



**Belt Sander** 

**MODEL 9031** 

# **INSTRUCTION MANUAL**



#### **SPECIFICATIONS**

Belt size	Belt speed	Overall length	Net weight	
30 mm x 533 mm (1-3/16'' x 21'')	200 m - 1,000 m (656 ft 3,280 ft.) <sup>/min.</sup>	380 mm (14-31/32'')	2.1 kg (4.6 lbs)	

\* Manufacturer reserves the right to change specifications without notice.

\* Note: Specifications may differ from country to country.

WARNING: For your personal safety, READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

# 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; for example, don't use circular saw for cutting tree limbs or logs.
- 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 tool with finger on switch. Be sure switch is OFF when plugging in.
- 16. EXTENSION CORDS. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

			Total Length of Cord in Feet			
			0 - 25	26 - 50	51 - 100	101 - 150
Amp More Than	ere R	ating lot More Than	A W G			
0	_	6	18	16	16	14
6	_	10	18	16	14	12
10	_	12	16	16	14	12
12		16	14	12	Not Recommended	

TABLE 1 MINIMUM GAGE FOR CORD SETS

- 17. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- 18. STAY ALERT. Watch what you are doing, use common sense. Don't operate tool when you are tired.
- 19. 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.
- 20. GUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
- 21. REPLACEMENT PARTS. When servicing, use only identical replacement parts.
- 22. POLARIZED PLUGS. To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

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. Hold the tool firmly with both hands.
- 2. Make sure the belt is not contacting the workpiece before the switch is turned on.
- 3. Keep hands away from rotating parts.
- 4. Do not leave the tool running. Operate the tool only when hand-held.
- 5. This tool has not been waterproofed, so do not use water on the workpiece surface.

### SAVE THESE INSTRUCTIONS.

#### Installing the side grip

For your own safety, always use the side grip. Install it by screwing it firmly on the grip holder. The side grip can be pivoted for easy operation. See the figure at right.



#### Installing or removing the abrasive belt

CAUTION:

Always be sure that the tool is switched off and unplugged before installing or removing the belt.

Loop the belt over the front pulley. Hold the tool as shown at right and press down to retract the front pulley so that you can slip the other end of the belt over the rear pulley. When pressing down the tool, be careful not to allow the front pulley to turn unexpectedly, causing you to lose control of the tool.



NOTE :

The arrow on the inside of the belt and that marked on the rear pulley must point in the same direction.



#### Switch action

#### CAUTION:

Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released. If it does not operate properly, do not use the tool. Have it repaired immediately.

To start the tool, simply pull the trigger. Release the trigger to stop. For continuous operation, pull the trigger and then push in the lock button. To stop the tool from the locked position, pull the trigger fully, then release it.



#### Speed adjusting dial

The belt running speed can be adjusted and maintained between 200 m (656 ft.) and 1,000 m (3,280 ft.) per minute by turning the adjusting dial. The dial is marked 1 (lowest speed) to 6 (full speed).



#### CAUTION:

Adjust the speed adjusting dial only within the range of numbers 1 through 6. Do not force the dial beyond this range or damage to the tool may result.

#### Operation

Hold the tool firmly with both hands. Turn the tool on and wait until it attains your desired speed. Gently apply the tool to the workpiece surface and move the tool forward and back. Press the belt only lightly on the workpiece. Excessive pressure may damage the belt and shorten tool life.

#### CAUTION:

- Secure the workpiece with clamps, etc. if there is any possibility of it moving during the work operations.
- The tool should not already be in contact with the workpiece surface when you turn the tool on or off. Otherwise a poor sanding finish, damage to the belt of loss of control of the tool may result.
- When working with the tool, be very careful to avoid any contact of the tool and belt with any part of your body or anyone or anything near you.

#### **Dust extraction**

Open the nozzle cap. Connect the hose of a vacuum cleaner/dust collector to the nozzle.



#### CAUTION:

Always close the nozzle cap when the hose of a vacuum cleaner/dust collector is not connected to the nozzle. Never insert your finger into the nozzle.

### 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 the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.





To maintain product SAFETY and RELIABILITY, repairs, nay other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, 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.

#### Abrasive belt

(10 per pkg)



Part No.	Grit	
742301-7	40	
742302-5	60	
742303-3	80	
742304-1	100	
742305-9	120	
742334-2	150	



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

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MAC	MACHINE			HINE	
1	1	Grip 36	29	1	Strain Relief
2	1	Hex. Bolt M8x40	30	1	Cord
3	1	Cap 30	31	1	Cord Guard
4	1	Spring Pin 4-20	32	1	Spring Pin 4-20
5	3	Tapping Screw 4x25	33	1	Top Pulley Shaft
6	1	Flat Shoe	34	1	Pulley 30-25
7	1	Tapping Screw Bind CT 5x12	35	1	Ball Bearing 688DDW
8	1	Compression Spring 13	36	1	Sleeve 12
9	1	Flat Washer 12	37	1	Ball Bearing 688DDW
10	1	Wing Nut M16	38	1	Angle Stay Complete
11	1	Gear Housing Complete	39	1	Arm Complete
12	1	Ball Bearing 607LB	40	2	Wave Washer 12
13	1	Helical Gear 35	41	1	Hex. Nut M6-17
14	1	Spring Pin 3.5-12	42	1	Name Plate
15	1	Ball Bearing 6904DDW	43	2	Carbon Brush
16	1	Bearing Retainer 44	44	2	Brush Holder Cap
17	2	Tapping Screw CT 4x12	45	1	Motor Housing Complete
18	1	Pulley 33-64	46	1	FIELD ASSEMBLY
19	1	Abrasive Belt 30x533 AA100	47	2	Tapping Screw Bind BT 4x60
20	1	Pulley Liner	48	1	Baffle Plate
21	1	Flat Washer 5	49	1	Ball Bearing 627LB
22	1	Hex. Socket Head Bolt M5x20	50	1	Insulation Washer
23	3	Tapping Screw 4x18	51	1	ARMATURE ASSEMBLY
24	1	Handle Cover			(With Item 49, 50, 52 & 53)
25	1	Switch	52	1	Fan 60
27	1	Controller	53	1	Ball Bearing 608DDW
28	2	Tapping Screw 4x18			

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



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#### Makita Corporation

3-11-8, Sumiyoshi-cho, Anjo, Aichi 446 Japan 883891 - 064