BAROMETRIC DRAFT CONTROL

Model: M+MG2

This is a dual purpose control, with single or double-acting control funtionality.

Single Acting Control - The control is configured creating functionality similar to the Type M controls, when the stop and two cover plates are in place. This control is for use with oil or solid fuels.

Double Acting Control - The control is configured as Type MG-1 (double acting) when the stop and two cover plates are removed. The control is then for use with gas atmospheric appliances.

FIELDCONTROLS

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.

ITEMS INCLUDED:

1. DRAFT CONTROL
2. COLLAR
3. BAGGED HARDWARE ASSY
4. MOUNTING STRAPS (2)
5. INSTRUCTION SHEET
6. FTS-6 MOUNTING INSTRUCTIONS

CONTROL LOCATIONS

WARNING: The control must be installed in the same room as the appliance.

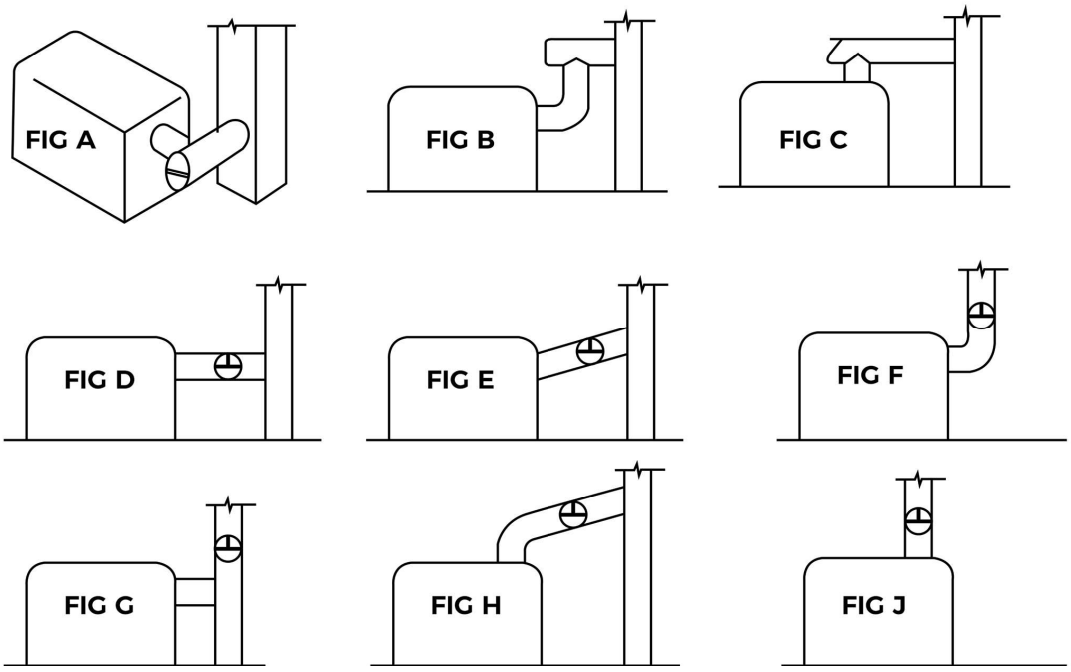
Do NOT install the draft control in any of the Unacceptable Locations shown in Fig K through Fig O.

For gas-fired atmospheric equipment, the draft control must be installed per one of the Acceptable Locations shown in Fig A through Fig J.

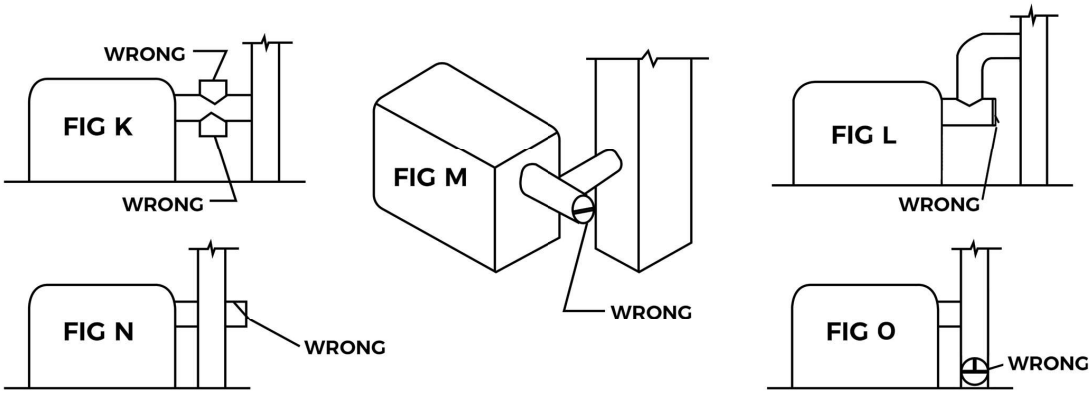
For non-atmospheric gas-fired equipment, Fig D thru J show acceptable locations.

For oil or solid fuel-fired equipment, Fig D through Fig J show acceptable locations. The control must also be located at least 18" from a combustible ceiling or wall. If a stack switch is installed in the vent, locate the control at least 12" downstream from the stack switch.

ACCEPTABLE LOCATIONS



UNACCEPTABLE LOCATIONS



COLLAR INSTALLATION

This control is shipped with a collar patterned to fit a round breeching. If you are using the collar in your installation, please refer to Draft Control Collar Installation instructions below:

EXAMPLE OF MOUNTING
ROUND COLLAR TO BREECHING

EXAMPLE OF
STRAPPING COLLAR TO FLUE PIPE

I. PATTERNED COLLAR TO ROUND BREECHING (SEE FIGURE 1)

1. Bend outward the two ears at the front corners of each collar half. Bend 90°, ¼ inch behind the single hole on the strap.
2. Insert clamping screws in ears on collar and bolt the remainder of the collar halves together to form a complete collar.
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 ½" inside of this outline.
5. Make a series of cuts about ½" 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 Installation & Adjustment)

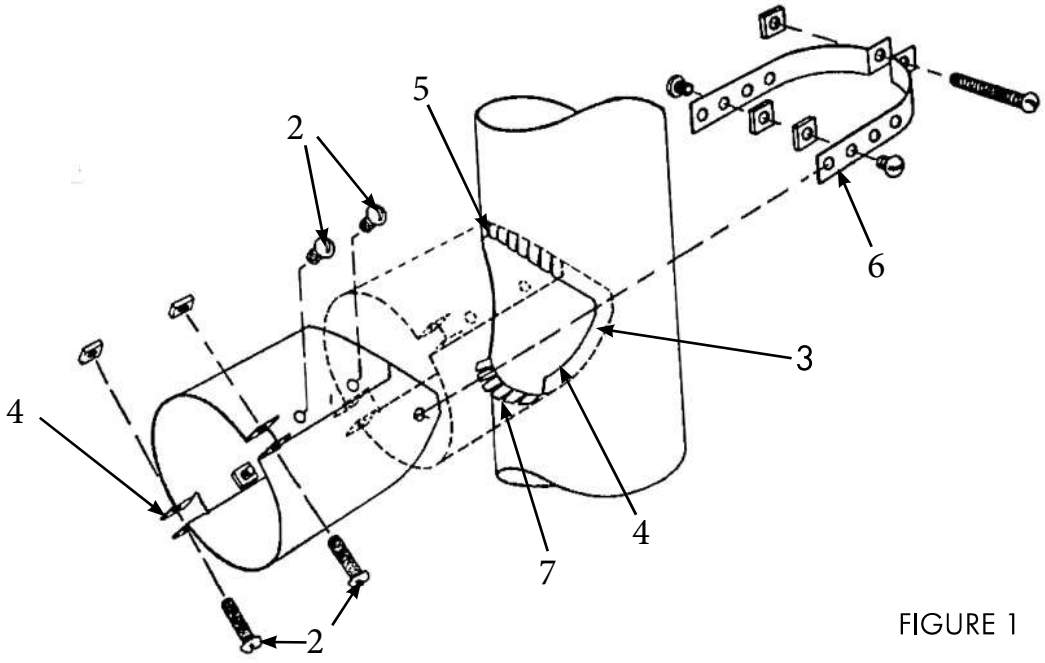


FIGURE 1

II. PATTERNED COLLAR TO HEAVY GAGE FLUE

1. If flue pipe is made of material too heavy to bend out into collar, make the diameter of the opening within ½" of the inside diameter of the collar.

III. PATTERNED COLLAR OR SQUARE END COLLARS TO RECTANGULAR BREECHING (INSTALLER-FABRICATED) SEE FIGURE 2

1. If patterned, cut off the patterned section of each collar half so that you have two square end collar halves.
2. Bend outward the two ears at the front corners of each collar half.
3. Cut a series of slits ½" apart and ½" to ¾" deep in the back edge of each collar half.
4. Insert the clamping screws and bolt the collar halves together to form a complete collar.
5. Bend alternate ears out 90°.
6. Cut a hole in the breeching slightly larger than the outside diameter of the collar.
7. Insert the unbent ears of the collar into this hole and bend these ears against the inside of the breeching. This seals the opening and locks the collar in place.
8. Insert the draft control. (See Installation & Adjustment)

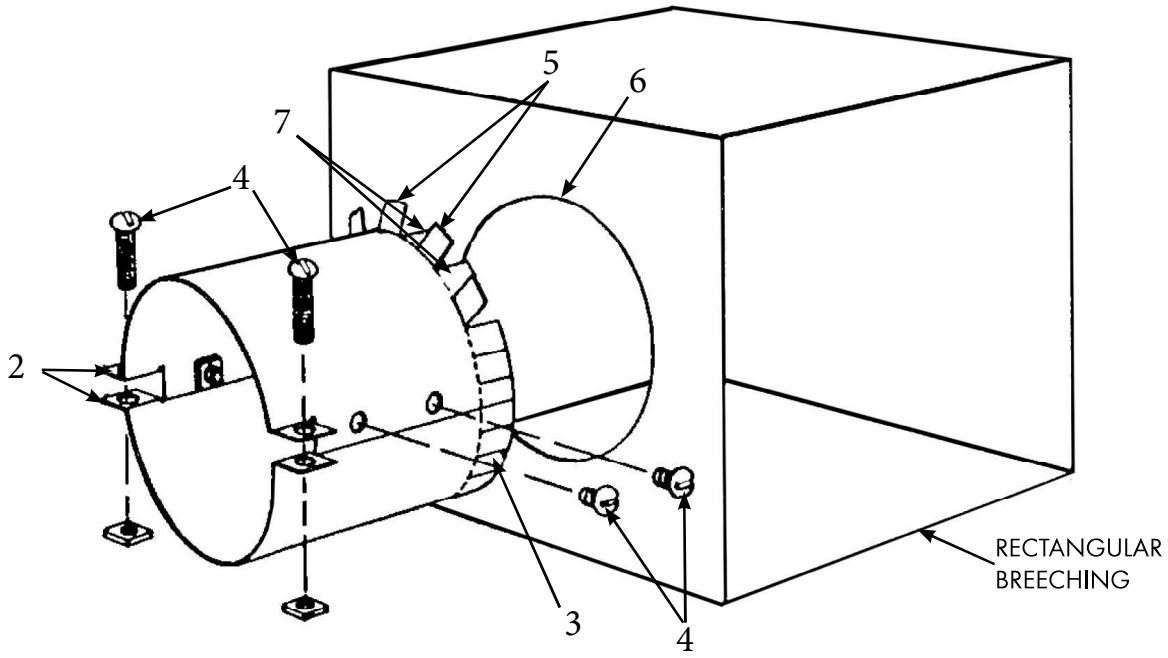


FIGURE 2

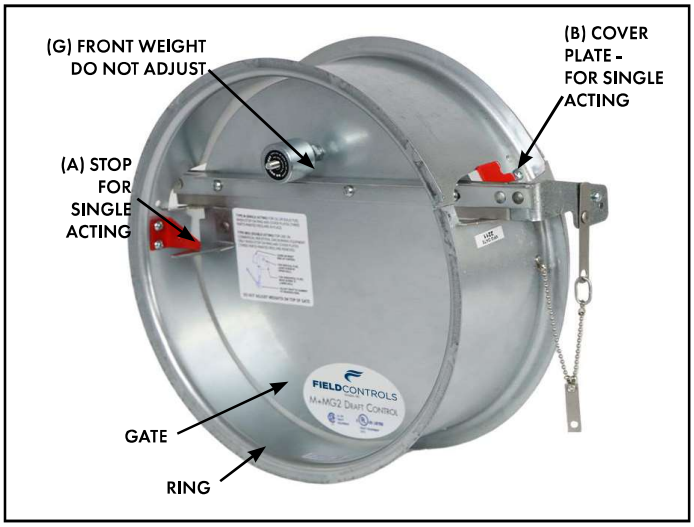
IV. ALTERNATE METHODS OF ATTACHING TO RECTANGULAR BREECHING

1. Weld the collar to the breeching.
   a. Tack-weld the assembled collar to the breeching in a couple of places.
   b. Insert the draft control into the collar and clamp it in place. Support control from above if necessary to prevent sagging.
   c. Finish the complete weld around the base of the collar.
   d. Remove the control and cut a hole in the breeching either by using high heat on the arc welder, flame cutting, etc. If care is taken, the hole may be cut before the collar is attached.
2. Mounting rings
   a. Weld a narrow band of steel, in the form of a ring, to the breeching or weld or bolt an angle ring to breeching.
   b. Cut a hole in the breeching inside of this ring.
   c. Bolt the draft control collar to the inside or outside of this band or flange.

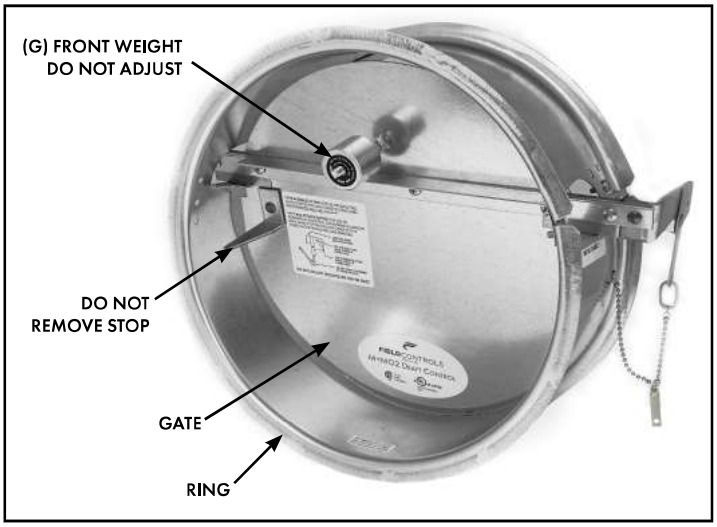
V. SQUARE END COLLAR TO A ROUND BREECHING

1. If breeching is round or oval, a short collar cut to fit the curvature of the breeching must be made by some local shop or contractor. After fastening this collar to the breeching, attach the collar furnished with the draft control to it.

INSTALLATION



SINGLE ACTING FOR OIL AND SOLID FUELS



DOUBLE ACTING FOR GAS

The stop and two cover plates are painted red for easy identification. To remove the stop simply remove the two screws that hold it to the ring. To remove the cover plates, bend or break off the tab that goes through the small hole in the ring. DO NOT REMOVE THE STOP ATTACHED TO THE GATE.

Insert the draft control into the collar. The front face of the control MUST BE PLUMB (SEE PLUMB PHOTO ON PAGE 6). The bearing surfaces MUST BE LEVEL (SEE LEVEL PHOTO ON PAGE 6) whether the control is on a horizontal, vertical or sloping flue pipe. Using a spirit level, plumb and level the draft control accurately. Secure the control in the collar by tightening the clamping screws. If the collar is supplied locally, the control may be held in place by small bolts or sheet metal screws. If the control has any tendency to sag, support it from the ceiling by wire or by strapping.

LEVEL - ON ANY INSTALLATION

PLUMB - ON ANY INSTALLATION

Vertical Flues - The control is shipped with screw in upper hole.

Horizontal Flues - Remove the screw from the upper hole in the weight lever and insert it in the lower hole.

SCREW POSITION
VERTICAL INSTALLATION

SCREW POSITION
HORIZONTAL INSTALLATION

ADJUSTING THE CONTROL

Consult with the appliance and/or burner manufacturer for the correct draft setting.

Assure that the area where the draft control is installed is configured for normal operating conditions by opening and/or closing all doors, windows, and combustion air openings or equipment and/or ventilating equipment that are intended for normal operation of the heating plant. Create a call for heat, and allow the burner and vent system to reach normal operating temperatures before 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.

DO NOT MOVE THE LARGE WEIGHTS ATTACHED DIRECTLY TO THE GATE as they are used only for adjustment at the factory.

WEIGHT INSTALLATION

This manual may be downloaded and printed from the Field Controls website:
www.fieldcontrols.com

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

Field Controls Customer Service
252.522.3031

FIELDCONTROLS

AIR TREATMENT COMBUSTION VENTILATION PORTABLES

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