

INSTRUCTION MANUAL

MONTAGUE Gas Fired Cheesemelter

**Models:
CM(24, 36, 48, 60 & 72)**

**These instructions should be read thoroughly before attempting installation.
Set up and installation should be performed by qualified installation personnel.**

Keep area around appliances free and clear from combustibles.

**PLEASE RETAIN THIS MANUAL
FOR FUTURE REFERENCE.**



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CONTENTS

INSTALLATION	1
OPERATION	6

MAINTENANCE	7
SERVICE	9
RENEWAL PARTS	10

IMPORTANT

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the operating and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY:

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION MAY BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

SHIPPING DAMAGE CLAIM PROCEDURE:

For your protection, please note that equipment in this shipment was carefully inspected and packed by skilled personnel before leaving the factory. The transportation company assumed full responsibility for safe delivery upon acceptance of this shipment.

If shipment arrives damaged:

1. **VISIBLE LOSS OR DAMAGE** — Be certain this is noted on freight bill or express receipt, and signed by person making delivery.
2. **FILE CLAIM FOR DAMAGES IMMEDIATELY** — Regardless of the extent of damage.
3. **CONCEALED LOSS OR DAMAGE** — If damage is unnoticed until merchandise is unpacked, notify transportation company or carrier immediately, and file "concealed damage" claim with them. This should be done within fifteen (15) days of date that delivery was made to you. Be sure to retain container for inspection.

We cannot assume responsibility for damage incurred in transit. We will, however, be glad to furnish you with necessary documents to support your claim.

INSTALLATION

The Montague gas fired cheesemelters are produced with the best possible material and workmanship. PROPER INSTALLATION IS ESSENTIAL FOR SAFE AND EFFICIENT TROUBLE-FREE OPERATION.

The gas fired cheesemelter is manufactured for use with the type of gas indicated on the nameplate.

THE INSTALLATION INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE BROILER AND/OR INJURY TO THE OPERATOR.

Qualified installation personnel are individuals, a firm, corporation or company which either in person or through a representative are engaged in and are responsible for:

- A. The installation or replacement of gas piping or the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required, and has complied with all requirements of state or local authorities having jurisdiction. Reference: National Fuel Gas Code Z223.1, 1984, Section 1.4.
- B. The installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance. Qualified installation personnel must be experienced in such work, be familiar with all precautions required and have complied with all requirements of state or local authorities having jurisdiction. Reference: National Electric Code, N.F.P.A. No. 70, 1984.

CAREFULLY READ AND FOLLOW THESE INSTRUCTIONS

THE CHEESEMELTER MUST BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, OR IN THE ABSENCE OF LOCAL CODES, WITH THE NATIONAL FUEL GAS CODE, ANSI Z223.1-1984, INCLUDING:

1. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.45 kPa).
2. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.45 kPa).

INSTALLATION

PROVISIONS MUST BE MADE FOR ADEQUATE AIR SUPPLY TO THE UNIT.

VENTILATING HOOD

The cheesemelter must be installed under a properly designed ventilating hood. The hood should extend at least 6" beyond all sides of the unit. The hood should be connected to an adequate mechanical exhaust system.

Information on construction and installation of ventilating hoods may be obtained from the "Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment", NFPA No. 96-1987 available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

It is also necessary that sufficient room air ingress be allowed to compensate for the amount of air removed by the ventilating system. Otherwise, a subnormal atmospheric pressure will occur which may interfere with burner performance or may extinguish the pilot flame. In case of unsatisfactory cheesemelter performance, check with the exhaust fan in the "OFF" position.

CLEARANCES

FOR USE ONLY IN NONCOMBUSTIBLE LOCATIONS

MINIMUM CLEARANCE FROM COMBUSTIBLE MATERIAL AND NONCOMBUSTIBLE MATERIAL COUNTER INSTALLATION

FOR INSTALLATION ON NONCOMBUSTIBLE COUNTER
ADJACENT TO NONCOMBUSTIBLE WALLS.

WALL MOUNTED

MOUNTED ON NONCOMBUSTIBLE WALL WITH 18"
CLEARANCE FROM SIDE AND BOTTOM TO COMBUSTIBLE
MATERIAL.

RANGE MOUNTED

REFER TO THE RATING PLATE MOUNTED ON THE RANGE
FOR THE PROPER CLEARANCE.

INSTALLATION

Adequate clearance for service and proper operation must be provided at the front, top, sides and back. The combustion air openings are provided in the front of the unit and must not be obstructed.

CAUTION

DO NOT OBSTRUCT THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE CHEESEMELTER. KEEP THE APPLIANCE AREA FREE AND CLEAR FROM COMBUSTIBLES.

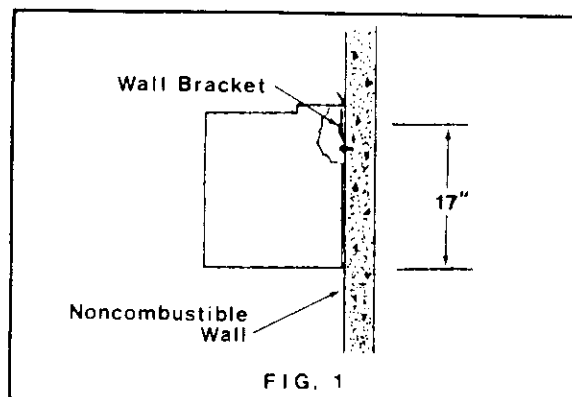
SETTING IN PLACE

COUNTER INSTALLATION

Level unit by placing shim under low side.

WALL MOUNTED

Must be installed on NONCOMBUSTIBLE WALL ONLY. Remove lower bracket from back of the cheesemelter. Attach bracket securely to the wall at the desired height and location as shown in Figure 1. Place unit so that the cheesemelter mounted bracket engages the wall bracket.



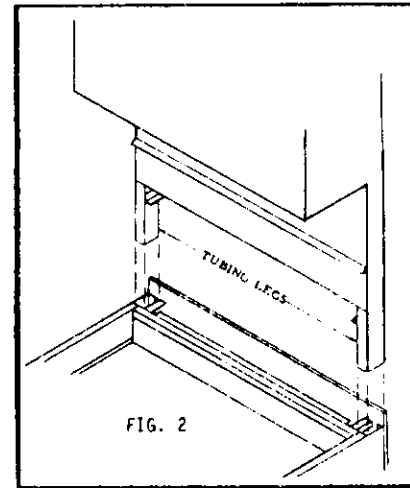
RANGE MOUNTED

MODEL CM36

To be mounted on reinforced high back for installation on any Model 136, V136 or 36 Series Montague range as follows:

INSTALLATION

Lift the cheesemelter assembly above the range and slide the vertical posts into position on the range body. (See Figure 2).



RANGE MOUNTED

MODELS CM24, CM36, CM48, CM60, CM72

Any of these cheesemelters may be mounted on a reinforced high shelf on any (G, VG)26, (G, VG)2626, (G, VG)260, (G, VG)2616, (G, VG)1626, G16, G160, G016, G0 and G00 Series, provided that the cheesemelter section is not more than 4 inches wider than the range over which it is mounted.

1. Lift the reinforced high shelf above the range and slide channels into position on the range body. Secure with screws through the holes that are provided in the range body.
2. Lift cheesemelter over the flue outlet of high shelf and set unit in place on shelf.
3. Align holes in high shelf with holes in bottom of cheesemelter. Secure cheesemelter to high shelf using four (4) 1/4-20x3/4 cap screws and washers which are provided.

GAS PRESSURE REGULATOR

THIS CHEESEMELTER IS DESIGNED FOR USE WITH A GAS PRESSURE REGULATOR. THE REGULATOR SUPPLIED WITH THIS UNIT MUST BE USED.

FOR NATURAL GAS: This gas pressure regulator is factory adjusted for 6.0" W.C. manifold pressure. The rated inlet pressure to the regulator is 1/2 psig (3.45 kPa).

FOR PROPANE GAS: This gas pressure regulator is factory adjusted for 10" W.C. manifold pressure. The rated inlet pressure to the regulator is 1/2 psig (3.45 kPa).

The cheesemelter is equipped with fixed orifices for use with a manifold pressure of 6.0" water column for Natural gas and 10.0" water column for Propane gas.

Locate the gas pressure regulator external to the cheesemelter as near the unit as possible. The gas pressure regulator must be located out of the heat zone to prevent damage to the regulator.

INSTALLATION

GAS CONNECTION

REMOVE CONTROL PANEL AND TOP PANEL FOR ACCESS TO GAS CONNECTION.

Before connecting the cheesemelter to the gas supply line, be sure that all new piping has been cleaned and purged to prevent any foreign matter from being carried into the controls by the gas. In some cases, filters or drops are recommended. A separate gas shut off valve must be installed upstream from the gas pressure regulator adjacent to the unit and located in an accessible area.

It is important that adequately sized piping run directly to the point of connection at the cheesemelter with as few elbows and tees as possible. Consult local gas company for proper piping size and gas pressure.

PIPE JOINT COMPOUND OR THREAD SEALANT THAT IS USED SHOULD BE RESISTANT TO ACTION OF LIQUEFIED PETROLEUM GASES.

Install the gas pressure regulator with gas flowing as indicated by the arrow on the regulator. Use pipe compound or thread sealant and carefully thread regulator to pipe so that there is no cross threading, etc., which could cause leakage.

Apply wrench only to the flat areas around the pipe tapping at the end being threaded to the pipe to avoid possible damage to the regulator body which could result in leakage.

Connect the gas supply line from the service gas shut off valve to the inlet side of the gas pressure regulator using 3/4" pipe. If a flexible connector is used, an AGA Listed commercial duty type with an I.D. equal to 3/4" pipe must be used. DO NOT USE A DOMESTIC TYPE GAS FLEXIBLE CONNECTOR. Avoid kinks or sharp bends that could restrict gas flow.

Turn gas shut off valve on and immediately check carefully for gas leaks. Do this before attempting to operate the cheesemelter.

TEST ALL PIPE JOINTS FOR LEAKS BEFORE OPERATING CHEESEMELTER. THIS INCLUDES ALL GAS CONNECTIONS THAT MAY HAVE LOOSENED DURING SHIPMENT. USE A RICH SOAP SOLUTION (OR OTHER ACCEPTED LEAK TESTER) AROUND ALL PIPE CONNECTIONS AND ALL OTHER JOINTS. DO NOT USE AN OPEN FLAME. ABSOLUTELY NO LEAKAGE SHOULD OCCUR, OTHERWISE, THERE IS A DANGER OF FIRE OR EXPLOSION DEPENDING UPON CONDITIONS. NEVER USE IF LEAKAGE IS DETECTED.

OPERATION

THIS APPLIANCE HAS BEEN CLASSIFIED AS COMMERCIAL COOKING EQUIPMENT AND MUST BE OPERATED BY QUALIFIED AND/OR PROFESSIONAL OPERATING PERSONNEL.

CAUTION

DO NOT OBSTRUCT THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE CHEESEMELTER. KEEP THE APPLIANCE AREA FREE AND CLEAR FROM COMBUSTIBLES.

GAS CONTROLS

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUT OFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

A. LIGHTING/RELIGHTING

1. TURN BURNER VALVE TO "OFF" POSITION AND WAIT FIVE (5) MINUTES.
2. Apply lighted match to pilot burner and/or check that pilot is burning.
3. Rotate valve handle counterclockwise to full on. Burner will ignite automatically. DO NOT THROTTLE DOWN.
4. If pilot becomes extinguished, turn burner valve to "OFF" position and wait five (5) minutes.

B. SHUT DOWN

1. Stand by.
To turn off, rotate valve handle clockwise.
2. Complete.
Turn all gas valves to "OFF" position.

NEVER THROTTLE THE BURNER DOWN. OPERATE BURNER IN FULL "ON" POSITION ONLY OR BURNER DAMAGE MAY OCCUR.

MAINTENANCE

CARE AND CLEANING

GENERAL CLEANING

Lint and grease suspended in the air tend to collect in passages. Therefore, air openings, flueways, and primary air openings, etc., should be periodically cleaned to prevent clogging. The complete cheesemelter should be given a periodic general cleaning.

DAILY: Remove grid rack, drip shield (below grid rack) and grease container. Thoroughly wash with mild detergent or soap. Excessive grease build up may be removed by using a mildly abrasive cleanser.

PAINTED SURFACE

EXTERIOR

The cheesemelter should be permitted to cool down before cleaning exterior surfaces. Painted surfaces should be cleaned using a mild soap and warm water solution on a sponge or soft cloth.

INTERIOR

Clean interior using a mildly abrasive cleanser with a damp cloth or nylon cleaning pad.

STAINLESS STEEL SURFACE

To remove dirt, grease or product residue from stainless steel, use ordinary soap and water (with or without detergent) applied with a sponge or cloth. Dry thoroughly with a clean cloth.

To remove grease and food splatter, or condensed vapors, that have baked on the equipment apply cleanser to a damp cloth or sponge and rub cleanser on the metal in the direction of the polishing lines on the metal. Rubbing cleanser as gently as possible in the direction of the polished lines will not mar the finish of the stainless steel. NEVER RUB WITH A CIRCULAR MOTION. Soil and burnt deposits which do not respond to the above procedure can usually be removed by rubbing the surface with SCOTCH-BRITE scouring pads or STAINLESS scouring pads. DO NOT USE ORDINARY STEEL WOOL as any particles left on the surface will rust and further spoil the appearance of the finish. NEVER USE A WIRE BRUSH, STEEL SCOURING PADS (EXCEPT STAINLESS), SCRAPER, FILE OR OTHER STEEL TOOLS. Surfaces which are marred collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack.

MAINTENANCE

To remove heat tint: Darkened areas sometimes appear on stainless steel surfaces where the area has been subjected to excessive heat. These darkened areas are caused by thickening of the protective surface of the stainless steel and are not harmful. Heat tint can normally be removed by the foregoing, but tint which does not respond to this procedure calls for a vigorous scouring in the direction of the polish lines, using SCOTCH-BRITE scouring pads or a STAINLESS scouring pad in combination with a powdered cleanser. Heat tint action may be lessened by not applying or by reducing heat to equipment during slack period.

SERVICE

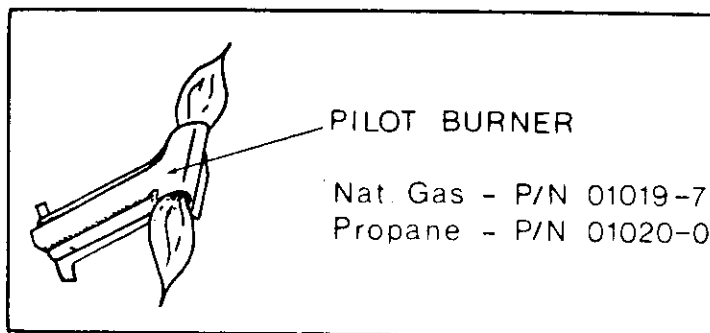
WHEN SERVICE IS NEEDED, CONTACT A LOCAL SERVICE COMPANY, DEALER OR FACTORY TO PERFORM MECHANICAL MAINTENANCE AND REPAIRS. THESE INSTRUCTIONS ARE INTENDED FOR USE BY COMPETENT SERVICE PERSONNEL.

CAUTION

TURN OFF GAS AT MANUAL SHUT OFF VALVE NEXT TO THE APPLIANCE BEFORE ATTEMPTING TO LOOSEN ANY GAS CONNECTIONS.

PILOT BURNER

If pilot flame burns yellow, clean pilot orifice and pilot burner to insure a steady blue flame. The orifice can be cleaned by washing in a solvent and/or blowing out with air.



GAS PRESSURE REGULATOR

WARNING

NO UNTRAINED PERSON SHOULD ATTEMPT TO MAINTAIN OR SERVICE THE GAS PRESSURE REGULATOR.

ORIFICE SIZE CHART-DRILL SIZE

	NATURAL GAS <u>6.0" W.C.</u>	PROPANE GAS <u>10.0" W.C.</u>
20,000 BTU/HR	47	54
32,000 BTU/HR	40	51

SERVICE

MODEL CM SERIES CHEESEMELTER RENEWAL PARTS

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	01019-7	Burner Pilot Assy - Nat. Gas
	01020-0	" " " - Propane Gas
2	01000-6	Valve, Pilot
3	09308-4	Burner Assy w/ Nat. Gas Orifice (28-1/4)
	09314-9	" " w/ Propane Gas Orifice (28-1/4)
	09321-1	" " w/ Nat. Gas Orifice (16-3/4)
	09323-8	" " w/ Propane Gas Orifice (16-3/4)
4	09310-6	Elbow w/ Nut & Sleeve
5	09311-4	Orifice SPUD - #40 Drill; Nat. Gas
	09313-0	" " - #51 Drill; Propane Gas
	09317-3	" " - #47 Drill; Nat. Gas
	09315-7	" " - #54 Drill; Propane Gas
6	01068-5	Valve, Burner
7	02002-8	Handle, Valve w/ Set Screw
8	01609-8	Rack, Wire - 21-1/2"
	01616-0	" " - 33-1/2"
	01610-1	" " - 45-1/2"
	01612-8	" " - 57-1/2"
	01613-6	" " - 69-1/2"

WARNING

If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or in fuel combustion which can cause death or serious illness and which are known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California enacted the California Safe Drinking Water and Toxic Enforcement Act of 1986, (Prop. 65), which "prohibits any person in the course of doing business from knowingly and intentionally exposing any individual to a chemical known to the State of California to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individuals." The Governor's Scientific Advisory Panel added carbon monoxide to the list of hazardous chemicals known to cause reproductive harm.

In order to establish full compliance with Proposition 65, we attached a yellow warning label to each gas fired unit manufactured by the Montague Company.

Carbon monoxide would not be present in concentrations that would pose a "significant risk" to the consumer when the equipment is installed, operated and maintained as follows:

1. Installed in accordance with all local codes, or in the absence of local codes, with the current National Fuel Gas Code Z223.1.
2. Installed under a properly designed and operating exhaust hood.
3. Connected to the type of gas for which the unit is equipped.
4. Proper appliance pressure regulator installed on the gas supply line and adjusted for the manifold pressure marked on the rating plate.
5. Adequate air supply to the unit.
6. The equipment is operated in the manner intended using the proper utensil for that type of appliance.
7. Keep the equipment clean and have it checked periodically.
8. Burner air adjustments, mechanical maintenance and repairs should be performed by qualified service personnel.

If the equipment is not installed, operated and maintained in accordance with the above, concentrations of carbon monoxide in excess of the established limits could be present in the kitchen environment.

ALL PERSONNEL IN THE WORKPLACE WHO MAY BE SUBJECT TO ANY EXPOSURE OF CARBON MONOXIDE MUST BE WARNED OF SUCH POSSIBLE EXPOSURE. THIS WARNING SHOULD BE CONVEYED IN A MANNER SO THAT IT IS CLEARLY UNDERSTOOD BY THE EMPLOYEE, AND THE EMPLOYEE SHOULD BE ASKED IF IN FACT HE OR SHE UNDERSTANDS THE CORRECT METHOD OF OPERATION OF THE EQUIPMENT AND THAT A RISK OF EXPOSURE EXISTS IF THE EQUIPMENT IS OPERATED IMPROPERLY.

IMPORTANT

When ordering parts, to eliminate mistakes and facilitate delivery, always give the following information:

Serial No. _____

Model No. _____

Change No. _____

Name & No. of Part

<u>Model No.</u>	<u>Change No.</u>	<u>Serial No.</u>
<input type="text"/>	<input type="text"/>	<input type="text"/>

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