



For service contact:
German Knife Inc.
1-800-500-3519
www.turboairinc.com

OWNER & OPERATOR INSTRUCTION MANUAL

Model No.

**GS-10LD
GS-12LD**



IMPORTANT SAFETY NOTICE

To ensure safe and trouble free performance of you new German knife slicer, we suggest that all personnel who will use and maintain the slicer read and understand the manual before operating the equipment. Should there be any questions or if we can be of further assistance, please call us toll free at (800) 500-3519.

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ATTENTION OWNERS AND OPERATORS

German Knife's equipment is designed to provide safe and productive processing 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, strictly following all the instructions contained in this manual and the requirements of local, state or federal law.

Supervisor should not permit anyone to touch this equipment unless they are at least 18 years old, are adequately trained and supervised, and have read and understood this manual. Supervisors should also ensure that no customers, visitors or other unauthorized personnel come in contact with this equipment. Please remember that German Knife cannot anticipate every circumstance or 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 - particularly the sharp knife and all moving parts. If you are uncertain about a particular task or the proper method of operating this equipment, ask your supervisor.

This manual contains a Safety Tips Section listing 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 affecting your personal safety are indicated by :



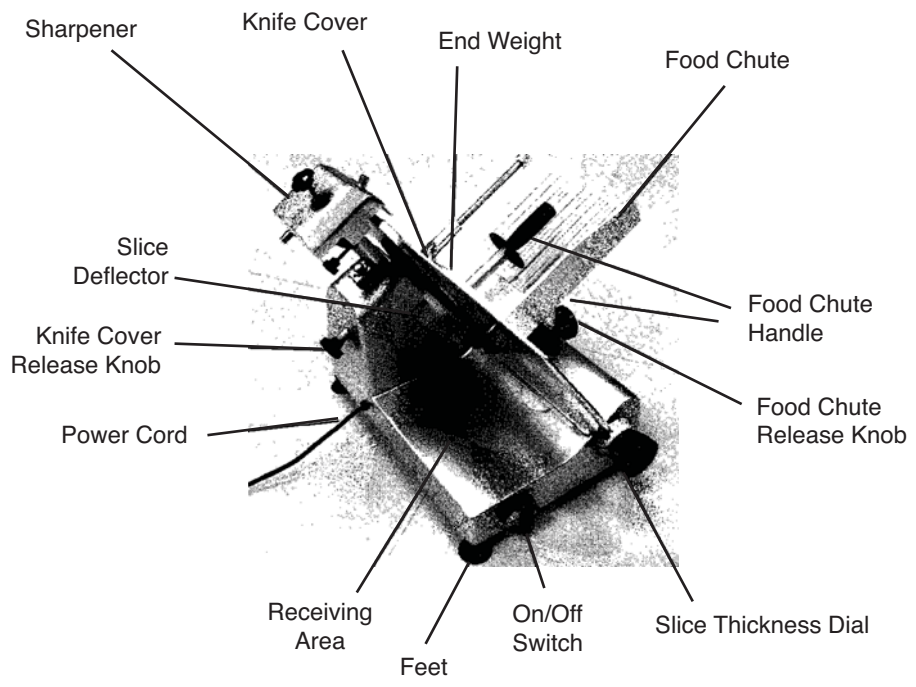
Warning related to possible damage to the equipment are indicated by :



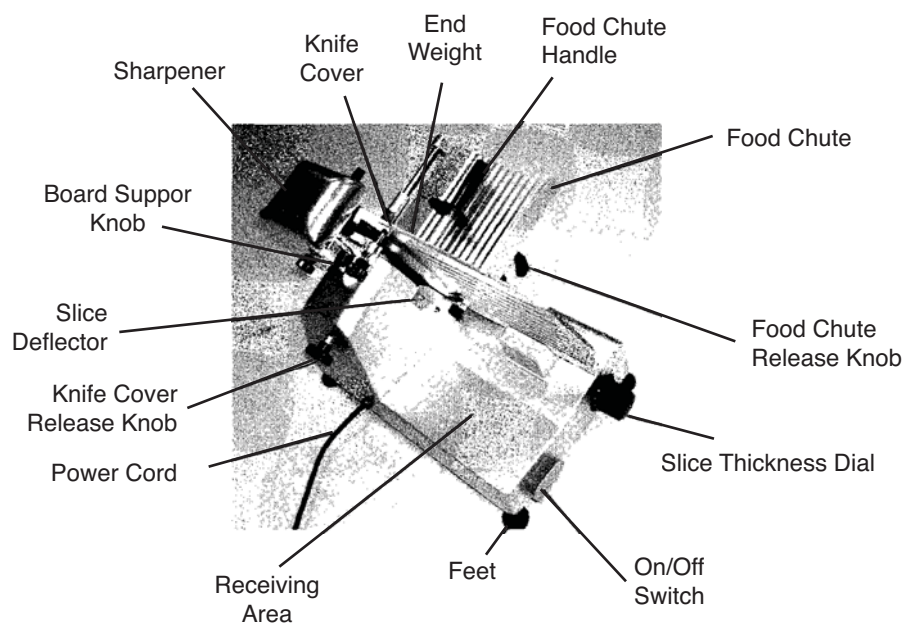
Make certain that the manual and GS Series safety tips card are available for easy reference by an operator. German Knife has put a warning label in the English language on its slicers.

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

KEY COMPONENT OF GERMAN KNIFE SLICER



GS-12LD Slicer



GS-10LD Slicer

GS SERIES SLICER SAFETY TIPS



SHARP KNIFE

TO AVOID SERIOUS PERSONAL INJURY

- **NEVER** touch this machine without training and authorization from your supervisor. You must be at least 18 years old. Read owner and operator manual first.
- **ONLY** install on level non-skid surface in clean ; well-lighted work area away from children / visitors.
- **ALWAYS** ground slicer utilizing proper power source.
- **NEVER TOUCH KNIFE.** Keep hands and arms away from all moving parts.
- **NEVER OPERATE** without knife cover and knife ring guard securely installed.
- **ONLY USE FOOD CHUTE HANDLE** to push food chute during manual slicing.
- **ONLY USE THE END WEIGHT, NOT YOUR HAND,** to hold food products when slicing. Never put your hand on or around food chute when slicer is on.
- **DO NOT CATCH SLICES WITH YOUR HAND.** Let slices drop on receiving area.
- **ALWAYS** turn off slicer and turn slice thickness dial completely clockwise after each use.
- **BEFORE CLEANING, SHARPENING, SERVICING, OR REMOVING ANY PARTS,** always turn slicer off and unplug slicer and turn slice thickness dial clockwise to closed position
- **USE ONLY GERMAN KNIFE SLICER ACCESSORIES** properly installed.

INSTALLATION

UNPACKING

Immediately after unpacking the slicer, check for possible shipping damage. If the slicer is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Prior to installing the slicer, test the electrical service to assure it agree with specifications on the machine data plate. The data plate is located on the right side of the slicer base.

UNPACKING



This machine is provided with a three-prong grounding plug. The outlet to which this plug is connected must be properly grounded. If the receptacle is not the proper grounding type, contact an electrician.

Contact your local representative of German Knife directly if you have any questions or problems with the installation or operation of this slicer.

CLEANING BEFORE USING

This machine must be thoroughly cleaned and sanitized after installation and before being used. Refer to Cleaning, page 8.

OPERATION



SHARP KNIFE

TO AVOID SERIOUS PERSONAL INJURY

Safety devices incorporated in this slicer must be in their correct operating position anytime the slicer is in use.

- With the slicer turned off, pull the food chute completely toward you and place the food product on the food chute. Slice only boneless, unfrozen product with the slicer. Use the end weight to hold the food product in place.
- Make sure all knob are tightened prior to using the slicer.
- Rotate the slice thickness dial counterclockwise to the desired slice thickness.
NOTE : Tighten the board support knob (on model GS-10LD only) to support the board before slicing.
- After slicing is completed, always turn the slice thickness dial completely clockwise to close the gauge plate. The number on the thickness dial do not indicate actual measurements.
- Turn on slicer.
- Use the food chute handle to manually push the food chute back and forth. The food chute handle is the only part of the slicer you should touch while slicing. Do not catch slice with your hand. Let slices drop on the receiving area.
- Turn off slicer after each use and always turn slice thickness dial completely clockwise to close the gauge plate.
- Pull the food chute completely towards you, close the gauge plate, if you have not already done so, and remove the product from the food chute.

If a product needs to be adjusted during slicing, always turn off slicer. Close the gauge plate, and pull the food chute all the way towards you prior to adjusting the product and the end weight.

CLEANING

This machine must be thoroughly cleaned and sanitized after each days operation or after being idle for an extended period of time.

This machine components are easily disassembled without the use of special tools.



SHARP KNIFE

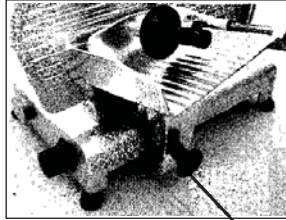
TO AVOID SERIOUS PERSONAL INJURY

- The slicer knife is very sharp. Exercise extreme caution when working near the knife.
- Unplug machine power cord and turn the thickness dial fully clockwise before cleaning.
- It may be desirable to wear non-cutting gloves the cleaning operation.
- Do not put the components in dishwasher.
- Do not hose down or pressure wash any slicer part.
- Do not use bleach or other caustic/strong detergents on the slicer base or components.
- Do not allow moisture to get into knife hub.
- Do not use a scrubber pad, steel wool, or abrasive material to clean the slicer.
- Never remove the sharpener from the slicer or immerse it in water.
- Use a clean cloth soaked in the mild detergent and warm water to wipe all surface of slicer.
- Rinse using a fresh cloth and clean water. Allow parts to air dry.

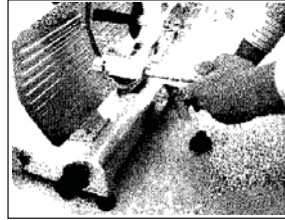
DISASSEMBLE AND CLEANING

1. Remove the food chute

Close the gauge plate and turn the food chute release knob counterclockwise until it comes off.

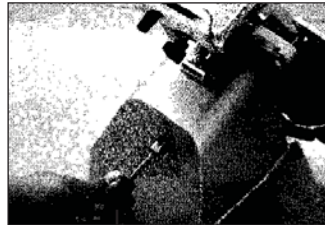


Food chute
release knob

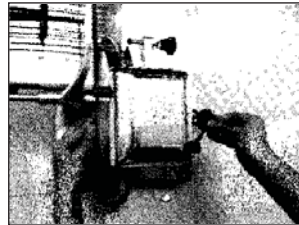


2. Knife cover

Turn knife cover release knob counterclockwise until it comes off. Push the knob inside again to push out the knife cover.

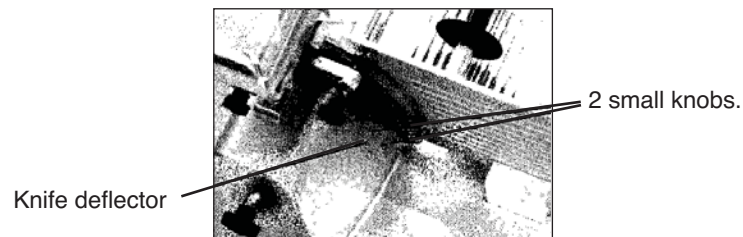


Knife cover
release knob



3. Knife deflector

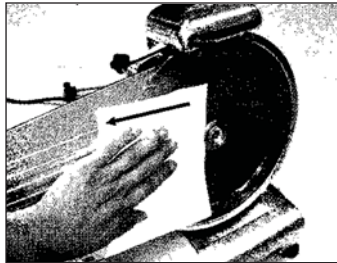
Remove the knife deflector by unscrewing the 2 small knobs.



DISASSEMBLE AND CLEANING

4. Knife cleaning

Wash and rinse both side of knife by wiping outward from the center carefully. Never clean any part of the slicer with steel pads.



Do not exceed chemical manufacturer's recommended concentrations for detergent or sanitizer. Solution with concentrations greater than 200 ppm will accelerate corrosion of metals.

5. Reassemble the knife cover and deflector

Carefully reassemble the knife cover over the blade. Hold the knife cover with one hand while tightening the knife cover release knob with the other hand. Reassemble the knife deflector by screwing the 2 small knobs.

6. Gauge plate cleaning

Wipe the gauge plate from the knife toward you. Never wipe the gauge plate toward the knife.

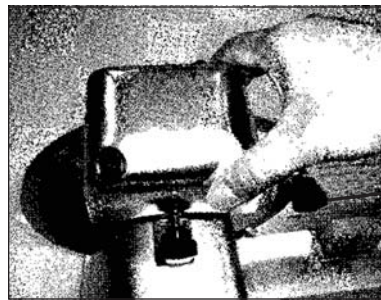


7. Clean and wipe down the entire slicer. Do not use steel pads.

- Do not exceed chemical manufacturer's recommended concentrations for detergent or sanitizer. Solution with concentrations greater than 200 ppm will accelerate corrosion of metals.
- Do not use any slicer base or motor in the water.
- Do not immerse slicer base motor in the water.
- Do not hose down slicer or splash excessively with water.

KNIFE SHARPENING

- Sharpen the knife when necessary, too frequent sharpening results in unnecessary knife wear. But in high volume applications where it is a practice to sharpen the knife frequently or even daily, the knife will be expended in a shorter time.
 - Never touch rotating knife.
 - Always keep hands clear of all moving parts.
1. Turn the slicer off and unplug power cord.
 2. Turn the slice thickness dial fully clockwise to close the gauge plate.
 3. Thoroughly wash the area around the knife, the exposed knife surfaces, and knife edge. (Following instructions for knife cleaning)
 4. Loosen the sharpener release knob by turning it counterclockwise until you can lift sharpener up.



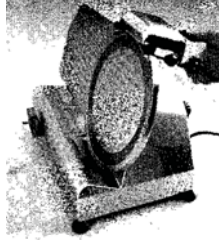
Sharpener release knob

5. Lift the sharpener cover up, rotate it clockwise, and lower it into position with the knife fitting between the two stones. Then tighten the sharpener release knob.

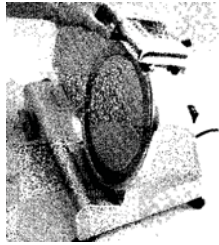


KNIFE SHARPENING

6. Plug in the slicer power cord and turn on the slicer.
7. Push the button on the back of sharpener for 5 seconds to sharpen back side of knife and then release. IF necessary, repeat sharpening for another 5 seconds.



8. Push the button on the front of sharpener for 0.5-1 seconds to remove the tough burr which developed on the front knife.



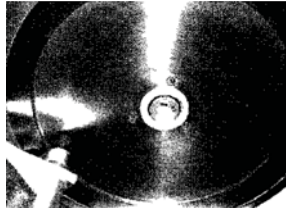
9. Turn off and unplug the slicer before inspecting.
10. Loosen the sharpener release knob by turning it counterclockwise until you can lift sharpener up.
11. Lift the sharpener cover up, rotate it counterclockwise, and lower it into position. And then tighten the sharpener release knob.
12. Clean the slicer with damp cloth to remove any grinding particles as described cleaning.

BELT CHANGING

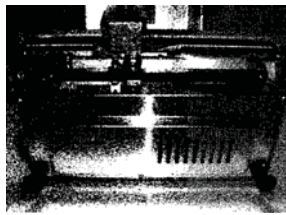
• After a long time using, belt should be changed to keep the machine in good condition.

1. Take out the knife cover as forenamed.

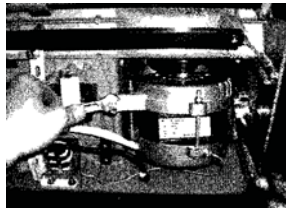
2. please screws to take out the blade.



3. Release screws to take out the board.



4. Release screws to take out the motor.



5. Take out the belt from the belt wheel and change a new one. Put everything back and machines can be used again.



SIMPLE MAINTENANCE

LUBRICATION

Various slicer parts need to be lubricated periodically using German Knife oil (supplied).

Do not use vegetable oil to lubricate. Vegetable oil will damage this slicer.

FOOD CHUTE SLIDE ROD (WEEKLY)

1. Put 4-5 drops directly on the slide rod weekly (depends on usage).
2. When excessive drag is felt, put 4-5 drops directly on the slide rod.
3. After dropping the oil, push the food chute forth and back several times to distribute the oil on the slide rod.

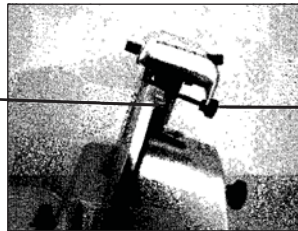


Food chute
slide rod

SHARPENER SHAFT (WEEKLY)

1. Loosen the sharpener release knob.
2. Lift the sharpener cover and drop oil to the main shaft, and then lower the sharpener.
3. Lift the sharpener up and down several times to distribute the oil on the main shaft.
4. Tighten the sharpener release knob.

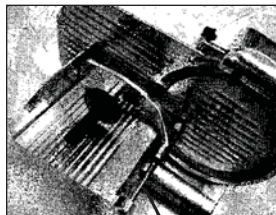
Sharpener
main shaft



Sharpener
release knob

END WEIGHT SLIDE ROD (WEEKLY)

1. Put the 3-4 drops to the end weight slide rod.
2. Slide the end weight up and down to distribute the oil.



End weight slide rod

TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Knife is not rotating	Power cord not plugged in Switch off V-belt broken	Plug in power cord Turn switch on Call for service to replace V-belt
Bad cuts	Dull Knife Too much grinding on the front side of knife Knife is worn Knife gauge plate gap too wide Knife is too small	Sharpen the knife Resharpener the knife Sharpen or replace the knife Call for service to adjust gauge table Replace the knife
Hard to push food chute	No lubrication	Lubricate slide rod
Metal noise	Knife cover Food chute Gauge plate	Tighten knife cover release knob Tighten or adjust food chute knob Call for service to adjust gauge table
Hard to sharpen	Knife dirty Grinding stones dirty, wet or clogged with grease Worn stones Stones not properly aligned	Clean the both side of knife Clean stones with brush and dry Replace the stones Call for service to adjust sharpener

LIMITED WARRANTY

Warranty Claims

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.

On-site warranty service calls within 100 miles of an authorized service company. End user is responsible for all extra travel and mileage at prevailing rates. No mileage or travel time is paid.

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 from the date of original installation or fifteen (15) months after shipment date from German Knife Radiance whichever occurs first.

- Radiance Medium Duty Microwaves- NE/NM series (TMW-1100NE, TMW-1100NM, TMW-1100C)
- Radiance Ranges & Countertop cooking series (All TAR-, TARG-, TAHP-, TARB-, TAMG-, TATG-, TASP-, TAWR-)
- Radiance Steam Tables (RST-)
- Radiance Cheesemelters, Salamanders, Hand Wrappers (All TACM-, TASM-, RHW-, RFW-)
- Radiance Bakery Equipment (RBCO-, RBDO-, TDC-)
- German Knife Light Duty Slicer- LD series (GS-12LD)

Two years from the date of original installation or twenty seven (27) months after shipment date from German Knife Radiance whichever occurs first.

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

One year from the date of original installation or fifteen (15) months after shipment date from German Knife Radiance whichever occurs first. Plus 2 additional years for Magnetron (part only)

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

Stainless steel fabrication models such as sinks, work tables, equipment stands, wall shelves, utility carts are not covered under warranty unless damage is reported or claimed right after shipment is received not exceeding 3 days from receiving.

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, food, 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, unstable power supply, 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.