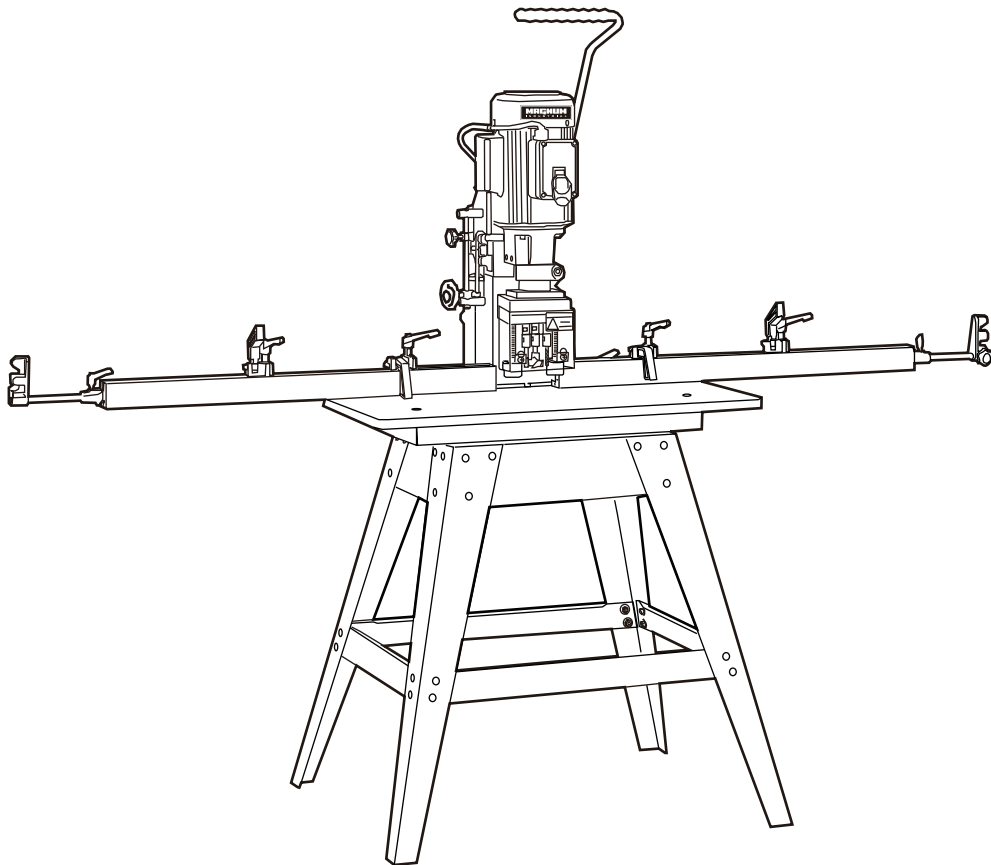


# MAGNUM

## INDUSTRIAL

**MODEL NO.: MI-77450**



***OPERATING MANUAL***

# RULES FOR SAFE OPERATION

1. **ALWAYS KEEP THE GUARDS IN PLACE**, and in working order.
2. **REMOVE ADJUSTING KEYS AND WRENCHES.** From the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
3. **KEEP THE WORKING AREA CLEAN.** Cluttered areas and benches invite accidents.
4. **DON'T USE IN A DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep the work area well lit.
5. **MAKE THE WORKSHOP KID-PROOF** with padlocks, master switches, or by removing starter keys.
6. **USE THE RIGHT TOOL.** Don't force the tool or attachment to do a job for which it was not designed.
7. **WEAR PROPER APPAREL.** Don't wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
8. **ALWAYS USE SAFETY GLASSES.** Also use a face or dust mask if the operation is dusty. Everyday glasses only have impact-resistant lenses. They are not safety glasses.
9. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate the tool.
10. **DON'T OVER-REACH.** Keep proper footing and balance at all times.
11. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
12. **DISCONNECT POWER FROM TOOLS** before servicing. When changing accessories, such as blades, bits, cutters, etc.
13. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in the off position before you plug it in.
14. **USE RECOMMENDED ACCESSORIES.** Consult the equipment manufacturer's manual for recommended accessories. The use of improper accessories may cause injury.
15. **NEVER STAND ON THE TOOL.** Serious injury could occur if the tool is tipped, or if the cutting tool is unintentionally contacted.
16. **CHECK DAMAGED PARTS.** Before further use of the tool, damaged parts should be carefully checked to determine that they will operate properly and perform their intended function. Check for alignment, binding or breakage of moving parts, or any other conditions which may effect operations.
17. **DIRECTION OF FEED.** Only feed work into a blade or cutter against the blade's rotation direction.
18. **NEVER LEAVE THE TOOL UNATTENDED WHILE IT'S RUNNING.** Don't leave the tool until it comes to a complete stop.
19. **KNOW YOUR POWER TOOL.** Read both the assembly and operation manual, and get acquainted with maintenance and lubrication procedures. Never use accessories or attachments not recommended by the manufacturer, as it may result in injury. Learn application and limitations, as well as specific potential hazards peculiar to this tool.

# ELECTRICAL REQUIREMENTS

Before connecting the machine to the power source, verify that the voltage of your power supply corresponds with the voltage specified on the motor I.D. nameplate. A power source with greater voltage than needed can result in serious injury to the user as well as damage to the machine. If in doubt, contact a qualified electrician before connecting to the power source. In all cases, make certain the receptacle is properly grounded. If you are not sure, have a qualified electrician check the receptacle. This tool is for indoor use only. Do not expose to rain or use in damp locations.

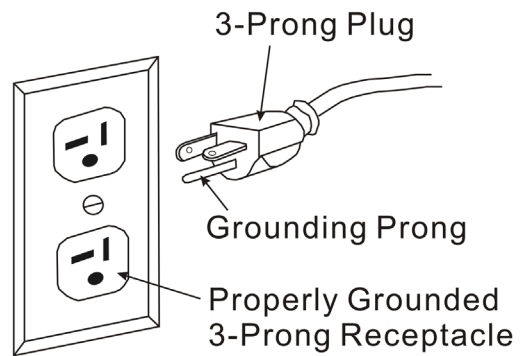
## GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock to. This motor of this machine is wired for 110V single phase operation and is equipped with a 3-conductor cord and a 3-prong grounded plug to fit a grounded type socket. Do not remove the 3rd prong (grounding pin) to make it fit into an old 2-hole wall socket. If an adaptor plug is used it must be attached to the metal screw of the socket. The wall socket must be properly installed and grounded. Note: The use of an adaptor plug is illegal in some areas. Check you local codes.

### **DO NOT MODIFY THE PLUG PROVIDED.**

If it will not fit your receptacle, have the proper receptacle installed by a qualified electrician.

**CHECK** with a qualified electrician or service person if you do not completely understand these grounding instructions, or if you are not sure the tool is properly grounded.



**This tool must be grounded while in use to protect the operator from electrical shock.**

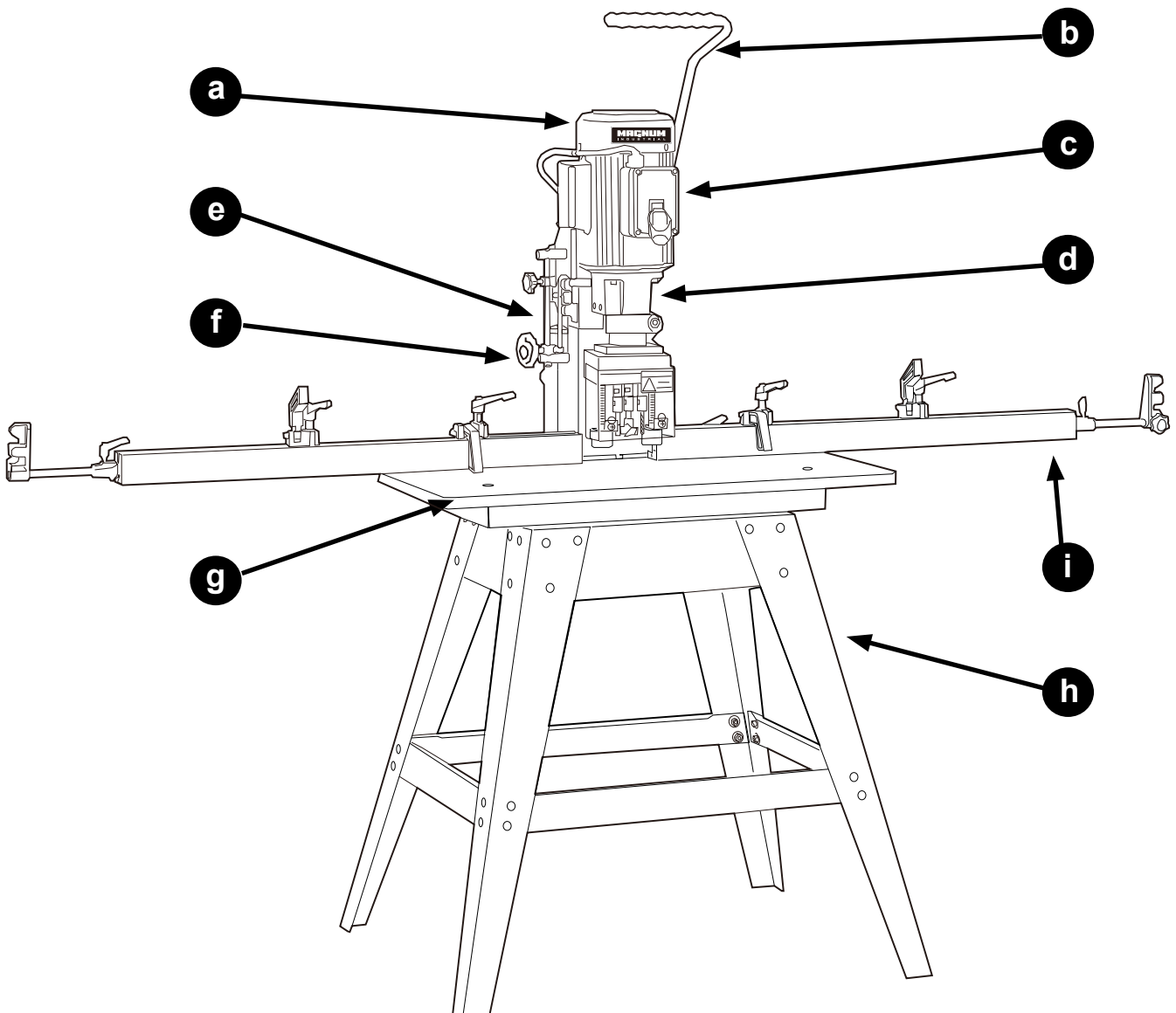
## **EXTENSION CORDS**

**USE ONLY 3-WIRE EXTENSION CORDS THAT HAVE 3-PRONG GROUNDING PLUGS AND 3-POLE RECEPTACLES THAT ACCEPT THE TOOL'S PLUG. REPAIR OR REPLACE DAMAGED OR WORN CORD IMMEDIATELY.**

If you find it necessary to use an extension cord with your machine make sure the cord rating is suitable for the amperage listed on the motor I.D. plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number the heavier the gauge.

TABLE - MINIMUM GAUGE FOR CORD						
AMPERE RATING	TOTAL LENGTH OF CORD IN FEET					
	25 FEET	50 FEET	75 FEET	100 FEET	150 FEET	200 FEET
	AWG					
< 5	16	16	16	14	12	12
5 TO 8	16	16	14	12	10	* NR
8 TO 12	14	14	12	10	* NR	* NR
12 TO 15	12	12	10	10	* NR	* NR
15 TO 20	10	10	10	* NR	* NR	* NR
21 TO 30	10	* NR	* NR	* NR	* NR	* NR
* NR = Not Recommended						
* Based on limiting the line voltage drop to 5V at 150% of the rated amperes.						

# IDENTIFICATION OF MAIN PARTS AND COMPONENTS



**a** MOTOR

**b** HANDLE

**c** ON/OFF SWITCH

**d** HEAD

**e** COLUMN

**f** DEPTH STOP

**g** TABLE

**h** STAND

**i** FENCE

# ASSEMBLY INSTRUCTIONS

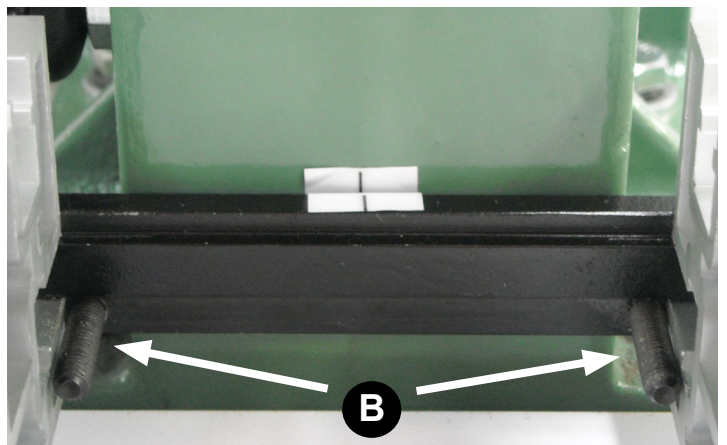
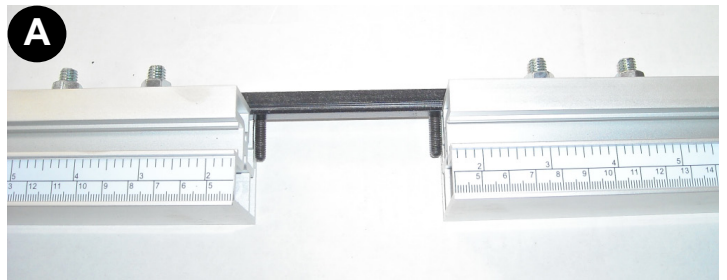
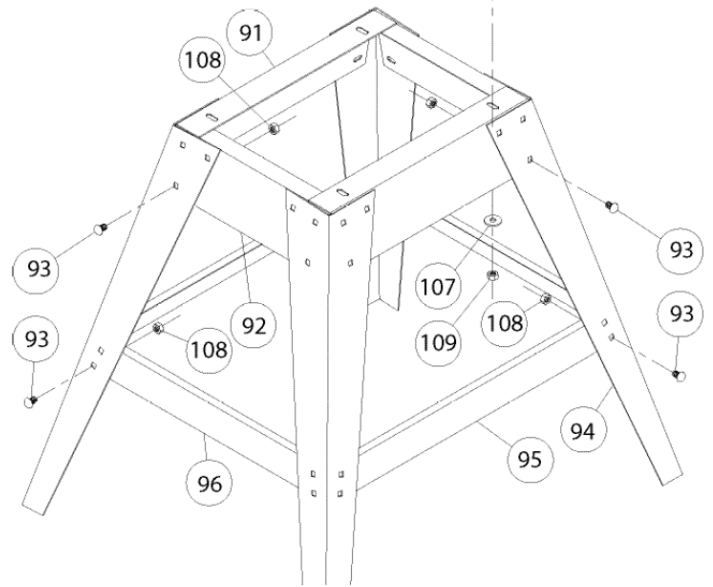
- !** To avoid risk of serious injury, make sure the boring machine is installed on a flat, solid and stable surface.  
Serious personal injury could occur if you connect the machine to the power source before you have completed the assembly steps. **DO NOT** connect the machine to the power source until instructed to do so.

## STAND ASSEMBLY

1. With the carriage bolts and nuts, begin assembling one end of the boring stand by attaching 1 short top shelf and 1 short tie bar to 2 leg.

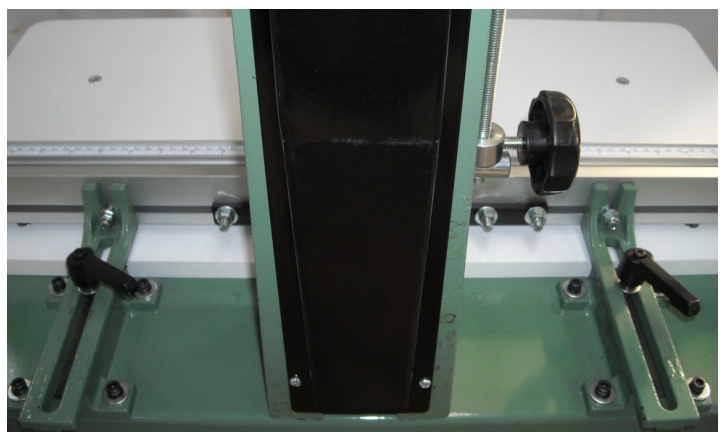
**Do not tighten hex nuts until all fasteners are attached. Then place the stand on a flat surface To square it up and finally tightens all the nuts.**

2. Assemble the opposite side of the stand the same way as described in step 1. Then use the 2 long top shelves and 2 long tie bars to join both assembled ends and complete the stand as shown.
3. Place the machine onto the stand with its front end along one of the stands shorter ends and align the four holes in the stands top shelf with those in the machine base. Fasten machine to stand using the 4 hex head screws, 4 nuts and 8 washers. Place the table on the base with 4 screws then tighten screws.



## FENCE ASSEMBLY

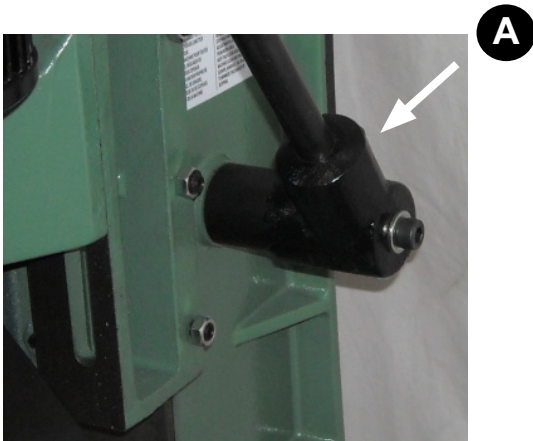
1. Slide the fence connector into the right fence slot and move the connector until it touch set screw and tighten screws A.
2. Repeat the same procedure for left fence.
3. Slide the screw B into both right and left fence and fit two fences to two fence brackets in proper position. Make sure the fences are as close as possible to table.
4. Move the fence assembly as close as column and align the center line of the connector and column. If not, readjust the screw B as in step 3.





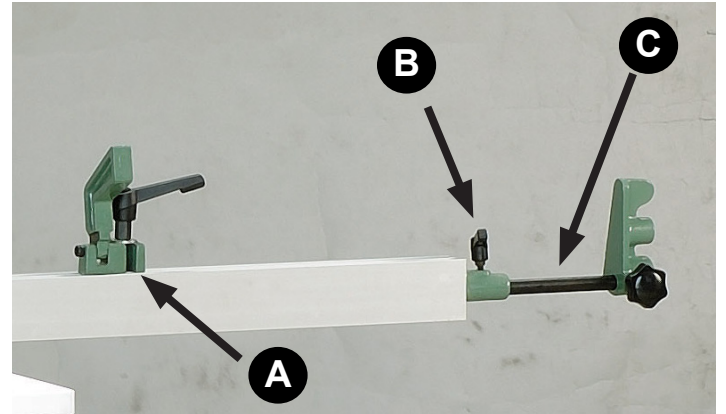
## HANDLE ASSEMBLY

Assemble handle to the handle body. Loosen the screw A then mount the handle and tighten the screw A securely.



## EXTENSION BAR ASSEMBLY

Mount the extension stop A to fence. Fit the slide block B into the fence slot and tighten the cap screw. Insert the stop rod C into slide block hole. Then tighten the lock handle.



## ADJUSTMENTS AND CONTROLS

### HINGE BORING DEPTH SCALE

The hinge boring depth scale A provides inch and metric graduation for choice. Moving boring head to the wood block as close as possible then tighten knob B. Move the scale knob C to desired position then tighten.



### LARGE WOOD BLOCK (over 2.5")

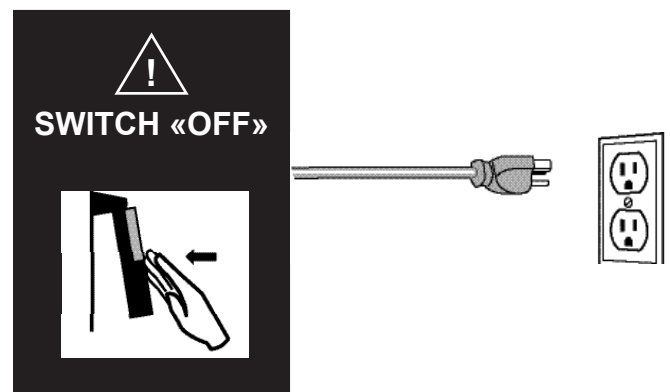
Using large wood block, loosen 2 screws A and use knob B to raise boring head to desired position.



### CONNECTING TO A POWER SOURCE

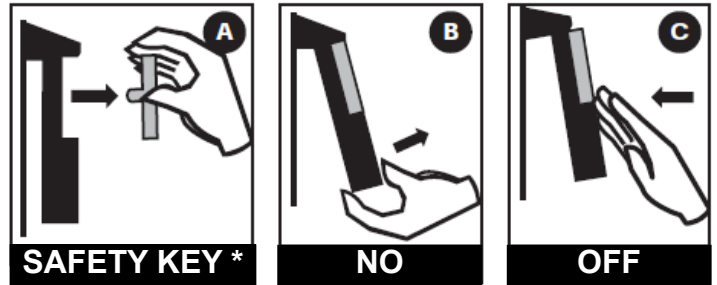
To avoid risk of shock or fire do not operate the unit with a damaged power cord or plug. Replace damaged cord or plug immediately. To avoid unexpected or unintentional start-up, make sure that the power switch is in the the OFF position before connecting to a power source.

1. Uncoil the power cord A and plug it into an appropriate outlet (refer back to section "Electrical Requirements" and make sure all requirements and grounding instructions are followed).



### **POWER ON/OFF SWITCH WITH SAFETY KEY**

The model MI-77450 is equipped with a simple “rocker style” On/Off switch featuring a removable lock out safety key A to prevent unauthorized use or unintentional start-up of the bandsaw. Whenever the bandsaw is not in use, remove the yellow safety key and store it in a safe place, out of the reach of children.



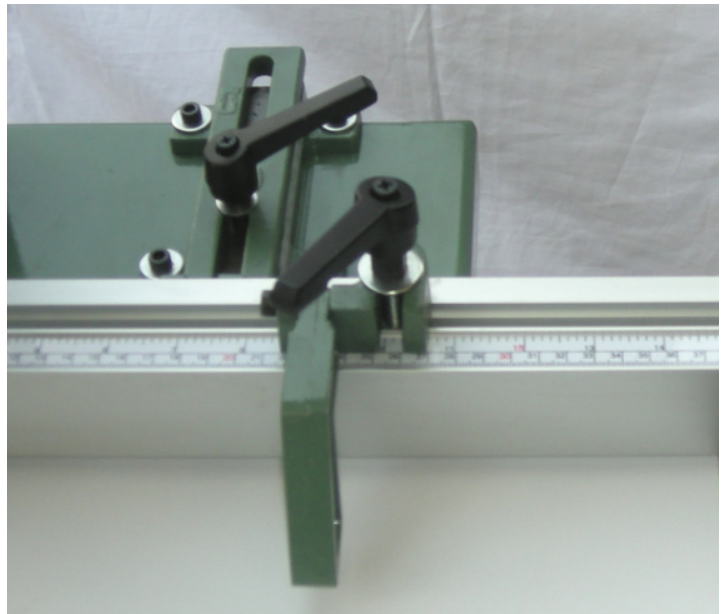
### **\* PREVENTS START-UP WHEN REMOVED**

- To START the bandsaw: Insert the safety key and pull the switch toward you B.
- To STOP the bandsaw: Push the red tab down C.

### **SETTING STOPS ON FENCE**

There are four stops on the fence. It can move any position. Loosen locking handle can move the stop to desired position.

Loosen two ratchet handles to slide the fence to desired position. Align the both scales then tighten ratchet handles.



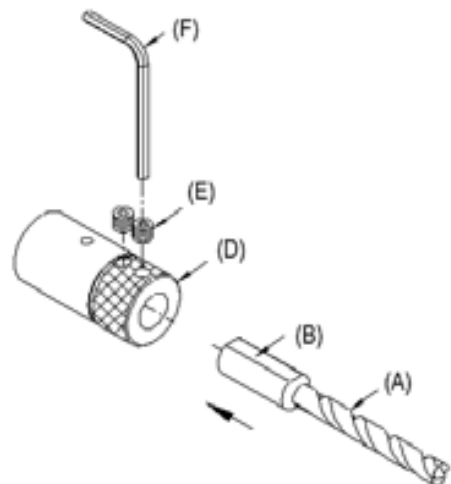
### **MOUNTING BITS ON COLLET**

The bit (A) is especially suitable for hinge boring. Select the correct helix direction on bit according to the running direction of hinge boring.

Flat face (B) on boring bit shank. Insert it into the collet (D).

The machine provides \_10 mm. collet.

Apply a Allen wrench (F) to turn screws (E) for tightening the bit. At this time, make sure the running direction is correct.

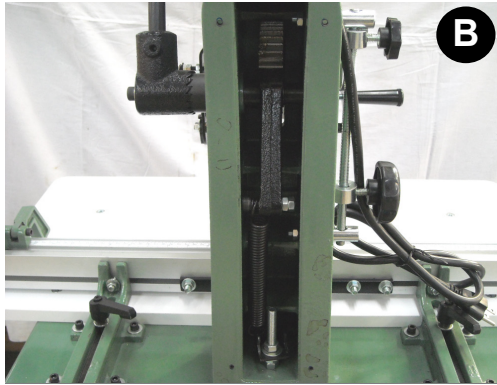
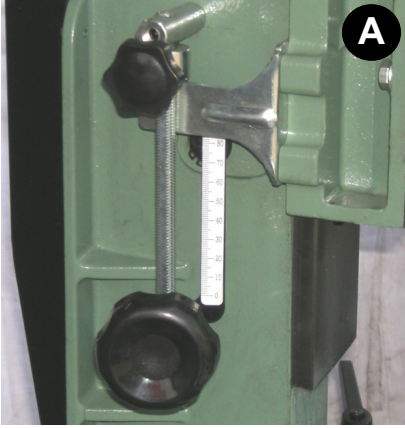


# MAINTENANCE AND LUBRICATION

**!** Disconnect machine from power source, before performing any lubrication or maintenance.

## LUBRICATION

Keep the column (A), gear (B) greased and free of dust or debris. Clean and remove dust, debris, after every of use. After cleaning, re-apply Grease as needed. (Use any all purpose grease).



## PERIODIC MAINTENANCE

**!** Never operate the hinge with any damaged part. Replace a damaged part at the first visible signs of damage.

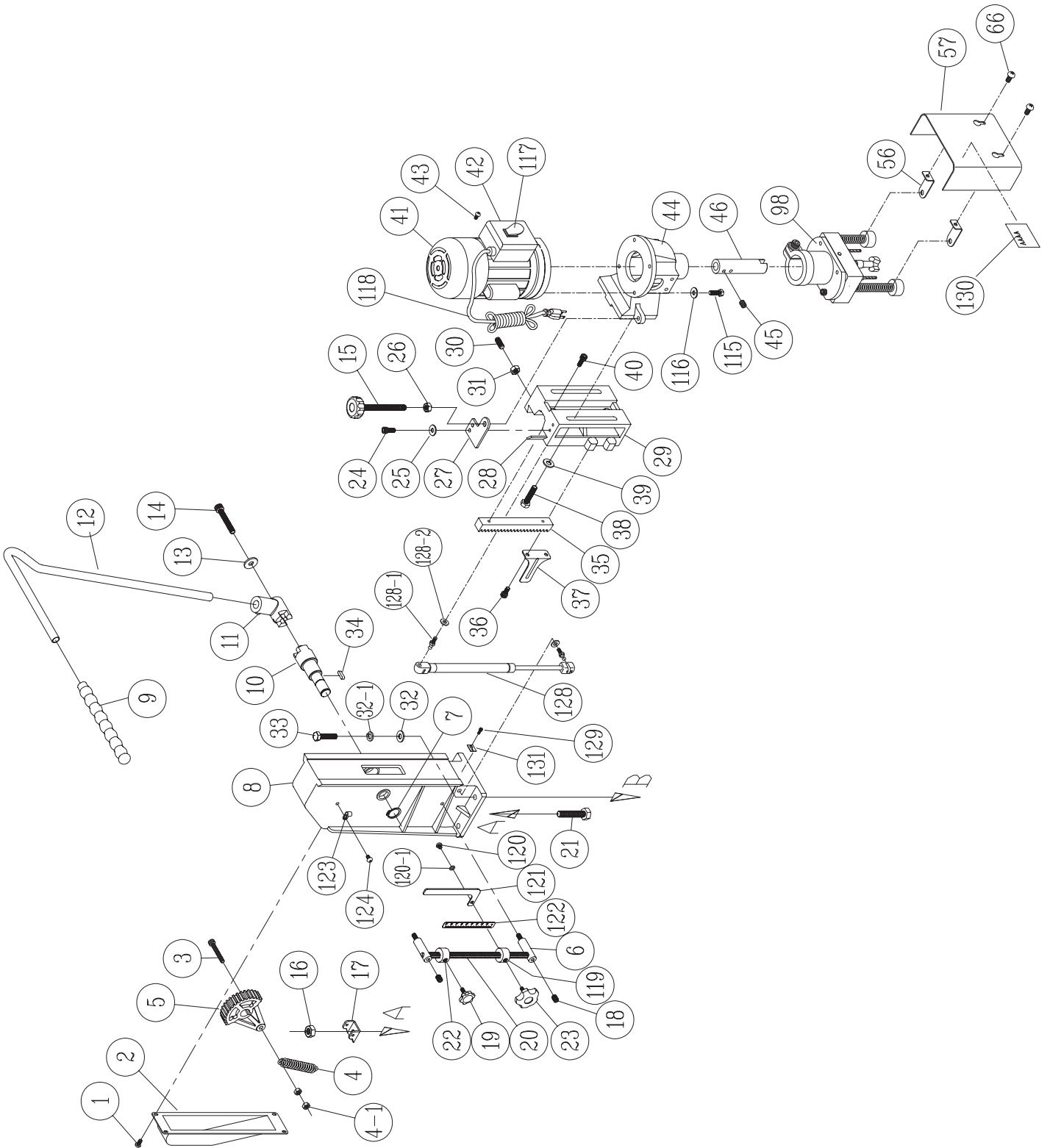
1. Inspect/test the ON/OFF switch before each use. Do not operate the hinge boring with a damaged switch; replace a damaged switch immediately at the first visible signs of damage.
2. Periodically inspect the power cord/plug/blade for damage.

**!** To avoid eye injury from blowing debris, wear safety goggles when blowing out dust.

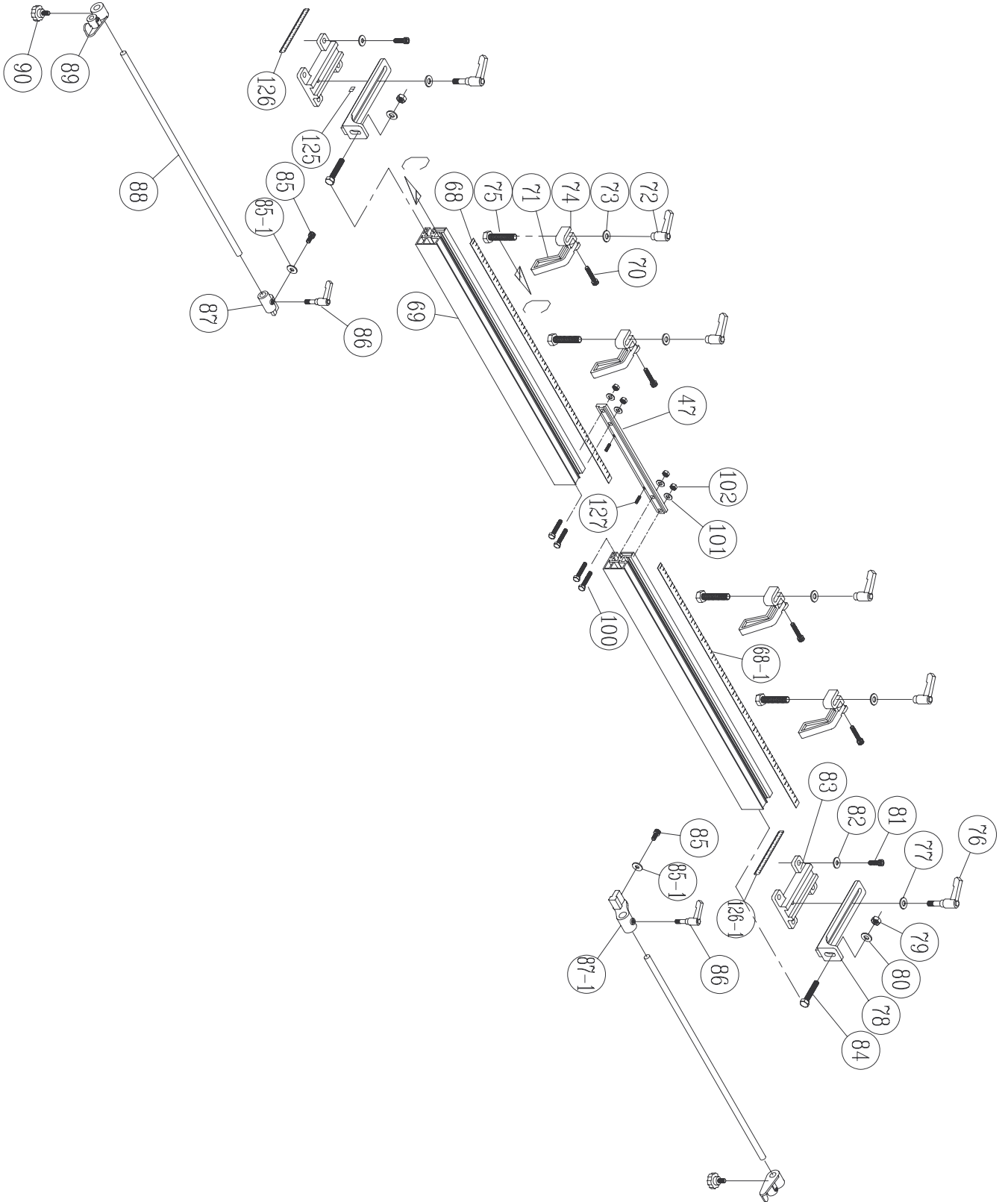
3. Keep the machine clean and free of dust. Frequently blow out or vacuum up the dust and wipe down the machine occasionally with a damp rag.
4. Do not allow dirt, pitch or gum to build up on the table, drill bits, column. clean as needed with gum and pitch remove.



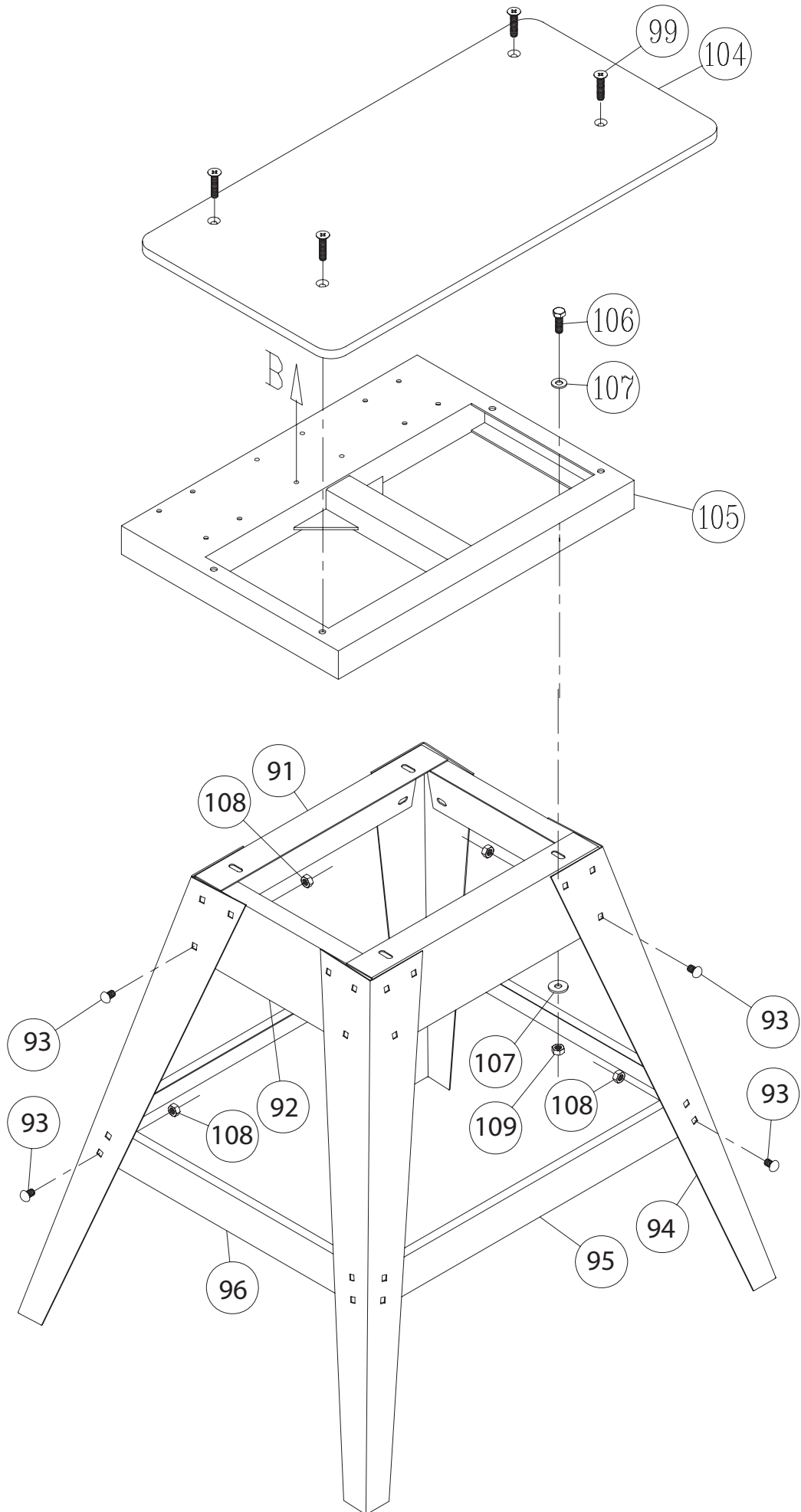
# PARTS LIST FOR MI-77450



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## PARTS LIST FOR MI-77450

REF.NO.	DESCRIPTION	QTY	REF.NO.	DESCRIPTION	QTY
MI-77450-1	SCREW 3/16 X 3/8" "	4	MI-77450-73	WASHER 5/16 X 18 X 2	4
MI-77450-2	COLUMN COVER	1	MI-77450-74	LINKING BLOCK	4
MI-77450-3	SCREW M8X40	1	MI-77450-75	HEX HEAD SCREW M8 X 45	4
MI-77450-4	SPRING	1	MI-77450-76	KNOB	2
MI-77450-4-1	NUTM8	2	MI-77450-77	WASHER 5/16 X 18 X 2	2
MI-77450-5	GEAR	1	MI-77450-78	FENCE BRACKET	2
MI-77450-6	BAR SHAFT	2	MI-77450-79	NUT	2
MI-77450-7	RING S20	1	MI-77450-80	WASHER 5/16 X 18 X 2	2
MI-77450-8	COLUMN	1	MI-77450-81	SCREW CAP M6 X 20	8
MI-77450-9	HANDLE GRIP	1	MI-77450-82	WASHER 1/4 X 19 X 2	8
MI-77450-10	GEAR SHAFT	1	MI-77450-83	FENCE FIXED BRACKET	2
MI-77450-11	LOCK HANDLE BODY	1	MI-77450-84	HEX HEAD SCREW M8 X 45	2
MI-77450-12	HANDLE	1	MI-77450-85	SCREW CAP M5 X 25	2
MI-77450-13	WASHER 5/16 X 23 X 2 "	1	MI-77450-85-1	WASHER 3/16 X 19 X 2	2
MI-77450-14	SCREW CAP M8*80	1	MI-77450-86	KNOB 6X13	2
MI-77450-15	LONG BOLT 3/8 X 150 "	1	MI-77450-87	BAR BRACKET (LEFT)	1
MI-77450-16	NUT M10	2	MI-77450-87-1	BAR BRACKET (RIGHT)	1
MI-77450-17	PRESSURE ADJUSTING PLATE	1	MI-77450-88	BAR	2
MI-77450-18	SET SCREW 5/16 X 3/8 "	2	MI-77450-89	FIXED PLATE	2
MI-77450-19	KNOB 5/16 X 3/4 "	1	MI-77450-90	KNOB 5/16 X 3/4 "	2
MI-77450-20	DEPTH STOP BAR	1	MI-77450-91	TOP BRACE (LONG)	2
MI-77450-21	SCREW M10 X 90	1	MI-77450-92	TOP BRACE (SHORT)	2
MI-77450-22	ADJUSTING SLEEVE	1	MI-77450-93	CARRIAGE BOLT 5/16 X 1/2	40
MI-77450-23	KNOB	1	MI-77450-94	LEG	4
MI-77450-24	SCREW CAP M6 X 16	2	MI-77450-95	SUPPORTING BRACE(LONG)	2
MI-77450-25	WASHER 1/4 X 13 X 1	2	MI-77450-96	SUPPORTING BRACE(SHORT)	2
MI-77450-26	NUT	1	MI-77450-98	HINGE	1
MI-77450-27	BOLT BRACKET	1	MI-77450-99	SCREW M8 X 35	4
MI-77450-28	GIB	1	MI-77450-100	HEX HEAD SCREW M8 X 35	4
MI-77450-29	HEAD BODY	1	MI-77450-101	WASHER 5/16 X 18 X 2	4
MI-77450-30	SET SCREW M8 X 20	3	MI-77450-102	NUT M8	4
MI-77450-31	NUT	3	MI-77450-104	WORKING TABLE	1
MI-77450-32	WASHER 5/16 X 18 X 2	4	MI-77450-105	BASE	1
MI-77450-32-1	SPRING WASHER 5/16	4	MI-77450-106	HEX HEAD SCREW M8 X 25	4
MI-77450-33	HEX HEAD SCREW M8 X 35	4	MI-77450-107	WASHER 5/16 X 23 X 2	8
MI-77450-34	PIN 6 X 6 X 15	1	MI-77450-108	NUT 5/16	40
MI-77450-35	RACK 19 X 19 X 175	1	MI-77450-109	NUT M8	4
MI-77450-36	SCREW CAP M6 X 12	2	MI-77450-115	HEX HEAD SCREW 1/4 X 3/4	4
MI-77450-37	STOP PLATE	1	MI-77450-116	SPRING WASHER 1/4 "	4
MI-77450-38	HEX HEAD SCREW M6 X 12	2	MI-77450-117	SWITCH	1
MI-77450-39	WASHER 5/16	4	MI-77450-118	POWER CORD	1
MI-77450-40	SCREW CAP M6 X 16	2	MI-77450-119	ADJUSTING SLEEVE	1
MI-77450-41	MOTOR	1	MI-77450-120	SCREW M5 X 8	1
MI-77450-42	SWITCH BOX	1	MI-77450-120-1	SCREW 3/16 X 3/8" "	1
MI-77450-43	SCREW 3/16 X 3/8" "	4	MI-77450-121	SCALE PLATE	1
MI-77450-44	MOTOR BRACKET	1	MI-77450-122	SCALE	1
MI-77450-45	SET SCREW M8 X 8	2	MI-77450-123	CABLE CLAMPS	1
MI-77450-46	LINKED BAR	1	MI-77450-124	SCREW 3/16 X 3/8" "	1
MI-77450-47	SCALE BLOCK	1	MI-77450-125	ZERO POINT	2
MI-77450-56	GUARD BRACKET	2	MI-77450-126	SCALE ( LEFT)	1
MI-77450-57	GUARD (PC)	1	MI-77450-126-1	SCALE (RIGHT)	1
MI-77450-66	SCREW M5 X 12	2	MI-77450-127	STOP SCREW M5_8	2
MI-77450-68	SCALE	1	MI-77450-128	GAS SPRING	1
MI-77450-#68-1	SCALE	1	MI-77450-128-1	SCREW M8	2
MI-77450-69	ALUMINIUM FENCE	2	MI-77450-128-2	SPRING WASHER	2
MI-77450-70	SCREW CAP M6 X 30	4	MI-77450-129	SCREW M5 X 8	1
MI-77450-71	FIXED PLATE	4	MI-77450-130	WARNING LABEL	1
MI-77450-72	KNOB	4	MI-77450-131	PLATE-ZERO POINT	1