

TRI-STAR INC

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CONVECTION OVEN

MODEL # _____.

OWNER'S MANUAL

INSTALLATION OPERATION MAINTENANCE

All equipments manufactured by Tri-star Inc. for use with the type of gas specified on the rating plate and for installation I accordance with National Fuel Gas Code ANSI Z223.1 (latest edition)

FOR YOUR SAFETY

Do not store or use gasoline or other inflammable vapors or liquids in the vicinity of this or any other appliance.

WARNING

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

Instructions to be followed in the event the user smells gas, shall be posted in a prominent location in the kitchen area. This information shall be obtained by consulting the local gas supplier.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

IMPORTANT

Safe and satisfactory operation of your equipment depends to a great extent on its proper installation. Installation must conform with local codes, or in the absence of local codes, the **National Fuel Gas Code, ANSI Z-223.1** (latest version). In Canada, installation should conform to installation codes for gas burning appliances and equipment standard **CAN1-B149.1** (Natural Gas) or **CAN1-B149.2** (Propane Gas).

Electrical wiring from the Electric Meter, main control box or service outlet to appliance must be electrically grounded in accordance with local codes or in the absence service of local codes with the **National Electrical Codes ANSI/NFPA 70** – current. In Canada, conform to **Canadian Electrical ode CSA-C22.1**.

Installation, Operation and Service Personnel:

Installation of the equipment should be performed by qualified, certified, licensed and / or authorized personnel who are familiar with and experienced in state / local installation codes.

Operation of the equipment should be performed by qualified or authorized personnel who have read this manual and are familiar with the functions of the equipment.

Service of the equipment should be performed by qualified personnel who are knowledgeable with Tri-Star Cooking Equipments.

SHIPPING DAMAGE CLAIM PROCEDURE

The equipment is inspected & crafted carefully by stilled personnel before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this equipment. If shipment arrives damaged:

Visible loss or damage: Note on freight bill or express delivery and signed by the person making delivery.

File claim for damages immediately: Regardless of the extent of damages.

Concealed loss or damage: If damage is noticed after unpacking, notify the transportation company immediately and file a “Concealed Damage” claim with them. This should be done within fifteen (15) days from the date delivery made to you. Retain container for inspection.

GENERAL

1. A manual gas shut-off valve must be installed in the gas supply (service) line ahead of the appliance and gas pressure regulator for safety and ease in servicing.
2. The gas pressure regulator supplied must be installed on the appliance prior to connection the equipment to the gas line. Failure to install a regulator will be potentially hazardous and will void the appliance warranty.
3. 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 (3.45 kpa).
4. The appliance must be isolated for 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 or less than ½ psi (3.45 kpa).
5. To perform maintenance and repairs of the appliance, please contact the factory, the factory representative, or the nearest authorized local service company.

RATING PLATE

The rating plate is located in front of the oven below the oven section. Information on this plate includes the model, and serial number, BTU / Hour input of the burners, operating gas pressure in inches WC, and whether the appliance is orificed for Natural or Propane gas. Pilot lighting instructions are also located in the same area.

**TRI-STAR COOKING APPLIANCES MUST BE CONNECTED
ONLY TO THE TYPE OF GAS IDENTIFIED ON THE RATING PLATE!!**

CLEARANCES

The appliance area must be kept free and clear of all combustibles. This unit is design-certified for the following installations only:

The clearances from **combustible** and **noncombustible** construction are as follows:

	Combustible	Noncombustible
Back	6"	0
Side	6"	0

DO NOT MOUNT oven on a curb base. Use legs / casters provided. Adequate air space at the bottom and rear of the unit must be provided for proper venting of blower motor.

ASSEMBLY

DO NOT USE door to lift or move oven!!! All ovens must be installed on leg assembly or casters or casters shipped with the unit.

The leg / stand assembly parts or casters are shipped separately.

SINGLE OVEN

Assemble the leg / stand assembly as follows:

1. Remove legs from package.
2. Secure top frame parts to the legs with bolts provided (long angle – front and back. Short angle Sides).

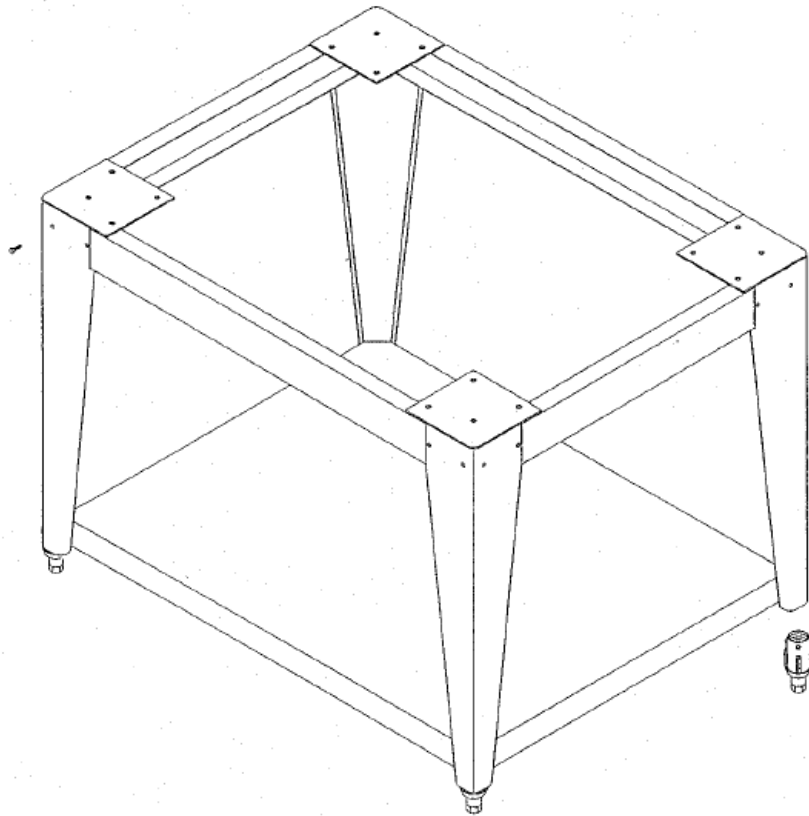


Figure 1

3. Place the oven on top of leg / stand assembly. Match loses on the frame with oven bottom base. Fasten with bolts provided.

If provided with optional bottom self and rack support: (**REF Figure 1**).

- a. Screw the bottom shelf to the legs.
- b. Screw rack guide support angles to bottom shelf & top leg frame.

DOUBLE OVEN

6" leg assembly is provided.

1. Match holes on the legs with oven bottom base and screw with bolts provided.
2. Set top oven on top of bottom oven.
3. Bolts down at rear and front as shown in **FIGURE 2**. Remove top kick plate to access screwing the front bolts.
4. Assemble bottom flue extension as shown in **FIGURE 2**.

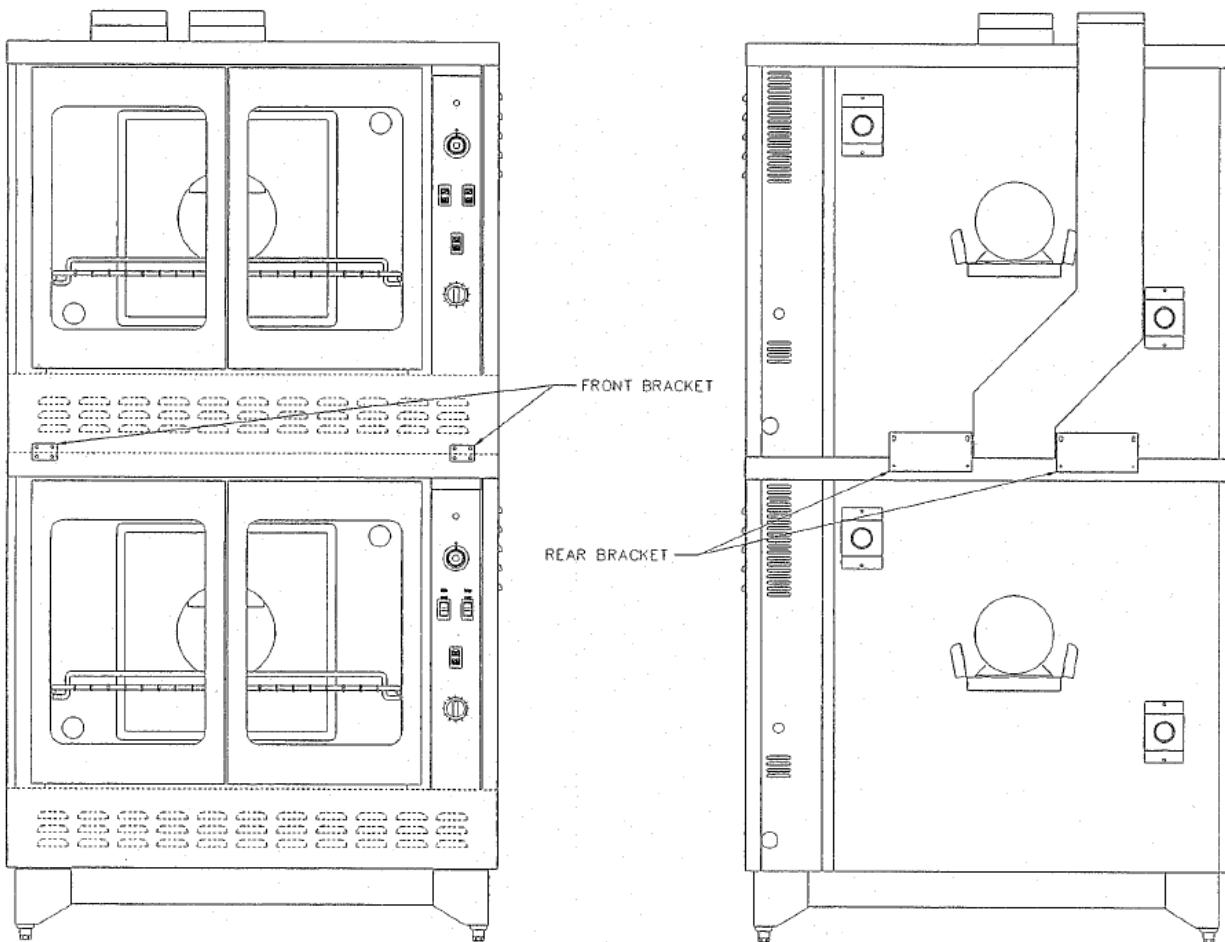


Figure 2

CASTER INSTALLATION

If casters are provided, match holes on the caster with holes on the oven bottom base and fasten with bolts provided.

NOTE: Front casters are locking type.

LEVELING

A carpenter's spirit level should be placed on the oven's center backing rack and the unit leveled both front – to – back and side – to – side. If it is not level, cakes, casseroles, and any other liquid or semi-liquid batter will not bake evenly, burner combustion may be erratic, and the unit will not function efficiently.

If the floor is relatively smooth and level, the unit may be further leveled with adjustment in the foot of the leg. Units with casters must be leveled with shims. A unit will probably not return to the same position after being moved, requiring re-leveling after each and every move.

AIR SUPPLY & VENTILATION

The area in front of, around and above the appliance must be kept clear to avoid any obstruction of the flow of combustion and ventilation air. Adequate clearance must be maintained at all times in front and at the side of the appliances for servicing and proper operation.

Means must be provided for any commercial, heavy-duty cooking appliance to exhaust combustion waste products to the outside of the building. Usual practice is to place the unit under an exhaust hood. Filters and drip troughs should be part of any industrial hood, but consult local codes before construction and installing a hood.

Strong exhaust fans in this hood or in the overall air conditioning system can produce a slight vacuum in the room and / or cause air drafts, either of which can interfere with pilot or burner performance and can also be hard to diagnose. Air movement should be checked during installation; if pilot or burner outage problems persist, make-up air openings or baffles may have to be provided in the room.

ELECTRICAL CONNECTION

TRI-STAR CONVECTION OVENS requires a 120 volt supply to operate the ignition system and circulating fan. The supply cord provided along with the appliance is equipped with a three prong (grounding) plug for protection against shock hazard. The electrical service in the building must be equipped with a properly grounded three prong receptacle, in accordance with local codes, or in the absence of local codes, with the national electrical code , **ANSI/NFPA 70-1987**, in Canada, conform with Canadian electrical codes, **CAS-C22.1**.

Do not cut or remove the grounding prong from this plug. Wiring diagram is located on the backside of the appliance. **Disconnect power supply before cleaning or servicing.**

<p>NOTE: This appliance is not capable of being operated in the event of a power failure. No attempt should be made to operate this appliance during a power failure.</p>
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GAS CONNECTION

Single Deck oven requires one gas connection.
Double Deck oven requires two gas connections.

NOTE:

The gas supply (service) line must be the same size or greater than the inlet line of appliance. Tri-star ovens use a 3/4" NPT inlet. Sealant on all pipe joints must be resistive to LP gas.

MANUAL SHUT- OFF VALVE

The is installer-supplied valve must be installed in the gas service line ahead of the appliance and regulator in the gas stream and in a position accessible in the event of an emergency.

!! Failure to install the pressure regulator will void the equipment warranty !!

The regulators supplied with Tri-Star Ovens, have 3/4" inlet / outlet openings and are adjusted at the factory for 5" WC (Natural gas) or 10" WC (Propane gas) depending on customer's ordering instructions.

Prior to connecting the regulator, check the incoming line pressure, as these regulators can only withstand a maximum pressure of 1/2" PSI (14" WC). If the line pressure is beyond this limit, a step-down regulator will be required. The arrow shown on the bottom of the regulator body shows gas flow direction, it should point downstream to the appliance. The red air vent cap on the top regulator is part of the regulator and should not be removed.

Any adjustments to regulators must be made only by qualified service personnel with the proper equipment.

CONNECTIONS

Please check installer – supplied intake pipes visually and / or blow them out with compressed air to clear any dirt particles, threading chips, or other foreign matter before installing a service line. When gas pressure is applied these particles can clog orifices.

All connections must be sealed with a joint compound suitable for LP gas, and all connections must be tested with a soapy water solution before lighting any pilots.

FLEXIBLE COUPLING, CONNECTORS AND CASTERS.

If the unit is to be installed with flexible couplings and / or quick-disconnect fittings, the installer **must** use a **heavy-duty**, AGA design-certified commercial flexible connector of at least 3/4" NPT (with suitable strain relief). The flexible connector must comply with the standard for **Connectors for Movable Gas Appliances, ANSI Z21.69** and addendum **Z21.69a** (or latest edition) and a quick-disconnect device that complies with the standard for quick-disconnect devices for use with gas Fuel should comply with **ANSI Z21.41** and addendum **Z21.41a** (or

latest edition). If disconnection of the restraint is necessary, make sure to reconnect restraint after the appliance has been returned to its originally installed position. Domestic gas or water connectors are not suitable.

Restraining device may be attached to the back frame / panel of unit.

If the unit is to be installed with casters, a flexible connector must be used and the same **ANSI** standards apply. Locking front casters are provided to limit the movement of the appliance without depending on the connector or associated piping. A suitable strain relief must be installed with the flexible connector.

All connections must be sealed with a joint compound suitable for LP gas and all connections must be tested with a soapy water solution before light pilots.

INITIAL PILOT LIGHTING

!!! CAUTION !!!

When lighting pilots and checking for leaks, do not Stand with your face close to the combustion chamber.

All Tri-Star Inc. appliances are adjusted and tested before leaving the factory, effectively matching them to sea level conditions. Adjustments and calibrations to assure proper operation may be necessary on installation to meet local conditions, low gas characteristics, to correct possible problems caused by rough handling or vibration during shipment, and are to be performed only by qualified services personnel. These adjustments are the responsibility of the customer and / or dealer and are not covered by our warranty.

Check all gas connections for leaks with a soapy water solution before lighting any pilots. **DO NOT USE AN OPEN FLAME TO CHECK FOR LEAKS.** Putting an open flame beside a new gas connection is extremely dangerous.

1. Turn the thermostat dial to the "OFF " position. Place the power switch to the "OFF" position.
2. Wait five minutes.
3. Place power switch to the "ON" position. Turn the oven thermostat to the desired temperature.
4. For a complete shutdown, place the thermostat and power switch in the "OFF" position.

TO CHECK FOR GAS LEAKS.

1. Remove the kick plate and right side front panel.
2. Check pilot tubing and burner tubing for leaks at the connectors with a soapy water solution.
3. Light the pilot as described above.
4. Turn the thermostat to any setting and the burner should light.
5. Check the burner orifice elbow connection downstream of the valve with a soapy water solution.
6. Check the burner visually for blue flame. There should be no yellow tips or soot. If yellow tipping occurs, call an authorized service person to adjust the burner air shutter.

FINAL PREPARATION.

On initial installation, turn the oven to 250 degrees and operate for about 1 hour, then reset the thermostat to its maximum and operate for another hour. This will drive off solvents remaining in the unit. At the end of this second hour, turn the thermostat OFF, open the door and allow the unit to cool. Oven should then be thoroughly washed using hot, soapy water before being used.

CLEANING AND MAINTENANCE.

Any piece of equipment works better and lasts longer when maintained properly. Cooking equipment is no exception. Your Tri-Star oven must be kept clean during the working day and thoroughly cleaned at the end of the day.

!!! CAUTION !!!

**Never use ammonia in an oven that is warmer than
Room temperature and always have direct ventilation**

DAILY CLEANING.

Ovens:

1. Remove the baking racks. Wash in hot soapy water, and replace after the rest of the oven is cleaned.
2. Scrape off any food particles with a nylon griddle scraper. Be very careful about scratching the porcelain finish on the oven liner panels.
3. Wash all the above with hot soapy water, then reassemble.
4. Baked on spills may be loosened and stubborn stains removed with ordinary household ammonia and scrubbing with a nylon pad in a cold oven only.

5. Do not allow spray type oven cleaners to come in to contact with the temperature probe in the oven.
6. After cleaning the oven, rinse well with $\frac{1}{4}$ cup of vinegar to one quart of clear water solution to neutralize any caustic residue of the cleaning compound. Wipe dry.
7. To increase the life of the motor, follow these instructions:
 - a. Never run oven with motor off.
 - b. After you finish cooking and the oven is not to be used for more than $\frac{1}{2}$ hour. Place the switch to the "COOL DOWN" position and open the door. When oven temperature is equal to room temperature turn unit off.

PERIODIC CLEANING:

Check the ventilation system periodically to see that nothing has fallen down into the exhaust vents.

Lubricate the pivot pins of the oven door hinge. Use a multi-purpose lubricating oil sparingly so as to not drip oil needlessly.

Your appliance should be checked for safe and efficient operation at least once a year by qualified service personnel.

STAINLESS STEEL:

All stainless steel body parts should be wiped regularly with hot soapy water during the day and with a liquid cleaner designed for this material at the end of each day.

DO NOT USE steel wool, abrasive cloths, cleaners or powders to clean stainless surfaces. If it is necessary to scrape stainless steel to remove encrusted materials, soak in hot water to loosen the material, then use a wood or nylon scraper.

DO NOT USE a metal knife, spatula, or any other metal tool to scrape stainless steel. Scratches are almost impossible to remove.

Contact the factory, the factory representative or a local service company to perform all Maintenance and repairs.