

INSTRUCTION MANUAL

addendum

MONTAGUE **VECTAIRE** SL

**Gas Convection Ovens
with
Solid State Electronic Controls**

**MODELS:
SL70 (AH, AP) and SL2-70 (AH, AP)**

This manual is meant as a supplement to the Gas Vectaire manual. The contents herein describe the function and operation of the Solid Electronic Controls. For information on the Gas Vectaire oven installation, operation, maintenance, service and parts, refer to the Gas Vectaire manual part no. 4520-9.

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

INTRODUCTION, INSTALLATION & CAUTIONS	2
OPERATION (Cooking with Solid State Controls)	3-7
WIRE DIAGRAMS	8

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.

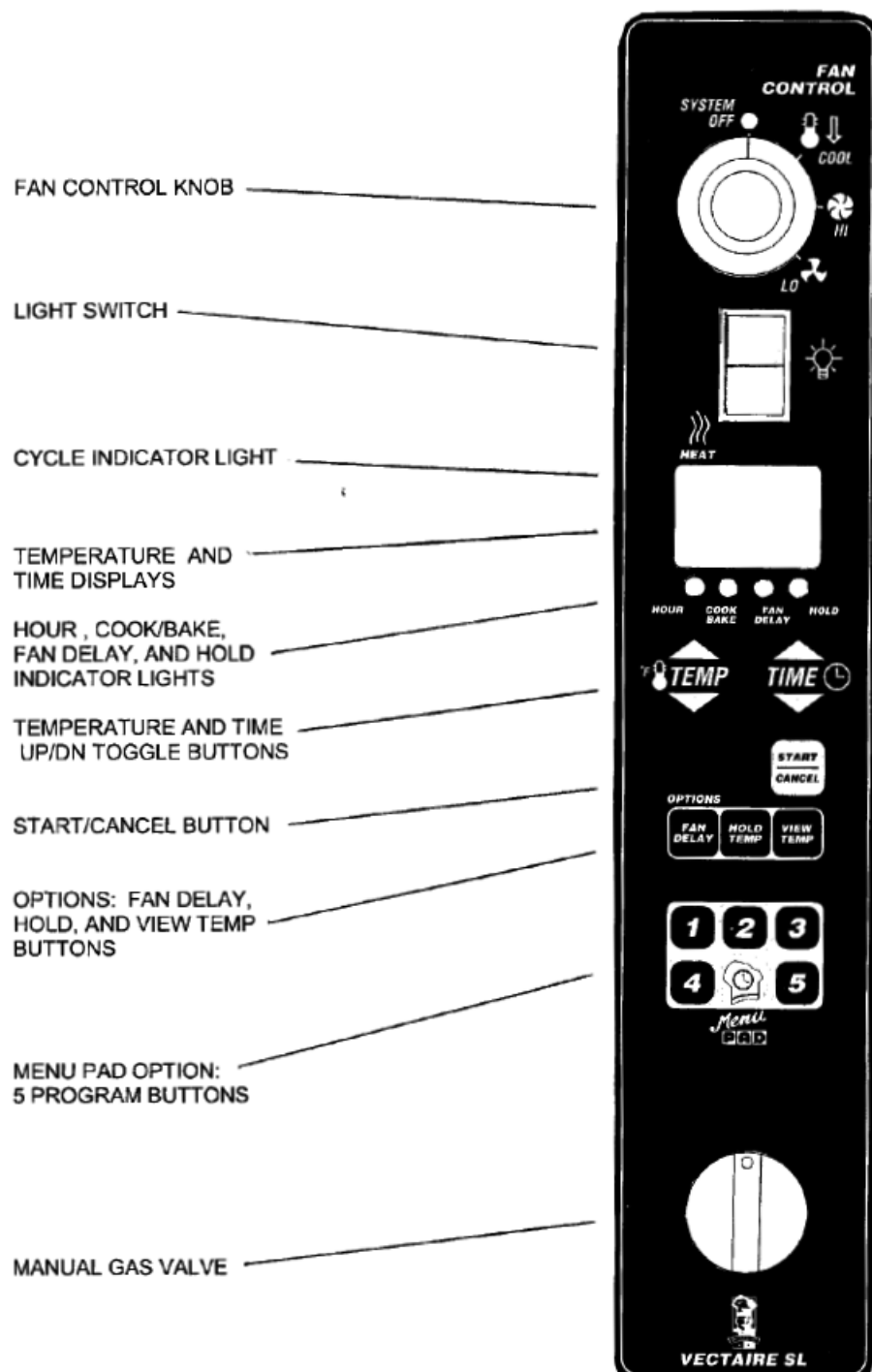


DIAGRAM A: SL70(AH,AP) Control Panel with Cook-n-Hold and MENU PAD Option.

The SL series Vectaire gas convection ovens are very similar to the Vectaire ovens Montague has produced for years. The most significant difference is that solid-state electronic controls are used instead of the electro-mechanical ones commonly used. The result is the most accurate, responsive and predictable ovens we have ever offered with the recognized dependability of solid-state components.

This special manual is meant to be used as a supplement to the main "Vectaire Gas Convection Ovens" instruction manual, which should be reference first for special instructions.

INSTALLATION

Montague's general installation instructions should be followed. In addition, since solid state components have a very short life span when exposed to temperatures above 185°F, (85°C), certain installation precautions are necessary. The SL ovens have been designed to operate well below this temperature when installed properly, and the following cautions are observed:

Caution

1. Do not obstruct the air out the vent holes at the top of the oven, or the flow of fresh room air to the oven bottom or lower front portion of the burner access cover.
2. Do not mount the oven on a solid curb unless it has been modified at the factory for this type of operation.
3. When stacking ovens, never reverse the top and the bottom ovens.
4. Never stack an SL convection type oven with a standard Vectaire, or any other type of oven without first consulting the factory. Certain ovens are not compatible, or a stacking kit may be required.

Special Caution

DO NOT PLACE HIGH HEAT PRODUCING EQUIPMENT ADJACENT TO THE RIGHT SIDE OF AN "SL" VECTAIRE CONVECTION OVEN. EXCEEDING 185°F, (85°C), SURFACE TEMPERATURE CAN CAUSE PREMATURE COMPONENT FAILURE NOT COVERED UNDER MANUFACTURERS WARRANTY. THE OVENS NEED 6" MINIMUM CLEARANCE ON THE RIGHT SIDE BETWEEN SIMILAR OVENS OR OTHER COOKING EQUIPMENT. OPTIONAL INSTALLATION KITS ARE AVAILABLE THAT REDUCE THE MINIMUM CLEARANCE BETWEEN SIMILAR OVENS TO 1" AND BETWEEN OTHER EQUIPMENT TO 2". CONSULT FACTORY.

Gas Control System - Vectaire SL (all models)

Follow the procedures in the main “Vectaire Gas Convection Ovens” manual to light the standing safety pilot on standard models.

On models equipped with the optional Electronic Ignition, the procedure in the main manual is to be followed with one exception. The Fan Control Knob must first be set to either HI or LO before the electronic ignition system is energized and a temperature can be selected to initiate pre-heat.

On initial start-up or if the oven has not been used for an extended period of time, the pilot may fail to ignite within 50 seconds, and a complete shut down of the ignition system will occur for safety purposes. Turn the Fan Control Knob to the SYSTEM OFF position for at least 30 seconds, then back to either HI or LO and repeat the procedure.

If the oven does not ignite after 3 successive attempts, the entire oven gas system should be checked for possible causes.

Control Panel - Vectaire SL70AH Models (Cook-n-Hold) See Diagram A.

The FAN CONTROL KNOB is located at the top of the control panel, and when in the “off” position turns all power off to the oven. The “COOL “ position is used to cool down the oven with the fan on and the door open. The “HI” and “LO” positions are to select the fan speed. If the model is not equipped with a two-speed motor, the “LO” position will result in no change in speed. The fan must be switched on during cooking.

The LIGHT SWITCH is located directly below the fan control. If pressed and held, the oven lights will come on. When released, the oven lights will turn off.

Below the light switch is the control DISPLAY WINDOW. At the top-left corner of the window is the “CYCLE INDICATOR” light. When illuminated, the burner is on and applying heat to the oven. When out, the control is not calling for more heat and the burner is off.

The TEMPERATURE DISPLAY is located at the top of the window and the TIME DISPLAY is located at the bottom of the window.

Beneath the time display are four indicator lights. “HOUR” is illuminated when the time displayed is greater than 60 minutes. “COOK/BAKE” is illuminated whenever a timed cooking or baking cycle has been started, and the time display is showing the time remaining. “FAN DELAY” is illuminated when this option has been selected, and the fan is either being pulsed or delayed at the beginning of the cycle. “HOLD” is illuminated whenever this option has been selected, the cook cycle has ended, and the oven is in the hold phase.

Below the indicator lights are the “TEMP” AND “TIME” toggle buttons. These are used for selecting the cook temperature and cook time. Pushing on the upper arrow will increase the setting, and pushing on the lower arrow will decrease the setting.

The white “START/CANCEL” button has a variety of functions. If a bake/cook time has been selected in the time display, then pushing this button will begin the cycle and the time display will count-down the time remaining. If this button is pushed during a cook/bake cycle it will pause the count-down timer, and if it is pushed again it will re-start the timer. If this button is pushed and held for several seconds, it will clear the timer display back to 00:00.

Below the start/cancel button are located three OPTIONS buttons. One or all of these options can be selected by the operator at the beginning of a cook/bake cycle. At the end of the cycle any selected options are cleared.

FAN DELAY OPTION: This allows the operator to either “pulse (30 sec on, 30 sec off)” or “delay (continuously off)” the fan at the beginning of the bake cycle. To select this option, momentarily push the FAN DELAY button which will result in the top display flashing either “DELA” or “PLSE”. Use either of the TEMP toggle buttons to select the preferred mode. The bottom display will flash the length of time for the option in minutes and seconds. Use the TIME toggle buttons to select the desired time setting from 1 to 20 minutes. After several seconds, the display will revert back to normal. The option has been programmed and will be initiated when the START/CANCEL button is pushed to begin the bake cycle. If the FAN DELAY button is pushed again, it will display the values that are currently programmed.

HOLD OPTION: This allows the operator to add a hold period at the end of the cook cycle. To select this option, momentarily push the HOLD TEMP button which will cause the temperature display to flash. Use the TEMP toggle buttons to select a hold temperature between 140F and 200F. After several seconds the display will revert back to normal and the hold temperature has been programmed. During operation, a single beep is sounded at the end of the timed cook cycle and the oven will automatically cool down to the selected hold temperature. The oven burner will then cycle to maintain the hold temperature while the time display counts-up to show the total hold time. Once finished, pushing the START/CANCEL button will end the cycle and clear all pre-set information from memory. If the HOLD TEMP button is pushed during the cook cycle, it will display the selected hold temperature. This option is only activated if a hold temperature has been entered.

VIEW TEMP OPTION: If this button is pushed momentarily, it will display the actual temperature inside the oven for several seconds, then revert back to the display of the set temperature.

REMEMBER: All commercial ovens can temporarily display an actual temperature significantly different than the set temperature (i.e. when the oven is first pre-heated, or after cold product is loaded, or after the door has been opened). This is normal and does not indicate a malfunction of the oven.

Control Panel - Vectaire SL70AP Models (Cook-n-Hold with Menu Pad Option)

The control panel for the SL70AP Models is identical to the Cook-n-Hold model described above, but also includes 5 programmable buttons directly below the option buttons. (See Diagram A) This optional feature is called a MENU PAD.

The MENU PAD allows the operator the convenience of pre-setting time and temperature values for popular or repeated products, and then selecting them when needed by simply pushing a single button. A total of five different time/temperature pairs can be programmed.

To program BUTTON 1, push and hold the button for several seconds until the time and temperature display begins to flash, signaling that the program mode has been entered. Use the TEMP toggle buttons to select the desired cook temperature, and then the TIME toggle to select the desired cook time. Once completed, the display will stop flashing and revert back to the normal display, indicating that these values have been stored in memory.

To recall these values, simply push BUTTON 1, and the TIME and TEMPERATURE values programmed will appear in the display, and the oven will begin pre-heating. Once ready, the operator can push the START/CANCEL button to start the timer. Since these values have been pre-selected, they cannot be changed during operation. If the wrong button is accidentally selected, pushing and holding the START/CANCEL button for several seconds will clear the time and temperature display.

This procedure can be repeated until all five buttons are programmed. The pre-selected values will remain in the system memory even if the oven is shut-off, but can easily be changed by entering different values or clearing the values completely.

COOKING WITH SL70 (AH,AP) MODELS

Cooking with solid-state controls is easy and straight-forward. The gas must be turned on and the pilot lit (except models with electronic ignition option) before using.

STANDARD TIMED BAKE: (Cookies @325°F for 18 minutes) Turn the fan control to HI or LO. Enter 325F in the temperature display. The burner indicator light will come on and the temperature display will flash as the oven pre-heats. Once 325°F is reached the display will stop flashing and there will be a single beep signal. (To eliminate "first-bake" inconsistency, allow the oven to cycle for an additional 20 minutes to reach thermal equilibrium). Select 18 minutes in the time display, load the oven and close the door, and push the START/CANCEL button to start the timer. The COOK/BAKE indicator light will come on. When time has expired, the display will flash "done" and the alarm will beep until silenced by pushing the START/CANCEL button. Remove the baked product and repeat the cycle if desired, or turn the fan control to OFF if finished

BAKE WITH FAN DELAY(PULSE): (Hi-rise muffins @ 310°F for 22 minutes) Turn the fan control to HI or LO. Enter 310°F in the temperature display. The oven will begin pre-heating. Now, push and release the FAN DELAY button to select this option. Use the TEMP toggle to select “plse” in the temperature display, and use the TIME toggle to select 12 minutes in the time display. Wait several seconds for the control to revert back to normal display, and select the bake time of 22 minutes. When ready, load the oven, shut the door, and push the START/CANCEL button. The bake time will begin counting-down and the fan will repeatedly pulse (30 seconds off - 30 seconds on) to allow the muffins to rise and take a set. The FAN DELAY indicator light will be on during this period. When 12 minutes has expired, a single beep will be signaled and the fan will automatically return to continuous operation. At the end of the timed bake the alarm will beep until canceled by pushing the START/CANCEL button.

BAKE WITH FAN DELAY(OFF): (Cream Puffs @ 350°F for 24 minutes) Turn the fan control to LO and enter 350°F in the temperature display. The oven will begin pre-heating. Now, push and release the FAN DELAY button. Use the TEMP toggle to select “dela” and then use the TIME toggle to enter 8 minutes in the time display. Wait several seconds, and then select the bake time of 24 minutes. When ready, load the oven, shut the door, and push the START/CANCEL button. The bake time will begin counting down, the FAN DELAY indicator light will come on, and the fan will shut off to allow the Cream Puffs to set. Once the 8 minutes has expired, a single beep will be signaled and the fan will automatically turn on for the remainder of the bake. At the end of the timed bake the alarm will beep until cancelled by pushing the START/CANCEL button.

COOK-N-HOLD: (Rolled Roast @ 225°F for 2HR 30Min.) Turn the fan control to LO and enter 225°F in the temperature display. The oven will begin pre-heating. Now, push and release the HOLD button. Use the TEMP toggle buttons to select a hold temperature of 150°F. There is no need to select a hold time, and after a few seconds pause the display will revert back to normal. Now use the TIME toggle buttons to select 2 hours and 30 minutes in the display (the HR indicator light will come on). When ready, load the oven, close the door, and push the START/CANCEL button. The COOK/BAKE indicator light will come on and the timer will begin counting down. When it reaches 00:00 time, a single alarm will sound, the time display will flash “hold”, the temperature display will show 150F, and the HOLD indicator light will come on. Now the timer will begin counting-up to display the accumulated HOLD time. When it is time to remove the roast, the operator should push the START/CANCEL button to end the cycle and clear the displays. The roast can now be removed.

PROGRAMMED COOK: (Baked potatoes @ 450°F for 50 minutes) If the operator had pre-programmed BUTTON 1 of the Menu Pad for 450°F temperature and a time of 50 minutes, all he needs to do now is push BUTTON 1 and release. The temperature display will show 450° F, the time display will show 50 minutes, and the oven will begin pre-heating. When ready, load the oven, shut the door, and push the START/CANCEL button. The timer will start, and once time has expired, the alarm will sound until cancelled by pushing the START/CANCEL button again. The time and temperature values will reload, and another repeat cook could be started as soon as the oven was loaded with fresh product. If the operator was completed cooking or wanted another cook temperature or time, he could push and hold the START/CANCEL button to clear the display.

SERVICING SOLID-STATE CONTROLS

When servicing the solid-state controls on the oven, make certain the precautions in the main manual regarding disconnecting power and turning off the gas supply are followed before beginning.

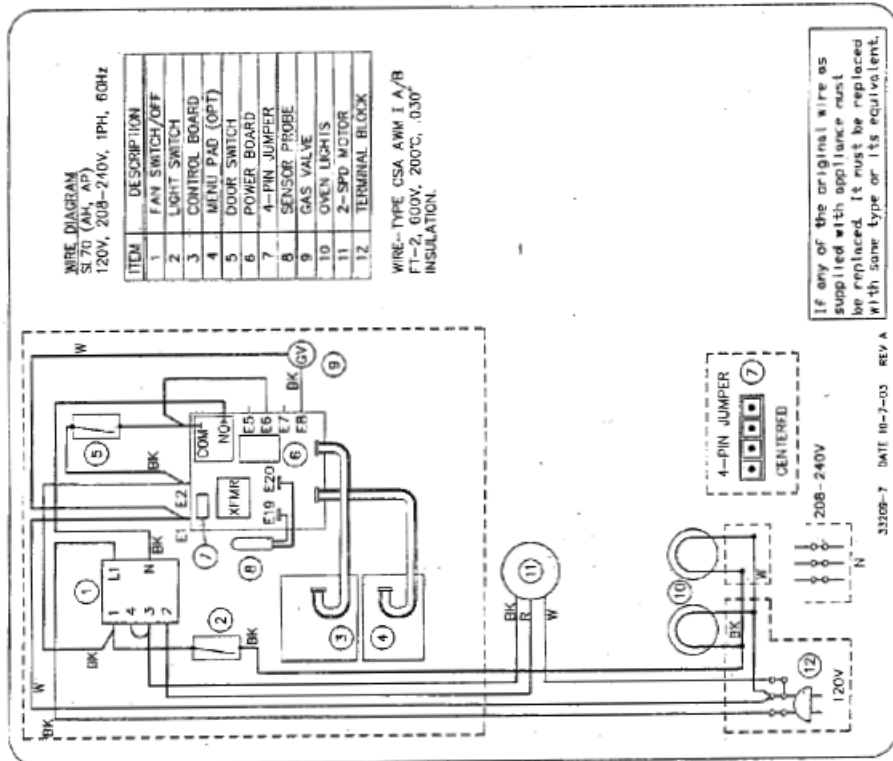
RUNNING HOURS: When first turned on the control will display momentarily the total number of running hours logged by the oven.

THERMOSTAT CALIBRATION: The SL70(AH,AP) controls are factory calibrated, and as long as the control is functioning, re-calibration is not necessary. If the control stops functioning or shows Error Codes in the display, it is necessary to contact an authorized service agent.

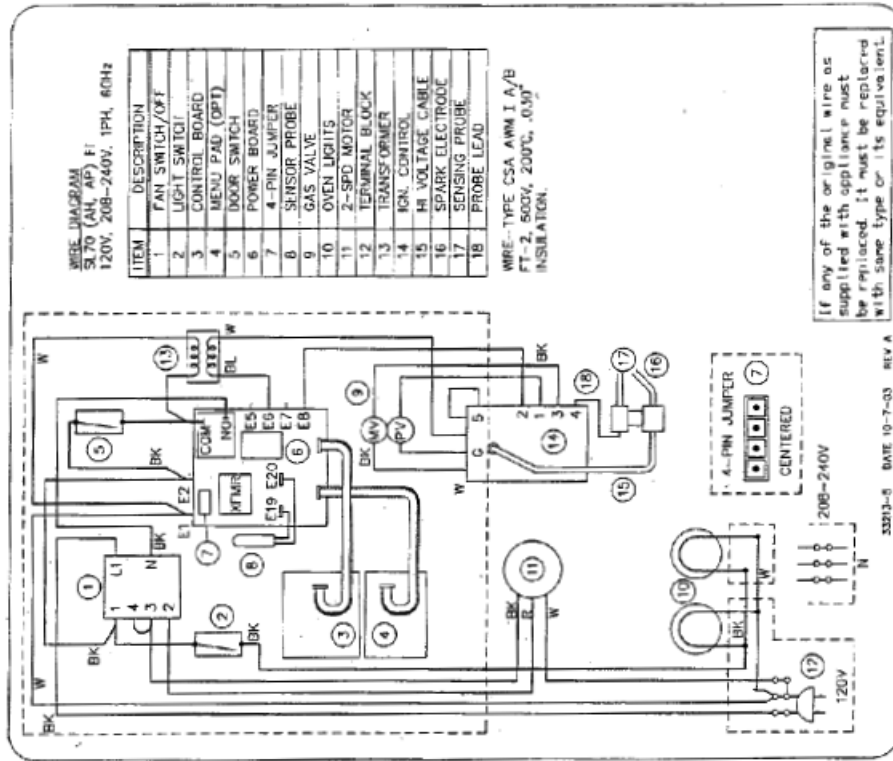
ALARM VOLUME ADJ: While at idle, press and hold the TEMP UP/TEMP DOWN buttons for 3 seconds. Press either TEMP button to toggle between S - soft, L - loud, or E - external. After 3 seconds the setting is saved and the control will return to idle.

ERROR CODES: The control will display error codes and alarms that will alert the operator to a problem and aid in its diagnosis and correction. The codes, cause, and correction are listed below:

<u>ERROR</u>	<u>EXPLANATION</u>	<u>CORRECTION</u>
Err1	This is the result of a shorted temperature sensing probe. Clear the code by turning power off to the oven.	Replace the sensing probe.
Err2	This is the result of an open sensing probe. Clear the code by turning off power to the oven.	Check the probe connections, or replace the probe.
Err3	This is the result of a shorted auxiliary sensing probe (optional). Clear the code by turning off power to the oven.	Replace the sensing probe.
Err4	The oven temperature has exceeded the maximum set temperature by 50°F (28°C) or more. The heating function has been terminated, and can only be cleared by turning off power to the oven.	Call servicer to diagnose problem and correct.
Err5	The control board is about to exceed the operating temperature and could fail. Complete the bake and turn off power to the oven. Once cooled down, the oven will continue operating.	Check to be certain the vents on top of the oven are clear, the exhaust hood is operating properly, and whether an adjacent appliance might be heating the control compartment excessively. If no problem is found, call the servicer.



WIRE DIAGRAM #333209-7: SL70 (AH, AP) STANDARD



WIRE DIAGRAM #33213-5: SL70 (AH, AP), ELECTRONIC IGNITION

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 part, 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 34455-9 7/04