

Micro-Mark®

OPERATING INSTRUCTIONS FOR #60514 MICROLUX MULTI-SAW

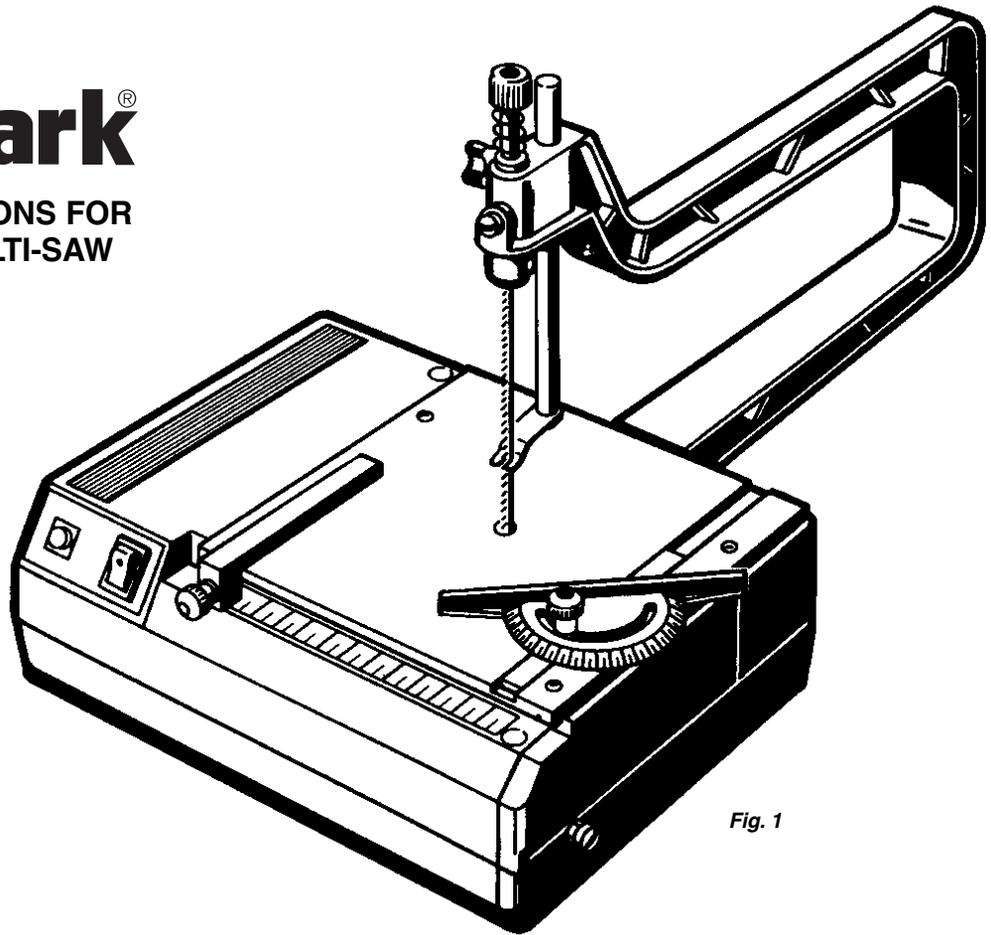


Fig. 1

FOREWORD

Dear Customer:

The MicroLux Multi-Saw is a high performance tool for every model maker, and is ideal for the sawing of curves in wood, plastic and non-ferrous metals.

State-of-the-Art production and testing procedures ensure the maximum reliability from your power tool.

This manual comprises:

- Safety instructions
- Installation and operating instructions
- Spare parts list
- Warranty information

Reading this manual will:

- Help you understand the machine's operation.
- Avoid malfunctions due to improper operation.
- Increase the life of the machine.

Always keep this manual close at hand.

Do not operate the machine unless you are fully familiar with it. Please observe the safety instructions.

Use only original MicroLux spare parts.

PARTS BAG

Your parts bag contains the following parts:

- 1 Rip fence
- 1 Miter gauge
- 1 Pack of saw blades
- 1 Machine screw and washer
- 3 Wood screws
- 1 Long Allen wrench
- 1 Short Allen wrench (not needed)

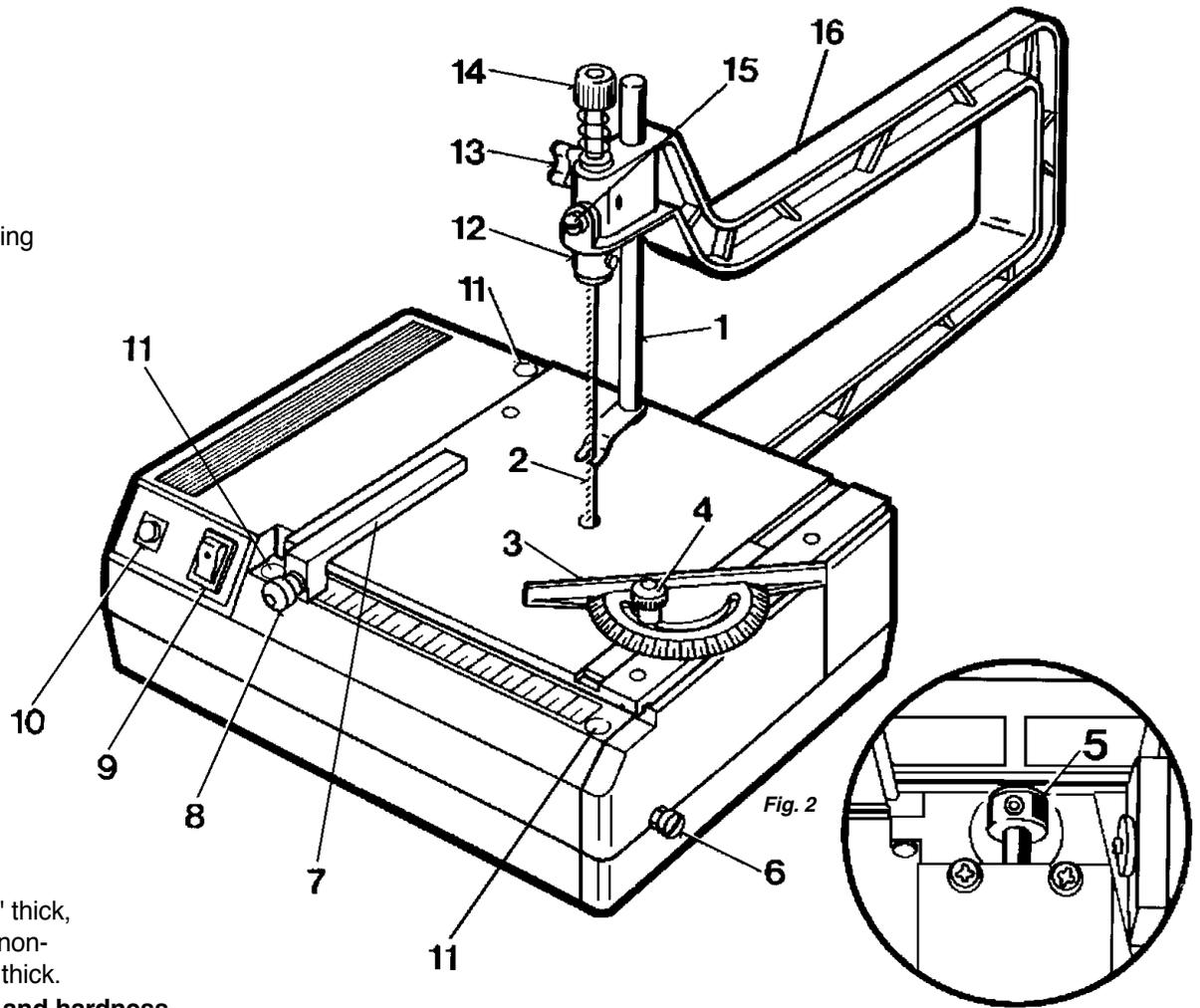
SAFETY INSTRUCTIONS

Please read the following safety instructions thoroughly and follow them before starting to work with the machine:

- Keep the work area clean and tidy.
- Do not use electric tools in rain, under wet conditions, near flammable liquids or gasses.
- Avoid contact with grounded parts, such as pipes, radiators, cookers or refrigerators.
- Store tools out of the reach of children.
- Do not overload the machine.
- Do not wear loose clothes or jewelry.
- Do not carry the machine by the electric cable or bow.
- Keep the electrical cable away from heat, oil and sharp edges. If necessary have it replaced by a specialist.
- Fasten the machine securely to a work table.
- Replace dull saw blades.
- Clean the machine thoroughly after completing your work.
- Pull out the electric plug before maintaining the machine, before changing the saw blade or the toothed belt, or when not using the machine.
- Make sure that the machine is switched off before connecting it to the wall outlet.
- Check the machine for obvious damage before use. Replace defective parts.
- Repairs in the electrical system should be carried out by a specialist.
- Use only accessories and spare parts which are recommended in these instructions.
- Use a push stick when working near the saw blade.

LEGEND

1. Saw blade guide
2. Saw blade
3. Miter gauge
4. Clamping screw
5. Lower clamping ring
6. Sliding door with locking screw
7. Rip fence
8. Locking screw
9. On-off switch
10. Speed regulator
11. Mounting holes
12. Upper clamping ring with set screw
13. Clamping screw for saw blade guide
14. Tensioning screw for saw blade
15. Guide screw
16. Bow



MACHINE CAPACITIES

The MicroLux Multi-Saw cuts soft wood up to 2" thick, hard wood up to 1/2" thick, printed circuit boards and non-ferrous metals up to 5/64" thick.

Note: Material thickness and hardness, plus blade design and condition, will affect cutting speed.

TECHNICAL DATA

Number of strokes: continuously variable between 100 and 2,700 per minute

Stroke: .200"

DIMENSIONS:

Table: 6-1/4" square

Distance from blade to neck of bow: 12"

Motor: 110v AC, 1/10 HP

MOUNTING THE SAW BOW



Fig. 3

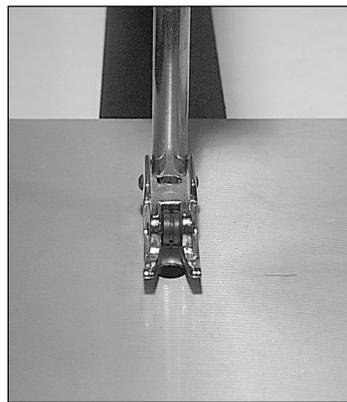


Fig. 4

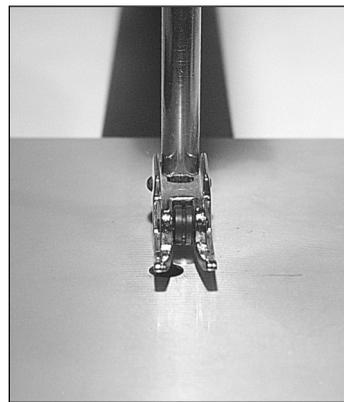


Fig. 5

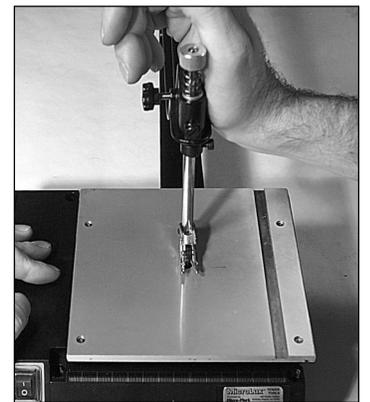


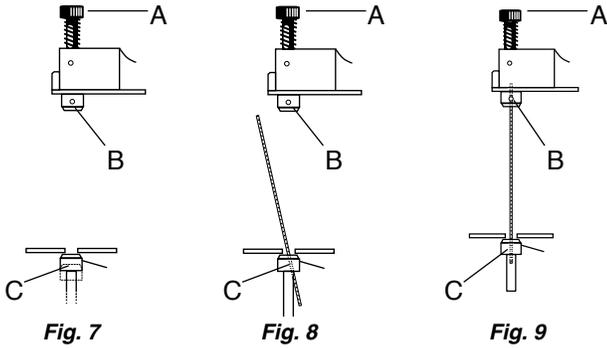
Fig. 6

The bow is packed separately and must be mounted by mating the raised edge of the bow with the slot at the rear of the housing using the machine screw and washer provided. (Fig. 3)

Next, check for bow alignment by lowering the blade guide almost to the table level. The slot in the blade guide roller should be in-line with the center hole and its shaft perpendicular to the table. (Fig. 4)

If your alignment is as in Fig. 5 (either left or right of center), then an easy adjustment is required, and is normally required for your initial set-up. Referring to Fig. 6, grasp the base firmly with one hand and push the bow's head in the direction required to correct the alignment. Push the head slightly beyond center. It will spring back to a resting point. Keep adjusting until proper centering is achieved.

BLADE INSTALLATION



Open sliding door on right side of housing: To unlock door, turn spring-loaded screw 1/4 turn or until it disengages. Slide door forward to remove. Lower clamping ring "C" is visible inside housing (Fig. 7). Plug in your scroll Saw. With speed control set at slowest speed, cycle on/off switch quickly until the clamping ring has reached the top of its stroke. Unplug unit.

Loosen set screw in the lower clamping ring with long Allen wrench provided. Do not unscrew more than 2 turns or screw will fall out.

Insert saw blade between blade guide prongs (teeth downward, facing forward) and into slot in lower assembly (Fig. 8). Adjust

blade location so that at least 2 teeth are below table surface. Orient blade vertically and tighten screw in "C".

Depending on blade length, it may be necessary to "bow" the blade slightly left or right in order to access the slot of upper locking ring "B" (Fig. 9). Press downward on "A" to lower the clamping ring. Hold in position with 1/8" to 1/4" of blade inserted into the slot of the clamping ring. Tighten the set screw in "B."

Blade should be perpendicular to table and should ride lightly in blade guide roller. Adjust your blade and the roller in the guide as necessary.

Plug in saw. Turn on and set at slowest speed. The spring under knob "A" should **NOT** compress fully. If it does, loosen knob "A" slightly. If spring still compresses fully, you may have not set the blade into the lower clamping ring when it was at its highest point of the stroke.

Reinstall blade into lower clamping ring per previous instructions.

Your unit should run smoothly throughout the speed range. If all appears in good order, you can close and lock the sliding door.

Any standard jeweler's blade can be used. If blade has cross pins or is more than 5-1/2" long, it can be trimmed with wire cutting pliers (Wear safety glasses).

WORKING WITH THE SCROLL SAW

WARNING!

To use the saw safely, accurately and to avoid vibration, it must be secured to your table or workbench.

FASTENING THE MACHINE

Several options are available. To be portable, use our saw mounting plate (#81387), or use the three wood screws provided to mount the saw to a piece of 3/4" pine or plywood. Clamp to the edge of your bench with C-clamps. These methods do not harm your table surface. If this is not a concern, mount the saw directly to your bench with the three wood screws. (Fig. 10).

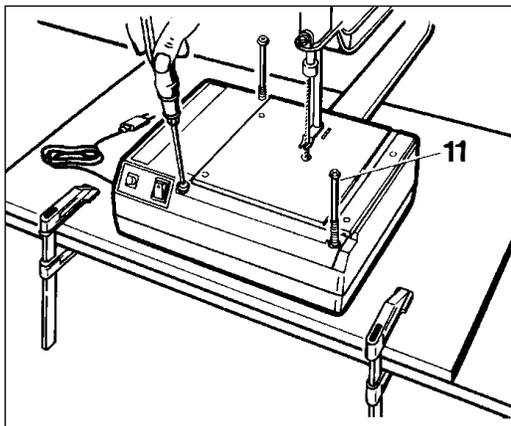


Fig. 10

Make a test cut. If saw will not cut, blade may not be inserted deeply enough into lower blade chuck.

SPEED CONTROL

As a general rule, use slower speeds and finer blades (more teeth) for thin materials and metal. Use faster speeds and coarser blades (less teeth) for thick materials. Deciding on which blade to use will come with experience and will vary depending on the material being cut.

ADJUSTING THE SAW BLADE GUIDE

Loosen the clamping screw 13 for the saw blade guide 1, set it as low as possible, and tighten the clamping screw.

When sawing, always be sure to press material down against table. Grip material firmly and feed slowly into the blade. If you feed work too fast, blade may break or wander off the cutting line. Keep blade guide tight against work whenever possible.

FREEHAND CUTTING

Press the work piece firmly onto the working table and move it slowly and with gentle forward force.

SAWING WITH RIP FENCE

Loosen the clamping screw for the rip fence 8 (Fig. 11) and adjust it to the desired width of the workpiece.

Note: Maximum width of workpiece 2-3/4"

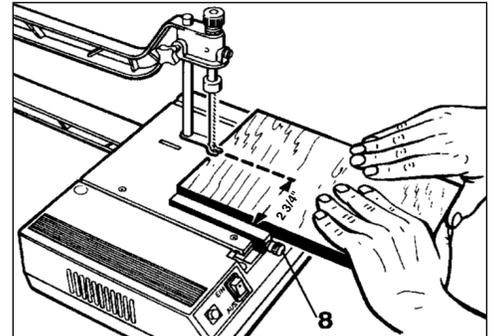


Fig. 11

SAWING WITH THE MITER GUIDE

Adjust the desired angle on the miter gauge. Hold the workpiece tightly against the miter gauge and move it together with the miter gauge lightly against the saw blade (Fig. 12).

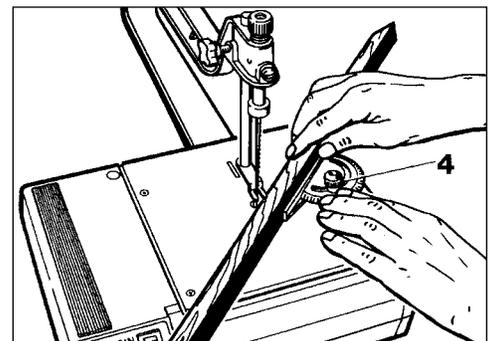


Fig. 12

Note! Use only saw blades which are in good condition!
Replace blades when wear is apparent!
Always remove the plug from the wall outlet before maintaining or cleaning the machine!
Do not leave the machine running while unattended!

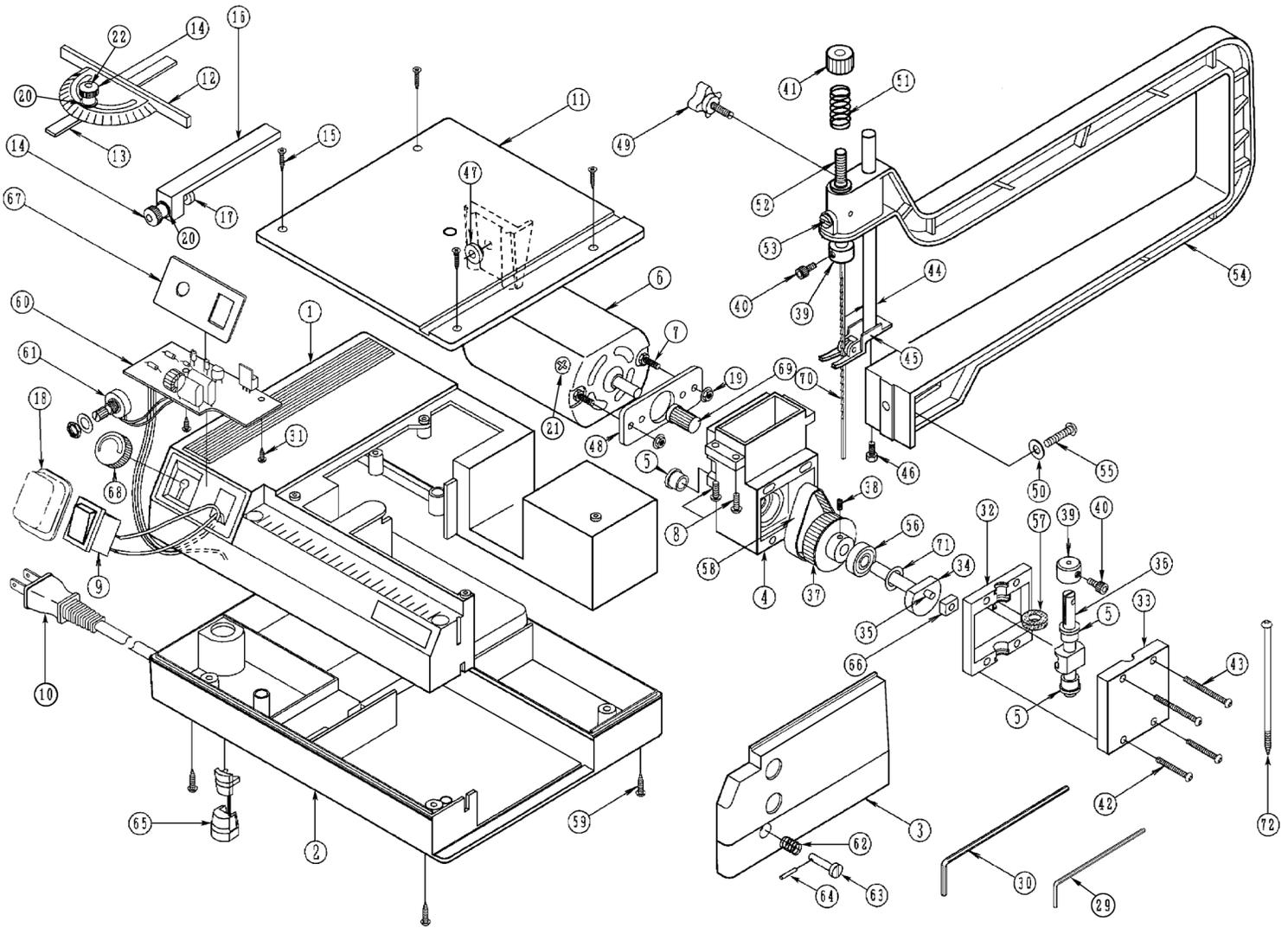
MAINTENANCE AND ADDITIONAL INFORMATION

Frequently vacuum out the dust compartment.

Inspect blades periodically and replace as required.

Occasionally place a drop of oil on the upper and lower chuck shafts. No other lubrication is required.

Should replacement parts become necessary, contact Micro-Mark at 908-464-1094.



DRAWING MM053101

WHEN ORDERING REPLACEMENT PARTS, PLEASE REFER TO THE ITEM NUMBERS SHOWN ABOVE.

LIMITED WARRANTY

Micro-Mark guarantees this product to be free of manufacturing defects for a period of 90 days from date of shipment, regardless of the amount of time the product has been used and/or stored. The product, or parts thereof, will be repaired or replaced (at our option) and shipped back to you free of charge if the following conditions have been met:

- the product is shipped back to us within the warranty period,
- incoming transportation charges have been pre-paid,
- proof of purchase has been provided, and
- our Service Department determines that the problem was caused by a defect in material and/or workmanship.

Please return to **Micro-Mark Product Service Department** at the address below with a note explaining the problem.

For products returned after the warranty period, our regular repair charges shall apply. Please include your telephone number so we may advise you of the repair estimate. Any product returned to the purchaser without repair work being performed shall be shipped C.O.D. for the return transportation charges.

This warranty does not cover damages resulting from improper assembly, adjustment or maintenance, accident, alterations, normal wear, abuse or misuse, and does not apply where products are used commercially. The warranty shall also not apply when the product has been used for purposes beyond those for which it was designed or unreasonable for its size.

Micro-Mark makes no other warranty of any kind whatever, expressed or implied, and all implied warranties of merchantability and fitness for a particular purpose which exceed the above mentioned obligation are hereby disclaimed by Micro-Mark and excluded from this warranty.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. The obligation of the warrantor is solely to repair or replace the products. The warrantor is not liable for any incidental or consequential damages due to such defect. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

Our Product Service Department
 may be telephoned at **908-464-1094**
 1pm to 5pm Monday–Friday except holidays.

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 Berkeley Heights, NJ 07922