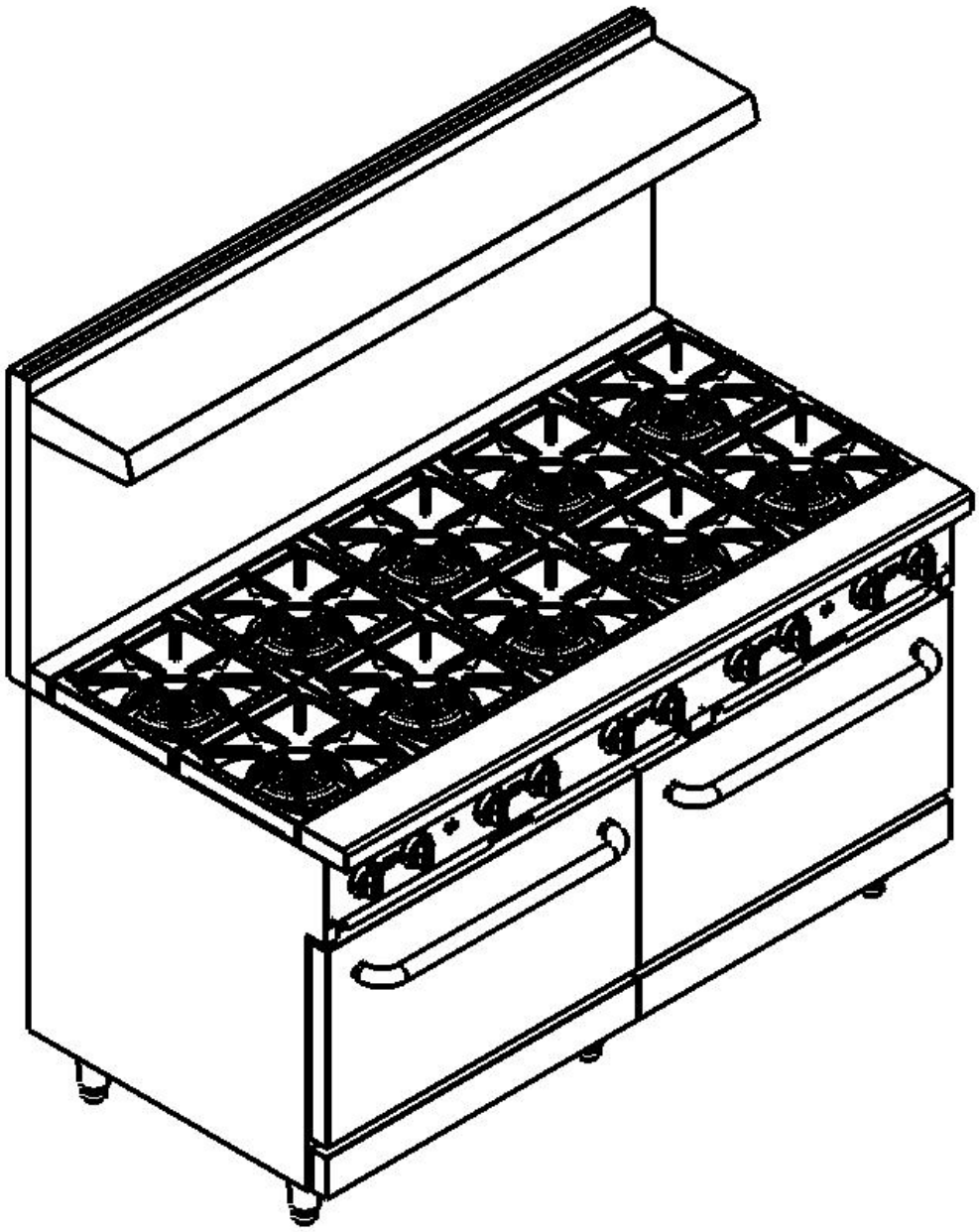
INSTALLATION & OPERATION MANUAL

Gas Range Oven



Manually Controlled Models:

HSD-B24 HSD-B36 HSD-B48 HSD-B60

-IMPORTANT SAFETY NOTICE-

This manual contains important safety instructions which must be strictly followed when using this equipment. Please retain this manual for future reference.

FOR YOUR SAFETY

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

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

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Attention owner and Operators

The equipment is designed to provide safe and productive processing, cooking and warming of food products as long as the equipment is used in accordance with the instructions in this manual and is properly maintained. Unless the operator is adequately trained and supervised there is a possibility of serious injury. Owners of this equipment bear the responsibility to make certain that this equipment is used properly and safely, and to strictly follow all of the instructions contained in this manual and the requirements of local, state of federal law.

Owners should not permit anyone to touch this equipment unless they are over 18 years old, are adequately trained and supervised, and have read and understood this manual. Do not attempt to repair or convert any gas types one your own. Repairs and conversions are to be made solely by an authorized local servicer.

Owners should also ensure that no customers, visitors or other unauthorized personnel come in contact with this equipment. Please remember that supplier cannot anticipate every circumstance of environment in which its equipment will be operated. It is the responsibility of the owner and the operator to remain alert to any hazards posed by the function of this equipment. If you are ever uncertain about a particular task or the proper method of operating this equipment, ask your supervisor.

This manual contains a number of precautions to follow to help promote safe use of this equipment.

Throughout the manual you will see additional warnings to help alert you to potential hazards.

Warning affection your personal safety indicated by:

⚠ **WARNING**OR ⚠

Warning affect or possible damage to the equipment and property are indicated by:CAUTION

If any warning labels or this manual are misplaced,damaged,or illegible, or if you require additional copies, please contact your nearest representative or vendor directly for these items at no charge.

Please remember that this manual or the warning labels do not replace the need to be alert, to properly train and supervise operators, and to use sense when using this equipment.

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Attention owner and Operators

⚠ **WARNING**TO AVOID SERIOUS PERSONAL INJURY AND PROPERTY DAMAGE:

- ALWAYS install equipment in a work area with adequate light and space.
- ONLY operate on a solid, level, nonskid surface that is nonflammable and away from sinks and water hazards
- NEVER bypass, alter or modify this equipment in any way from its original condition. Doing so may create hazards and will void warranty.

GAS and GAS PRESSURE

CAUTION

This unit is factory supplied in Nature Gas. This unit can be converted to L. P gas by a licensed and certified gas technician. Documentation may be necessary for warranty issues. Failure to comply with this instruction , will void warranty.
See the L.P. conversion kit for gas conversion parts and instructions.

⚠ WARNING

This equipment must be installed under proper ventilation as required by local code.
***NOTICE: Local codes regarding installation and ventilation vary greatly by area. The National Fire Protection Association states in its NFPA 96 latest edition that local codes are "authority having jurisdiction" when it comes to requirements for installation of equipment. Therefore, installation should comply with all local codes.**

⚠ WARNING

The installation of this appliance must conform to local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1, as applicable.The appliance is not used for elevation over 2000 ft(610 m).

- The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ PSI (3.5kPa).
- The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to less than ½ PSI (3.5kPa).

SPCIFICATIONS

⚠ WARNING

MINIMUM CLEARANCES FROM COMBUSTIBLE CONSTRUCTION AND NONCOMBUSTIBLE CONSTRUCTION

There must be adequate clearance between ranges and combustible construction. Clearance must also be provided for servicing and for operation.

Minimum Clearances for ranges with ovens:

	COMBUSTIBLE CONSTRUCTION	NONCOMBUSTIBLE CONSTRUCTION
Sides:	8”	**0”**
Back:	8”	**0”**

- **Ranges must installation on non-combustible floors.**
- **Adequate clearance must be provided in the aisle and at the side and rear to allow the door to open sufficiently to permit the removal of the racks and for serviceability.**

SPCIFICATIONS

SPECIFICATIONS

Models	BTU Oven(BTU)	BTU Burner(BTU)	BTU Griddle(BTU)	GAS PRESSURE(“WC)
HSD-B24	30,000	4X30,000	N/A	NG:5 Propane：10
HSD-B36	30,000	6X30,000	N/A	NG:5 Propane：10
HSD-B48	2X30,000	8X30,000	N/A	NG:5 Propane：10
HSD-B60	2X30,000	10X30,000	N/A	NG:5 Propane：10

INSTALLATION

INSTALLATION

NOTE: It is vital that the purchaser of this equipment post in a prominent location the instructions to be followed if the user smells gas. This information shall be obtained by consulting the local gas supplier.

1. THIS APPLIANCE IS NOT SUITABLE FOR INSTALLATION IN A NON-COMMERCIAL OR RESIDENTIAL APPLICATION. (WARRANTY AND LIABILITY WILL BE VOIDED)
2. Read this manual thoroughly before installation and operation. DO NOT proceed with installation and operation if you have any questions or do not understand anything in this manual. Contact your local representative or MOTAK first.
3. Select a location for the Range that has a level, solid, nonskid surface that is nonflammable and away from water hazards or sinks and is in a well-lighted work area away from children and visitors.
4. Level the range with a spirit level on the oven rack. The height can be adjusted by the adjustable feet. The adjustable feet have an adjustment of one inch. Do not slide unit with legs mounted. Lift if necessary, to move the unit. Do not sway or tilt during operation.
5. The supplied gas pressure regulator is factory set at 5” Natural Gas W.C. or 10” Propane Gas.
6. THESE UNITS ARE SUITABLE FOR INSTALLATION ON NON-COMBUSTIBLE SURFACE. Zero (0) clearance from NON Combustible
7. Do not obstruct the flow of combustion and ventilation air under the unit by the legs/casters or behind the unit by the flue. Do not place objects between the bottom of the unit and the floor.
8. There must be adequate clearance for removal of the front panel. All major parts except the burners are removable through the front if the gas is disconnected.
9. A manual gas valve should be installed upstream of the device where is easy to reach to shut off the fuel supply to the range in the event of an emergency.
10. It may be necessary to adjust the balance of gas volume and air supply to each burner. This must be done by an authorized service technician.
11. Pipe threading compound must be resistant to the action of liquefied petroleum gas. **DO NOT USE TEFLON TAPE.**

12.Adequate clearance for air openings into the combustion chamber.

INSTALLATION

LEGS or CASTERS has been installed on the product except for DCR24 Series;
For DCR24 Series, a set of four legs or castors is packed inside the oven.

ATTACH LEGS

Each leg has a corresponding mating thread. The legs can be adjusted to overcome a slightly uneven floor.

1. Raise range sufficiently to allow legs to be attached. For safety, “shore up” and support the range with an adequate blocking arrangement strong enough to support the load.
2. Screw the legs into the holes in the bottom of equipment.
3. Lower range gently onto a level surface. Never drop or allow the range to fall.
4. Use a level to make sure that the range surface is level. The foot of each leg can be screwed in or out to lower or raise each corner of the range.
5. Go on to Installation Step 3.

ATTACH CASTERS

NOTICE

For an appliance equipped with casters, (1) the installation shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 or Connectors for Moveable Gas Appliances, CAN/CGA-6.16, and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41, or Quick Disconnect Devices for Use with Gas Fuel, CAN1-6.9, (2) adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick- disconnect device or its associated piping to limit the appliance movement, and (3) the restraining means should be attached to a frame member on the back of the unit.

Each caster has a corresponding mating thread. Casters are provided with a fitting for proper lubrication when required.

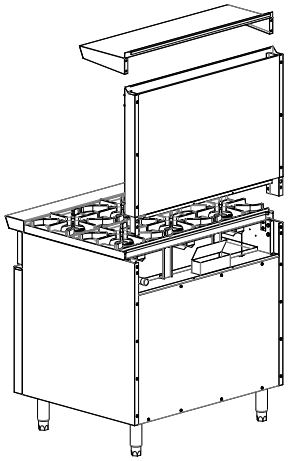
1. Raise range sufficiently to allow the casters to be attached. For safety, “shore up” and support the range with an adequate blocking arrangement strong enough to support the load.
2. Screw the casters into the holes in the bottom of equipment.. Install the casters that have a locking brake under the front of the range.
3. Lower range gently onto a level surface. Never drop or allow the range to fall.
4. Use a level to make sure that the range surface is level. The casters can be screwed in or out slightly to lower or raise each corner of the range.
5. Go to Installation Step 3

INSTALLATION

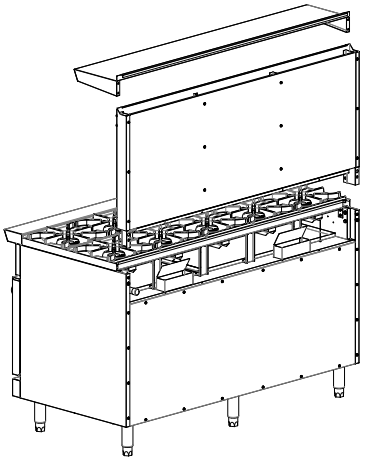
ATTACH FLUE RISER AND SHELF ASSEMPLY

Place the flue riser assembly on the range as shown on the appropriate diagram below.

1. Slide the flue riser assembly over the bayonets until it bottoms out, as shown below.
2. Secure ends of flue riser assembly with two (2) 1/4-20 x 3/4 hex head bolts, flat washers and lockwashers.
3. Attach the shelf assembly (if ordered) to the flue riser assembly with 1/4-20 x 3/4 hex head bolts, flat washers and lockwashers.



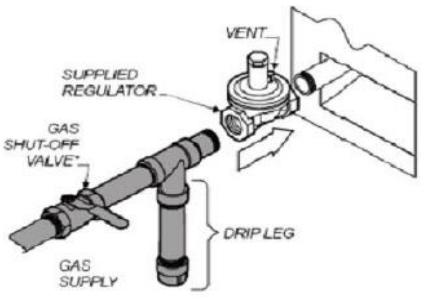
Single-Oven Models



Dual-Oven Models

GAS CONNECTION

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 should be checked to determine if it has adequate capacity. Joint compound (pipe dope) should be used sparingly and only on the male threads of the pipe joints. Such compounds must be resistant to the action of Liquefied Propane (LP) gases.



Connection diagram

INSTALLATION

Regulator information: ¾" NPT (National Pipe
Thread) inlet and outlet; factory adjusted for FIVE inch (5) Water Column (WC) Natural Gas standard and may be converted by qualified personnel to be used for Propane at ten (10) Water Column pressure.
Prior to connecting the regulator, check the incoming line pressure. The regulator can only withstand a maximum pressure of ½ PSI (14" WC). If the line pressure is beyond this limit, a step-down regulator before the regulator provided will be required. The arrow forged into the bottom of the regulator body shows gas flow direction and should point downstream to the appliance.

CAUTION Any loose dirt or metal particles, which can enter the gas line on this appliance, will damage the valve and affect its operation. When installing this appliance, all pipe and fittings must be free from any internal contaminates. It is recommended that a "drip leg" be installed in-line before the regulator. See diagram above.

Manual Shut Off Valve: A manual shut off valve should be installed upstream from the manifold, within four (4) feet, (1.2M) of the appliance and in a position where it can be reached in the event of an emergency.

Checking For Gas Leaks: Use of a gas leak detector or a soapy water solution is recommended for locating gas leaks. Matches, candle flame, or other sources of ignition shall not be used for this purpose. Check entire piping system for leaks.

⚠ **WARNING DO NOT use an open flame to check for leaks. Check all gas piping for leaks with a soap and water solution before operating unit.**

PRECAUTIONS & RECOMMENDATIONS

- Installation, operation and maintenance of this device should be done by professional personnel or qualified people.
- Please keep the integrity of the appliance and remove the outer packing. If you have any questions, call the manufacturer and stop using the appliance. Keep the packing materials away from children. (Plastic bags, nails etc.)
- Upon first use, the duration of ignition may be a little longer due to the air existing in the new pipe. If the ignition cannot be lit up, turn off the gas valve and wait 3 minutes to allow unused gas to dissipate.
- Do not use a gas type or gas regulator that is not applicable for this range. Make sure the gas supply is the same as the gas type this device is set up to use. If not, please stop using immediately.
- During operation, do not leave unattended.
- This product is a commercial machine that needs to be operated by trained professional personnel.
- This device is for commercial use only, not applicable for other usage.
- Do not sway or tilt during operation.
- Do not dismantle or self-modify the device. Dismantlement or modification may cause damage to the appliance and WILL VOID THE WARRANTY.
- Use only as intended. Abnormal operation may cause damage and danger.
- Do not obstruct the exhaust vent, which will cause damage to the appliance and do harm to your health.
- High surface temperature may cause burns. Do not touch the appliance with hands directly during or after operation. To avoid burns, do not move the device if it is still hot.
- Do not spray water directly on the device. Clean the stainless steel surface regularly to prevent damage caused by surface oxidation and chemical reaction. Always clean with the grain.
- Do not deface the control panel with hard or sharp objects.
- If the device is malfunctioning, turn off the gas main valve upstream to the device and contact the manufacturer to repair.
- Do not put any flammable objects (e.g. towel etc.) anywhere of the surface, or it may cause fire.
- After using, please turn off the gas valve immediately.
- If any gas leakage is found, please turn off the gas valve and open the window to Ventilate. Do not turn the power and switches on or off.

OPERATING

⚠ **WARNINGDO NOT use an open flame to check for leaks. Check all gas piping for leaks with a soap and water solution before operating unit.**

OPERATION OF TOP BURNERS

To operate a top burner, turn the corresponding control knob on the front panel to the desired flame level.

Each top burner has its own pilot. If a top-burner pilot needs to be lit, do the following:

1. Turn all the top-burner control knobs to the OFF position.
2. On ranges with standard pilots, use a match or lighter to light all the pilots.

OPERATION OF TOP GRIDDLE(if applicable)

Turn the burners on about 15-20 minutes before cooking for preheating. Set the knobs to the desired flame height.

NOTE: This is a Manually Operated Griddles there is NO TEMPERATURE CONTROL, you the operator, must maintain temperature by increasing or decreasing the flame height as required.

Each valve controls the gas flow to the burner to bring that area of the griddle up to the desired temperature. If different temperature settings are to be used, adjoining areas should be set to progressively higher temperatures using the lowest temperature on the outside burners. A uniform and systematic approach to the loading of the unit will produce the most consistent product results.

OPERATION OF GAS OVEN

Each oven has its own pilot. If an oven pilot needs to be lit, do the following:

1. Turn the oven thermostat to the OFF position.
2. Open the kick panel below the oven door,depress the button on oven safety valve.
3Light the pilot while continuing to depress the button on the safety valve. Wait 30 seconds, and then release the button.
4.The pilot should remain lit.
5. Close the kick panel.
6. Replace the oven bottom

SHUTDOWN OF ENTIRE RANGE

To completely shut down the range for an extended period (or prior to disconnecting the gas supply), do the following:

1. Turn all burner control knobs to OFF.
2. Turn the oven thermostat knob(s) to OFF.

Cleaning Instructions

Before cleaning, please turn off the range and the gas valve upstream.

- Please clean the burners and tray for crumbs and debris regularly.
- Clean the stainless steel surface with non-corrosive detergent suitable for stainless steel every day and rinse it completely. (Do not spray the range directly with water - especially when hot, damage will occur.)
- During cleaning, do not clean the stainless steel surface with abrasive detergent, brush or scraper etc. The residual iron scale may cause rusting. Scrub it according to direction of grain. Do not clean the surface with chlorine cleanser (bleach, hydrochloric acid etc.) even if these products are diluted.
- Do not clean the floor where the device locates with corrosive substance (e.g. KCL).
- Clean the dirt off the burners and baffle regularly.
- Do not modify the air ventilation volume needed during combustion.
- Do not allow the accumulation of substances containing acidic ingredient, e.g. vinegar, lemon juice, spices, salt etc. which will damage the surface of the device.
- A complete cleaning every day will ensure good performance and extend the service life of the device. Clean the device with a wet towel containing detergent, rinse it with clear water and dry it with clean cloth. Do not clean the device with steel brush, which may cause rust.
- Splotch and abrasion of the stainless steel surface: Scrapes and black stain can be removed with a plastic scouring pad such as Scotch Brite®. During cleaning, the direction should be the same as the polishing, always rub with the grain on the stainless steel.
- Rusting on Cast Iron Cooking Grate: To remove the rust, remove cast iron grate and clean with a wire brush. Wash in warm soapy water and immediately dry thoroughly. Lightly coat the cooking grate with food grade cooking oil.
- To avoid rusting of the device, please make sure that the residual salt inside or outside the device is cleared away.
- To avoid short-time incomplete combustion, be sure that the burner holes are not clogged.
- If this device will not be used for a long period of time, please turn off all gas valves including the upstream supply valve. (Note: the standing pilots will go out.)
- 90% of the device is metals (stainless steel, iron, aluminum, galvanized metal sheet) which can be recycled by an appointed treatment plant according to environmental standards of the equipment installation countries. (No littering!)

Cleaning Instructions

- DO NOT use any abrasive or flammable cleaning fluids.
- DO NOT hose down immerse, or pressures wash any part of the Griddle, excluding the catch tray. NEVER use a scrubber pad (on all exterior surfaces, except the griddle plate), steel wool or abrasive material, or cleaners containing chlorine, iodine and ammonia, or bromine chemicals as these will deteriorate the stainless steel and shorten the life of the unit.

It takes very little time and effort to keep the Griddle attractive and performing at top efficiency. Wait until the griddle is cool after the unit had been turned off. Please follow the cleaning steps below:

PART	REQUIRED ACTION	FREQUENCY
Body	Use a clean cloth and a non-abrasive cleaner to clean the stainless steel body of the Griddle. Wipe the polished areas with a soft cloth.	Daily
Back and Side Splashes	Thoroughly clean. Wipe with clean, warm mild soapy water then re-wipe splashes with a damp cloth.	Daily
Controls	Unit should be turned off when not in use. It is recommended that the unit be disconnected from the gas supply by closing the main gas valve. Use a clean cloth to wipe any grease or debris from the control knobs.	Daily
Griddle Plate	Clean surface with a grill pad or metal spatula, being careful not to scratch the griddle surface. ✓ Clean the griddle surface thoroughly. ✓ Rub with the grain of the metal while the griddle is still warm. A mild soap may be used on the plate surface to help clean it. ✓ The plate should then be covered with a thin film of oil to prevent rusting. ✓ Clean stainless surfaces with a damp cloth and polish with a soft dry cloth. To remove discoloration, use a nonabrasive cleaner. ✓ After each “weekly” cleaning with mild soap and water, the griddle must be seasoned again. If the griddle usage is very high, the “weekly” cleaning procedures may be done more often than once a week. *The use of ice on the griddle plate to cool may damage the plate.	Daily & Weekly
Catch Tray	Once the unit has cooled, remove the catch tray and discard the waste,grease, debris and crumbs. **CAUTION**: If the catch tray is permitted to fill too high, grease/debris is likely to accumulate under the unit. This catch tray/drawer is removed by pulling forward. **USE CAUTION WHEN REMOVING!**	As Needed

Troubleshooting

Symptoms	Causes	Solutions
The pilot flame can't be ignited.	1. The gas pressure is not sufficient. 2. The nozzle is blocked. 3. Connection of the thermocouple is loose. 4. The thermocouple is defective. 5. The gas control valve is malfunctioning.	1. Adjust the pressure regulator to get a proper pressure. 2. Unblock the nozzle. 3. Tighten the thermocouple. 4. Replace the thermocouple 5. Please replace the gas control valve.
The pilot flame is on, but the main burner will not ignite	1. The gas pressure is not sufficient. 2. The main burner orifice is blocked. 3. The gas control valve is defective. 4. By-pass setting incorrect.	1. With the use of a manometer,adjust the pressure regulator to the proper pressure setting on the data tag. 2. Unblock the burner orifice. 3. Replace the gas control valve. 4. Reset By-pass setting.
Burner has a "Pop"sound when gas supply is turned off.	1. The burner orifice is not the correct size for the type of gas being supplied to the range. 2. The air shutter is not adjusted properly. 3. The gas pressure is too low. 4. The gas supply connection is not the correct size.	1. Check the orifice size to be sure it is correct for the gas supply. 2. Adjust the air shutter on the burner. 3. With the use of a manometer,adjust the pressure regulator to the proper pressure setting on the data tag. 4. Verify that the connection type is at least ¾" inside diameter and of commercial grade. Check with your installer for correction.
Burners have yellow tips and creating black soot.	1. The burner orifice is not the correct size for the type of gas being supplied to the range. 2. The air shutter is not adjusted properly. 3. The gas pressure is too low. 4. The volume of gas being supplied to too low.	1. Check the orifice size to be sure it is correct for the gas supply. 2. Adjust the air shutter on the burner. 3. With the use of a manometer,adjust the pressure regulator to the proper pressure setting on the data tag. 4. Verify that the connection type is at least ¾" inside diameter and of commercial grade. Check with your installer for correction.

The above trouble shooting guide is for reference only. If any failure occurs, please stop using, and inform the professional technicians to check and repair. Safety First! Maintenance should be done only after the power supply and gas supply are shut down.

Limited Warranty

We warrants to the original purchaser of new equipment that said equipment, when installed in accordance with our instructions within North America and subjected to normal use, is free from defects in material or workmanship for a period of 1 year. The labor warranty is one year from original installation or 18 months from actual factory shipment date whichever date occurs first. Warranty includes onsite service calls within 60 miles of an authorized service company. End user is responsible for all extra travel and mileage at prevailing rates

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR EXPRESSEDOR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Our obligation and liability under this warranty is expressly limited to repairing and replacing equipment which proves to be defective in material or workmanship within the applicable warranty period.
All repairs pursuant to this Warranty will be performed by an Authorized Designated Service Location during normal working hours.
This warranty does not cover services performed at overtime or premium labor rates. End user is responsible for the difference between normal service rates and premium service rates.
IN NO EVENT SHALL WE BELIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES TO BUYER OR ANY THIRD PARTYINCLUDING, WITHOUT LIMITATION, LOSS OF PROPERTY, PERSONAL INJURY, LOSS OF BUSINESSOR PROFITS OR OTHER ECONOMIC LOSSES, OR STATUTORY OR EXEMPLARY DAMAGESWHETHER IN NEGLIGENCE, WARRANTY, STRICT LIABILITY, OR QTHERWISE
This warranty is given only to the first purchaser from a retail dealer. No warranty is given to subsequent transferees.

Warranty does not cover product failures caused by: failure to maintain, neglect, abuse, damage due to excess water, fire, normal wear, improper set up and use. Periodic maintenance is not covered This warranty is not in force until such time as a properly completed and signed installation/warranty registration or an online registration form has been received by the supplier within 30 days from the date of installation.
Proof of purchase is required to extend warranty more than 1 year from date of shipment from the factory.

THE FOREGOING WARRANTY PROVISIONS ARE A COMPLETE AND EXCLUSIVE STATEMENTETWEEN THE BUYER AND SELLER. WE NEITHER ASSUMES NOR AUTHORIZES ANYPERSONS TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SAIDEQUIPMENT

Example of items not covered under warranty, but not limited to just these items

1 Acts of God, fire, water damage, burglary, accident, theft

2 Freight damage

3 Improper installation or alteration of equipment

4 Use of generic or after-market parts

5 Repairs made by anyone other than a designated servicer

6 Lubrication.

7 Expendable wear parts, adjustable feet, blown fuses, lamps, etc.

8 Cleaning of equipment

9 Misuse or abuse