



For service contact:  
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[www.turboairinc.com](http://www.turboairinc.com)

# OWNER & OPERATOR INSTRUCTION MANUAL

Model No. **TACM-24 TASM-24**  
**TACM-36 TASM-36**  
**TACM-48**



## IMPORTANT SAFETY NOTICE

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL. POST IN A PROMINENT LOCATION: THE INSTRUCTIONS ARE TO BE FOLLOWED IN THE EVENT WHEN SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

### IMPORTANT

In the event a gas odor is detected, shut down units at main shutoff valve and contact the local gas company or gas supplier for service.

### FOR YOUR SAFETY

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

### WARNING

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

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#### SHIPPING DAMAGE CLAIM PROCEDURE

The equipment is inspected & crated carefully by skilled personnel before leaving factory. The transportation company assumes full responsibility for safe delivery upon acceptance of this equipment if shipment arrives damaged;

1. VISIBLE LOSS OR DAMAGE: Note on freight bill or express delivery and signed by person making delivery.
2. FILE CLAIM FOR DAMAGES IMMEDIATELY: regardless of extent of damages.
3. CONCEALED LOSS OR DAMAGES: If damages are noticed after unpacking, notify Transportation Company immediately and file "Concealed Damage" claim with them. This should be done within fifteen (15) days from date delivery is made to you. Return container for inspection.

## INSTALLATION

### UNPACKING:

1. Remove appliance from container.
2. Remove all protective packaging material.
3. Retain container and packaging material until the appliance is operated and found in good condition.
4. Check appliance for any shipping damage. If appliance shows any external or internal damages, promptly inform dealer/distributor where you bought your appliance.

NOTE: Installation and repair should be done by a qualified service person. Qualified service person should read these instructions and should be familiar with the operation and functions of the equipment.

### GENERAL SAFETY INSTRUCTIONS:

Accidents are always tragic especially because so many of them could have been prevented with little care and judgment. There are some basic good practices; we hope you will follow for safe use of the equipment as well as your well-being.

### IMPORTANT SAFETY INFORMATION:

- Always maintain proper clearances from combustible materials.
- Ventilation air supply must be maintained at all times when the equipment is operating.
- Never connect equipment to an unregulated gas supply.
- Gas supply connections should be checked utilizing soap solution. Never use a flame for gas leak checks.
- Service and repair should be done by a qualified service person. Do not service while hot or operating.

## INSTALLATION

The installation must conform with codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA54, or the Natural Gas and propane Installation Code, CSA B149.1, as applicable, including:

1. The appliance 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 PSI.
2. The appliance must be isolated from the gas supply piping 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 PSI.

MODEL SERIES	COMBUSTIBLE		NON-COMBUSTIBLE	
	BACK	SIDES	BACK	SIDES
<b>TASM</b>	4"	4"	0"	0"
<b>TACM</b>	4"	4"	0"	0"

NOTE: Ensure the gas supply and/or gas type, as shown on rating plate match with (Rating plate is located on the backside of the front panel of unit) pipe gas supply to unit.

### SERVICE CLEARANCES:

A manual shutoff valve (to be supplied by user) must be installed in the gas supply line upstream of the appliance and gas pressure regulator (supplied with your appliance) in the supply gas line for safety and ease of future service or repair. Your equipment operates at 5" W.C. pressure on natural gas (regulator supplied with your appliance) and at 10" W.C. on propane gas (regulator supplied with your appliance).

### RATING PLATE:

The Salamander broiler and Cheesemelter are supplied with its own rating plate located on the unit. Information on this plate includes the model and serial numbers. When communicating with factory about a unit or requesting special parts or information, this data is essential for proper identification. Other information on this plate is the BTU/hr. input of the burners, operating gas pressure in inches WC, and whether the unit has an orifice for natural or propane gas.

## OPERATING INSTRUCTIONS

**PRIOR TO LIGHTING,  
CHECK ALL GAS CONNECTIONS FOR LEAKS!!!!!!**

### LIGHTING INSTRUCTIONS:

- ☐ Turn all burner valves to “OFF” position (bottom).
- ☐ Turn on the main gas supply to the unit.
- ☐ Pilots are located on the top of the salamander and cheesemelters.
- ☐ Turn pilot valve(s) adjusting screw counterclockwise, then light standing pilot and adjust the pilot flame to approximately ¼” to ½” high.
- ☐ Turn burner valve on by turning counterclockwise to “ON” position. This should light the main burner.
- ☐ If the main burner does not light, turn burner valve to “OFF” position. Wait five (5) minutes to clear any gas. Then smell for gas, if you don’t smell gas, go to next step.
- ☐ Repeat the lighting procedure.

### SHUTDOWN INSTRUCTIONS:

- ☐ Turn burner valve clockwise to “OFF” position.
- ☐ For complete shutdown, turn pilot(s) pilot adjusting screw clockwise to shutoff gas to the pilot(s).

### PREHEATING:

- ☐ Before initial use, turn salamander burner on high and let it run for 15 minutes. This will burn off any solvents remaining on the rack.

### RECIPE AND GRID ADJUSTMENT:

- ☐ Positioning the broiler grid is an important factor in the desired product end results. Position the grid farther away from the burners for thick meats and for melting cheese or butter to avoid drying the product.
- ☐ Position the grid closer to the burners for bacon, toast, and quick heating, but watch carefully to avoid burning.

### CARBONIZATION OF CERAMIC:

- ☐ If ceramic take on a black sooty accumulation, the burners are receiving an insufficient amount of air. The air shutter needs to be opened further. If carbonization occurs during the initial adjustment, it will burn off as soon as adjustment is achieved.

## OPERATING INSTRUCTIONS

### 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 the front and the sides of the appliance 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 through should be part of any industrial hood, but consult local codes before constructing and installing through 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.

**NOTE: This appliance is not capable of being operated in the event of power failure. NO attempt should be made to operate this appliance during a power failure.**

### GAS CONNECTION:

The gas supply (service) line must be the same size or greater than the inlet line of the appliance. Radiance equipment's use a 3/4" NPT inlet. Sealant on all pipe joint must be resistive to LP gas.

### MANUAL SHUT-OFF VALVE:

This 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 where it can be reached quickly in the event of an emergency.

### PRESSURE REGULATOR:

All commercial cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. The manual shut-off valve is normally supplied by the installer; however, a pressure regulator is packed inside each Radiance product. The regulator has 3/4" inlet/outlet openings. The maximum amount of pressure these regulators can withstand is 14" W.C. pressure (1/2 PSI). If the line pressure is beyond this limit, a step-down regulator will be required. The arrow forged into the bottom of the regulator body shows gas flow direction; it should point downstream to the appliance. The blue 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 test equipment.

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

## MAINTENANCE



**All cleaning and maintenance should be done when the unit is cool and the gas supply turned off by turning off the manual shutoff valve.**

**At least on weekly basis, the following items must be inspected:**

- Clean area surrounding the unit of all combustible material, gasoline and other flammable vapors and liquids.
- Ensure that the free flow of combustion and ventilating air is not obstructed.

**Recommended Cleaning Materials:** Mild dishwashing liquid detergent, hot water, Nylon cleaning pad, wire brush, paper clip, scraper, compressed air, stainless steel cleaner. **DO NOT USE CLEANERS THAT CONTAIN ACID, MINERAL SPIRITS OR XYLENE.**

**Outside Surfaces:** Regularly wipe the surfaces with a mild dish washing detergent, hot water solution & periodically apply stainless steel cleaner with a clean cloth. Do not use harsh abrasives on any portion of the stainless steel surfaces.

**Grease Pan:** Check frequently, empty the food residue, and clean as needed. Carefully scrape the mounted grease and spillovers from the grease pan.

**Grates & Flame Tamers:** Regularly clean with a mild dish washing detergent or baking soda, hot water and wire brush. DO NOT expose the grates to extreme heat as a method of cleaning the grates. This will shorten the life cycle of the grates.

**Main Burners:** Main burners are located on the top of the units so cleaning the infra-red burners are not necessary.

**Note:** Contact the manufacturer, company representative, dealer or a qualified service person to perform maintenance and or repairs.

# **LIMITED WARRANTY**

## **WARRANTY CLAIM:**

German Knife / Radiance warrants that the equipment, as supplied from the factory to the end-user, is free from defects in materials and workmanship. Should any part be found defective resulting from normal use within the defined warranty period, German Knife / Radiance will gladly dispatch an authorized service agency to repair and/or replace necessary parts under the following conditions.

Repairs under this warranty are to be performed by a German Knife / Radiance authorized service agency only. German Knife / Radiance will not be responsible for service parts and labor charges performed by non-authorized service companies. All claims should include the model number, serial number, proof of purchase, date of installation, and all pertinent information supporting the alleged defect.

## **PRODUCTS UNDER WARRANTY:**

### ***One Year Warranty:***

- ☐ Radiance Medium Duty Microwaves- ER/MR series (TMW-1100ER, TMW-1100MR)
- ☐ Radiance Ranges & Countertop cooking series  
(All TAR-, TARG-, TAHP-, TARB-, TAMG-, TATG-, TASP-, TAWR-)
- ☐ Radiance Cheesemelters, Salamanders, Steam Tables, Hand Wrappers, and Food Warmers  
(All TACM-, TASM-, RST-, RHW-, RFW-)
- ☐ German Knife Light Duty Slicer- LD series (GS-10LD, GS-12LD)

### ***Two Year Warranty:***

- ☐ German Knife Heavy Duty Meat Slicer- Automatic & Manual (GS-12A, GS-12M, GS-13A, GS-13M)
- ☐ German Knife Meat Grinder (All GG-)
- ☐ German Knife Band Saw (All GBS-)

### ***Three Year Warranty:***

- ☐ Radiance Heavy Duty Microwaves- HD Series (TMW-1200HD, TMW-1800HD)

Any part covered under this warranty that is found by German Knife / Radiance to have been defective within the above time period is limited to the repair or replacement, including labor charges, of defective parts or assemblies. The labor charges shall include standard straight time labor charges only and reasonable travel time as determined by German Knife / Radiance.

## **WHAT IS NOT COVERED BY THIS WARRANTY:**

German Knife / Radiance's sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

- ☐ Equipment failure resulting from improper installation will not be honored under warranty. Examples are wrong utility connection and improper utility supply problems.
- ☐ Equipment that has not been maintained accordingly. Examples are calibration of controls, adjustment to pilots and burners, and damage from improper cleaning.
- ☐ Equipment that has not been used in an appropriate manner, alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood, acts of God.
- ☐ Warranty is not transferrable and only applies in favor of the original purchaser.
- ☐ Equipment failure resulting from electrical power failure, use of extension cords, low voltage, and voltage drops to the unit.

These warranties are exclusive and in lieu of all other warranties, including implied warranty and merchantability or fitness for a particular purpose. No consequential damages. German Knife / Radiance is not responsible for economic loss, profit loss or special, indirect, or consequential damages. There are no warranties which extend beyond the description on the face hereof.

Outside the U.S., this warranty does not apply to, and German Knife / Radiance is not responsible for, any warranty claims made on products sold or used outside the continent of the United States.