

# INSTRUCTION MANUAL

## MONTAGUE LEGEND

**Gas Fired Heavy Duty  
Chinese Ranges**

**Models:  
CR and CRM Models**

**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.**



**THE MONTAGUE COMPANY**  
1830 Stearman Avenue P.O. BOX 4954  
HAYWARD, CA 94540-4954  
TEL: 510/785-8822 FAX: 510/785-3342

## CONTENTS

INSTALLATION ..... 3  
OPERATION .....9

MAINTENANCE .....10  
SERVICE ..... 11  
RENEWAL PARTS.....13

# 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 assumes 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 range is manufactured for use with the type of gas indicated on the name plate.

The MONTAGUE Heavy Duty Chinese Range is produced with the best possible materials and workmanship. PROPER INSTALLATION IS ESSENTIAL FOR SAFE AND EFFICIENT TROUBLE-FREE OPERATION.

**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 OVEN/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 and local authorities having jurisdiction. Reference: National Electric Code, N.F.P.A. No. 70 – 1984.

**READ CAREFULLY AND FOLLOW THESE INSTRUCTIONS**

**THE RANGE 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 pressure equal to or less than 1/2 psig. (3.45 kPa).

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

## INSTALLATION

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

### VENTILATING HOOD

The range 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 the construction and installation of ventilation 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. 96-1980, available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

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

### CLEARANCES

**FOR USE IN NONCOMBUSTIBLE LOCATIONS ONLY.  
MINIMUM CLEARANCE FROM NONCOMBUSTIBLE CONSTRUCTION IS 0" FROM SIDE  
AND 0" FROM BACK.**

Adequate clearance must be provided in the aisle in front of the range for safe removal of drip trays (if provided), and for serviceability. Adequate clearance for air openings into the combustion chamber must be provided.

**CAUTION!  
DO NOT OBSTRUCT THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE  
RANGE. KEEP THE APPLIANCE AREA FREE AND CLEAR FROM COMBUSTIBLES.**

### ASSEMBLY

Uncrate range as near to final location as possible. Remove all shipping wire from burners and all packing materials and accessories.

Then assemble as follows:

#### MODEL CR SERIES:

Screw the adjustable feet of the legs in all the way. Then tightly screw the complete leg assembly into each hole in the bottom of the range body.

#### MODEL CRM SERIES:

Insert leg assembly into each hole in the bottom of the range body. Tighten all thumb screws to secure legs to the body.

#### STANDARD SHELF OR PIPE SHELF:

1. Remove bolts from top splash at rear and sides of range.
2. Lift shelf above the range and position shelf flange over splash.
3. Align holes and bolt shelf into position using bolts removed in step 1.

#### TWO SECTION RANGE

1. Place the first section in the exact position it will occupy in the kitchen.
2. Place the second section next to the first section. Align sections by turning foot on adjustable leg.
3. Connect the short manifold to each range section manifold. Tighten both manifold unions gas tight. Use back up wrench to prevent manifolds from rotating. **FAILURE TO DO THIS MAY RESULT IN DAMAGE TO PILOTS AND GAS VALVES.**
4. If one 2" waste drain is provided for the two range sections, the rear water trough must be welded together.

## INSTALLATION

### WATER CONNECTION- (if provided)

1. Connect the cold water supply line to the 1/2" NPT-M connection provided, at the inlet of the range top water wash down manifold. If the range is constructed in two sections, two water inlet connections are required.
2. If swing faucets are provided, connect the cold water supply line to each 3/8" NPT-F faucet inlet. Do not use hot water through the faucets.

### GAS PRESSURE REGULATOR

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

**FOR NATURAL GAS:** This pressure regulator is factory adjusted for 4.0" W.C. manifold pressure.

**FOR PROPANE GAS:** This gas pressure regulator is factory adjusted for 10.0" W.C. manifold pressure.

**Unless otherwise specified, the range is equipped with fixed orifices for use with a manifold pressure of 4.0" water column for natural gas and 10.0" water column for propane gas.**

The range must be installed with the following gas pressure regulator(s):

MAXIMUM INPUT RATING OF THE RANGE BTU/HR	REGULATOR MODEL No.	SIZE	PART # NATURAL GAS	PART # PROPANE GAS
250,000	RV43 MAXITROL	3/4"	01039-1	01040-5
360,000	R500 MAXITROL	3/4"	02145-8	02146-6
560,000	R600 MAXITROL	1"	02419-8	04686-8
*OVER 560,000	(2) R600 MAXITROL	1"	02419-8	04686-8

\*When the total input rating of the range exceeds 560,000 BTU per hour, two regulators must be used — one on each end of the gas supply manifold.

### GAS CONNECTION

Before connecting the range 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(s) must be installed upstream from the gas pressure regulator(s) adjacent to the range and located in an accessible area.

**WARNING: CAP ALL UNUSED OPEN ENDS OF THE GAS SUPPLY MANIFOLD**

It is important that adequately sized piping be run directly to the point of connection at the range 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(s) with gas flowing as indicated by the arrow on the regulator(s). Use pipe compound or thread sealant and carefully thread regulator(s) to pipe so that there is no cross threading, etc., which could cause leakage.

The range is equipped with a 1-1/4" gas supply manifold which is open at both ends. It will be necessary to use a reducing elbow in order to install the gas pressure regulator(s). Close the unused end of the 1-1/4" manifold.

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(s) to the inlet side of the gas pressure regulator(s).

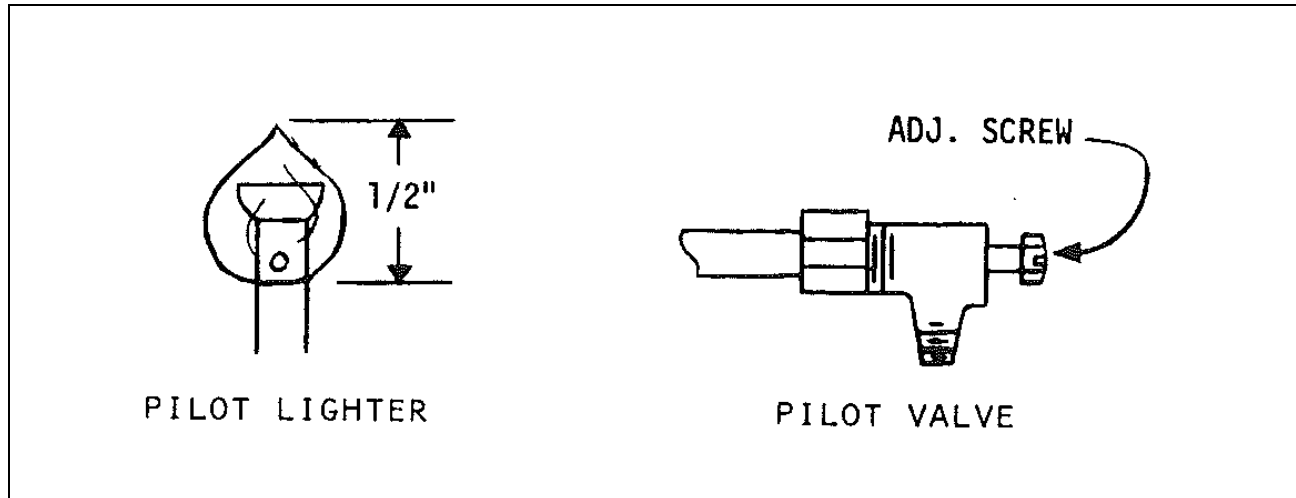
Turn gas shut off valve "ON" and immediately check carefully for gas leaks. **DO THIS BEFORE ATTEMPTING TO OPERATE THE RANGE.**

**TEST ALL PIPE JOINTS FOR LEAKS BEFORE OPERATING RANGE. 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.**

## INSTALLATION

### PILOT ADJUSTMENT

Each pilot lighter is controlled by a pilot valve. Turn adjusting screw until pilot flame is 1/2" high.



### BURNER ADJUSTMENT

The efficiency of the range depends on a delicate balance between the supply of air and the volume of gas so that complete combustion is achieved. Whenever this balance is disturbed, poor operating characteristics occur.

The air supply is controlled by an air shutter on the front of the burner. The air shutter openings should be increased until the flame on the burner begins to "lift". The air shutter should then be closed slightly and locked in place. A yellow streaming flame indicates insufficient air. This condition can be corrected by increasing air shutter opening.

**OPERATING INFORMATION FOR THE RANGE HAS BEEN PREPARED FOR USE BY QUALIFIED AND/OR PROFESSIONAL OPERATING PERSONNEL.**

### **BEFORE OPERATING**

SMELL ALL AROUND THE RANGE AREA FOR GAS. BE SURE TO SMELL NEXT TO THE FLOOR BECAUSE SOME GAS IS HEAVIER THAN AIR AND WILL SETTLE ON THE FLOOR. IN THE EVENT A GAS ODOR IS DETECED, SHUT DOWN RANGE AT MAIN SHUT OFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

### **CAUTION**

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

## **BURNERS**

### **A. LIGHTING/RELIGHTING**

1. TURN BURNER VALVE TO "OFF" POSITION AND WAIT FIVE (5) MINUTES.
2. APPLY LIGHTED MATCH TO PILOT LIGHTER AND/OR CHECK THAT PILOT IS BURNING.
3. ROTATE VALVE HANDLE COUNTERCLOCKWISE TO FULL ON. BURNER WILL IGNITE AUTOMATICALLY. ADJUST FLAME HEIGHT AS DESIRED.
4. IF PILOT FLAME BECOMES EXTINGUISHED, TURN BURNER VALVE CLOCK WISE TO "OFF" POSITION AND WAIT FIVE (5) MINUTES.

### **B. SHUT DOWN**

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

## **MAINTENANCE**

### **CARE AND CLEANING**

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

### **EXTERIOR**

**PAINTED SURFACE:** Allow equipment to cool after use and wash with a mild detergent soap solution. Dry thoroughly with a clean cloth.

### **STAINLESS STEEL SURFACE**

To remove normal 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. 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.

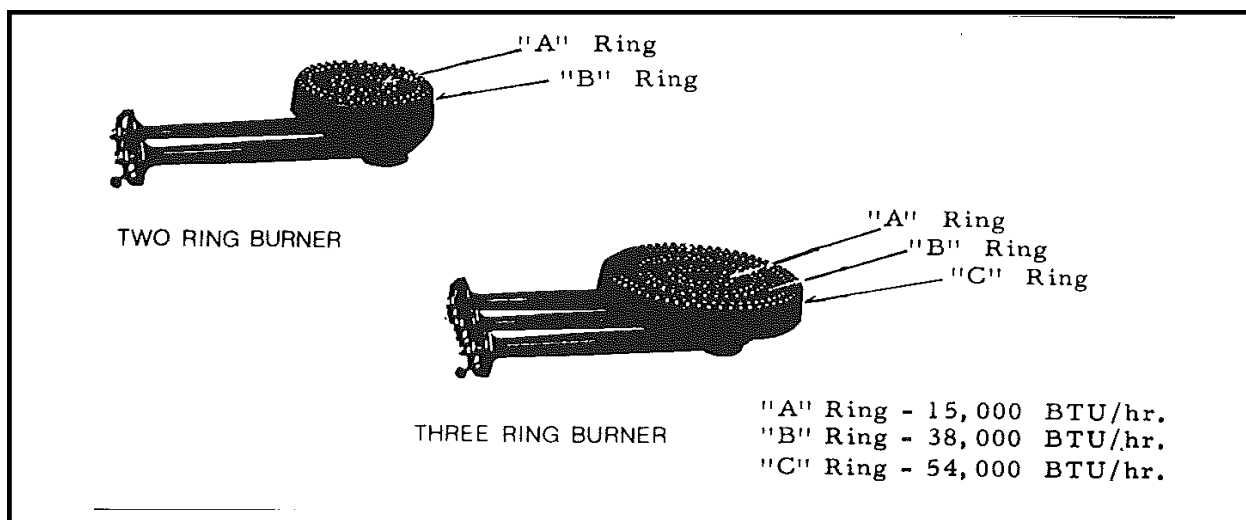
To remove heat tint: Darkened areas sometimes appear on stainless steel surfaces where the area has been subjected to excessive heat. These darkened areas are caused by thickening of the protective surface of the stainless steel and are not harmful. Heat tint can normally be removed by the foregoing, 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 periods.

**DAILY:** Remove and wash drip pans under burners (if provided), Brush burner head(s) daily with a stiff wire brush and clean clogged ports with stiff wire or an ice pick.

**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 SUPPLY WHEN SERVICING GAS CONTROL SYSTEM.**

**ORIFICE SIZE CHART-DRILL SIZE**



<b>BURNER</b>	<b>A</b>	<b>B</b>	<b>C</b>
NATURAL GAS 4.0" W.C.	51	37	30
PROPANE GAS 10.0" W.C.	56	50	45

Input ratings shown above for elevations up to 2,000 feet. For elevations above 2,000 feet, ratings should be reduced at the rate of 4 percent for each 1,000 feet above sea level.

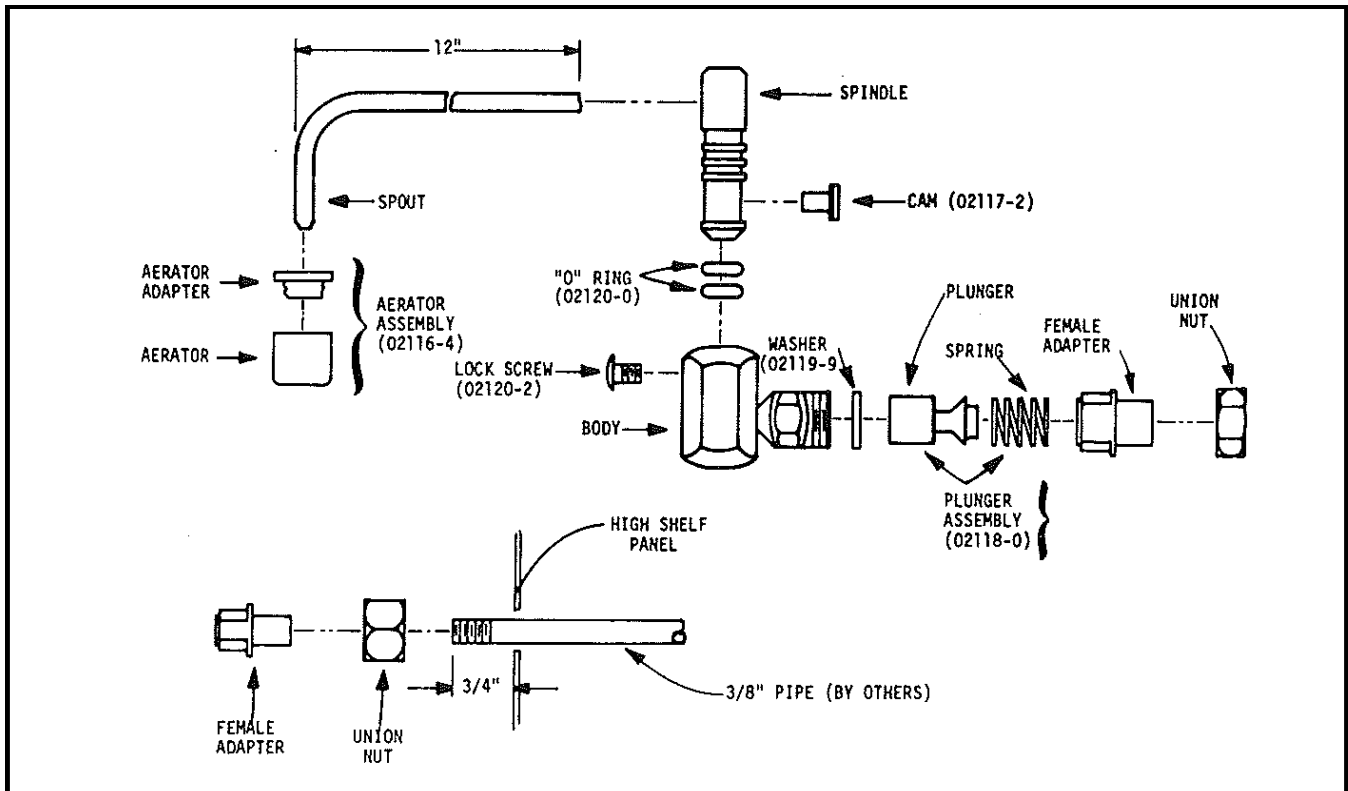
# SERVICE

## GAS PRESSURE REGULATOR

### WARNING

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

## SWING FAUCET RENEWAL PARTS



## CHINESE RANGE RENEWAL PARTS

<u>ITEM</u>	<u>PARTS NO.</u>	<u>DESCRIPTION</u>
1	04335-4	VALVE, BURNER— "A" BURNER—NATURAL GAS
	01002-2	VALVE, BURNER— "A" BURNER—PROPANE GAS
2	11701-3	VALVE, BURNER— "B" BURNER—NATURAL GAS
	04331-1	VALVE, BURNER— "B" BURNER—PROPANE GAS
3	11702-1	VALVE, BURNER— "C" BURNER—NATURAL GAS
	04330-3	VALVE, BURNER— "C" BURNER—PROPANE GAS
4	01038-3	VALVE, GAS (MASTER)
5	01055-3	VALVE, PILOT
6	11497-9	LIGHTER, PILOT (A-B BURNER) WITHOUT MASTER VALVE
	11496-0	LIGHTER, PILOT (B-C BURNER) WITHOUT MASTER VALVE
	11495-2	LIGHTER, PILOT (A-B BURNER) WITH MASTER VALVE
	11494-4	LIGHTER, PILOT (B-C BURNER) WITH MASTER VALVE
7	03478-9	BURNER ASSY (A & B RING)
	03477-0	BURNER ASSY (C RING)
8	11705-6	CONTAINER, DRIP — 17" WIDE
	11706-4	CONTAINER, DRIP — 20" WIDE
	11707-2	CONTAINER, DRIP — 24" WIDE

## **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 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.



**The MONTAGUE COMPANY**  
1830 Stearman Avenue, P.O. Box 4954 Hayward, CA 94540-4954

# **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**

**Model No.    Change No.    Serial No.**

--	--	--	--

The Montague Company  
1830 Stearman Avenue  
P.O. Box 4954  
Hayward, CA 94540-4954

P/N 4528-4    1286