

## DAMPER ACTUATOR REPLACEMENT 2100 SERIES

Item #1043106R Damper Actuator Assy 240V Item #1043107R Damper Actuator Assy 120V

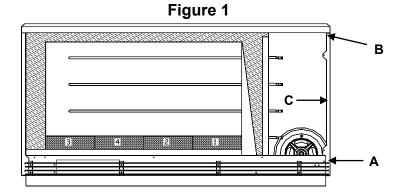
## THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN

## REPLACEMENT

- 1. Disconnect power to all branch circuits of the heater and remove the painted front panel.
- 2. Hinge the right side panel open by A) removing the screw located above the grill slats on the lower right side of the heater; B) loosening the screw located at the top right corner of the electrical compartment; and C) pushing out on the right side panel. Refer to Figure 1.

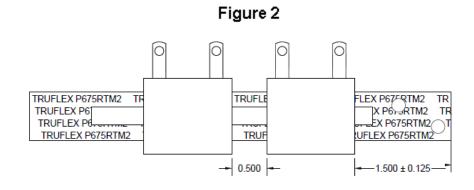


HAZARDOUS VOLTAGE: Risk of electric shock. Can cause injury, or death. System may be connected to more than one branch circuit. Disconnect power to all circuits before servicing.



- 3. Disconnect the two (2) orange wires from the damper actuator assembly to the base I/O relay board. One wire is connected to the damper terminal and one wire is connected to an orange jumper wire (L2).
- 4. Remove the damper actuator assembly by removing the screws holding it in place.
- 5. Inspect the two (2) resistors on the new actuator assembly. Verify there are no cracks, chips, or other physical damage.
- 6. Verify the resistors are aligned and secured on the actuator as shown in Figure 2.

NOTE: The resistors must be secured to the actuator, or the actuator assembly will not operate properly.



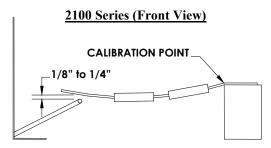
- 7. Measure the ohm value across the orange wires on the damper actuator assembly.
  - 120V = 256 284 ohms
  - 240/208V = 1026 1134 ohms
- 8. Install the new damper actuator assembly so the bimetal strip is above the damper rod (Figure 3).

## NOTE: Writing on the bimetal strip MUST face downward.

9. Verify the gap between the bimetal strip and the damper rod. At room temperature, it should be approximately 1/8" - 1/4". Calibrate, if necessary, by bending the actuator near its mounting point as shown in Figure 3.

NOTE: Do not change the radius of the bimetal strip in the resistor region.

Figure 3



- 10. Route the orange wires from the damper actuator assembly to the base I/O relay board and connect one wire to the damper terminal and one wire to the orange jumper wire from L2.
- 11. Verify the heater wiring does not interfere with the operation of the damper actuator assembly.
- 12. Verify damper operation to ensure optimum performance of the heater. Verify the damper opens and closes freely by pressing down on the damper rod. Slowly release pressure on the damper rod to verify the damper does not stick when closing.
- 13. Reassemble the heater and restore power.
- 14. Complete the Air Discharge System Check Out procedure.