

Installation, Operation & Maintenance of the T₃SQ Thermal VAV Diffuser

Step 1

The units should be shipped assembled except for the backpan.

Remove all packaging from the components. The thermal T₃SQ is shipped with additional packaging to protect the actuator assembly. Be sure to remove packaging between the diffuser plaque and the control disc. Make sure that no packaging is obstructing the thermal element at the top of the actuator or the induction cap on the plaque.

If unit is not assembled, follow the steps below before proceeding (See Figure 1):

1. Insert induction cap into plaque of diffuser.
2. Insert venturi tube into induction channel until tabs engage.
3. Slide control disc over venturi tube.
4. Insert actuator through center hole in the control disc and snap into induction channel.

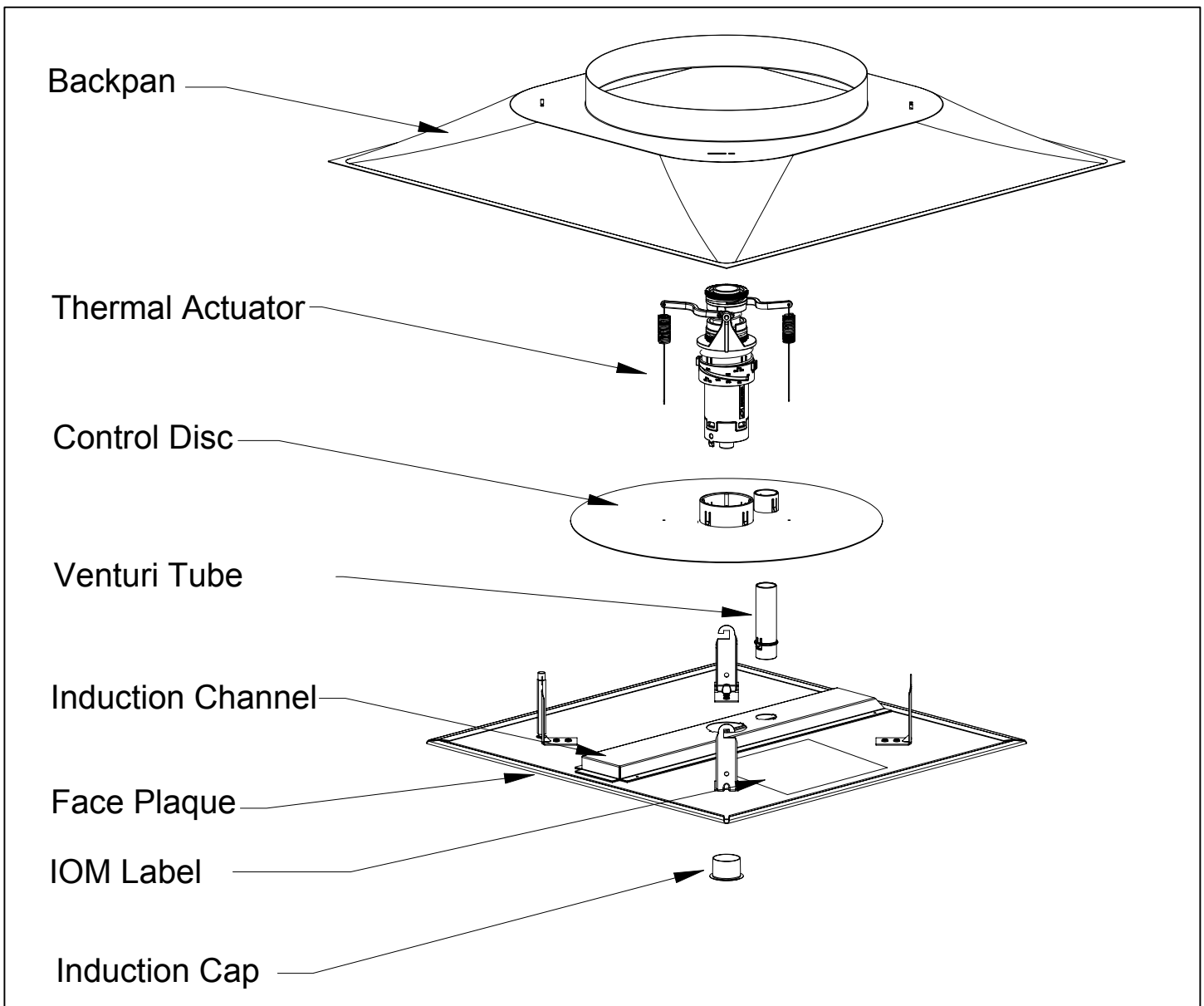


Figure 1. T₃SQ-4 Parts & Assembly

Step 2

For system balancing, the springs (A) must be disconnected from the control disc (B) to allow the control disc to go to full open. (See Figure 2)

After balancing, reconnect the springs to the control disc. If the actuator arms are not connected to the control disc the diffuser will not operate.

Ensure that each control disc spring (A) is attached to both the control disc (B) and the lever arm (C) before installing.

Step 3

Place the back pan into ceiling grid. Connect duct work to back pan.

Step 4

Adjust room temperature:
Turn the blue ring assembly (D) to the desired temperature indicated (66°F to 74°F)

To adjust the offset differential between heating and cooling, turn the green tab (E) clockwise to increase positive temperature offset and counterclockwise to increase temperature offset in a negative direction.

Step 5

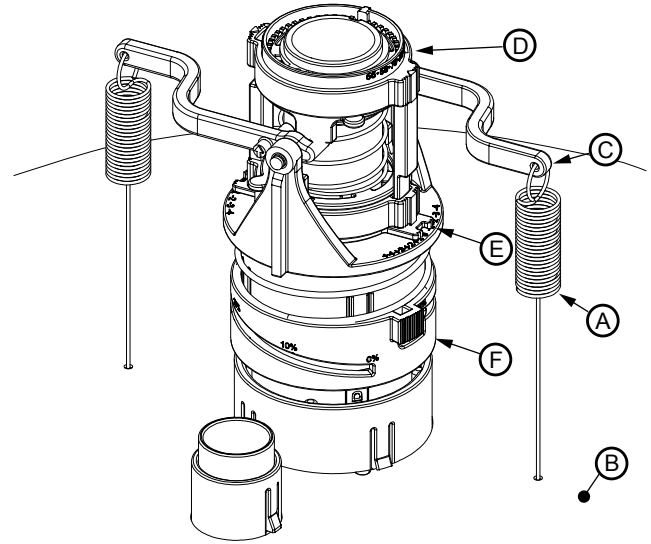
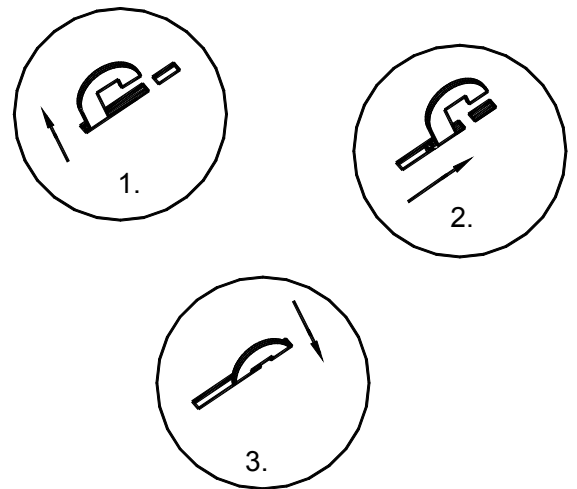
Minimum airflow can be adjusted from 30% of maximum down to fully closed or 0% of maximum by turning the grey flow adjustment ring (F) clockwise.

Step 6

Installation is completed by lining up the hooks on the face plaque assembly with the corresponding slot. The hooks are inserted and the face plate assembly is rotated clockwise, and lowered so that each hook is firmly in place. (See Figure 3)

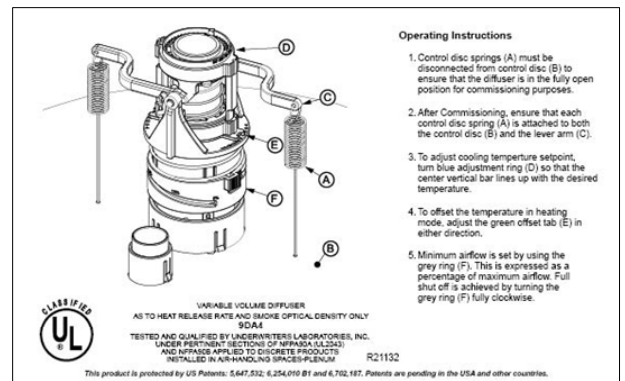
Note:

A simplified version of these operating instructions can be found on the plaque of each diffuser. (See Figure 4)


Figure 2. T₃SQ Thermal Actuator and Control Disc Assembly

Figure 3. Face Plaque Installation

Thermal - T₃SQ-4 Replacement Parts

Description	Part Number
Heating / Cooling Actuator	38203201
Venturi Tube	72540201
Venturi Tube Guide	72540301
Control Disc Sleeve	72540401
Control Disc	72540501
Thermal Induction Channel	78200201
Induction Cap	72549501
Plaque/Actuator/Control Disc Assy T3SQ-4	31763101


Figure 4. T₃SQ-4 Operating Instruction Label