STAR MANUFACTURING INTERNATIONAL, INC. 9325 OLIVE BLVD., P.O. BOX 8492 St. Louis, MO 63132

STARMASTER MODEL 441 GAS HOTPLATE STARMASTER SERIES GAS APPLIANCE

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.

THIS GAS APPLIANCE IS EQUIPPED FOR THE TYPES OF GAS INDICATED ON THE NAMEPLATE MOUNTED UNDER THE DRIP TRAY. IT IS SHIPPED ADJUSTED FOR USE ON NATURAL GAS.

THE INSTALLATION OF THE APPLIANCE SHOULD CONFORM TO THE NATIONAL FUEL GAS CODE ANSI Z223.1-1984 AND NFPA 70-1984 AND ALL LOCAL GAS COMPANY 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(3.45KPA). 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(3.45KPA). FOR YOUR PROTECTION, WE RECOMMEND A QUALIFIED INSTALLING AGENCY INSTALL THIS APPLIANCE. THEY SHOULD BE FAMILIAR WITH GAS INSTALLATIONS AND YOUR LOCAL 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) INCH FOR ACCURATE AND PERFECT LINE-UP WITH OTHER STARMASTER SERIES UNITS. CAUTION: DO NOT REMOVE FEET.

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 VALVE AND AFFECT ITS OPERATION. WHEN INSTALLING THIS APPLIANCE, ALL PIPE AND FITTINGS MUST BE FREE FROM ALL LOOSE DIRT.

PRESSURE REGULATOR

A CONVERTIBLE PRESSURE REGULATOR SET AT 6 INCHES W.C. FOR USE ON NATURAL GAS IS FURNISHED. THE NIPPLE SUPPORT FLANGE IS ALSO SUPPLIED AND SHOULD BE SECURED TO THE UNIT BACK WITH (2) SCREWS PROVIDED. ATTACH THE LONG NIPPLE TO THE REGULATOR. SLIDE THE LONG NIPPLE THROUGH THE NIPPLE SUPPORT FLANGE AND FASTEN TO THE INLET ELBOW ON THE UNIT. THE SUPPLY IS TO BE CONNECTED TO THE REGULATOR. A 1/8" TAP IS FURNISHED ON THE NIPPLE FOR CHECKING PRESSURE.

MANUAL SHUT OFF VALVE

A MANUAL SHUT OFF VALVE SHOULD BE INSTALLED UP-STREAM 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.

CLEARANCE

A VERTICAL DISTANCE OF NOT LESS THAN 48" SHALL BE PROVIDED BETWEEN THE TOP OF THE APPLIANCE AND COMBUSTIBLE MATERIAL AND A 6" CLEARANCE FROM THE SIDES AND BACK. ADEQUATE CLEARANCE SHOULD ALSO BE PROVIDED FOR PROPER OPERATION AND SERVICING.

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.

ADJUSTING GAS INPUT

GAS INPUT OF HOTPLATE

FOR NATURAL GAS - 20,000 BTU/HR OR 10,000 BTU/HR FOR ONE BURNER. REGULATOR OUTPUT PRESSURE SET 6" W.C.

FOR PROPANE GAS - 20,000 BTU/HR OR 10,000 BTU/HR FOR ONE BURNER. REGULATOR OUTPUT PRESSURE SET $10^{\prime\prime}$ W.C. THE APPLIANCE IS EQUIPPED WITH NATURAL GAS ORIFICE HOODS. A SEPARATE SET OF HOODS (BLACK COLOR) ARE PROVIDED FOR USE ON PROPANE GAS.

LIGHTING INSTRUCTIONS

THE APPLIANCE IS EQUIPPED WITH A STANDING PILOT, WHICH IS LOCATED IN THE CENTER OF THE APPLIANCE BETWEEN THE FRONT AND REAR BURNERS, AND SHOULD BE LIGHTED IMMEDIATELY AFTER THE GAS IS TURNED ON.

TURN CONTROL KNOBS TO "OFF" POSITION.

REMOVE GRATES AND DRIP TRAY, AND LIGHT PILOT WITH A LIGHTED TAPER.

TO ADJUST PILOT, REMOVE FRONT BURNER AND FRONT DRIP PAN, THEN TURN THE
ADJUSTMENT SCREW, LOCATED ON THE PILOT FILTER JUST BEHIND THE BURNER VALVES.
THE PILOT SHOULD BE ADJUSTED TO AS SHORT A FLAME AS POSSIBLE AND STILL HAVE
GOOD IGNITION TO THE BURNERS.

ADJUSTING BURNERS

WITH THE CONTROL VALVE TO THE FRONT BURNER TURNED TO FULL "ON", CLOSE THE AIR SHUTTERS TO GIVE A SOFT BLUE FLAME HAVING LUMINOUS TIPS AND OPEN TO A POINT WHERE THE YELLOW TIPS DISAPPEAR, THEN TIGHTEN THE LOCKING SCREWS. REPEAT THIS PROCEDURE WITH THE REAR BURNER.

ADJUSTING UNIT FOR USE ON PROPANE GAS

- SET REGULATOR OUTLET PRESSURE TO 10 INCHES W.C. A 1/8" PIPE PLUG ON THE NIPPLE CAN BE REMOVED FOR ATTACHING A PRESSURE GAUGE. REMOVE THE SLOTTED COVER FROM THE PRESSURE REGULATOR AND INVERT THE PLUG. REPLACE THE COVER ON THE REGULATOR AND PLUG ON THE NIPPLE. REGULATOR IS NOW SET AT 10 INCHES W.C.
- REMOVE NATURAL GAS ORIFICES AND INSTALL PROPANE ORIFICES (#61 BLACK COLOR)
 THAT ARE LOCATED BEHIND THE FRONT PANEL UNDER THE DRIP TRAY, CLOSE THE AIR
 SHUTTER TO GIVE A SOFT BLUE FLAME HAVING LUMINOUS TIPS AND OPEN TO A POINT
 WHERE THE YELLOW TIPS DISAPPEAR, THEN TIGHTEN THE LOCKING SCREW.

OPERATING INSTRUCTIONS

OPERATING PROCEDURE

EACH PROCEDURE WILL DELIVER UP TO 10,000 BTU/HR OF HEAT AND IS CONTROLLED BY AN ADJUSTABLE ON/OFF VALVE. THE RIGHT CONTROL KNOB CONTROLS THE FRONT BURNER AND THE LEFT CONTROL KNOB CONTROLS THE REAR BURNER. AFTER THE PILOT IS ONCE LIT AND ADJUSTED, THE BURNERS WILL IGNITE AUTOMATICALLY BY TURNING THE CONTROL KNOB FULL "ON" TO THE LEFT. AN INFINITE NUMBER OF HEAT SETTINGS MAY THEN BE HAD BY TURNING THE CONTROL KNOB TO ANY POSITION BETWEEN ON AND OFF.

LIGHTING INSTRUCTIONS

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1. TURN CONTROL KNOBS TO "OFF" POSITION.

2. REMOVE GRATES AND DRIP TRAY, AND LIGHT PILOT WITH A LIGHTED TAPER.

TO ADJUST PILOT, REMOVE FRONT BURNER AND FRONT DRIP PAN, THEN TURN THE
ADJUSTMENT SCREW, LOCATED ON THE PILOT FILTER JUST BEHIND THE BURNER VALVES.
THE PILOT SHOULD BE ADJUSTED TO AS SHORT A FLAME AS POSSIBLE AND STILL HAVE
GOOD IGNITION TO THE BURNERS.

4. TURN CONTROL KNOBS TO "ON" POSITION.

ADJUSTING BURNERS
WITH THE CONTROL VALVE TO THE FRONT BURNER TURNED TO FULL "ON", CLOSE THE AIR
SHUTTERS TO GIVE A SOFT BLUE FLAME HAVING LUMINOUS TIPS AND OPEN TO A POINT
WHERE THE YELLOW TIPS DISAPPEAR, THEN TIGHTEN THE LOCKING SCREWS, REPEAT THIS
PROCEDURE WITH THE REAR BURNER.

AIR INTAKES IN BOTTOM

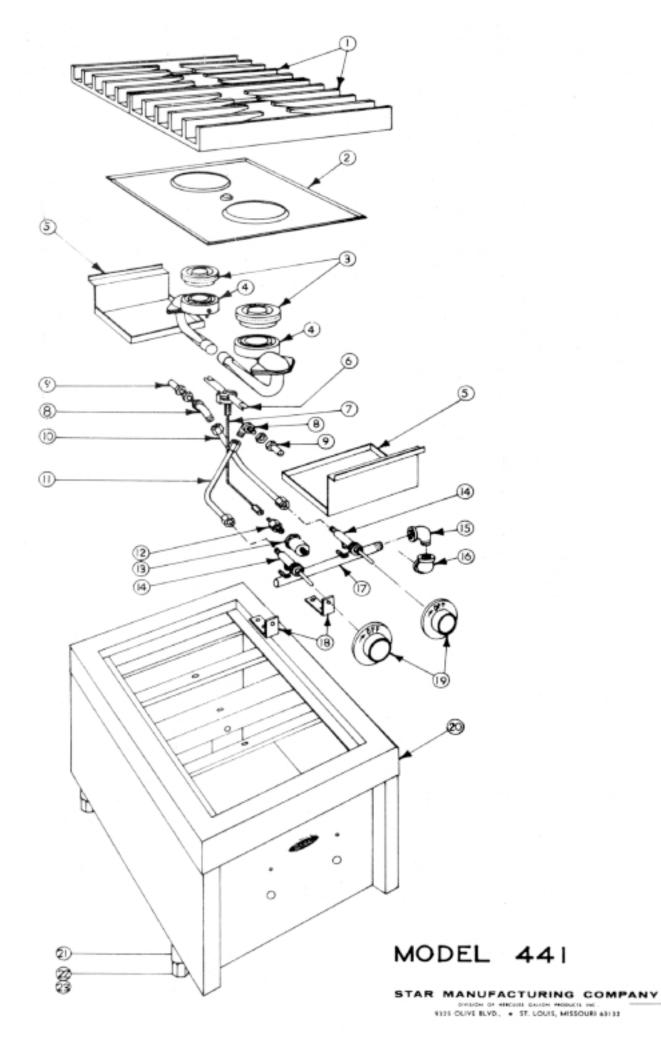
MAKE CERTAIN THAT THE AIR INTAKE OPENINGS IN THE BOTTOM OF THE APPLIANCE ARE NOT OBSTRUCTED. THEY ARE ESSENTIAL FOR PROPER COMBUSTION AND OPERATION OF THE APPLIANCE.

G FANING

THE EXTERIOR SURFACE CAN BE KEPT CLEAN AND ATTRACTIVE BY REGULARLY WIPING WITH A CLEAN SOFT CLOTH. ANY DISCOLORATION CAN BE REMOVED WITH A NON-ABRASIVE CLEANER. THE BURNER GRATES, DRIP TRAYS AND BURNER TOPS CAN BE REMOVED FOR CLEANING.

KEEP THE APPLIANCE AREA CLEAR AND FREE FROM COMBUSTIBLES.

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



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441 Hotplate Manufactured from 12-67 to 4-91

Key Number	Part Number	Number Per Unit	Description
1	2F-8950	2	Grate
2	I2-441003	1	Drip Tray Assembly
3	2P-6599	2	Cap - Burner (NO LONGER AVAILABLE)
4	I2-441022	2	Burner Assembly Complete
	2J-Y2953	2	Jet
5	I2-9355	2	Tray - Lower
6	2J-Y1628	1	Lighter - Flash (5/8" Cut off Tube) (NO LONGER AVAILABLE)
7	I2-Y3518	1	Tube - Pilot (NO LONGER AVAILABLE)
	I1-Y4418	2	Flash Tubes (not shown)
8	2A-9369	2	Fitting - Orifice W/Nut
9	I2-9367	2	Hood - Orifice (#54) (NAT)
	I2-9368	2	Hood - Orifice (#61) (LP)
10	I2-Y3517	1	Tube - Rear Burner
11	I2-Y3516	1	Tube - Front Burner
12,13	2J-Y2636	1	Filter - Pilot
14	2V-6630	2	Valve
15	2K-7760	1	Elbow - Street Ell
16	2K-2665	1	Elbow - 90 ⁰ Ell
17	2J-9361	1	Manifold
18	I2-9356	2	Support - Manifold
19	2R-9364	2	Knob - Control
20	I4-441001	1	Top Assembly
21	Z1-115006	4	Leg Assembly (less foot)
22	2A-7612	4	Foot
23	2A-9347	4	Extension Foot
	2C-9348	4	Stud (not shown)
	2J-Y3948	1	Pressure Regualtor (not shown)

IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED INCLUDE MODEL AND SERIAL NUMBER

Some items are included for illustrative purposes only and in certain instances may not be available.

