

**INSTALLATION INSTRUCTIONS:
TYPE MG1-4 DOUBLE ACTING DRAFT CONTROL**

This draft control is shipped as a single acting draft control. If the draft control is not being used on a gas draft induced furnace or a sidewall venting system, remove the gate stop on the draft control ring before installing.

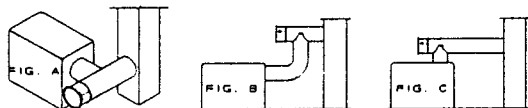
CAUTIONS: like other gas appliances or gas accessory attachments, the draft control needs the approval of your local gas company and/or city inspectors. Check to make sure that barometric draft controls are formally approved or accepted in your community.

Inspect the heating plant and building for conditions which might cause prolonged down drafts and or a negative pressure condition. Have these conditions corrected before operating the appliance. **EXAMPLES:** a chimney with its top lower than the peak of the roof or if mounted too close to a higher building may cause prolonged down drafts. A large exhaust fan improperly sized or located may cause a negative pressure in the building. It is recommended that a flue gas spillage switch, like the Field Controls SSK-1 or the FTS-6, is used to guard against continuous flue gas spillage caused by down drafts or negative building pressure problems.

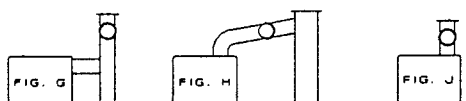
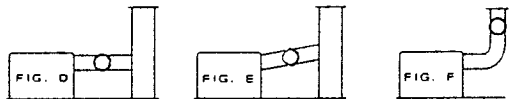
Control Locations - for most gas-fired equipment the preferred installation is in a bull head tee (see Fig. A, B, C and refer to installation of a bull head tee section). Fig. D through J show acceptable locations if it is not feasible to locate the control as per Fig. A, B, C or for use with gas draft induced furnaces.

**Do not install in a room separated from the appliance.
Do not install in a chimney below where the flue enters.**

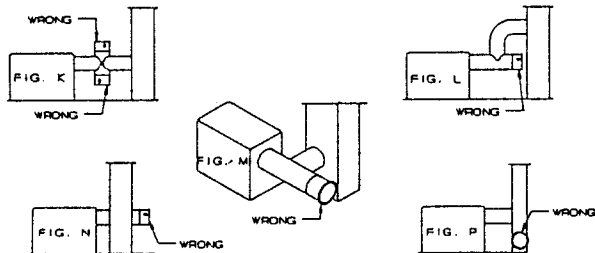
BEST LOCATIONS FOR CHIMNEY VENTED SYSTEMS



ACCEPTABLE LOCATIONS FOR CHIMNEY AND FOR DRAFT INDUCED SYSTEMS



WRONG LOCATIONS

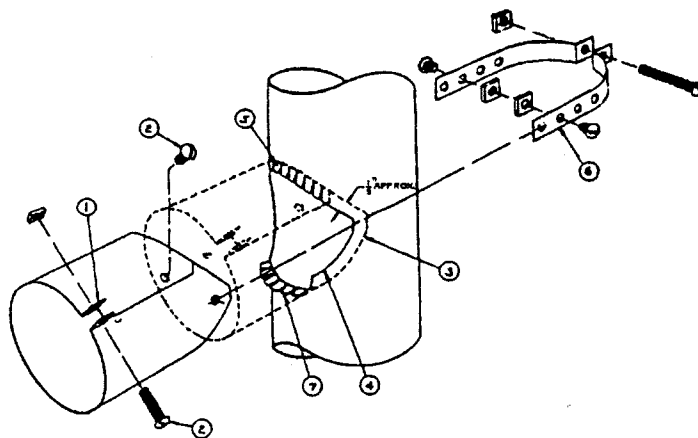


Collar Installation - this control is shipped with or without a collar patterned to fit a single wall round vent pipe. To attach this collar to the flue, see Fig. 1 and follow the instructions below.

1. Bend outward the two ears at the front corners of the collar. Bend 90 degrees, 1/4 inch behind the single hold on the straps.

2. Insert clamping screw in ears on collar and bolt the remainder of the collar together.
3. Hold the collar against the side of the flue in the exact position it is to be installed (shown by dotted lines) and mark the outline of the collar on the flue.
4. Cut a hole in the flue about 1/2" inside of this outline.
5. Make a series of cuts about 1/2" apart from the edge of this hole to the outline marks.
6. Strap the collar to the flue pipe.
7. Bend the tabs formed by the series of cuts outward against the inside of the collar to make a tight joint.
8. Insert the draft control. (See Draft control Installation and Adjustment Section.)

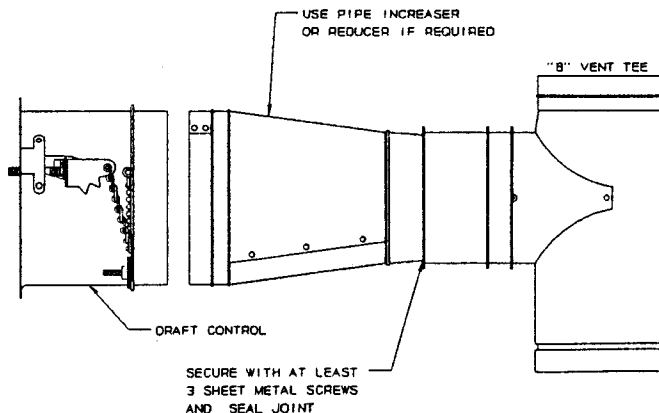
FIGURE 1



Draft Control Installation in Type B Vent Pipe - CAUTION: DO NOT use the supplied collar when mounting draft control to Type B Vent Pipe. Install by using a Type B Vent Pipe Tee.

1. Install a vent pipe reducer or increaser into the inner pipe and fasten using sheet metal screws (See Fig. 2).
2. The opening of the Type B Vent Tee, at the draft control mounting location, should be sealed with a high temperature sealant or equivalent.
3. Refer to Draft Control Installation Section.

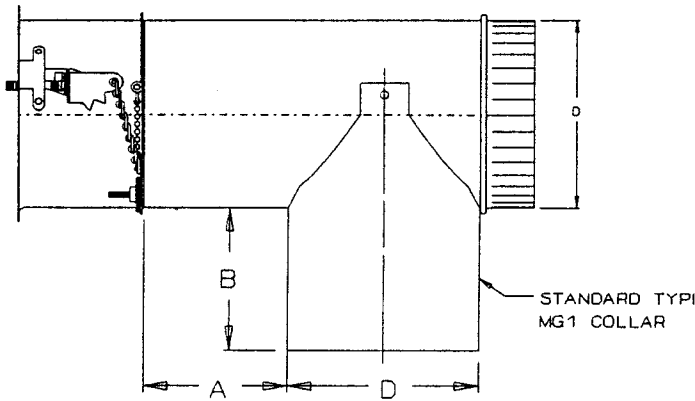
FIGURE 2



Installation in a Bull Head Tee - When making a bull head tee installation the collar usually furnished with the draft control can be attached to a piece of pipe (of the same size) to form a tee. However, the end of the tee which will receive the draft control **MUST** be as long as the standard draft control collar (See Fig. 3). The ring of the draft control can be fastened to the end of the flue pipe by sheet metal screws at the top and bottom of the ring. **Be sure these screws do not interfere with the movement of the gate.**

FIGURE 3

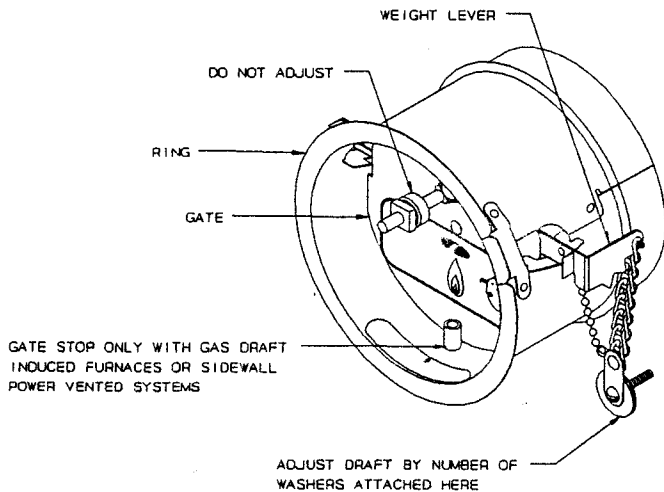
BULL HEAD TEE



"A" & "B" MUST BE SAME LENGTH

Draft Control Installation and Adjustment - insert the draft control into the collar or tee. The front face of the control **MUST** be plumb and the bearing surfaces **MUST** be level whether the control is on a horizontal, vertical or sloping flue pipe. Use a spirit level and level accurately (See Fig 4). Secure the control in the collar by tightening the clamping screws. If a tee is used or a collar is supplied locally, the control may be held in place by sheet metal screws.

FIGURE 4



Adjusting the Draft Control - the control **MUST** be adjusted to the desired draft setting by adding or removing the washer-type weights supported by the two chains on the side of the draft control (See Fig.4). **DO NOT** move the weight attached directly to the gate, this is used only for balancing at the factory.

What Draft Setting to Use - when adjusting the control, two things are essential:

1. The burner must be operating for at least 10 minutes to obtain maximum chimney draft.
2. An analysis of the flue gases is necessary to determine the percentage of CO₂ and check for presence of CO. Refer to the appliance instructions and/or to the local gas company for the proper CO₂ readings and allowable CO levels. A rule of thumb for draft setting is between .01" to .03" of water column draft at the appliance outlet or after the draft hood. (Check equipment requirement.)

Changes in the adjustment of the control should be made by adding or removing the washer-like weights (supplied with the control) to or from the weight holder chain assembly. After the control is adjusted, its action will be entirely automatic, the gate will open or close by itself to correct for changes in the draft that occur in the chimney.



The Field Controls Company

Your Number-One Draft Choice.

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