

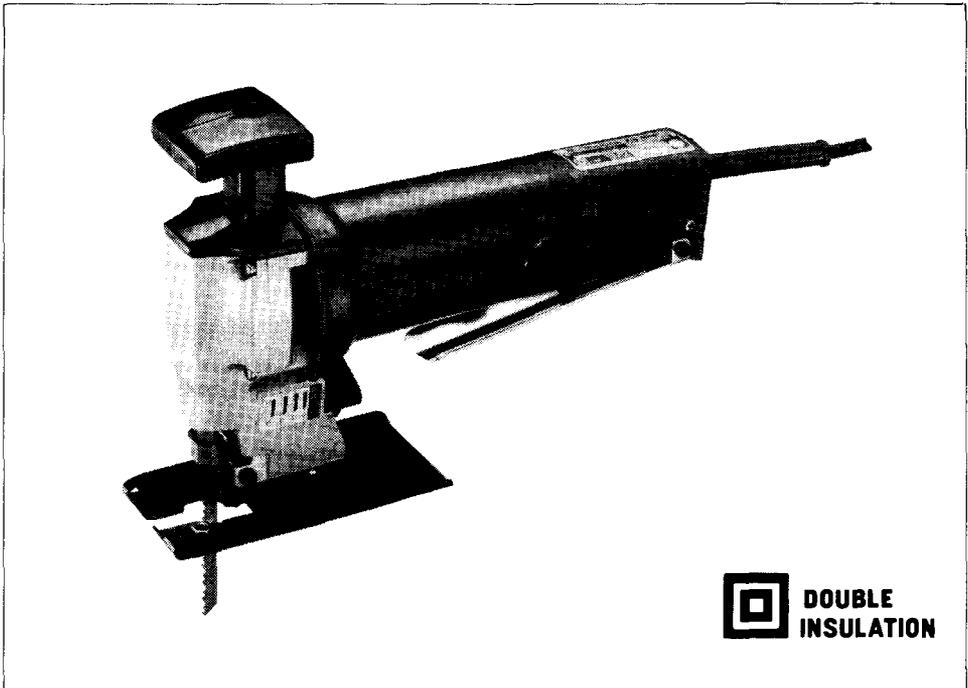


# Makita Jig Saw

アメリカ

MODEL JV2000

## INSTRUCTION MANUAL



 **DOUBLE INSULATION**

### SPECIFICATIONS

Length of stroke	Max. cutting capacities		Strokes per minute	Overall length	Net weight
	in wood	in steel			
20 mm (3/4")	50 mm (2")	6 mm (1/4")	0 - 3,400	263 mm (10-3/8")	1.6 kg (3.5 lbs)

- \* Manufacturer reserves the right to change specifications without notice.
- Note: Specifications may differ from country to country.

# **IMPORTANT SAFETY INSTRUCTIONS**

**(For All Tools)**

**WARNING: WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:**

## **READ ALL INSTRUCTIONS.**

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
3. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Don't let visitors contact tool or extension cord.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
6. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended.
7. **DRESS PROPERLY.** Don't wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
8. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
9. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
10. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
11. **DON'T OVERREACH.** Keep proper footing and balance at all times.
12. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
13. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is OFF when plugging in.
16. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
17. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate tool when you are tired.
18. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Don't use tool if switch does not turn it on and off.
19. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
20. **REPLACEMENT PARTS.** When servicing, use only identical replacement parts.

**VOLTAGE WARNING:** Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in **SERIOUS INJURY** to the user — as well as damage to the tool. If in doubt, **DO NOT PLUG IN THE TOOL.** Using a power source with voltage less than the nameplate rating is harmful to the motor.

## ADDITIONAL SAFETY RULES

1. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
2. Don't cut hollow pipe.
3. Do not cut oversize workpiece.
4. Check for the proper clearance beneath the workpiece before cutting so that the blade will not strike the floor, workbench, etc.
5. Hold the tool firmly.
6. Check the blade is not contacting the workpiece before the switch is turned on.
7. Keep hands away from moving parts.
8. When cutting through walls, floors or wherever "live" electrical wires may be encountered, **DO NOT TOUCH ANY METAL PARTS OF THE TOOL!** Hold the tool only by the plastic handle to prevent electric shock if you cut through a "live" wire.
9. Do not leave the tool running. Operate the tool only when hand-held.
10. Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
11. Do not touch the blade or the workpiece immediately after operation; they may be extremely hot and could burn your skin.

**SAVE THESE INSTRUCTIONS.**

## HOW TO USE

### Installing jig saw blade

Use the hex wrench to loosen the hex socket head bolt which holds the blade.

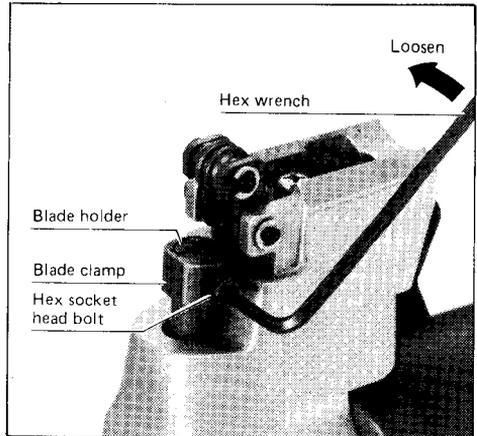


Fig. 1

With the blade teeth facing forward, insert the blade into the blade holder as far as it will go.

Make sure that the back edge of the blade fits into the roller and tighten the hex socket head bolt securely with the hex wrench.

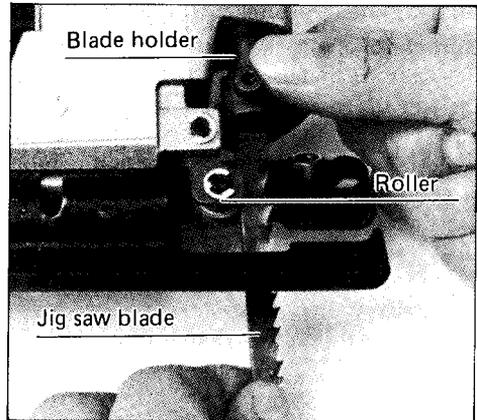


Fig. 2

### NOTE :

The larger hole of the blade can be seen as shown in Fig. 3 even after blade installation.

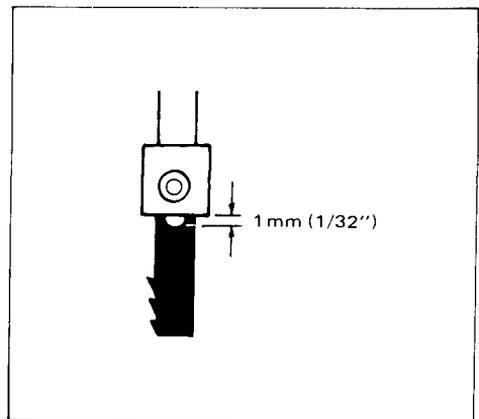


Fig. 3

### Switch action

To start the tool, simply squeeze the switch lever. Release the lever to stop. Tool speed (0 to 3,400 RPM) is increased by increasing pressure on the lever.

### CAUTION:

Before plugging in the tool, always check to see that the paddle switch actuates properly and returns to the "OFF" position when released.

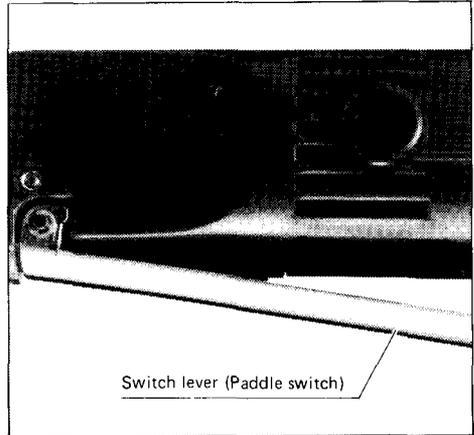


Fig. 4

### Straight line or orbital cutting action

Conventional jig saws cut with a straight line action, that is, the blade moves only up and down in a straight line. Your saw also cuts in this manner but, for softer materials, an orbital cutting action can be selected. Soft materials, like wood and plastic permit deep penetration of individual saw teeth. The orbital action thrusts the blade forward on the cutting stroke and greatly increases cutting speed over conventional jig saws. Harder materials like metal should be cut using the straight line cutting action or a very low orbital setting. To select straight line or orbital cutting, adjust the number on the saw.

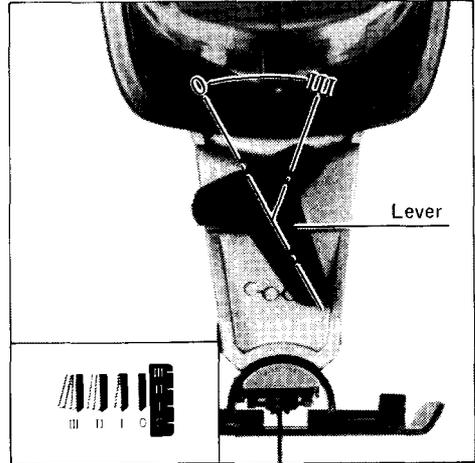


Fig. 5

- Position 0 — Thick metal. Clean cuts in wood, plastics, vinyl chloride, etc.
- Position I — Thin metal, aluminum, hard wood. Curved line cutting.
- Position II — Wood, plastics, vinyl chloride, etc. Hi-speed aluminum, metal cutting. Curved line cutting.
- Position III — Hi-speed wood cutting.

### Operation

Turn the tool on before contacting the workpiece. Then rest the base flat on the workpiece and gently move the tool forward along the previously marked cutting line.

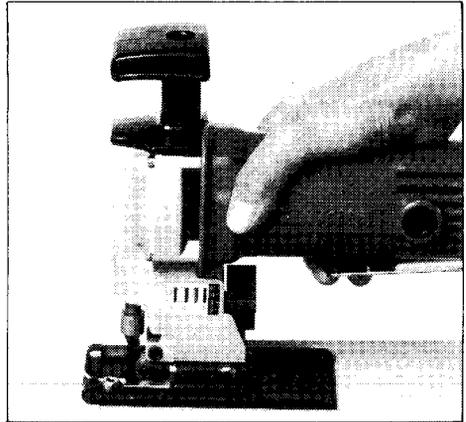


Fig. 6

### Plunge cutting

Starting a cut at other than the edge of the workpiece without first drilling a starting hole requires a "plunge cut". This can be accomplished by tipping the tool forward until the front end of the base rests against the workpiece. Switch the tool on and lower the back end of the tool slowly, gradually allowing the blade to saw through the wood until the base is able to sit flat on the workpiece. You may then proceed forward with the cut in a normal manner.

If using a drill for a starting hole, bore a hole over 12 mm (1/2") in diameter. Then insert the blade in it and proceed.

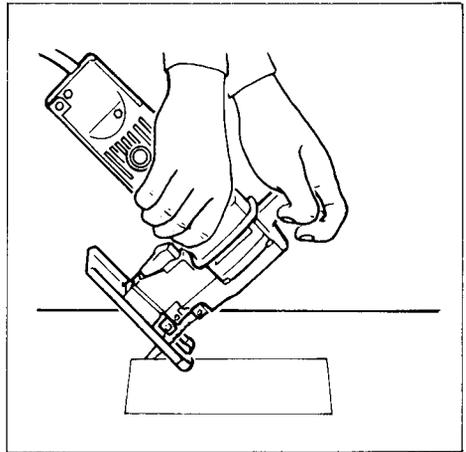


Fig. 7

### Front flush cuts

Loosen the bolt on the back of the base with the hex wrench, then slide the base backwards. Check the contact between the back edge of the blade and the roller, then secure the bolt.

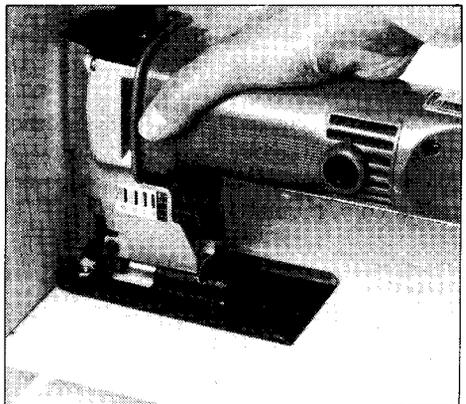


Fig. 8

### Bevel cutting

1. With the base tilted, you can make bevel cuts at any angle between  $0^\circ$  and  $45^\circ$  (left to right).

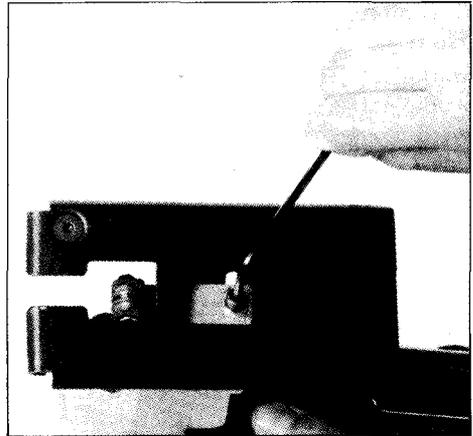


Fig. 9

2. Loosen the bolt on the back of the base with the hex wrench. Tilt the base to the desired angle. The edge of the housing indicates the bevel angle. (Fig. 10). Then check for contact between the back edge of the blade and the roller. Now tighten the bolt securely on the back of the base.

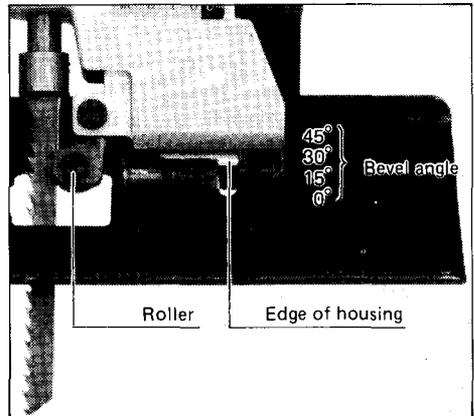


Fig. 10

### Finishing edges

To trim edges or make dimensional adjustments, run the blade lightly along the cut edges.

For smoother cutting of plywoods or other materials with easily splintered surfaces, the wood may be coated or transparent tape used over your cutting line.

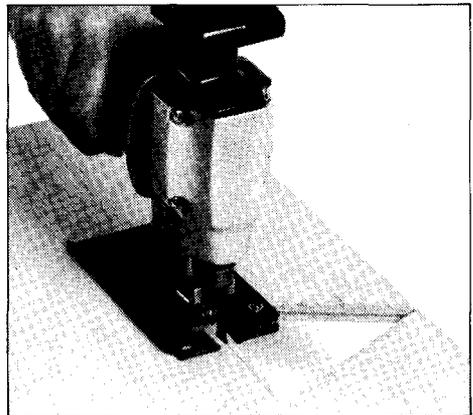


Fig. 11

### Using guide rule (Rip fence)

1. When cutting widths of under 150 mm (6'') repeatedly, use of the guide rule will assure fast, clean, straight cuts.

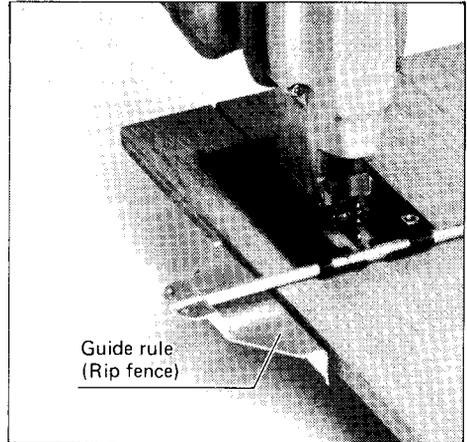


Fig. 12

2. To attach the guide rule (rip fence), use the hex wrench to loosen the screw on the under side of the base in front, slip in the guide rule and secure the screw.

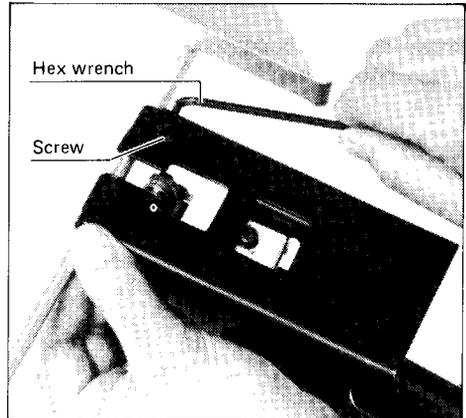


Fig. 13

### Using circular guide

1. Use of the circular guide insures clean, smooth cutting of circles (radius; under 200 mm; 7-7/8'') and arcs.

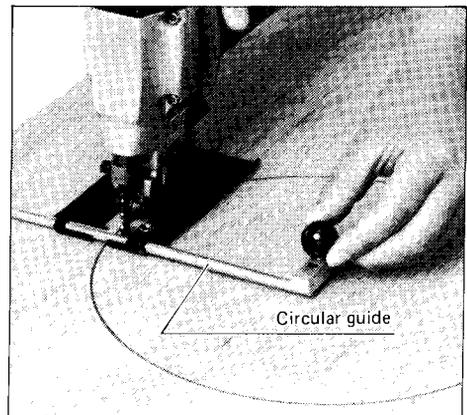


Fig. 14

2. When attaching the circular guide, use the pin, inserting it in the center hole (arrow) and secure it with the threaded knob. The circular guide attaches to the base of the tool in the same manner as the guide rule (rip fence).

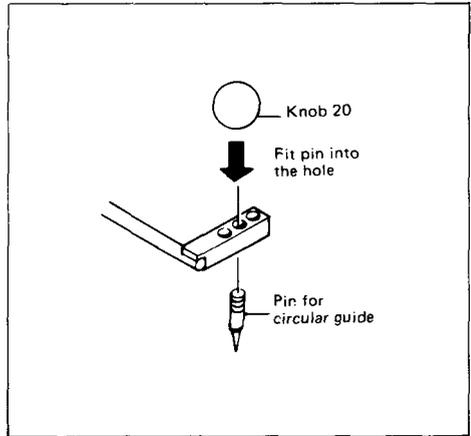


Fig. 15

### Metal cutting

Always use a suitable coolant (cutting oil) when cutting metal. Failure to do so will cause significant blade wear.

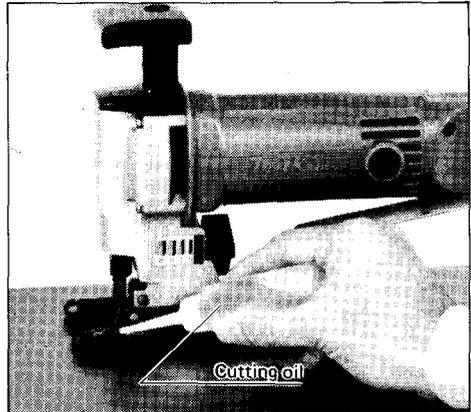


Fig. 16

The underside of the workpiece can be greased instead of using a coolant. (Fig. 17).

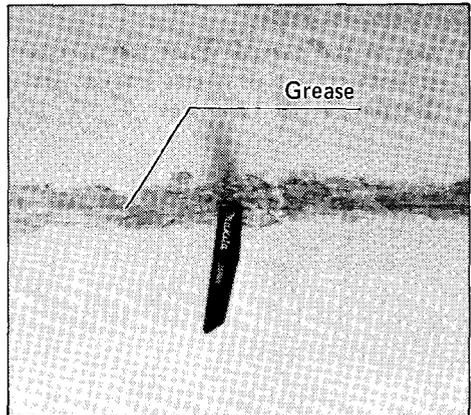


Fig. 17

## MAINTENANCE

### CAUTION:

Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

### Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to about 4.5 mm (3/16") or less. Keep the brushes clean and free to slip in the holders. Both brushes should be changed at the same time. Use only Makita carbon brushes.

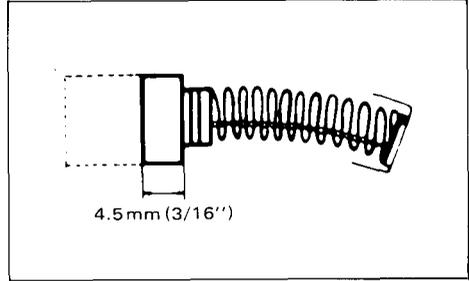


Fig. 18

Use a screwdriver to remove the brush holder cap as shown in the figure.

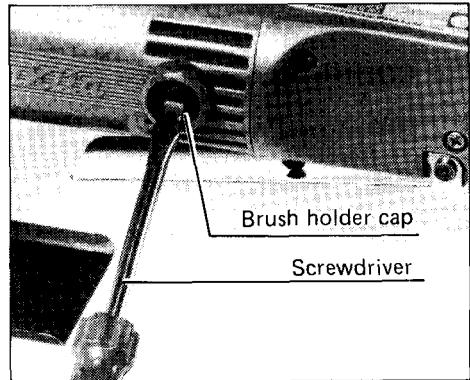


Fig. 19

Take out the worn brush, insert the new one and secure the brush holder cap.

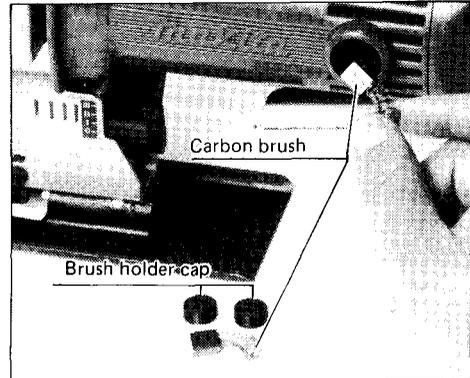


Fig. 20

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Center, always using Makita replacement parts.

# ACCESSORIES

## CAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

● **Jig saw blade** (packed 10 each in handy vinyl pouch)

Blade Type	Part No.	Teeth Per Inch	Overall Length	Applications
No. 1 	792145-5	24	80 mm (3-5/32")	Soft steel, non-ferrous metals, angles, pipe, channels, etc.
No. 2 	792136-6	14	80 mm (3-5/32")	Non-ferrous metals and plastics.
No. 3 	792139-0	9	80 mm (3-5/32")	Wood and plywood.
No. 4 	792142-1	9	80 mm (3-5/32")	Soft steel, non-ferrous metals, angles, pipe, channels, etc.
No. 5 	792133-2	24	58 mm (2-9/32")	Soft steel and non-ferrous metals.
No. 8 	792273-6	8	82 mm (3-7/32")	Wood and plywood. For very fast cutting.
No. 9 	792327-9	8	82 mm (3-7/32")	Wood and plywood. For clean and smooth cuts.
No. 10 	792328-7	8	82 mm (3-7/32")	Wood and plywood. For clean and smooth cuts, especially splinter free cuts in plywood.
No. 16 	792211-8	9	82 mm (3-7/32")	Wood and plywood. Ideal for scroll cutting.
No. 17 	792214-2	14	82 mm (3-7/32")	Non-ferrous metals and plastics. Ideal for scroll cutting.

● **Guide rule (Rip fence)**

Part No. 164113-2



● **Hex wrench 3**

Part No. 783201-2



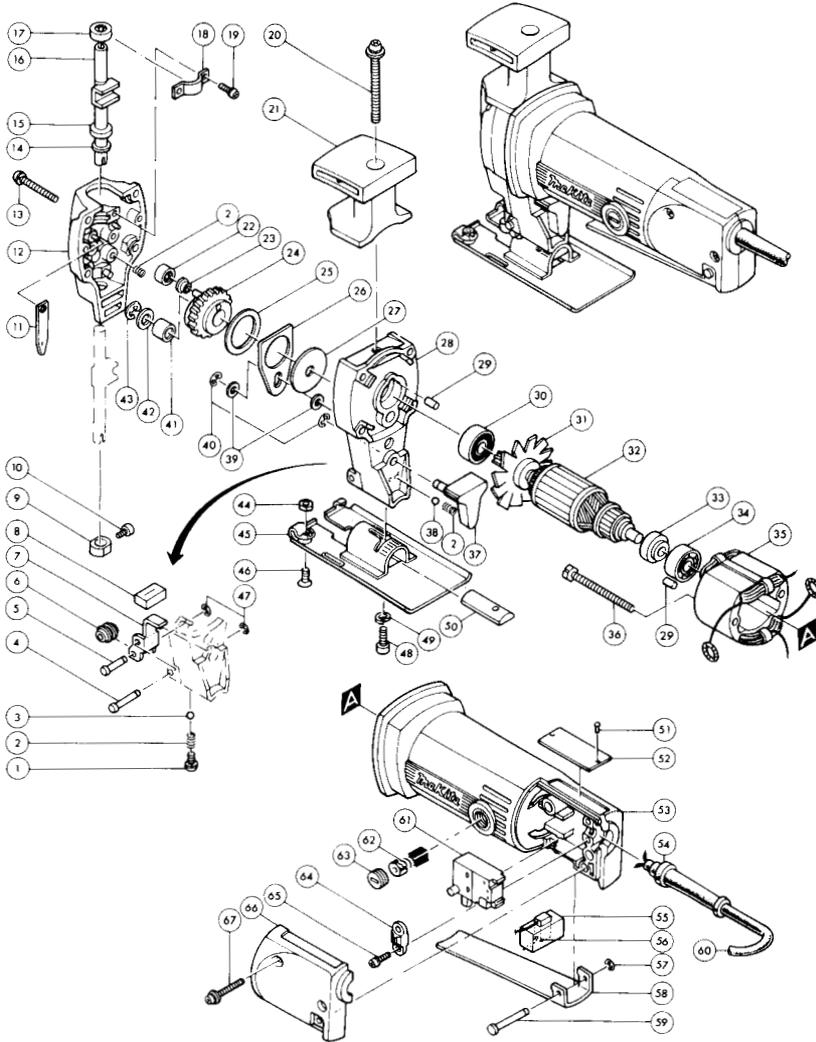
● **Circular guide assembly**

Part No. 123030-5





# JIG SAW Model JV2000



Note: The switch, noise suppressor and other part configurations may differ from country to country.

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
<u>MACHINE</u>			<u>MACHINE</u>		
1	1	Pan Head Screw M5x8 (With Washer)	33	1	Insulation Washer
2	6	Compression Spring 4	34	1	Ball Bearing 627LB
3	1	Steel Ball 4	35	1	FIELD ASSEMBLY
4	1	Pin 4	36	2	Hex. Bolt M4x55 (With Washer)
5	1	Pin 4	37	1	Lever 30
6	1	Roller	38	1	Steel Ball 3.5
7	1	Retainer	39	2	Fiat Washer 6
8	1	Sponge 12 21	40	2	Stop Ring E - 4
9	1	Blade Clamp	41	1	Needle Bearing 810
10	1	Hex. Socket Head Bolt M4x10	42	1	Fiat Washer 6
11	2	Plate	43	1	Stop Ring E - 6
12	1	Gear Housing Cover	44	1	Hex. Nut M5
13	4	Pan Head Screw M4x35 (With Washer)	45	1	Base
14	1	Fiber Washer 8	46	1	Hex. Socket Head Bolt M5x10
15	1	Felt	47	2	Stop Ring E - 3
16	1	Slider	48	1	Hex. Socket Head Bolt M4x25
17	1	Ball Bearing 805	49	1	Spring Washer 4
18	1	Holder	50	1	Clamp Plate
19	2	Pan Head Screw M4x8 (With Washer)	51	2	Rivet O. 5
20	1	Pan Head Screw M6x55 (With Washer)	52	1	Name Plate
21	1	Grip	53	1	Motor Housing
22	1	Needle Bearing 407	54	1	Cord Guard
23	1	Bush 4	57	1	Stop Ring E - 3
24	1	Gear	58	1	Switch Lever
25	1	Fiat Washer 28	59	1	Pin 4
26	1	Cam Plate	60	1	Cord
27	1	Fiat Washer 8	61	1	Switch
28	1	Gear Housing	62	2	Carbon Brush
29	2	Rubber Pin 4	63	2	Brush Holder Cap
30	1	Ball Bearing 608LB	64	1	Strain Relief
31	1	Fan 58	65	2	Pan Head Screw M4x18 (With Washer)
32	1	ARMATURE ASSEMBLY (With Items 30 - 34)	66	1	Switch Cover
			67	2	Pan Head Screw M4x30 (With Washer)

Note: The switch and other part specifications may differ from country to country.



## MAKITA LIMITED ONE YEAR WARRANTY

### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others;
- repairs are required because of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.



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