# Flow Torch<sup>TM</sup> 200 Quick Guide



# **Product Description**

The Flow Torch<sup>TM</sup> 200 is a 2" diameter stainless steel air heater designed for high flow rates at low pressure drops. It incorporates an open coil wound element of the highest grade material which provides quick heat up and cool down cycles with maximum heat transfer

# Wiring your Flow Torch<sup>TM</sup> 200 Wire your FT200 according to the picture thermocouple Ground L2 L1 1 Phase 3 Phase

## Operation

To operate this heater, ensure the blower or fan is running and energize the main supply disconnect. Set the controlling device to the desired temperature.

During initial heating, it is recommended to slowly ramp up the process set point and inspect the heating system for problems.

**DO NOT** operate the heater at voltages higher than the recommended use.

**DO NOT** operate the heater at flow rates below the minimum flow range—reduced flow can shorten heater life.

Supply clean, dry air to the heater.

# WARNING: DO NOT TURN ON THE HEATER UNTIL PROPER AIRFLOW IS ESTABLISHED





Tutco-Farnam Custom Products recommends installation be performed by qualified personnel familiar with the National Electrical Code and all local codes and standards. It is the responsibility of the installer to verify the safety and suitability of the installation.

Failure to follow Tutco-Farnam's recommendations could result in premature failure, serious equipment damage, injury or death.





**DO NOT** mount heaters in an atmosphere containing combustible gases, vapors, dusts or fibers.



Hazardous voltages are present in this equipment. Lock out and tag the branch circuit disconnect switch before working on this heater.



Exterior of heater at exhaust is approximately the air temperature. Treat the exterior of the heater as a burn hazard. An insulation blanket is available and recommended. See **Accessorie.** 

Typical causes for uneven airflow are structural components blocking air or mounting the heater too close to elbows, transitions or the fan/blower.

#### **Electrical Information**

Tutco-Farnam Custom Products strongly recommends the use of an electrical interlock with the air source—this helps ensure that the heater will not run without air.

Where thermocouple extension wire is required between the heater and control panel, verify that it is connected with proper polarity. Failure to do so may result in an uncontrolled heater. For Standard type K thermocouple: Yellow + and Red -

Attach a ground wire to the ground wire of the heater. The heater must be grounded.

www.farnam-custom.com

Flow Torch<sup>TM</sup> 200 Quick Guide



#### **Dimensions**

# Please visit www.farnam-custom.com for detailed drawings

## Maintaining your Flow Torch<sup>™</sup> 200

Periodically check all electrical connections, including field and factory-made connections for tightness and all wiring for deterioration.

Inspect periodically for moisture buildup, airway obstructions and corrosion.

**DO NOT** continue using a heater with signs of damage.

# **Troubleshooting your Flow Torch<sup>™</sup> 200**

Check the thermocouple wire polarity

If reduced heat output is suspected, verify the condition of the heating elements by using an ohmmeter to check the resistance.

- 1. Turn off and unplug power to the heater.
- When the heater is fully cooled, check the resistance between all the power leads. If the ohmmeter reads infinite or very high resistance it indicates that there is a break in the heater element. Cease operation and replace heater.
- 3. Use an ohmmeter to check the resistance between the leads and ground—if there is a low resistance measured it indicates that the coil has shorted to ground. Cease operation and replace heater.



CAUTION: Troubleshooting and repairs should only be attempted by qualified maintenance personnel



### **Accessories**

# FT200 Insulation Blanket



- Reduces heat loss
- Saves money in energy costs
- Improves safety
- Easy installation Velcro
- Fire retardant and puncture resistant
- Visit www.farnam-custom.com for more information

828.684.3766

MAILING:

SHIPPING:

P.O. Box 1377 Arden, NC 28704

30 Legend Drive Arden, NC 28704

www.farnam-custom.com

Flow Torch<sup>TM</sup> 200 Quick Guide

# **Regenerative Blowers**



- Range from 55 to 353 cfm
- Trouble-free installation
- Easy replacement of parts
- Continuous, low-maintenance operation
- Visit www.farnam-custom.com for more information

TFC-KPHRB300-141 CFM

TFC-KPHRB500-212 CFM

TFC-KPHRB750-353 CFM

