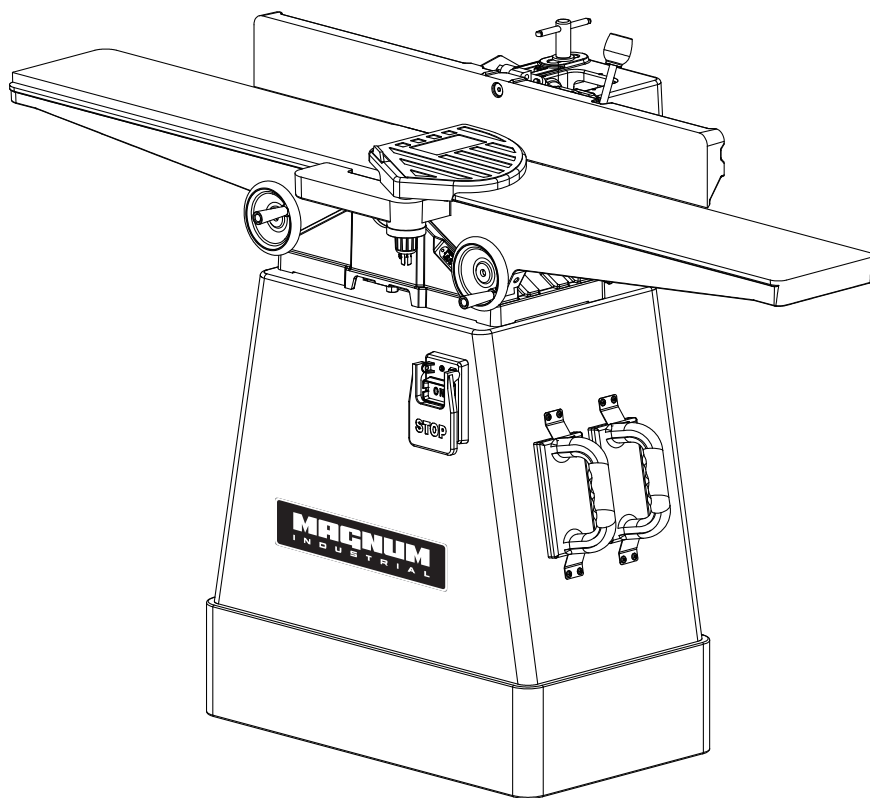


# MAGNUM

## INDUSTRIAL

**MODEL NO.: MI-81200**



***OPERATING MANUAL***

# RULES for SAFE OPERATION

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

Before you operate this machine, take a moment to read this manual. Learn how to use this jointer safely, and understand this machine's applications, limitations and potential hazards. Remember to respect the machine and always use caution. KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from the improper use of this equipment.

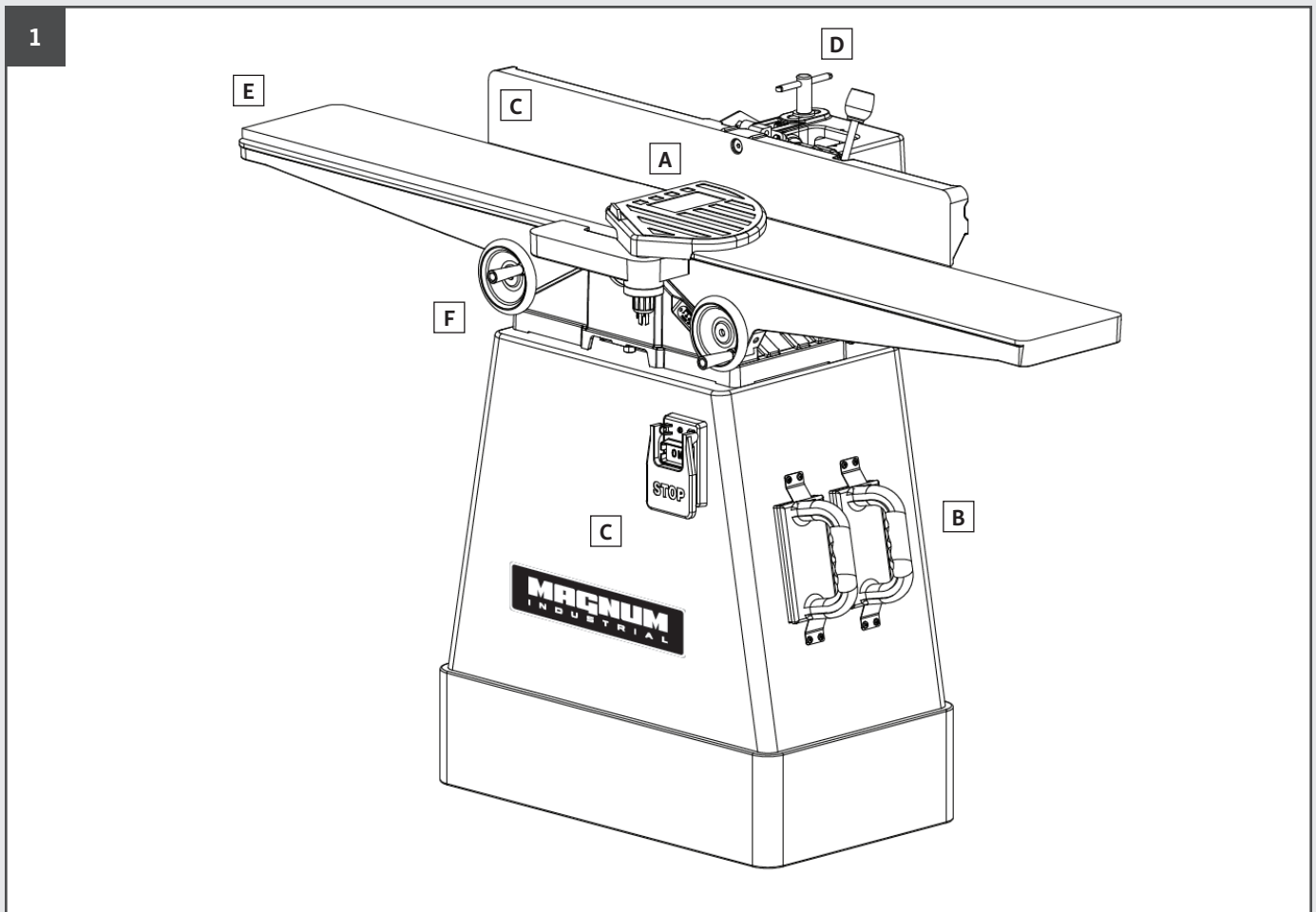
- Do not operate the jointer when tired, distracted or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
- Ensure your working area is clean, dry, well lit and free of debris.
- Keep children and visitors at a safe distance when the jointer is in operation. Do not permit them to operate the jointer.
- Prevent unauthorized or unsupervised use. Child proof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys.
- Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
- Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector.
- Wear face, eye, ear, respiratory and body protection devices.
- Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the machine is in operation.
- Remove adjusting wrenches, tools and other clutter from the machine and the table surface before using the machine.
- Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
- Never make cuts deeper than 1/8".
- Never make jointing, planing, or rabbeting cuts on material shorter than 8", wider than 6" or thinner than 1/2".
- Use a push block when working with material that's narrower than 3". Never work on material narrower than 3/4".
- Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.
- Do not work on long stock without adequate support on the outfeed end of the table.
- Do not force the jointer. It performs better and more safely when working at the rate for which it was designed.
- Feed the work in the correct direction.
- Always keep your hands at least 3" from the cutterhead.
- Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
- Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, properly re-attach it before using the tool again.
- Never leave the machine unattended while it is running or with the power on.
- Never stand on machinery. Serious injury could result if the tool is tipped over or if the cutting tool is unintentionally contacted.
- Always disconnect the machine from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.
- Ensure the switch is in the OFF position before plugging in the power cord.
- Make sure the tool is properly grounded. If equipped with a three-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
- If you use an extension cord, ensure that it is in good condition and is rated to carry enough current for this machine.
- Do not use this jointer for applications other than those for which it was designed. If used for other purposes, KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from that use.

# TOOL OVERVIEW

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### MAIN COMPONENTS

- (A) CUTTERHEAD GUARD
- (B) PUSH BLOCKS
- (C) FENCE ASSEMBLY
- (D) FENCE LOCK HANDLES
- (E) BED ASSEMBLY
- (F) TABLE HEIGHT ADJUSTMENT HANDWHEELS
- (G) ON / OFF SWITCH



### ADDITIONAL REQUIREMENTS

- Extra person to help lift
- Flat head screwdriver
- Phillips screwdriver
- 14 mm wrench

FIGURE 1: JOINTER OVERVIEW

# ASSEMBLY INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### WARNING!

Cutterhead knives are very sharp! Use extreme caution when handling the cutterhead.

- Before you assemble your jointer, review the parts breakdown and keep it ready for reference.
- Start by removing the parts from the packaging.
- Carefully check the packaging for small pieces before you continue.
- Lay out the parts on a large, clear and unobstructed area and ensure that all parts are accounted for.
- If you have any questions or require further information, please contact the KMS Tools Service Department at 604.395.4134 or email repairs@kmstools.com

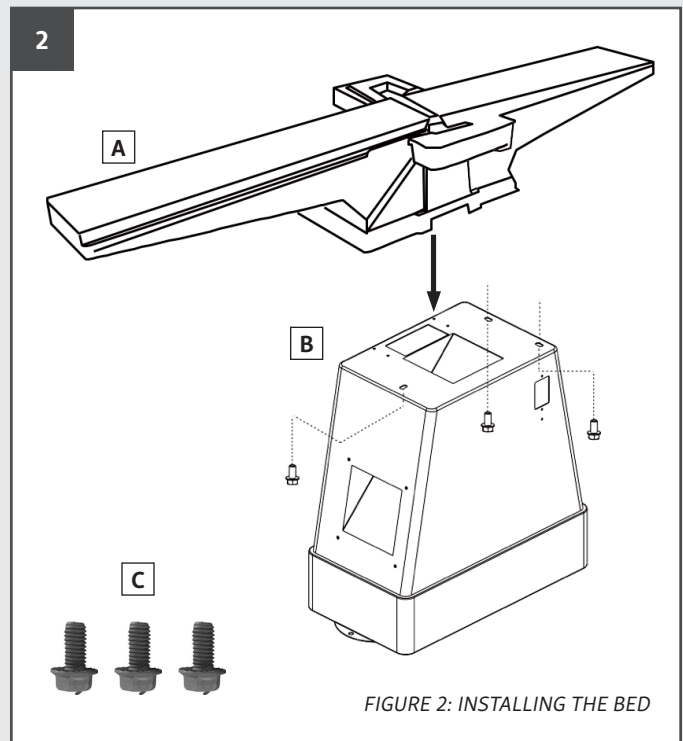
## CLEANING THE JOINTER

The protective coating on the jointer table prevents rust from forming during shipping and storage. Remove it with a rag dipped in environmentally friendly degreaser and dispose of the rag according to the degreaser manufacturer's safety recommendations. If necessary, scrape the coating with a putty knife held flat to avoid scratching the surface and then clean with degreaser. Avoid rubbing painted surfaces. To prevent rust, apply a light coating of paste wax or regularly apply an aftermarket surface protector or rust inhibitor.

## INSTALLING BED ON BASE

*The jointer bed is heavy. Before you start, ask a friend to help with lifting and positioning the bed.*

1. Place **BED ASSEMBLY (A)** on the **BASE (B)**. Ensure the side with the label faces the same side as the switch. See Figure 2.
2. Look through the access door in the **BASE** and align two holes in the **BASE** with the corresponding holes in the **BED ASSEMBLY**.
3. Attach **BASE** to **BED ASSEMBLY** with two **3/8" LOCK BOLTS AND LOCK WASHERS (C)**. Hand tighten.
4. Look through the dust chute and align the third hole in the base with the corresponding hole in the bed assembly.
5. Install the third **3/8" LOCK BOLT AND LOCK WASHER** through the dust chute.
6. Tighten all three **LOCK BOLTS** with a 14 mm wrench.



### WARNING!

Serious personal injury could occur if you connect the jointer to a power source before you have completed the installation and assembly steps!

# ASSEMBLY INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### WARNING!

Ensure the switch is in the OFF position before plugging in the power cord.

### INSTALLING FENCE TO BED

1. Place the **FENCE ASSEMBLY (A)** onto the bed. See Figure 3. Align the **KEY STOCK (D)** on the bed with the **CHANNEL (C)** in the fence. See Figure 4.
2. Place the **FLAT WASHER (F)** on **HOLE (H)**. Insert the **LOCK HANDLE (E)** through the fence casting and the bed casting.
3. Thread the **LOCK NUT (G)** onto the **LOCK HANDLE (E)**. Ensure the tab on the **LOCK NUT (G)** faces up and engages the slot in the bed casting. See Figure 4.
4. Thread the **FENCE TILT LEVER (I)** into the hole in the back of fence. See Figure 4.

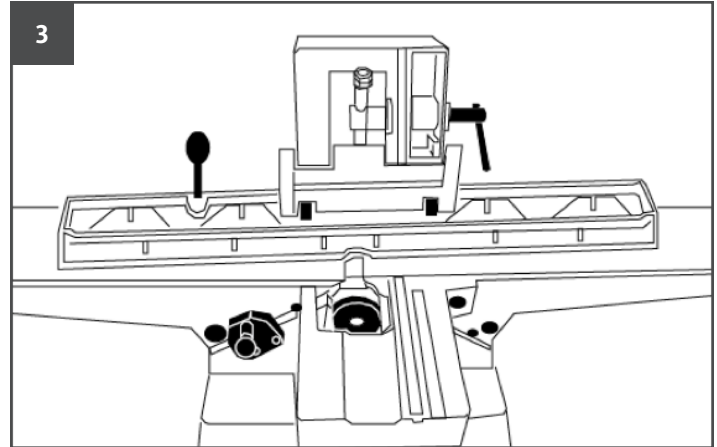


FIGURE 3: INSTALLING FENCE

### INSTALLING THE DRIVE BELT

1. Place **V-BELT (A)** onto **CUTTERHEAD PULLEY (B)** and through the opening in base. See Figure 5.
2. Place **V-BELT** onto **MOTOR PULLEY (C)**. If you can't roll the belt onto the pulley, loosen the motor mount screws.
3. Ensure **MOTOR PULLEY** and **CUTTERHEAD PULLEY** are vertically aligned. Also ensure that the **V-BELT** does not contact the sides of the opening in the base. To align pulleys, remove belt, adjust the **MOTOR PULLEY** in or out on the shaft and then reattach the belt.
4. Test tension on the **V-BELT** by applying finger pressure on the belt halfway between the two pulleys. There should be 1/2" of deflection. See Figure 6. If the **V-BELT** is too slack, loosen the four motor mount bolts, push down on the motor to tension the **V-BELT** and re-tighten the mounting bolts.
5. After two hours of operation, check belt tension again and re-adjust if necessary.

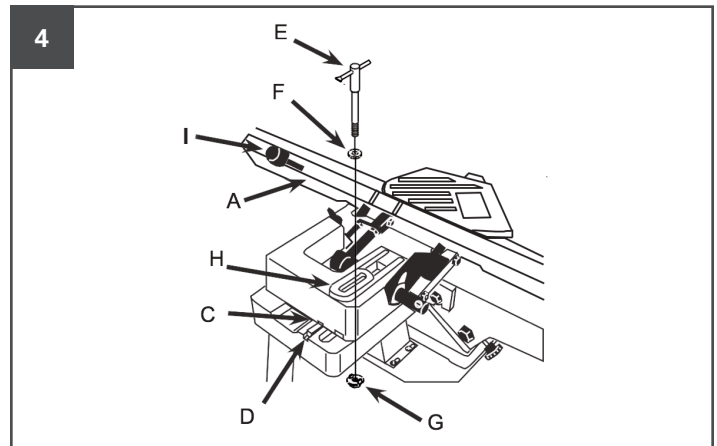


FIGURE 4: INSTALLING FENCE

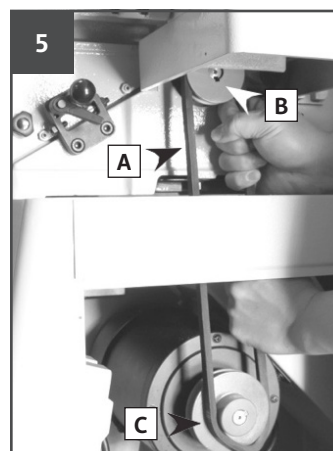


FIGURE 5: INSTALLING V-BELT

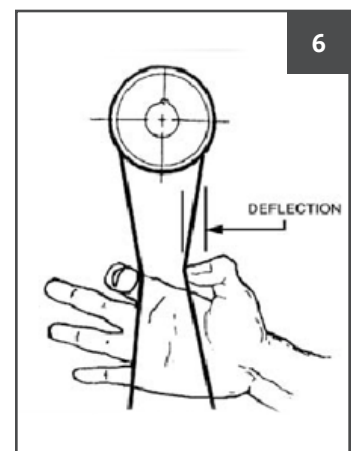


FIGURE 6: CORRECT V-BELT TENSION

# ASSEMBLY INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

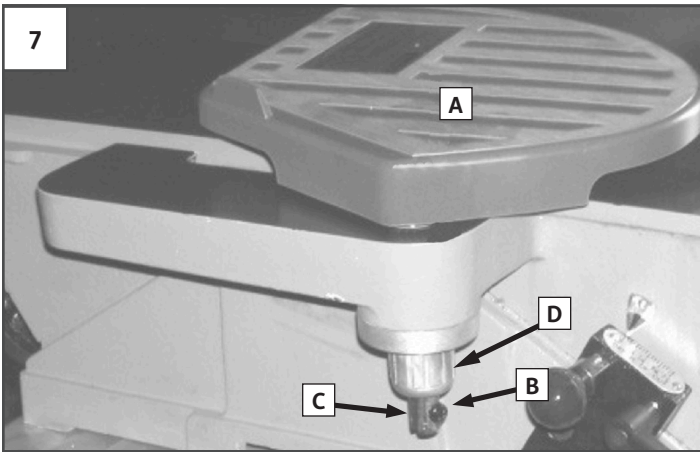


FIGURE 7: INSTALLING CUTTERHEAD GUARD

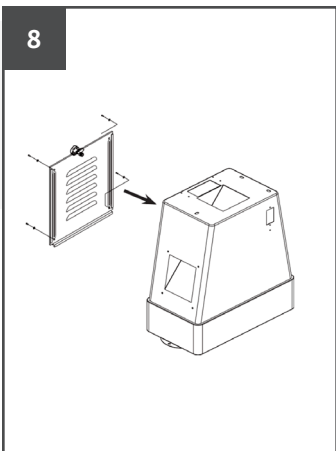


FIGURE 8: INSTALLING BASE DOOR

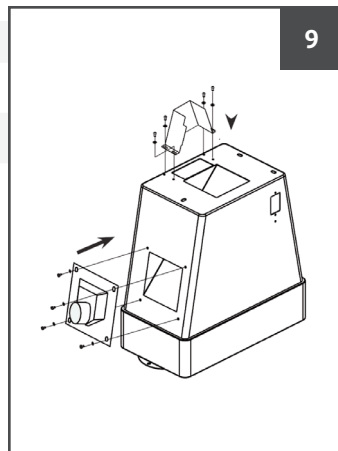


FIGURE 9: INSTALLING DUST PORT



FIGURES 10 & 11: INSTALLING TABLE HEIGHT ADJUSTMENT HANDWHEELS

### INSTALLING CUTTERHEAD GUARD

This jointer features a **CUTTERHEAD GUARD (A)** that pivots as the workpiece passes over the blades. A spring-loaded **TENSION-ADJUSTMENT KNOB (D)** beneath the rabbeting arm maintains tension so the **GUARD** automatically covers the knives once the workpiece has cleared the **GUARD**.

1. To install the **GUARD**, remove the **SET SCREW (B)** on the **GUARD SHAFT (C)**. See Figure 7.
2. Turn and hold the **TENSION-ADJUSTMENT KNOB** and insert the **GUARD SHAFT** into the hole on the rabbeting arm.
3. Test the tension by pulling the **GUARD** away from the table and releasing it. If the **GUARD** does not snap back firmly against the fence, add more tension. See Step 4.
4. Remove the **GUARD** and turn the **TENSION-ADJUSTMENT KNOB** another half turn. Reinstall the guard.
5. Test the tension again. Repeat steps 3 and 4 until the **GUARD** snaps firmly against the fence.
6. Secure the **GUARD** by tightening the **SET SCREW** on the bottom of the **GUARD SHAFT**.

### INSTALLING BASE DOOR

Attach the door to the base with four Phillips screws and flat washers. See Figure 8.

### INSTALLING DUST PORT

Attach the dust port to the right side of the base using small Phillips screws with small flat washers as shown in Figure 9.

### INSTALLING TABLE HEIGHT ADJUSTMENT HANDWHEELS

1. Fit the two table height adjustment handwheels on the shafts at the front of the machine. Align the handwheel slot with the spring pin on each shaft. See Figure 10.
2. Secure the handwheels by tightening the set screw on each shaft with the supplied 3 mm Allen key. See Figure 11.

# OPERATING INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### WARNING!

When working with stock that is longer than twice the length of the jointer table, use an infeed or outfeed table or ask a friend to help properly support the stock.

## BASIC OPERATIONS

Before plugging in your jointer, familiarize yourself with the machine. Adjust the infeed table to 0" and make a few practice cuts.

## SURFACING

Adjust cutting depth to 1/64", an ideal depth for surfacing. Shallower cuts give you more control over the material. If necessary take several passes to remove the desired amount of stock.

- Do not surface stock shorter than 12" or thinner than 3/8" without using a work-holding fixture.
- Do not surface stock thinner than 3" without using a push block.
- Use a two-handed push block for surfacing stock 8" to 12" long. See Figure 12.
- Use two push blocks for surfacing stock longer than 12". See Figure 13.
- Use a narrow L-shaped push block for narrow stock. See Figure 14.
- Use two push blocks with dowels for surfacing short stock over 4" wide. See Figure 15.

### WARNING!

Always keep your hands at least 3" from the cutterhead.

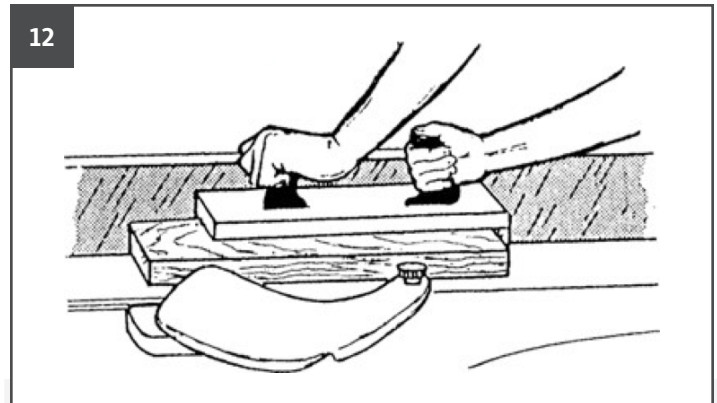


FIGURE 12: TWO-HANDED PUSH BLOCK

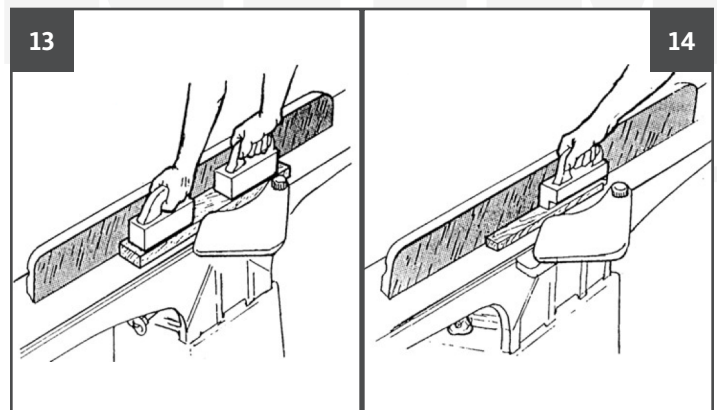


FIGURE 13: TWO PUSH BLOCKS

FIGURE 14: NARROW PUSH BLOCK

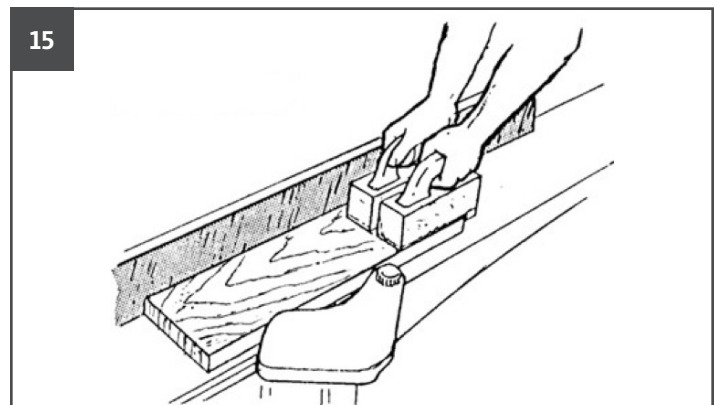


FIGURE 15: TWO PUSH BLOCKS WITH DOWELS

# OPERATING INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### WARNING!

When working with stock that is longer than twice the length of the jointer table, use an infeed or outfeed table or ask a friend to help properly support the stock.

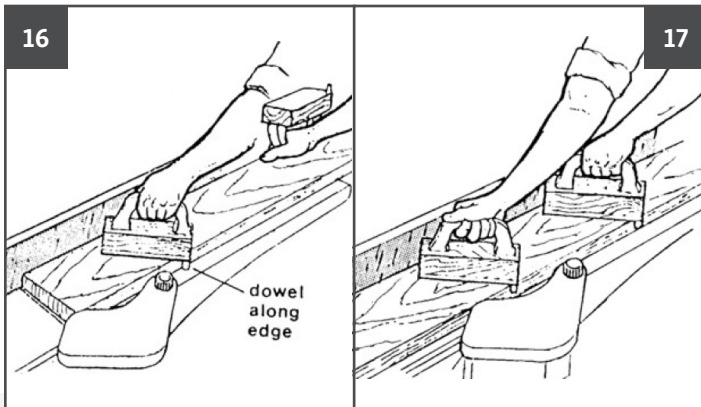


FIGURE 16: LEFT HAND PUSHES DOWN TOWARD FENCE. RIGHT HAND FEEDS

FIGURE 17: FEEDING HAND OVER HAND

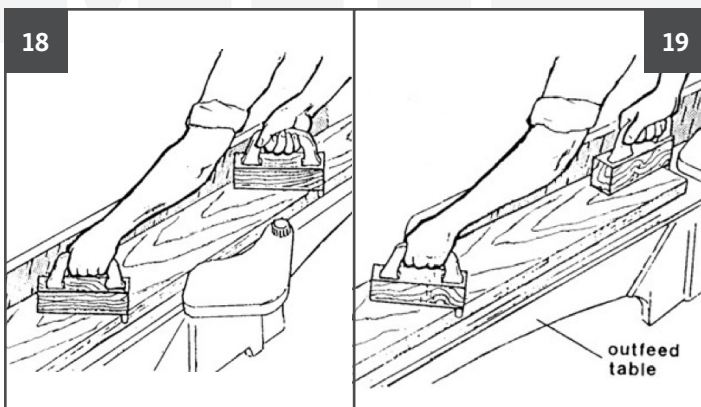


FIGURE 18: MOVE LEFT HAND TO OUTFEED SIDE

FIGURE 19: BOTH HANDS PULL STOCK ON OUTFEED SIDE

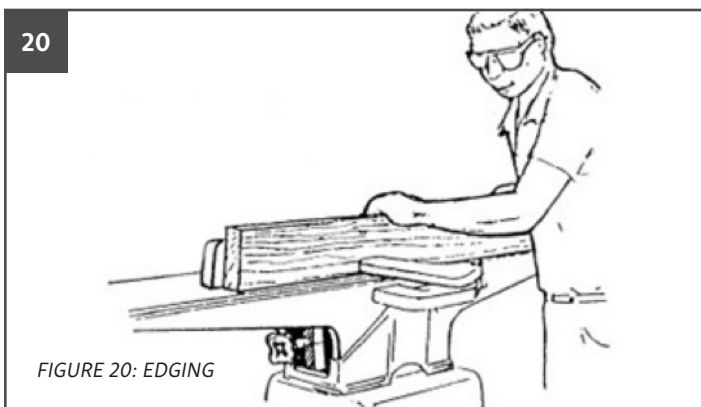


FIGURE 20: EDGING

## SURFACING LONG STOCK

When surfacing long stock, use a push block. The trailing end of long stock can sometimes kick back as it passes over the cutterhead. Always keep your hands at least 3" from the cutterhead.

Position the push block near the front of the stock and apply pressure. Feed the stock with your right hand until the guard swings open and the cutterhead engages the stock. See Figure 16.

Then place a second push block near the rear of infeed table and continue feeding stock using a hand-over-hand method. See Figure 17. Remember to move your left hand to the outfeed side of the table as soon as it nears the cutterhead. See Figure 18. As soon as possible bring your right hand over to the outfeed side and continue the cut. See Figure 19.

When working with stock that is longer than twice the length of the jointer table, use an infeed or outfeed table or ask a friend to help properly support the stock.

## JOINTING OR EDGING

Adjust cutting depth to 1/16" for edging hardwood or 1/8" for edging soft wood. Always use a push block when edging stock that is narrower than 3", thinner than 1/4", or shorter than 12"

Feed stock with your right hand and apply pressure to front of the stock with a push block. When edging wood wider than 3", place your fingers over the top of the wood, extending them back over the fence. Keep stock against the fence. See Figure 20.



# OPERATING INSTRUCTIONS

## MAGNUM INDUSTRIAL MI-81200 6" JOINTER

### CAUTION!

For safety reasons tilt the fence inward when making bevel cuts. See Figure 20.

### BEVELING

Set the jointer fence to desired angle. Adjust cutting depth to 1/16". Never make bevel cuts that are deeper than 1/16".

Ensure your stock is a minimum of 16" long, 1/4" thick and 1" wide.

CAUTION: For safety reasons tilt the fence inward. See Figure 21.

For stock wider than 3", hold your fingers close together near the top of the stock, lapping over the board and extending over the fence. When stock is narrower than 3", use beveled push blocks and apply pressure toward the fence. Keep fingers near top of push block. See Figure 22. When beveling short material use one bevel hold-down block and apply pressure toward the fence. Keep your thumb above the ledge on the hold down block. See Figure 23.

### CROSS GRAIN CUTTING

When beveling four edges of a workpiece, make the cross grain cuts first. This helps clean up chipping or splintering that can occur when beveling the end grain.

For bevelling long stock, follow the same hand-over-hand method described for surfacing long stock.

### SKEWING OR SHEAR CUTTING

When edging or facing burl or bird's-eye maple, the cutterhead can cut against the grain and deface or mar the surface. You can prevent this by skewing the material.

1. Release the fence locking handle and remove the two hex nuts and flat washers holding the fence to the fence support.
2. Remove the fence.
3. Remove the key from the fence slide base.
4. Replace the fence assembly at the desired angle across the cutterhead. Secure the fence to the support with the two hex nuts and flat washers, then tighten the fence locking handle.

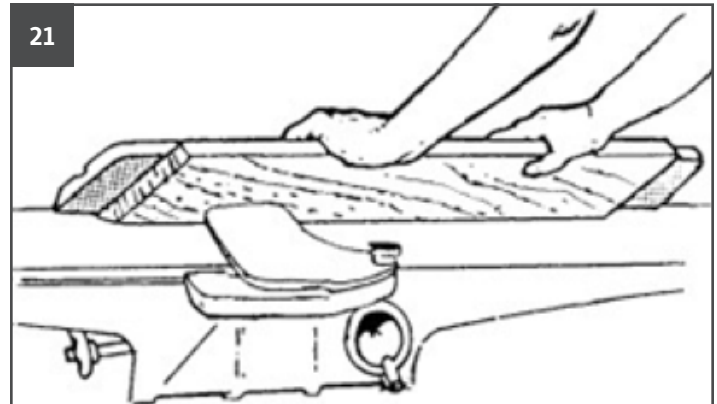


FIGURE 21: BEVELING

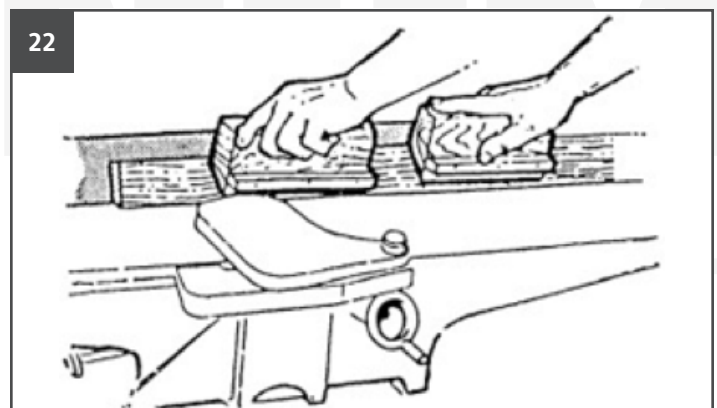


FIGURE 22: BEVELING NARROW STOCK

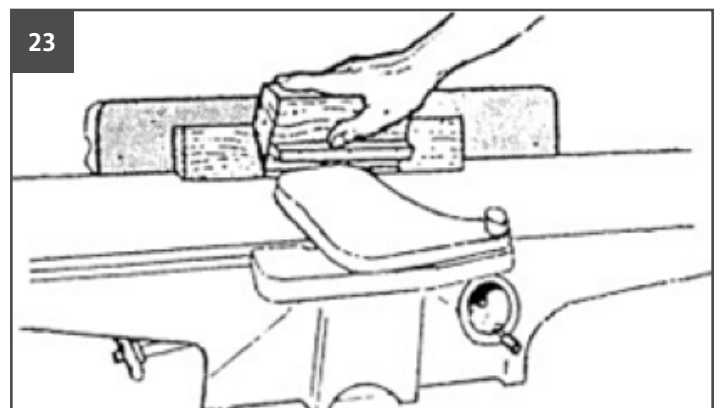
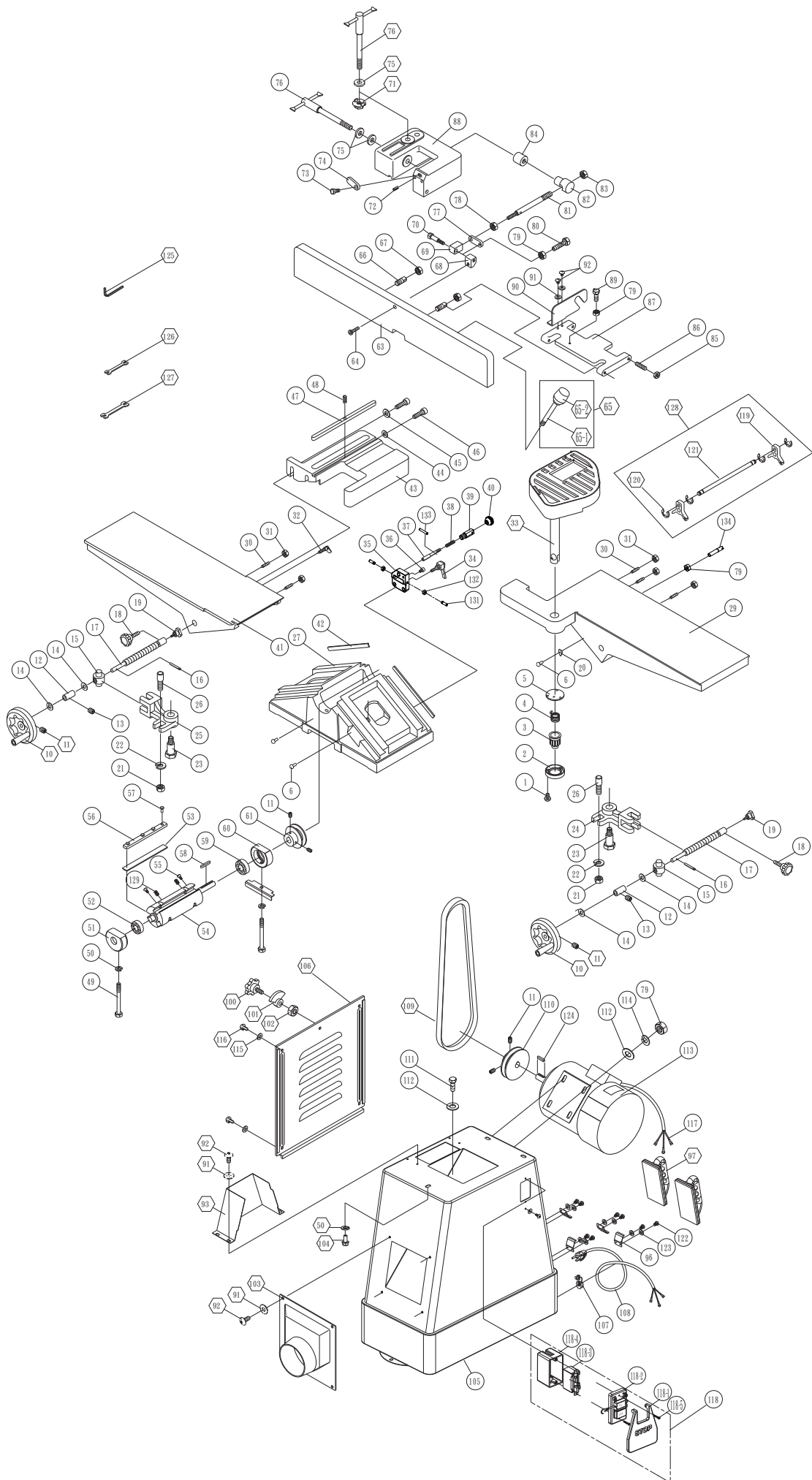


FIGURE 23: BEVELING SHORT MATERIAL

# PARTS LIST FOR MI-81200



## PARTS LIST FOR MI-81200

ITEM NO.	DESCRIPTION	SPECIFICATION	QTY
MI-81200-01	PHILLIPS HEAD SCREW	5/32"-32NCX5/8"	3
MI-81200-02	RETAINER		1
MI-81200-03	SPRING KNOB		1
MI-81200-04	SPRING		1
MI-81200-05	RETAINING WASHER		1
MI-81200-06	RIVET	2X5	5
MI-81200-10	HANDWHEEL		2
MI-81200-11	SET SCREW	1/4"-20NCX3/8"	4
MI-81200-12	BUSHING		2
MI-81200-13	SET SCREW	5/16"-18NCX3/8"	2
MI-81200-14	FLAT WASHER	10X22X0.8T	4
MI-81200-15	ADJUSTING NUT		2
MI-81200-16	SPRING PIN	3X25	2
MI-81200-17	LEAD SCREW		2
MI-81200-18	KNOB		2
MI-81200-19	KNOB		2
MI-81200-20	POINTER		1
MI-81200-21	HEX. NUT	1/2"-12NC(19.05BX11.11H)	2
MI-81200-22	LOCK WASHER	13X22.7	2
MI-81200-23	PIVOT PIN		2
MI-81200-24	FRONT BALL CRANK		1
MI-81200-25	REAR BALL CRANK		1
MI-81200-26	SHOULDER PIN		2
MI-81200-27	BASE		1
MI-81200-29	IN-FEED TABLE		1
MI-81200-30	SET SCREW		5
MI-81200-31	HEX. NUT	1/4"-20NC(11BX5.5H)	5
MI-81200-32	LOCK SCREW	7/8" X 1/4" -20NC X 1"	2
MI-81200-33	CUTTER GUARD		1
MI-81200-34	LOCK LEVER		1
MI-81200-35	FIXED PLATE		1
MI-81200-36	CAP SCREW	5/16"-18NCX3/4"	2
MI-81200-37	PIN		1
MI-81200-38	SPRING		1
MI-81200-39	SPRING SEAT		1
MI-81200-40	BALL HANDLE	22*1/4"-20NC	1
MI-81200-41	OUT-FEED TABLE		1
MI-81200-42	GIB		2
MI-81200-43	FENCE BRACKET		1
MI-81200-44	FLAT WASHER	10X20X3.0T	1
MI-81200-45	FLAT WASHER	10.5X28X3.0T	1
MI-81200-46	CAP SCREW	3/8"-16NCX1-1/2"	2
MI-81200-47	GUIDE BAR	3/8" X 3/8" X 225	1
MI-81200-48	SPRING PIN	4X20	1
MI-81200-49	BOLT	3/8"-24NFX89MM	2
MI-81200-50	LOCK WASHER	10.2X18.5	5
MI-81200-51	BEARING HOUSING		1
MI-81200-52	BEARING	6202-2NSE	1
MI-81200-53	KNIFE		3
MI-81200-54	CUTTER HEAD		1

## PARTS LIST FOR MI-81200

ITEM NO.	DESCRIPTION	SPECIFICATION	QTY
MI-81200-55	COUNTERSUNK SCREW	M5X0.8PX12	6
MI-81200-56	KNIFE LOCK BAR		3
MI-81200-57	KNIFE LOCK SCREW		12
MI-81200-58	KEY	5X5X25	1
MI-81200-59	BEARING	6203-2NSE	1
MI-81200-60	BEARING HOUSING		1
MI-81200-61	CUTTER HEAD PULLEY		1
MI-81200-63	FENCE BODY		1
MI-81200-64	COUNTERSUNK SCREW	5/16"-18NCX1-5/8"	1
MI-81200-65	FENCE HANDLE ASSEMBLY		1
MI-81200-65-1	HANDLE SHAFT		1
MI-81200-65-2	HANDLE KNOB		1
MI-81200-66	FENCE LINKAGE		2
MI-81200-67	HEX NUT	1/2"-20NF (19.05BX6.35H)	2
MI-81200-68	BLOCK		1
MI-81200-69	BLOCK		1
MI-81200-70	BOLT		1
MI-81200-71	LOCK NUT		1
MI-81200-72	SPRING PIN	4X12	2
MI-81200-73	HEX. HEAD BOLT		1
MI-81200-74	STOP PLATE		1
MI-81200-75	FLAT WASHER	13X28X3.0T	2
MI-81200-76	FENCE LOCKING HANDLE		2
MI-81200-77	STOP PLATE		1
MI-81200-78	HEX. NUT	7/16"-14NC (17.4BX9.52H)	1
MI-81200-79	HEX. NUT	5/16"-18NC (12.7BX6.75H)	41
MI-81200-80	HEX. HEAD BOLT	5/16"-18NCX1-3/4"	1
MI-81200-81	LINKAGE		1
MI-81200-82	SWIVEL BLOCK		1
MI-81200-83	HEX. NUT	5/8"-18NF (23.81BX8H)	1
MI-81200-84	SPACER		1
MI-81200-85	HEX. NUT	3/8"-16NC (14.2BX8.33H)	4
MI-81200-86	SCREW		4
MI-81200-87	LINK PLATE		1
MI-81200-88	FENCE SLIDE BLOCK		1
MI-81200-89	HEX. HEAD BOLT	5/16"-18NCX1"	1
MI-81200-90	PLATE		1
MI-81200-91	FLAT WASHER	6.6X13X1.0T	2
MI-81200-92	PHILLIPS HEAD SCREW	1/4"-20NCX1/2"	2
MI-81200-93	PULLEY COVER		1
MI-81200-96	PUSH BLOCK STORAGE BRACKET		4
MI-81200-97	PUSH BLOCK		2
MI-81200-100	KNOB		1
MI-81200-101	DOOR LATCH		1
MI-81200-102	HEX. NUT	3/8"-16NC(14.2BX8.33H)	1
MI-81200-103	10-076	DUST PORT	1
MI-81200-104	FLANGE BOLT (ITEM #10-076)	3/8"-16NCX3/4"	3
MI-81200-105	STAND		1
MI-81200-106	DOOR		1
MI-81200-107	CORD RETAINER	SB7R-1	1

## PARTS LIST FOR MI-81200

ITEM NO.	DESCRIPTION	SPECIFICATION	QTY
MI-81200-108	POWER CORD		1
MI-81200-109	V BELT	A36	1
MI-81200-110	MOTOR PULLEY		1
MI-81200-111	HEX. HEAD BOLT	5/16"-18NCX3/4"	4
MI-81200-112	FLAT WASHER	8.5X23X2.0T	8
MI-81200-113	MOTOR	1HPX110/220VX60HZX1PHX2P	1
MI-81200-114	LOCK WASHER	8.2X15.4	4
MI-81200-115	FLAT WASHER	4.3X10X1.0T	4
MI-81200-116	PHILLIPS HEAD SCREW	1/8"-40NCX3/8"	4
MI-81200-117	MOTOR WIRE	SJT16AWGX3CX700MM	1
MI-81200-118	SWITCH ASSEMBLY		1
MI-81200-118-1	SWITCH PAD		1
MI-81200-118-2	SWITCH FRONT COVER		1
MI-81200-118-3	SWITCH BODY		1
MI-81200-118-4	SWITCH BACK COVER		1
MI-81200-118-5	PHILLIPS HEAD SCREW	M4X0.7PX25	2
MI-81200-119	KNIFE SETTING GAUGE BLOCK		2
MI-81200-120	E RING	ETW-9	4
MI-81200-121	KNIFE GAUGE BAR		1
MI-81200-124	KEY	5X5X30	1
MI-81200-125	ALLEN KEY	3MM	1
MI-81200-126	OPEN WRENCH	8 -10 MM	1
MI-81200-127	OPEN WRENCH	12 -14 MM	1
MI-81200-128	KNIFE SETTING GAUGE ASS'Y		1
MI-81200-129	SPRING		6
MI-81200-130	FLAT WASHER	4.3*10*1.0t	1
MI-81200-131	SET SCREW	1/4"-20NC*3/4"	2
MI-81200-132	HEX. NUT	1/4"-20NC(11B*5.5H)	2
MI-81200-133	PIN	3*20	1
MI-81200-134	STEEL PIN		1