

Attachment 1

VENTILATORS®

PRINCIPLE OF OPERATION

The Gaylord Ventilator extracts 95% of the grease, dust and lint particles from the air stream passing through it, without the use of filters, revolving devices, removable parts or running water. Grease, dust and lint are centrifugally extracted from the air stream within the ductwork. (See Figure 1)

The interior of the ventilator contains four baffles, located within the path of the high velocity air passing through the ventilator. These baffles extend the length of the ventilator, with a clearance between the baffles of approximately 2-1/2". (See Figure 1)

The hot, contaminant-laden air rising from the cooking surface merges with the higher velocity air that wipes the front of the cooking equipment and extends, like an air blanket, from the front edge of the cooking equipment to the air inlet of the ventilator. As the air moves through the ventilator at a high speed, it is forced to make a series of turns around the baffles. As the high velocity air turns around each baffle, the heavier-than-air particles of grease, dust and lint are thrown out of the air stream by centrifugal force. The extracted grease, dust and lint are collected in grease gutters within the ventilator, remaining out of the air stream until removed daily by the cleaning cycle.

All four of the baffles perform a dual function:

Baffle #1

This baffle is located at the air entrance of the ventilator, is of airplane wing type construction and, in its normally open position, acts as the primary extracting baffle. (See Figure 1)

This baffle is hinged at each end and, in case of fire, is automatically closed by thermostatic action. It may also be closed by remote fire switch, or manually.

Baffle #2
This baffle is located on the interior back wall of the ventilator; it is a 1-5/8" stainless steel pipe, equipped with directed spray nozzles on 8" to 10" centers. (See Figure 1)

This baffle is the main hot water supply line for the ventilator and, during the cleaning cycle, hot detergent water is released through the nozzles. If the ventilator's automatic fire control system is activated, fire smothering water spray is released through the spray nozzles (See Figure 1)

Baffle #3
This baffle is located on the interior front wall of the ventilator at the level of the inspection doors. This baffle is also a grease collecting gutter, collecting grease, dust and lint extracted by the ventilator — preventing the contaminants, once extracted by the ventilator, from dropping back into the high velocity air stream. (See Figure 1)

Baffle #4
This baffle is located on the interior back wall of the ventilator and is a 1" stainless steel pipe equipped with directed brass spray nozzles on 8" to 10" centers. (See Figure 1)

The baffle is inter-connected with baffle #2, the main hot water supply line of the ventilator, and performs cleaning and fire protection function simultaneously with baffle #2. (See Figure 1)

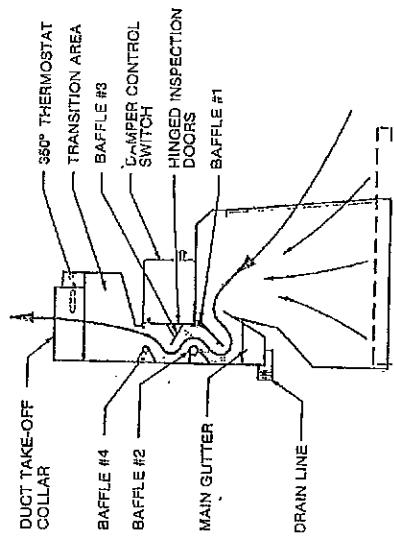


FIG. 1
EXTRACTION CYCLE

