

Micro-Mark®

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SPECIAL INSTRUCTIONS FOR #80463 MICROLUX TILT-ARBOR SAW

CAUTION!

PLEASE TAKE THE FOLLOWING STEPS
TO ASSURE YOUR SAFETY AND THE
PROPER OPERATION OF YOUR SAW.

Before operating your saw, you **MUST** check that it has not been damaged during shipment from our warehouse to your location. You must also save **ALL** the packing materials for your saw should you ever need to return it to us for any reason.

To inspect your saw, first remove the cleanout/blade storage door on the right side of the saw housing – turn the screw counterclockwise to unlock, then remove the door. Look inside the saw housing and locate the corrugated packing pieces. Carefully remove these pieces and **SAVE THEM**. While the door is open, check for damage to any of the internal parts of the saw.

**Carefully check the motor housing pivot system for damage...
in particular, check the molded holes surrounding the motor
housing pivot pin (item 21 on the Parts List).**

If everything checks OK, continue with the saw set-up as outlined in the OPERATING INSTRUCTIONS supplied with your saw. If damage is discovered, repack the saw and contact the Micro-Mark Customer Service Department at 1-908-464-6764 for assistance.

The internal mechanism of this tool must be packed properly to best prevent damage during shipment. If you need to return the tool to us for any reason, please be sure to properly replace all packing materials prior to shipment. **We cannot assume responsibility for damage resulting from the improper packing of merchandise being returned to us.**

Micro-Mark[®]

THE SMALL TOOL SPECIALISTS

340 Snyder Avenue, Berkeley Heights, NJ 07922 • Tech Support: 908-464-1094, 1 pm – 5 pm ET

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OPERATING INSTRUCTIONS

#80463 MICROLUX TILTING ARBOR TABLE SAW

GENERAL SAFETY INSTRUCTIONS

Table saws can be dangerous tools if not used properly. For your own safety and the safety of others, please read and understand operating instructions completely before using your new saw.

1. Always wear safety glasses or goggles. The blade can throw dust, a loose splinter or knot and damage your eyes. Everyday eyeglasses are not safety glasses.
2. Use saw blade guard for every operation for which it can be used.
3. Do not use power tools in damp or wet locations or expose them to rain.
4. Set up your saw in a comfortable, well lighted location. Keep the floor and work area around the saw clean and neat.
5. Keep hands out of the line of saw blade.
6. Use a push stick to move stock past the blade when ripping (cutting with the grain).
7. Don't overreach. Never reach around or over a rotating saw blade. Keep proper footing and balance at all times. Non-slip footwear is recommended.
8. Never wear loose clothing, work gloves, neckties, bracelets or other jewelry when operating table saws. Keep long hair tied back.
9. Keep power tools out of the reach of children.
10. Do not force tool. Feed stock through saw blade slowly.
11. Do not operate tool after taking drugs, alcohol or medications or when you are tired or fatigued.
12. Always unplug tool before changing blades, servicing, or doing any other tool maintenance or set-up. Never put hands inside saw housing with saw plugged in.
13. Keep your saw well maintained. If it binds, makes unusual noises or has broken parts, correct the problem immediately.
14. Check the switch to see that it is off before plugging in the cord. "0" mark on switch indicates "off".
15. Feed work against the direction of blade rotation.
16. A saw or other dust producing tool should not be used close to a furnace, water heater or other flame producing appliance. The dust in the air can be ignited, causing an explosion and/or fire.

AVOIDING KICKBACKS

A kickback occurs when a part of the workpiece binds between the blade and rip fence or other fixed object, rises from the table and is thrown toward the operator. To avoid injury, should a kickback occur, keep your face and body to one side of the saw blade, out of line with a possible kickback. You can help avoid the occurrence of a kickback by observing the following rules:

1. Maintain the rip fence parallel to the blade or slightly farther from the blade at the back of the saw than at the front. Use thumb screw at back end of rip fence to adjust.
2. Keep blades sharp and replace as soon as wear is apparent.
3. Do not attempt to rip work that is twisted or warped or does not have a straight edge to guide along the rip fence.
4. Do not rip cut dowels or other round objects.
5. Always use a push stick. Push on wood between blade and rip fence.
6. Do not perform any operations freehand. Never cut anything without the use of the rip fence or miter gauge.
7. Never rip cut metals.
8. Remove rip fence when cross cutting. Never use the rip fence as a stop for cross cut work.

NOTICE

Your MicroLux Tilting Arbor Table Saw has been designed to provide high power for cutting, but for **short intervals only**. Continuous heavy usage of the saw will cause excessive heat build up in the electronics and in the motor that may ultimately cause burnout of these components. Allow a cooling-off period after any heavy cutting and sure to clear out any saw dust which accumulates in the saw housing so that air can circulate to cool the motor.

Continuous heavy usage which overheats the drive components may void the warranty.

MICRO-MARK LIMITED HOME USE WARRANTY

Your MicroLux Tilting Arbor Table Saw is warranted against defective material or workmanship provided that the customer returns the saw prepaid to Micro-Mark, 340 Snyder Ave., Berkeley Heights, NJ 07922 with proof of purchase within one year of date of purchase. This warranty applies only to the original purchaser. Micro-Mark will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse, accident, unauthorized repairs or alterations or other causes unrelated to problems with material or workmanship. This warranty applies to home use only and will be void if saw is used for production or business purposes. Repairs made necessary by normal wear or abuse, or repair outside the warranty period, if they can be made, will be charged at regular service prices.

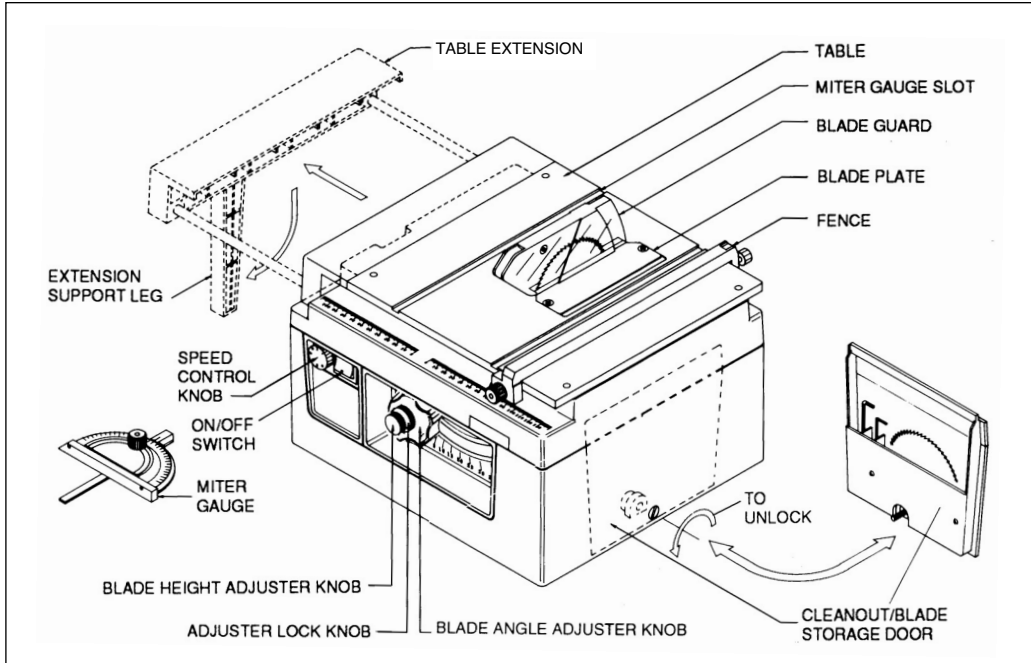
Under no circumstances will Micro-Mark be liable for incidental or consequential damages resulting from defective products. This warranty is Micro-Mark's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Micro-Mark.

PRODUCT LIABILITY DISCLAIMER

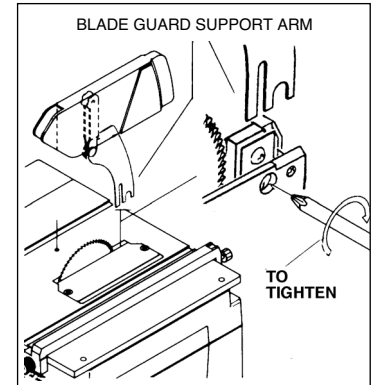
Buyer assumes all risk and liability whatsoever resulting from use of this product.

A. SET-UP INSTRUCTIONS

Do not plug cord into electrical outlet until all set-up steps are completed.



IMPORTANT NOTE: BLADE INSTALLED ON SAW IS FOR CUTTING WOOD ONLY.



1. For your safety, mount your saw in a location that does not require you or an observer to stand in line with the saw blade. Your saw **must** be securely mounted to a sturdy table or workbench before use. Using the template on page 4, drill four 1/4" diameter holes through your tabletop and secure the saw to the workbench with the screws and washers provided. As an alternate, to maintain some portability of your saw mounting, use the template to drill holes through a piece of 3/4" thick plywood and secure the saw with #10-32 x 1-1/4" Flat Head Machine Screws from your local hardware store; then use a minimum of two C-clamps to attach the plywood/saw combination to your workbench. **DO NOT OVER TIGHTEN SCREWS.**

2. Remove clean-out/blade storage door on right side of saw. Turn screw counter-clockwise with flat blade screwdriver. Swing bottom of door out and up until top of door is free from housing.
3. Remove packing material from inside of saw housing.
4. Install blade guard as follows: insert slotted end of blade guard support arm into blade slot in table top and between metal plate and motor housing as shown in drawing. Tighten holding screws securely with a cross-point (Phillips) screwdriver.
5. Check blade mounting screw for tightness before operating saw. See blade changing instructions that follow. (Section B).
6. Replace door.

NOTE: Some blade guards have a stop pin which prevents the guard from being placed in a fully raised position. In this case, use a piece of tape to hold the blade guard in the up position while changing the blade.

B. BLADE CHANGING INSTRUCTIONS

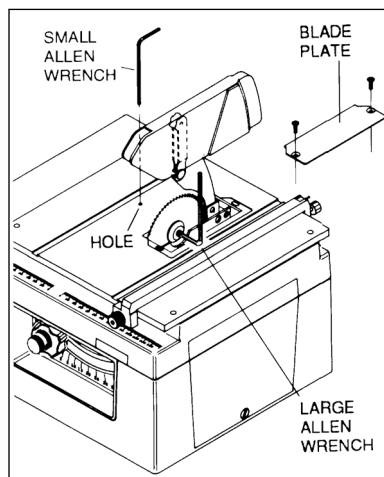
Always unplug saw before changing blades.

1. Remove blade plate on top of saw table by removing two screws holding plate to table.

2. Raise blade to its full up position. (See C-2).

3. Insert long end of smaller Allen wrench supplied into small hole in table top. Turn saw blade by hand until Allen wrench drops into arbor hole and prevents arbor shaft and blade from turning.

4. Insert small end of larger Allen wrench into socket head cap screw on end of blade arbor. Remove screw, washer and blade by turning screw counterclockwise.

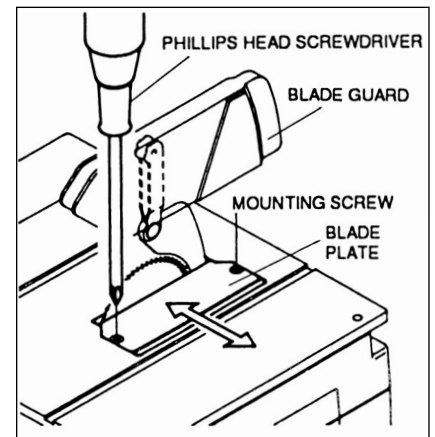


5. Install new blade by reversing operations 1 through 4.

Tighten hex head cap screw securely. Note: When using a blade thinner than .030", do not use the blade guard.

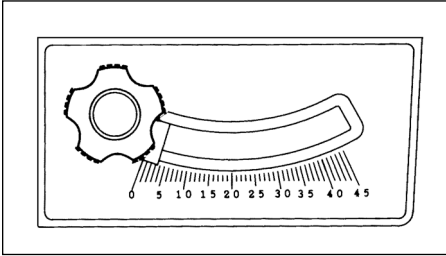
6. Adjust blade plate to suit different blade thicknesses and angles by sliding towards or away from blade. Keep blade plate at least 1/32" away from blade.

7. Blade may also be changed through clean out/blade storage door.



C. CHANGING BLADE ANGLE AND BLADE HEIGHT

Never change angle of blade with saw running.

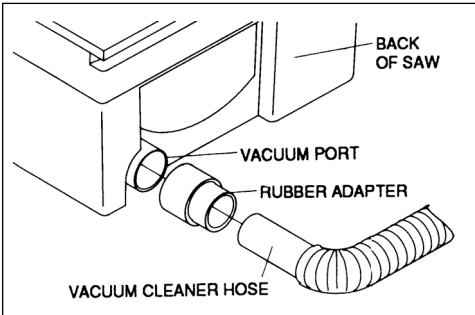
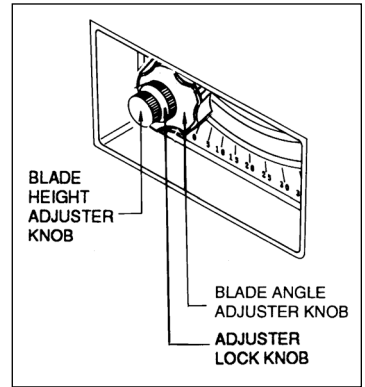


1. CHANGING ANGLE OF BLADE

Loosen locking knob and angle adjusting knob by turning counterclockwise. Move angle locking knob until blade is set to desired angle. Then turn both knobs clockwise to lock.

2. CHANGING HEIGHT OF BLADE

Loosen locking knob by turning counterclockwise. Turn blade height knob clockwise to raise blade and counterclockwise to lower blade. Then turn locking knob clockwise to lock.



D. DUST COLLECTOR ATTACHMENT

Connect vacuum cleaner hose to vacuum port at back of saw. Use rubber adapter included, if necessary, to accommodate variations in hose diameter.

E. SAW OPERATION

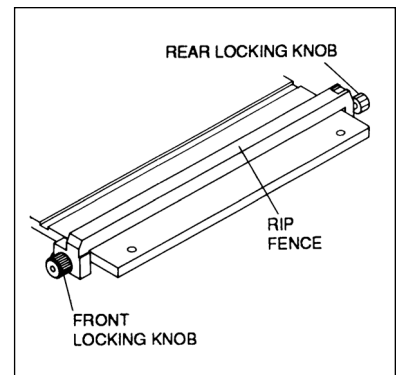
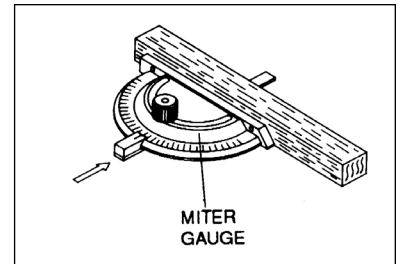
1. CROSS CUTTING

Cross cutting is a cut across the short dimension of a piece of wood (usually across the grain). Remove rip fence and ALWAYS USE MITER GAUGE WHEN CROSS CUTTING. Adjust blade height so it is approximately 1/16" above the wood. Hold the wood securely against the face of the miter gauge with one hand. Grasp the miter gauge lock knob with the other hand, keeping your hand away from the blade. Push wood and miter gauge slowly past the blade. Before making another cut, remove any loose pieces of wood from the table using the end of a push stick. Should any pieces get caught in the blade guard or in the slot in the table top, unplug cord before removing. For angle cuts, set the desired angle on the miter gauge and handle the wood in the same manner as described above. For precision angular cuts, use a protractor or other angle measuring device to set the angle of the miter gauge.

To support extra long stock when cross cutting, pull out the table extension and swing extension support leg down.

2. RIPPING

Ripping is a cut along the long dimension of a piece of wood (usually with the grain). Remove miter gauge and ALWAYS USE THE RIP FENCE WHEN RIPPING. Select a piece of wood that is flat and has at least one straight edge. The wood should be checked by holding it against a flat surface to see if it rocks or if any large gaps of light can be seen under it. If the edge is not straight, correct it with a hand plane or sandpaper. If the wood does not have a straight edge to ride along the rip fence it can bind and cause a kickback. Always feed the piece being cut completely through and past the blade. Never release the stock while it is still touching the blade. A kickback may result. Feed work past the blade slowly. If the blade slows down, you are feeding too fast. Use two push sticks, one in each hand, to push short or narrow workpieces past the blade. Use one stick to push the stock and hold it down to the table. Use the other push stick to hold the stock against the fence. Set the width of the piece to be cut by measuring from the offset tip of the blade tooth to the rip fence. Tighten front locking knob on rip fence to square it to the blade and to lock it in place, then tighten rear locking knob.



F. SAW BLADES AND CUTTING SPEEDS

Refer to chart on page 4

1. A NOTE ABOUT SAW BLADES:

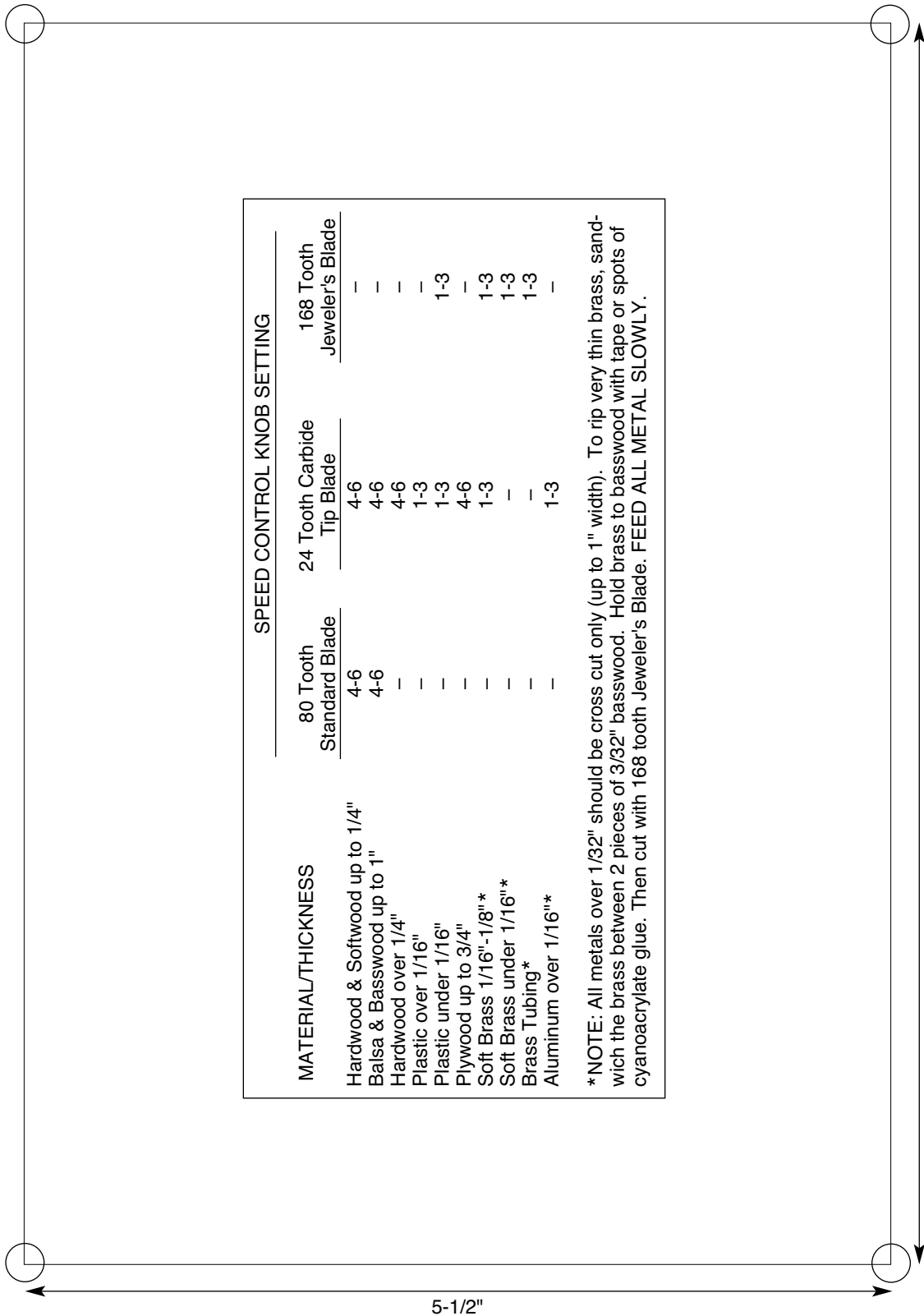
Because your saw is powerful at slow speeds, it is capable of cutting soft metals. However, keep in mind that even carbide tipped saw blades will become dull and wear much faster when cutting metal. For example, you could cross cut a 3/4" x 3/4" bar of aluminum with the carbide blade, but you could do the same with an inexpensive blade in a hack saw. In other words, don't waste a \$30.00 blade on a cut that could be made with a \$1.00 blade.

2. A NOTE ABOUT DC MOTORS AND SPEED VARIATION:

During use you may find that the minimum blade speed will not always be consistent. At some times the slowest speed will be faster than it is at other times. This is an inherent characteristic of variable speed DC motors with load compensation circuitry. In most cases the blade speed will return to its slowest speed once the circuitry is put under load (when the cut is started). This variation can also be minimized by turning the speed control knob as slowly as possible when changing from one speed to another.

TEMPLATE FOR LOCATING & DRILLING MOUNTING HOLES

Due to the possibility of shrinkage in the printing process, actual measurements are indicated for spacing between centers of holes.



Parts List for #80463 MicroLux Tilting Arbor Table Saw

Part no.	Qty.	Description	Part no.	Qty.	Description
97-1	1	Table	97-77	1	Screw, miter gauge pointer
97-2	1	Fence	97-78	1	Screw, pointer mounting
97-3	1	Faceplate	97-79	2	Screws, blade guard
97-4	1	Plate, tilt adjuster	97-80	4	Screws, faceplate mounting
97-5	1	Housing, saw, bottom	97-83	7	Bolts, motor housing assembly
97-6	1	Housing, saw, top	97-84	2	Screws, chute mounting
97-7	1	Door, cleanout/blade storage	97-85	2	Screws, motor housing pivot mounting
97-8	1	Panel, inner, door	97-86	2	Roll pins, extension rod stop
97-9	1	Extension, table	97-87	1	E-ring, extension leg pivot
97-10	1	Leg, extension	97-89	1	Knob, fence rear
97-11	1	Rear access panel	97-90	1	Screw, blade mounting
97-12	1	Housing, motor, left	97-91	2	Screws, blade plate mounting
97-13	1	Housing, motor, right	97-92	2	Clips, blade guard pivot
97-14	1	Chute, sawdust	97-95	7	Nuts, motor housing assembly
97-15	1	Guard, blade	97-96	2	Rivets, motor housing pivot bracket
97-16	1	Miter Gauge, main plate	97-97	2	Nuts, motor housing pivot mounting
97-17	1	Pointer, miter gauge	97-98	1	Nut, door latch
97-18	1	Clamp, power cord, inside bottom housing	97-99	6	Nuts, motor mounting and base
97-19	1	Vacuum coupler	97-100	2	Nuts, blade plate mounting
97-20	1	Arbor blade, with10mm mounting	97-101	1	Washer, miter gauge lock
97-21	1	Pin, blade pivot	97-102	1	Washer, fence front
97-22	1	Rod, tension	97-103	1	Washer, blade adjuster
97-23	1	Pivot Pin, motor housing	97-105	1	Wrench, blade arbor lock
97-24	1	Stud, blade adjuster	97-106	1	Wrench, blade retainer
97-25	1	Knob, blade height adjuster	97-107	2	Screws, extension rod
97-26	1	Knob, adjuster lock	97-111	1	Pointer blade washer
97-27	1	Knob, blade angle adjuster	97-112	1	Door latch spring
97-28	1	Knob, miter gauge lock	97-114	1	Vacuum adapter
97-29	1	Knob, fence front	97-116	1	Speed control
97-30	1	Pin, extension leg pivot	97-117	1	Motor cover screen
97-31	1	Screw/door latch	97-118	1	Motor cover screen safe ring
97-33	1	Washer, blade mounting	97-119	8	Screws, electronic cover (4), motor cover (4),
97-34	1	Pin, blade guard rear pivot	97-121	1	Motor cover (if so equipped)
97-35	1	Pin, blade guard front pivot	97-128	1	Cover, electronics
97-36	1	Stud, miter gauge	97-133	1	Cover switch, on/off
97-37	1	Pulley, blade arbor	97-137	1	Fan, motor
97-38	1	Pulley, motor shaft	97-140	4	Screws, table mounting
97-39	1	Clamp stud, fence	97-142	1	Clamp, power cord
97-40	2	Extension rods	97-144	1	Insert, threaded
97-41	2	Inserts, threaded, chute mounting	97-145	2	Collars, brass
97-45	1	Plate, blade	97-146	2	Screws, set, pulley
97-46	2	Retainers, blade plate nut	97-148	2	Washers, motor mount
97-47	1	Retainer, motor housing pivot	97-149	1	Pin, blade guard
97-48	1	Bracket, motor housing pivot	97-150	1	Blade, standard 80 tooth
97-49	1	Push plate, adjuster	97-151	1	Printed circuit board
97-50	1	Pointer, blade adjuster	97-153	1	Power cord
97-51	1	Runner, miter gauge	97-154	1	Motor
97-52	1	Bracket, blade guard	97-155	1	Clamp, power cord
97-53	1	Clamp plate, blade guard	97-156	1	Connector, electrical female
97-54	1	Arm, blade guard	97-157	1	Connector, electrical male
97-55	1	Clip, fence	97-159	3	Pins, electrical
97-56	2	Front pivot washers	97-160	n/a	Wires, electrical
97-60	2	Bearings, arbor	97-161	n/a	Wires, electrical
97-63	1	Knob, speed control	97-162	n/a	Wires, electrical
97-65	1	Bushing, cord strain relief	97-163	n/a	Wires, electrical
97-67	1	Belt, drive	97-164	1	Switch, on-off
97-68	2	Springs, tension	97-165	1	Wire harness
97-69	1	Spring, extension leg detent	97-166	1	Plug, plastic
97-70	1	Ball, extension leg detent	97-167	1	Pin, retaining clip fence
97-71	4	Screws, saw housing assembly	97-170	2	Screws, electronic components
97-72	6	Screws, power cord clamp	97-171	1	Nut, speed control
97-73	4	Screws, table mounting	97-172	1	Washer, speed control
97-76	6	Screws, inner door panel (2), coupler (2), rear access panel (2)			

When ordering parts please reference version number on assembly drawing.

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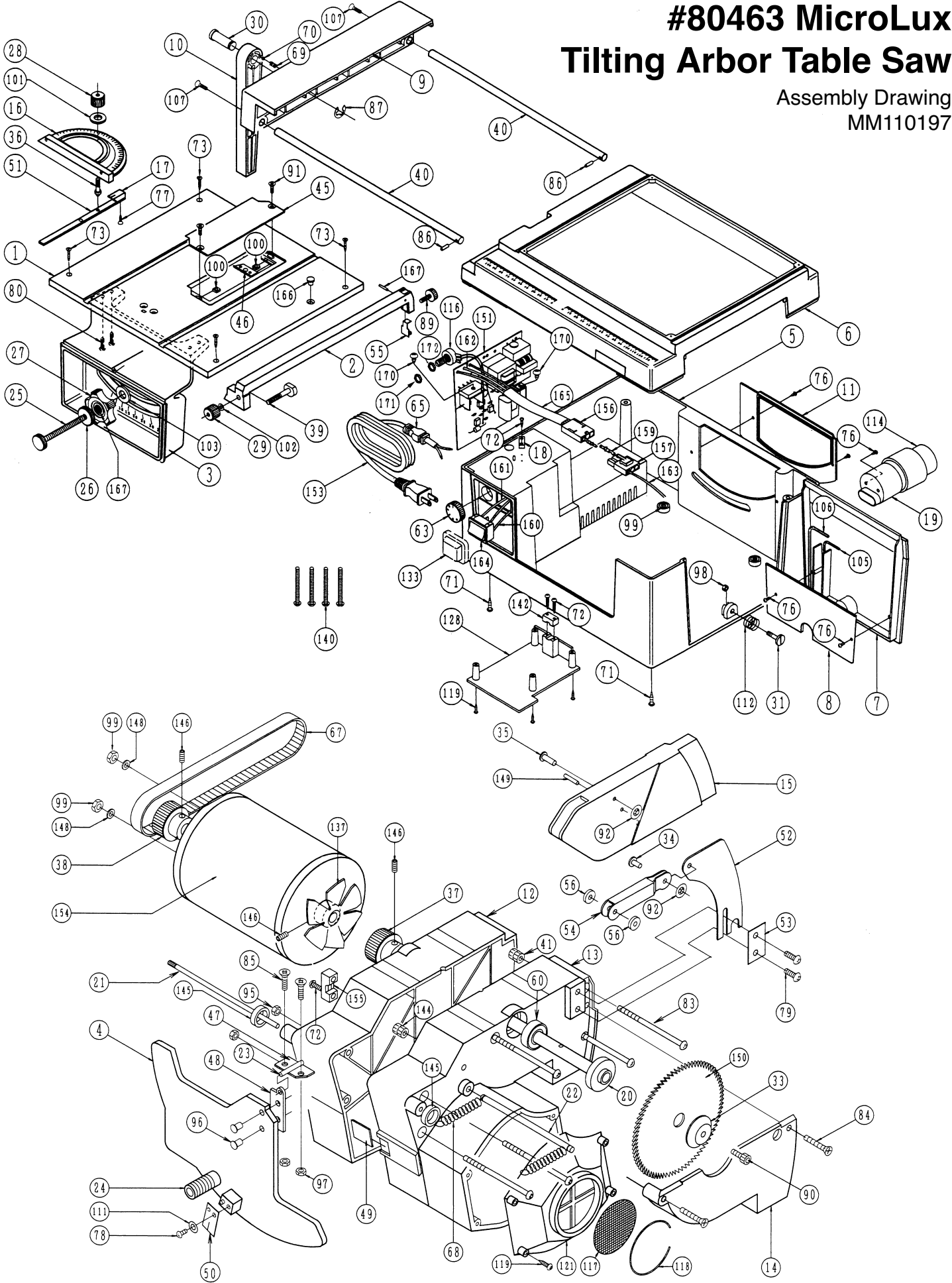
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MM122904

#80463 MicroLux Tilting Arbor Table Saw

Assembly Drawing
MM110197



Micro-Mark[®]

INSTRUCTIONS FOR CHANGING DRIVE BELTS #80793 (MXL Belt) OR #80850 (XL Belt) ON THE #80463 MICROLUX TILT ARBOR TABLE SAW

These instructions supplement those provided with the table saw and accompany each replacement drive belt. While the operations required to change a drive belt are not particularly difficult, the ability to use hand tools and some mechanical knowledge is required. The Micro-Mark Product Service department is available to replace the drive belt for you at our standard shop rates. Please call our Product Service department at 1-908-464-1094 if you need assistance.

NOTE: There are two different types of replacement drive belts available for this table saw. Each type of belt is matched to the pulleys that were installed on the saw at the factory. These drive belts are NOT interchangeable (the spacing of the teeth on the belt is different between the two)...you **must** use the same type of belt that came with the saw or it will not work properly. Damage to the new belt or to the saw will occur. **For your own safety, be sure to carefully read, understand and follow the instructions given below.**

Belt Identification

All saws purchased from January, 1995, onward use the #80850 XL Belt.

For saws purchased prior to January, 1995, either belt may have been installed at the factory. Follow steps 1 through 8 below to determine the kind of belt you need for your saw.

Belt Replacement

1. Unplug the saw to prevent accidental start-up.
2. Remove the storage/cleanout door on the right side of the saw.
3. Lower the blade completely.
4. Remove the blade guard (reverse of installation... see saw instructions).
5. Place saw upside-down on a flat surface.
6. Remove the four deeply-recessed screws located in the bottom saw housing with an extra-long #1 Phillips-head screwdriver. Note: Saws shipped as of late-November, 1997, also have a small electrical access cover on the bottom surface. Remove this cover to gain access to the fourth screw.

7. Before going any further, read the following: There is a cable which connects the motor to the control circuit and which will hamper the removal of the bottom saw housing. Slightly remove the bottom housing and look for the cable. Disconnect the quick-release cable connector latch (or the wire nuts and separate the wires, if so equipped) and then completely remove the bottom housing.
8. You can now, by carefully rotating the drive belt/pulley system, locate the code symbol (MXL or XL) of the belt and either order a replacement belt or confirm that this symbol matches the symbol on the belt you ordered. (The #80793 MXL belt has 12-1/2 teeth per inch; the #80850 XL belt has 5 teeth per inch).
9. The old drive belt can be "walked" off the pulley by pulling it to the side while gently turning the belt/pulley system.
10. The new belt should be installed by "walking" it on in the same manner as the old one was removed.
11. Check the belt tension: The new drive belt should properly engage and fit the space between the pulleys snugly, but without excessive tension, in order to assure both that the belt will not jump teeth yet will not exert undue stress on the motor and arbor bearings.
12. Reassembly of the saw is accomplished in the reverse order. Be careful when reconnecting the motor cable to be sure that the wire colors and mating features of the connector body match and that the connector is securely latched or the wire nuts are secure. Be sure the wires are clear of the drive belt.
13. Test run the saw to see that everything is working properly. You may install a tag on the saw to identify the type of drive belt that is required by the saw for convenience in placing a future order for a belt, should that ever become necessary.

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