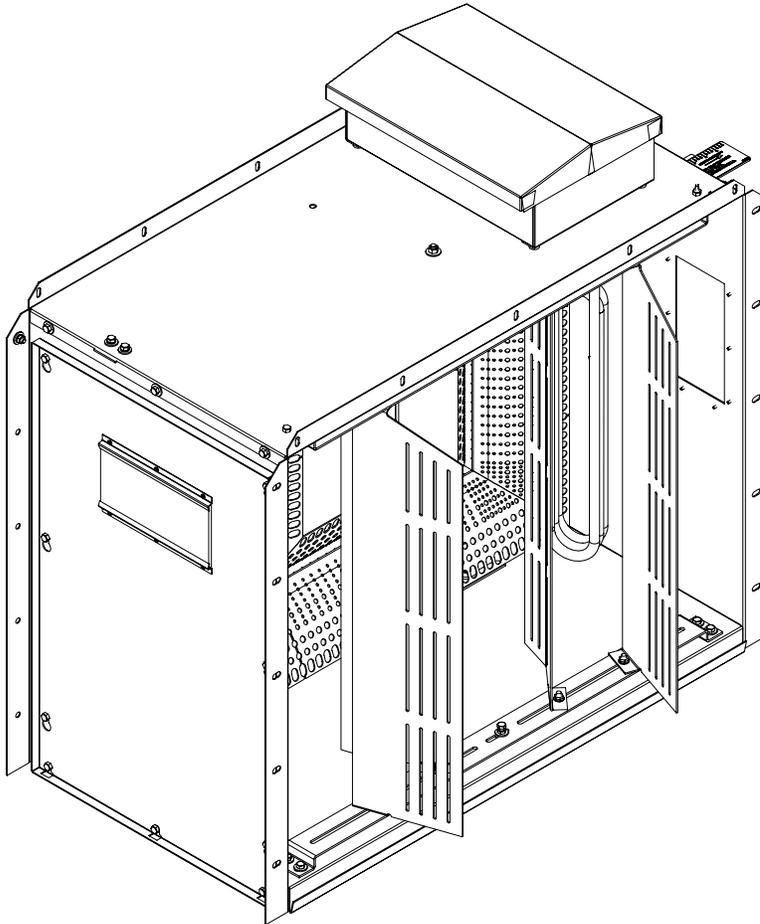


MAXX HEATER VANE KIT 423-409-001A



NOTE:
Also included but not
shown are baffles for
the transition.

The MAXX Heater Vane Kit is used in Shivers MAXX Heaters (691 series) to help reduce heat variations in the drying bin plenum.



DANGER

DISCONNECT AND LOCK OUT ALL POWER
TO THE GRAIN DRYING SYSTEM BEFORE
BEGINNING INSTALLATION.

SHIVERS MANUFACTURING INC.
614 W English Street
Corydon, IA 50060
Ph. (641)872-1005 ** Fax (641)872-1593
www.shivers.com

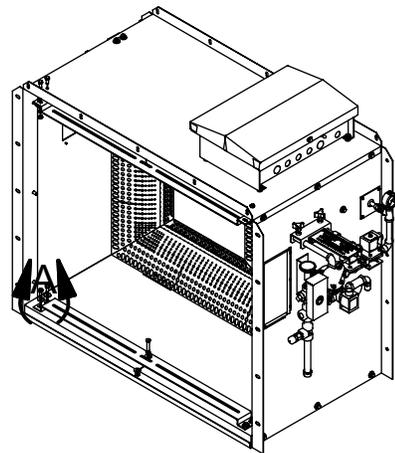
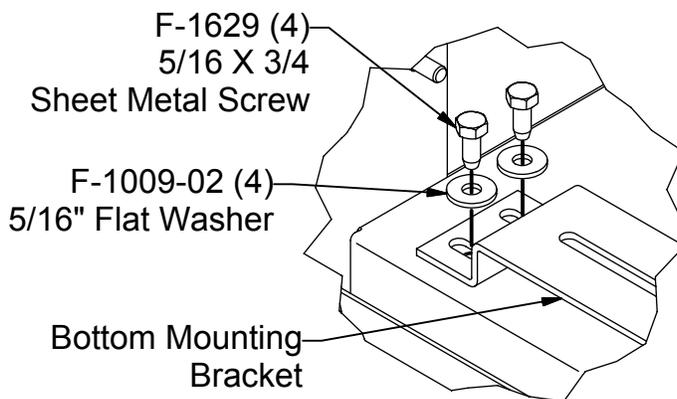
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9/23/13

INSTALLING VANE KIT INTO BURNER

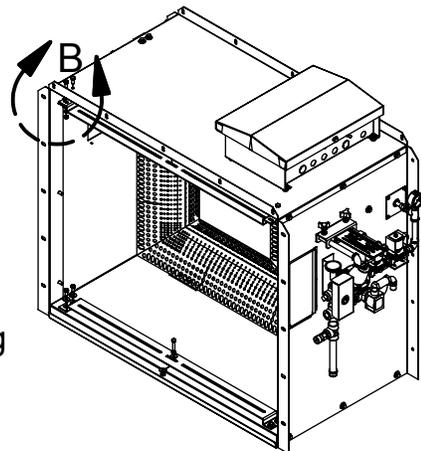
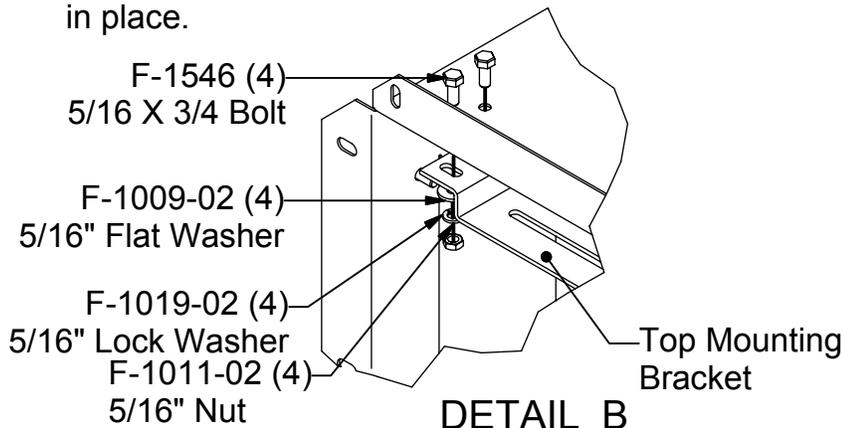
Step 1. Check to make sure the burner element is centered in the burner housing. The edge of the burner skirt should be about 3" from either side of the burner housing. If it is not centered, make those adjustments now. If the mounting brackets and vanes are already installed by the factory, skip to Step 8. If not, proceed to Step 2.

Step 2. Locate two mounting brackets (692-078P), four 5/16" X 3/4 bolts (F-1546), four 5/16 X 3/4" sheet metal screws (F-1629), ten 5/16" flat washers (F-1009-02), four 5/16" lock washers (F-1019-02), six 5/16" nuts (F-1011-02), and one 5/16 X 1-1/2" bolt (F-1693) in the box marked 423-409-001A.

Step 3. Position **bottom** mounting bracket flush along the transition side of the burner and centered from side to side. Mark the holes to be drilled and drill pilot holes using 1/4" bit. Install the bottom mounting bracket as shown below, using the 5/16" X 3/4" sheet metal screws (F-1629) and 5/16" flat washers to secure it to the burner. Be careful not to overtighten the screws.

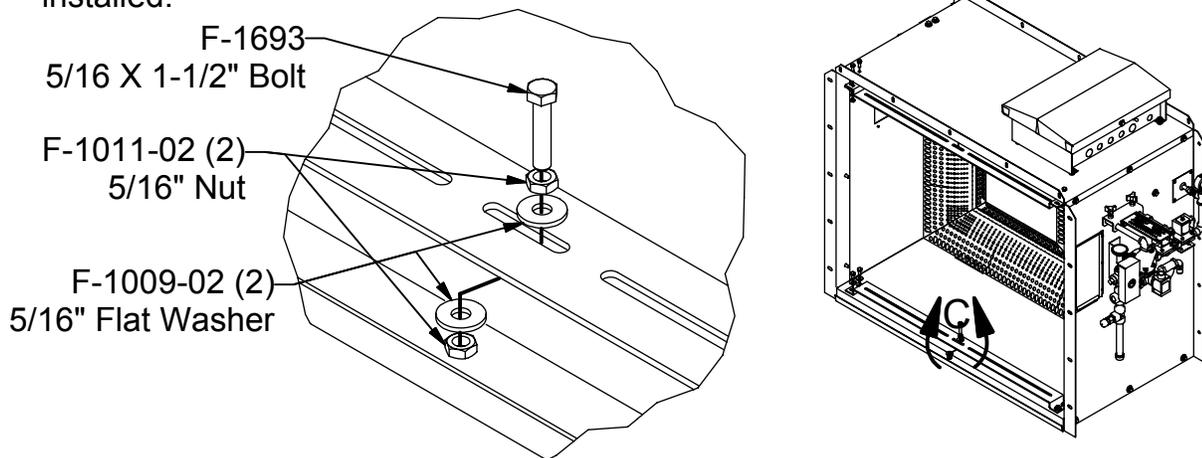


Step 4. Position the **top** mounting bracket flush along the transition side of the burner and centered from side to side. Mark the four holes to be drilled. Drill out using 11/32" bit (.343). Using the hardware shown, fasten the top mounting bracket in place.



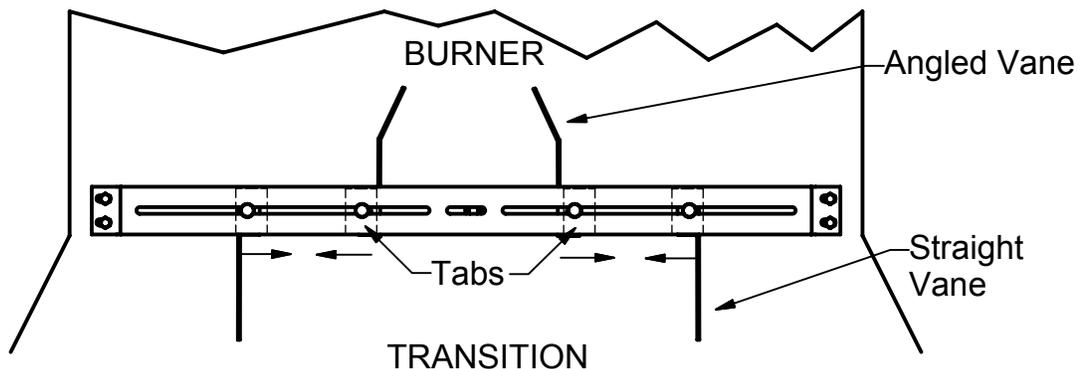
INSTALLING VANE KIT INTO BURNER

Step 5. Install the 5/16" X 1-1/2" bolt on the center of the bottom mounting bracket as shown below. Lock nuts together when bolt bottoms out on the burn housing bottom. This will prevent the mounting bracket from sagging when the vanes are installed.



Step 6. Locate the RH and LH straight vanes (692-079P & 692-082P), the RH and LH angled vanes (692-080P & 692-081P), eight 5/16" Carriage Bolts (F-1930), and eight 5/16" flange nuts (F-1931) from the 423-409-001A box.

Step 7. Install the vanes, so that the outside, straight vanes are oriented with the slotted end toward the transition and the tabs toward the center of the housing. The inside, angled vanes should be oriented with the slotted end towards the inside of the burner housing and the tabs facing away from the center of the burner housing.



Step 8. Once the vanes are installed, turn the vanes to the dimensions shown below.

Straight Vanes:

Bolt Location = 9-1/2" from bolt to inside of the burner housing

Edge Location = 8-1/2" from inside (non slotted) edge of vane to side of the burner housing.

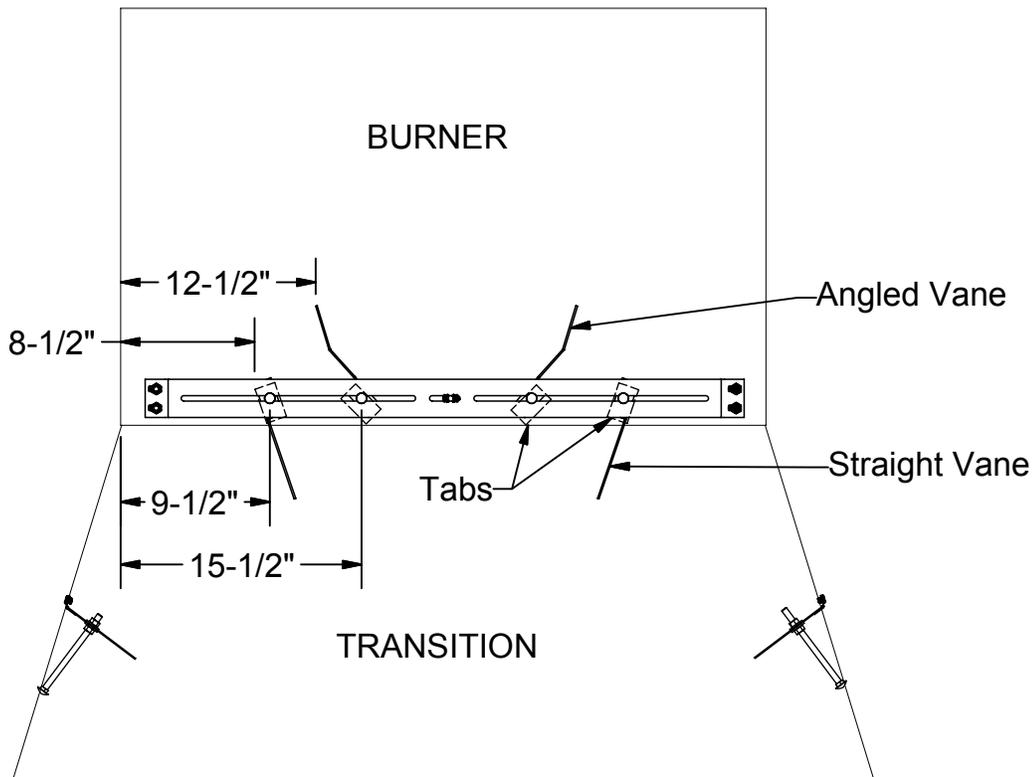
Tabs towards the center of housing and slotted end towards transition (outside of burner).

Angled Vanes:

Bolt Location = 15-1/2" from bolt to inside of the burner housing

Edge Location = 12-1/2" from inside (slotted) edge of vane to side of the burner housing.

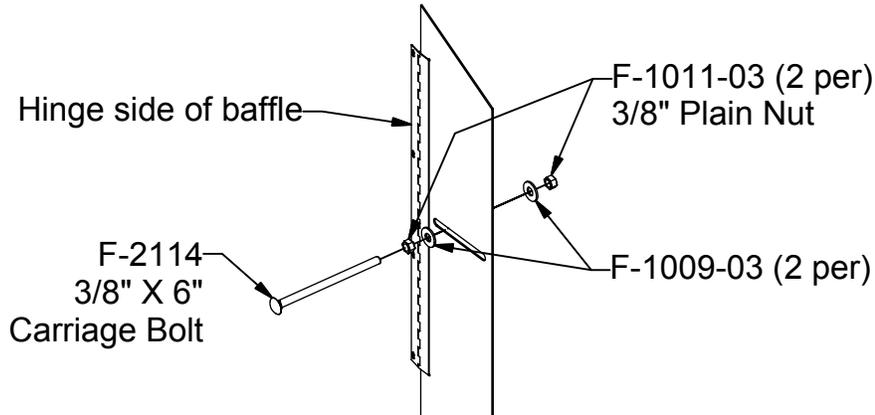
Tabs away from the center of housing and slotted end towards inside of burner (away from transition).



INSTALLING TRANSITION BAFFLES (One on each side.)

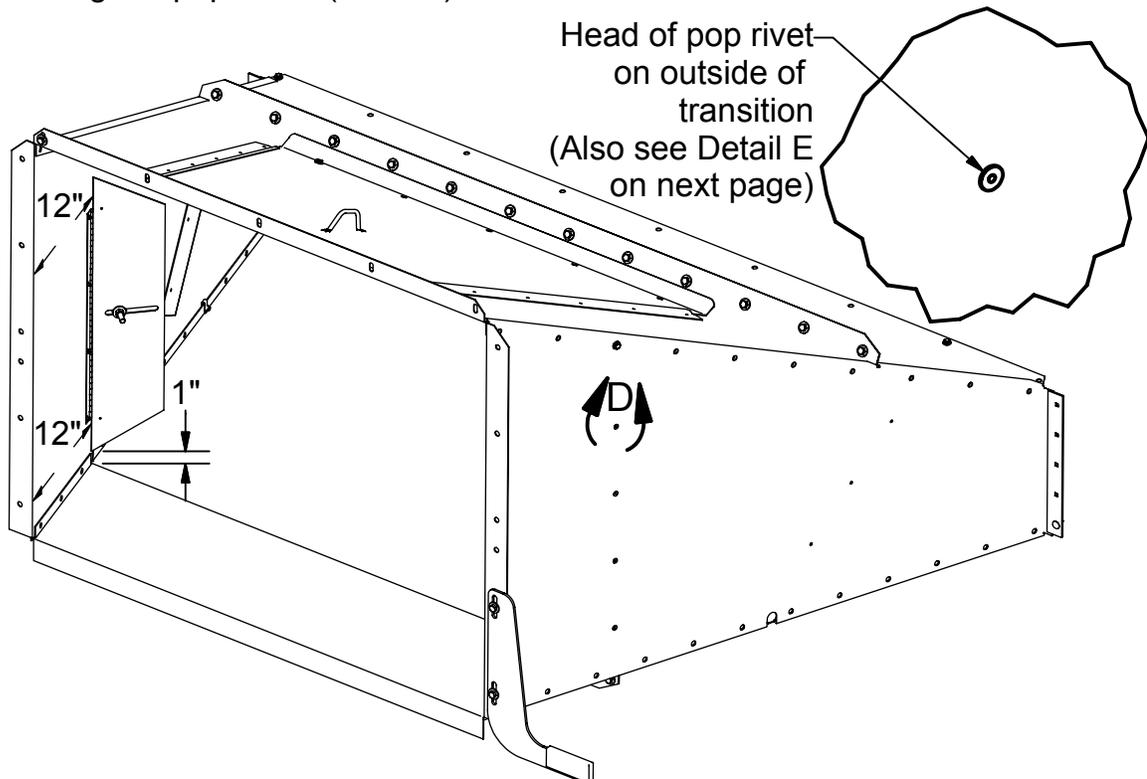
Step 1. Locate two baffles (119-150W), eight self drilling screws (F-1121), eight pop rivets (F-1095), two 3/8" X 6" carriage bolts (F-2114), four 3/8" flat washers (F-1009-03), and four 3/8" nuts (F-1011-03) in the box marked 423-409-001A or tied to the inside of the 691 Burner.

Step 2. Assemble the adjustment bolts onto the baffles, as shown below.



Step 3. Starting on the burner side of the transition, measure in 12" from the flange and 1" from the bottom. This is where the longest point of the baffle will be. Using the self drilling screws, screw the baffle in place (4 places per baffle). Repeat for other side.

Step 4. Remove the screws and drill holes out with 3/16" drill bit. Re-attach the baffles using the pop rivets (F-1095) from the outside of the transition.



Step 5. Adjust baffles with carriage bolts so that they extend in toward the center of the transition, 5" from the side of the transition to the edge of the baffle. The heads of the carriage bolts act as a stop against the inside of the transition. Air pressure will keep the baffles in place. See the illustration below. Make sure the baffles do not interfere with the transition damper.

