

BAROMETRIC DRAFT CONTROLS

MODEL: FIELD R-C



READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE INSTALLATION.

This device **MUST** be installed by a qualified agency in accordance with the manufacturer's installation instructions. The definition of a qualified agency is: any individual, firm, corporation or company which either in person or through a representative is engaged in, and is responsible for, the installation and operation of HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction.

Please retain these instructions after installation.

Installed By: _____ Phone: _____ Installation Date: _____



FIELDCONTROLS

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CHOOSING THE LOCATION

Do not attach draft control to top or bottom of the flue pipe, nor in room separated from appliance. Best location is as close to appliances as possible.

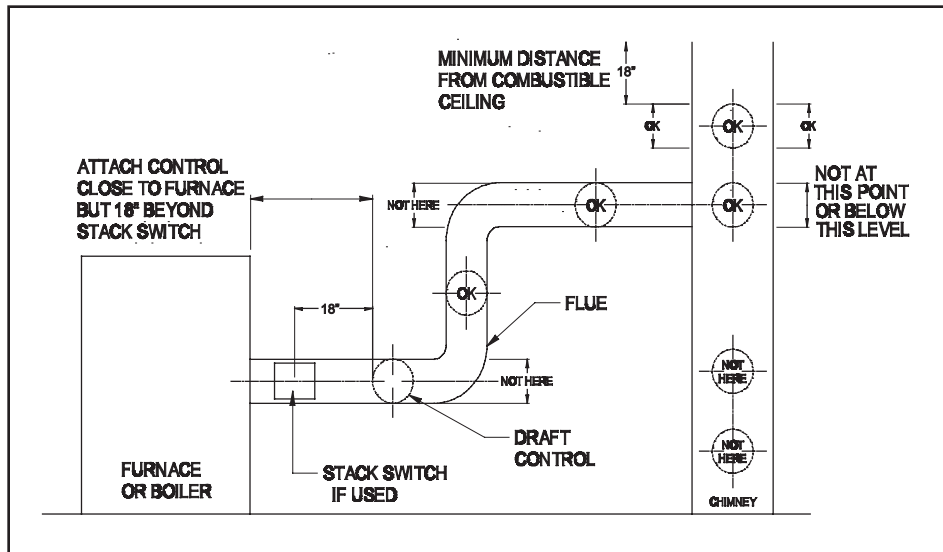


Figure 1

INSTALLATION

Important: Make these adjustments when installing.

Vertical Flue: (1) Adjustment weight must be in RIGHT HAND SLOT (Marked "V") in bracket on gate. (2) The arrow on flap at bottom of gate must line up with letter "V" on lower right part of gate. If it does not, remove flap, turn over and snap on to gate again.

Flap can be removed by inserting small screw driver at the back side of the gate between the gate and the flap, then pulling downward on flap.

Horizontal Flue: (1) Adjustment weight must be in LEFT HAND SLOT (Marked "H") in bracket on gate. (2) The arrow on flap at bottom of gate must line up with letter "H" on lower left part of gate. If it does not, remove flap, turn over and snap on to gate again.

Bend outward the two ears at the front corners of collar and insert clamping screw. Bolt the remainder of the collar together. (See Figure 2)

Hold the collar against the flue in the EXACT position and mark the outline of the collar on the flue. Cut a hole in the flue about half an inch smaller than the marks.

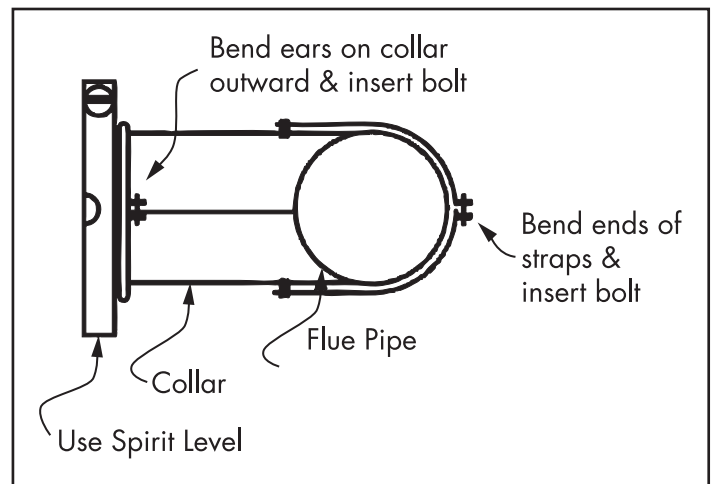


Figure 2

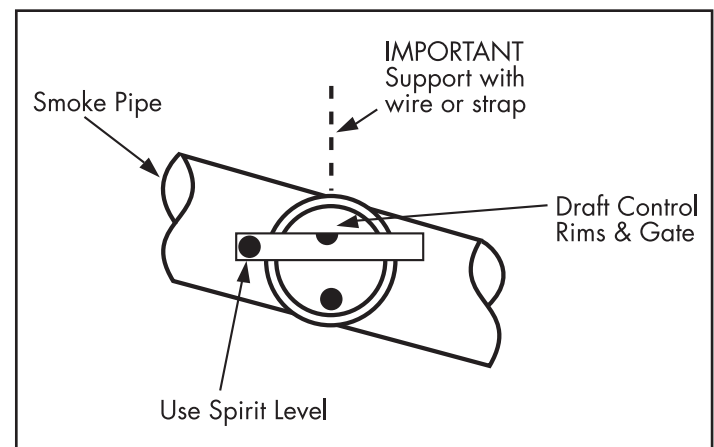


Figure 3

Then cut a series of short slits (about $\frac{3}{8}$ " or $\frac{1}{2}$ " deep) around the edges of the opening. After the collar is strapped on the flue the cut edges can be bent outward in the collar and thus make a better joint. WHEN FINISHED, THE OPENING INTO THE FLUE MUST BE FULL SIZE OF THE COLLAR OF THE DRAFT CONTROL. If flue pipe is made of material too heavy to bend out into collar, the opening into the flue must be within $\frac{1}{4}$ " of the same diameter as the collar.

Strap the collar to the flue pipe and place the draft control into the collar, fastening it there by tightening the clamping screw in the collar.

Use a spirit level to make sure that the control does not lean forward or backward but instead is plumb in both directions, regardless of whether the flue is horizontal, vertical, or sloping.

ADJUSTING THE CONTROL

Set the control to maintain as low a draft as will give good combustion and meet the requirements for heat. Turn adjustment weight counter-clockwise to loosen, then slide in slot to proper position and tighten. Bracket is marked 2, 4, 6 and 8, which indicates draft settings of .02", .04", etc. (These are drafts in flue adjacent to control, not over-fire drafts).

OIL BURNERS

The burner must be running when the adjustment of the control is made. Take draft readings over the fire. For a domestic oil burner the overfire draft should be approximately .02" to .03", although there are some makes of burners which require higher drafts. Consult with the burner manufacturer. There must always be enough draft so that the burner does not puff back into the room at the moment it starts, and there should be no objectionable smoke. It is essential that CO₂ readings be taken to determine the proper adjustments.

GAS-FIRED PLANTS

Domestic gas-fired furnaces or boilers usually operate on very low overfire drafts which mean almost zero drafts at the smoke outlets.

Draft controls having double swinging gates, known as Type G and MG regulators, are available. The gates of such controls open inward under normal up-draft conditions, and outward in case of blocked flues, thus relieving internal pressures.

STOKERS

Adjustments must be made while the stoker is running, with a normal fuel bed depth and its fan adjusted to approximately the correct setting.

When a draft gauge is available, draft reading should be taken over the fire. For a domestic stoker, the draft should be set at .04" OVER THE FIRE, with the STOKER ON. Have just enough draft so that at the moment the stoker starts, it does not gas or puff back into the room through cracks around the fire door (with the fire door closed). If there is objectionable smoke, increase draft slightly.

HAND-FIRED PLANTS

Adjust the draft control when a good fire is burning. Close any check damper and open wide any internal damper.

Usually a draft of .06" will be sufficient for cold weather, with reasonably quick pick up after a banked period. But if plant overheats, change to a lower draft setting. Raise the setting if there is not enough heat.

In mild weather when less heat is needed, or the fire is to be banked, close ash pit draft door partly or entirely. If desired, a check damper also can be used when banking the fire.

WARRANTY

For warranty about this or any Field Controls product, visit:
www.fieldcontrols.com/warranty



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