

STAR MANUFACTURING COMPANY
DIVISION OF THE PULLMAN COMPANY
9325 OLIVE BLVD., P.O. BOX 8492
ST. LOUIS, MO 63132

MODEL 230 - STAR FOOD WARMER
GENERAL INSTALLATION DATA

CAUTION: THIS EQUIPMENT IS DESIGNED AND SOLD FOR COMMERCIAL USE ONLY BY PERSONNEL TRAINED AND EXPERIENCED IN ITS OPERATION AND IS NOT SOLD FOR CONSUMER USE IN AND AROUND THE HOME NOR FOR USE DIRECTLY BY THE GENERAL PUBLIC IN FOOD SERVICE LOCATIONS. FOR EQUIPMENT TO BE USED BY THE GENERAL PUBLIC, PLEASE CONTACT THE FACTORY.

THE STAR MODEL 230 GAS FOOD WARMER IS EQUIPPED FOR THE TYPES OF GAS INDICATED ON THE NAMEPLATE MOUNTED ON THE INSIDE OF THE CABINET DOOR. THE TOTAL GAS INPUT IS 4,000 BTU/HR. IT IS SHIPPED ADJUSTED FOR USE ON PROPANE GAS.

THE INSTALLATION OF THE APPLIANCE SHOULD CONFORM TO THE NATIONAL FUEL GAS CODE ANSI Z223.1984 AND NFPA 70-1984 AND ALL LOCAL GAS CODES, RULES AND REGULATIONS

THIS APPLIANCE, ITS PRESSURE REGULATOR 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. THIS APPLIANCE AND ITS PRESSURE REGULATOR MUST BE ISOLATED FROM THE GAS SUPPLY 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. FOR YOUR PROTECTION, WE RECOMMEND A QUALIFIED INSTALLING AGENCY INSTALL THIS APPLIANCE. THEY SHOULD BE FAMILIAR WITH GAS INSTALLATIONS AND YOUR LOCAL GAS REQUIREMENTS. IN ANY CASE, YOUR GAS COMPANY SHOULD BE CALLED TO APPROVE THE FINAL INSTALLATION. IN ADDITION, THERE SHOULD BE POSTED, IN A PROMINENT LOCATION, DETAILED INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE OPERATOR SMELLS GAS. OBTAIN THE INSTRUCTIONS FROM THE LOCAL GAS SUPPLIER.

FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE OR OTHER
FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY
OF THIS OR ANY OTHER APPLIANCE. KEEP THE
APPLIANCE AREA CLEAR AND FREE FROM COMBUSTIBLES.

LEVELING UNIT

LEVEL UNIT BY ADJUSTING THE (4) FEET WHICH HAVE AN ADJUSTMENT OF 1" FOR ACCURATE AND PERFECT LINE-UP WITH OTHER DESIGNER SERIES UNITS. CAUTION: DO NOT REMOVE FEET. FOUR FOOT EXTENSIONS WITH STUDS ARE PROVIDED IN THE EVENT ADDITIONAL BOTTOM CLEARANCE IS REQUIRED FOR EASE OF CLEANING.

CLEARANCE

CLEARANCES FROM COMBUSTIBLE MATERIAL MUST BE A MINIMUM OF 48" FROM THE TOP OF THE APPLIANCE AND 6" FROM THE SIDES AND BACK. ADEQUATE CLEARANCE SHOULD ALSO BE PROVIDED FOR PROPER OPERATION AND SERVICING.

GAS PIPING

GAS PIPING SHALL BE OF SUCH SIZE AND SO INSTALLED AS TO PROVIDE A SUPPLY OF GAS SUFFICIENT TO MEET THE FULL GAS INPUT OF THE APPLIANCE. IF THE APPLIANCE IS TO BE CONNECTED TO EXISTING PIPING IT SHALL BE CHECKED TO DETERMINE IT HAS ADEQUATE CAPACITY. JOINT COMPOUND (PIPE DOPE) SHALL BE USED SPARINGLY AND ONLY TO THE MALE THREADS OF THE PIPE JOINTS. SUCH COMPOUNDS SHALL BE RESISTANT TO THE ACTION OF L.P. GASES. WARNING: ANY LOOSE DIRT OR METAL PARTICLES WHICH ARE ALLOWED TO ENTER THE GAS LINES ON THIS APPLIANCE WILL DAMAGE THE VALVE AND AFFECT ITS OPERATION. WHEN INSTALLING THIS APPLIANCE, ALL PIPE AND FITTINGS MUST BE FREE FROM ALL INTERNAL LOOSE DIRT.

MANUAL SHUT OFF VALVE

A MANUAL SHUT OFF VALVE SHOULD BE INSTALLED UPSTREAM FROM THE UNION AND WITHIN SIX FEET OF THE APPLIANCE.

CONNECTING GAS SUPPLY LINE

THE GAS INLET OF THIS APPLIANCE IS SEALED AT THE FACTORY TO PREVENT ENTRY OF DIRT. DO NOT REMOVE THIS SEAL UNTIL ACTUAL CONNECTION IS MADE TO THE GAS SUPPLY LINE.

CHECKING FOR GAS LEAKS

SOAP AND WATER SOLUTION, OR OTHER MATERIAL ACCEPTABLE FOR THE PURPOSE SHALL BE USED IN LOCATING GAS LEAKAGE. MATCHES, CANDLES, FLAME OR OTHER SOURCES OF IGNITION SHALL NOT BE USED FOR THIS PURPOSE.

AIR SUPPLY

PROVISIONS FOR ADEQUATE AIR SUPPLY MUST BE FURNISHED.

AIR INTAKES IN BOTTOM

MAKE CERTAIN THAT THE AIR INTAKE OPENINGS IN THE BOTTOM OF THE APPLIANCE ARE NOT OBSTRUCTED. THEY ARE ESSENTIAL FOR PROPER COMBUSTION AND OPERATION OF THE APPLIANCE.

EXHAUST CANOPY

IT IS ESSENTIAL THAT FACILITIES BE PROVIDED TO CARRY OFF FUMES AND GASES.

LIGHTING INSTRUCTIONS

1. TURN VALVE TO "OFF" POSITION.
2. WAIT 5 MINUTES TO CLEAR OUT GAS BEFORE RELIGHTING PILOT.
3. REMOVE ALL PANS FOR UNIT.
4. RAISE FRONT OF BAFFLE TO EXPOSE PILOT.
5. LIGHT PILOT.
6. LOWER BAFFLE INTO POSITION.
7. TURN MAIN BURNER CONTROL KNOB TO DESIRED SETTING BETWEEN HI AND LO. FLAME MAY BE OBSERVED THROUGH OPENING BEHIND FRONT DOOR PANEL.
8. TO TURN GAS OFF, TURN KNOB TO "OFF" POSITION.

TO ADJUST PILOT

1. OPEN THE FRONT DOOR PANEL BY PULLING ON THE LOUVRE.
2. LOOSEN LOCK NUT ON THE PILOT ADJUSTMENT VALVE JUST TO THE RIGHT OF THE CONTROL VALVE.
3. TURN THE SCREW TO ADJUST PILOT TO SMALLEST FLAME THAT WILL GIVE GOOD IGNITION OF THE BURNER.
4. TIGHTEN LOCK NUT.

TO ADJUST BURNER

THIS UNIT IS EQUIPPED WITH A DOUBLE COAXIAL ORIFICE AND IS ADJUSTED AT THE FACTORY FOR USE ON PROPANE GAS. FOR USE ON NATURAL GAS, THE FOLLOWING ADJUSTMENTS MUST BE MADE:

1. WITH THE CONTROL VALVE TO THE BURNER TURNED TO "HIGH" TURN THE ADJUSTABLE HOOD UNTIL A GAS RATE OF 4,000 BTU/HR IS OBTAINED.
2. LOOSEN THE LOCK NUT ON THE AIR MIXER ADJUSTMENT SCREW. THE SCREW IS LOCATED AT THE FORWARD END OF THE BURNER AND IS ACCESSIBLE THROUGH THE OPENING OF THE WARMING COMPARTMENT.
3. TURN THE AIR MIXER ADJUSTMENT SCREW IN A CLOCKWISE DIRECTION UNTIL THERE IS A SHORT HARD FLAME. TIGHTEN THE AIR MIXER SCREW LOCKNUT.
4. TURN THE CONTROL VALVE TO "LOW".
5. REMOVE THE CONTROL KNOB.
6. TURN THE SCREW IN THE CENTER OF THE STEM OF THE CONTROL KNOB UNTIL YOU GET AS SMALL OF A STABLE FLAME AS POSSIBLE.

IF THE UNIT HAS BEEN ADJUSTED TO NATURAL GAS AND IT IS DESIRED TO OPERATE IT ON PROPANE GAS, THE FOLLOWING ADJUSTMENTS MUST BE MADE:

1. TURN THE ADJUSTABLE HOOD "IN" UNTIL IT IS CLOSED. (RIGHT HAND THREAD) DO NOT FORCE.
2. LOOSEN THE LOCKNUT ON THE AIR MIXER ADJUSTMENT SCREW. WITH THE CONTROL VALVE TO THE BURNER TURNED TO "HIGH", TURN THE AIR MIXER ADJUSTMENT SCREW IN A COUNTERCLOCKWISE DIRECTION UNTIL THERE IS A SHORT HARD FLAME.
3. TURN THE CONTROL VALVE TO "LOW".
4. REMOVE THE CONTROL KNOB.
5. TURN THE SCREW IN THE STEM OF THE CONTROL KNOB UNTIL YOU GET AS SMALL A STABLE FLAME AS POSSIBLE.

OPERATING INSTRUCTIONS

OPERATING PROCEDURE

THE TUBULAR BURNER WILL DELIVER UP TO 4,000 BTU/HR OF HEAT AND IS CONTROLLED BY AN ADJUSTABLE ON/OFF VALVE. THE BURNER WILL IGNITE AUTOMATICALLY BY TURNING THE CONTROL KNOB TO "HI". AN INFINITE NUMBER OF HEAT SETTINGS MAY BE HAD BY TURNING THE CONTROL KNOB TO ANY POSITION BETWEEN "HI" AND "LOW".

BECAUSE THE CONSISTENCY OF DIFFERENT FOODS VARIES, AND BECAUSE LIQUIDS AND SOLIDS ABSORB HEAT AT DIFFERENT RATES, IT IS IMPRACTICAL TO SPECIFY THE EXACT DIAL SETTING. YOU WILL SOON LEARN FROM EXPERIENCE THE BEST DIAL SETTINGS TO MEET YOUR NEEDS.

PUT PRE-COOKED FOOD IN THE POTS, OR PANS, AND INSERT IN THE UNIT. ADAPTORS ARE AVAILABLE FOR TWO ROUND POTS, FOUR ROUND POTS AND A GREAT VARIETY OF SQUARE PAN COMBINATIONS.

IF PREHEATING IS DESIRED, SET THE CONTROL AT "HI" FOR APPROXIMATELY 5 MINUTES. PROLONGED "HI" SETTING MAY RESULT IN OVERCOOKING OR SCORCHING OF CERTAIN FOODS. TURN THE VALVE TO THE "OFF" POSITION WHEN THE UNIT IS NOT IN USE.

CAUTION: DO NOT OVERHEAT THE UNIT.

CLEANING

YOUR FOOD WARMER IS DESIGNED FOR LONG SERVICE AND WILL STAY NEW LOOKING BY REGULARLY WIPING WITH A CLEAN SOFT CLOTH. ANY DISCOLORATION MAY BE REMOVED BY USING A NON-ABRASIVE CLEANER. AT LEAST ONCE A DAY, WIPE OUT THE INTERIOR OF THE UNIT. THE BURNER HEAT BAFFLE IN THE BOTTOM OF THE UNIT CAN BE REMOVED FOR CLEANING.

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REPAIRS AND SERVICE

THIS APPLIANCE SHOULD ONLY BE REPAIRED OR SERVICED BY THE FACTORY OR FACTORY AUTHORIZED PERSONNEL.

PARTS LIST

EFFECTIVE— JANUARY 15, 1982

MODEL 230
DESIGNER SERIES 15" FOOD WARMER

KEY NUMBER	PART NUMBER	NUMBER PER UNIT	DESCRIPTION
	J1-230013	1	BURNER ASSEMBLY NLA
	J1-230002	1	BAFFLE ASSEMBLY
*	2V-6657	1	CONTROL VALVE (LESS KNOB)
	2R-9785	1	CONTROL VALVE KNOB
*	2V-6671	1	PILOT VALVE
*	2J-6723	1	PILOT (BURNER)
	2A-6660	1	PILOT ORIFICE
	2G-8845	1	DOOR CATCH
	2G-8842	1	DOOR STRIKE
	Z1-115006	4	LEG ASSEMBLY (LESS FOOT)
	2A-7612	4	FOOT
	2A-9347	4	EXTENSION FOOT
	W1-125003	1	STEAMER PAN W/COVER BRACKET
	W1-125002	1	BUN BASKET NLA
	W1-65205	1	BOTTOM MOISTURE BAFFLE
	W1-65206	1	TOP MOISTURE BAFFLE

*SUGGESTED PARTS STOCKING—

IMPORTANT: WHEN ORDERING SPECIFY VOLTAGE OR TYPE GAS DESIRED
INCLUDE MODEL AND SERIAL NUMBER—(1) MINIMUM PARTS ORDER—\$5.00PAGE 1
OF 1**STAR MANUFACTURING COMPANY**

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