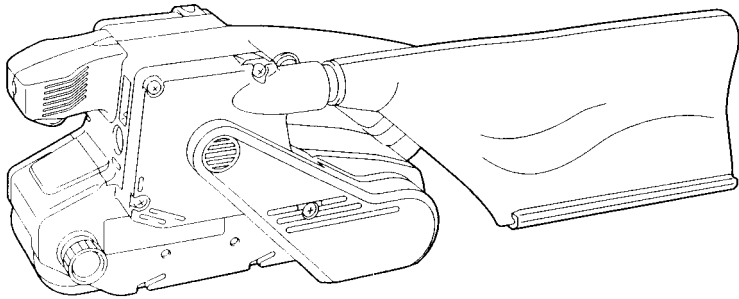


# Makita

## Belt Sander

76 mm (3'') MODEL 9902    76 mm (3'') MODEL 9920  
76 mm (3'') MODEL 9903    100 mm (4'') MODEL 9404

### INSTRUCTION MANUAL



 **DOUBLE INSULATION**

#### SPECIFICATIONS

Model	Belt size	Belt speed	Overall length	Net weight
9902	76 mm x 533 mm (3' x 21'')	440 m/min. (1,440 ft./min.)	296 mm (11-5/8'')	4.3 kg (9.5 lbs)
9903		210 - 440 m/min. (690 - 1,440 ft./min.)		
9920	76 mm x 610 mm (3' x 24'')	210 - 440 m/min. (690 - 1,440 ft./min.)	334 mm (13-1/8'')	4.5 kg (9.9 lbs)
9404	100 mm x 610 mm (4' x 24'')			4.7 kg (10.3 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.

# GENERAL SAFETY RULES

(For All Tools)

**WARNING!** Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.


## SAVE THESE INSTRUCTIONS

### READ ALL INSTRUCTIONS.

#### WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

#### ELECTRICAL SAFETY

4. **Double Insulated tools are equipped with 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 a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
8. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W."** These cords are rated for outdoor use and reduce the risk of electric shock.

#### PERSONAL SAFETY

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.

- 11. Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- 12. Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- 13. Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- 14. Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### **TOOL USE AND CARE**

- 15. Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- 16. Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- 17. Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- 18. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- 19. Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 20. Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- 21. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- 22. Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### **SERVICE**

- 23. Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 24. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

## Specific Safety Rules

1. Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
2. Hold the tool firmly with both hands.
3. Make sure the belt is not contacting the workpiece before the switch is turned on.
4. Keep hands away from rotating parts.
5. Do not leave the tool running. Operate the tool only when hand-held.
6. This tool has not been waterproofed, so do not use water on the workpiece surface.

**SAVE THESE INSTRUCTIONS.**


## SYMBOLS


The followings show the symbols used for tool.

V ..... volts

A ..... amperes

Hz ..... hertz

 ..... alternating current

 ..... Class II Construction

m/min ..... meter per minute

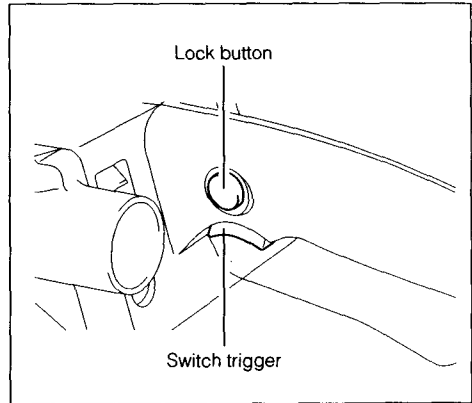
## FUNCTIONAL DESCRIPTION

### 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.
- The tool should not be in contact with the workpiece surface when you turn the tool on or off. Otherwise a poor sanding finish or damage of the belt may result.

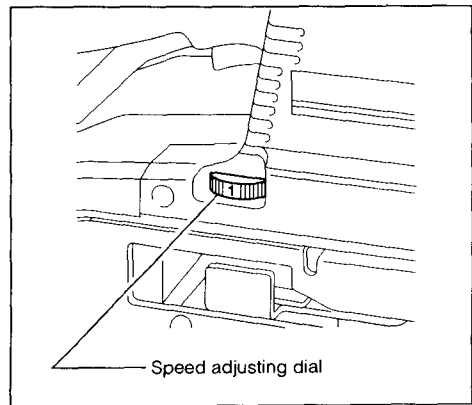
To start the tool, simply pull the trigger. Release the trigger to stop. For continuous operation, pull the trigger and then push in the lock button. To stop the tool from the locked position, pull the trigger fully, then release it.



### Speed adjusting dial For 9903, 9920 and 9404

The belt speed can be infinitely adjusted between 210 m (690 ft.) and 440 m (1,440 ft.) per minute by turning the speed adjusting dial to a given number setting from 1 to 5. Higher speed is obtained when the dial is turned in the direction of number 5; lower speed is obtained when it is turned in the direction of number 1.

Select the proper speed for the workpiece to be sanded.



#### CAUTION:

The speed adjusting dial can be turned only as far as 5 and back to 1. Do not force it past 5 or 1, or the speed adjusting function may not longer work.

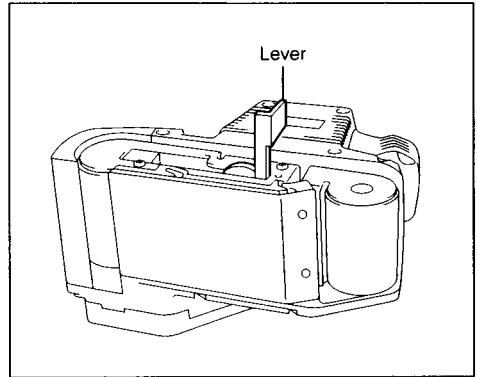
## ASSEMBLY

### Installing or removing abrasive belt

#### CAUTION:

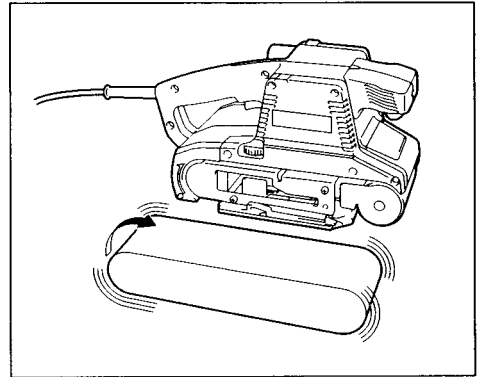
Always be sure that the tool is switched off and unplugged before installing or removing the belt.

Pull the lever all the way out and install the belt over the rollers, then return the lever to the original position.



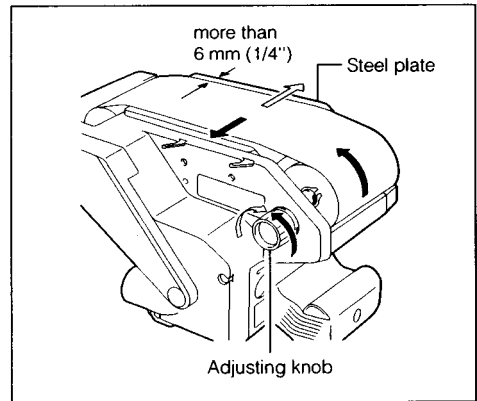
#### CAUTION:

When installing the belt, make sure that the direction of the arrow on the back of the belt corresponds to the one on the tool itself.



### Adjusting belt tracking

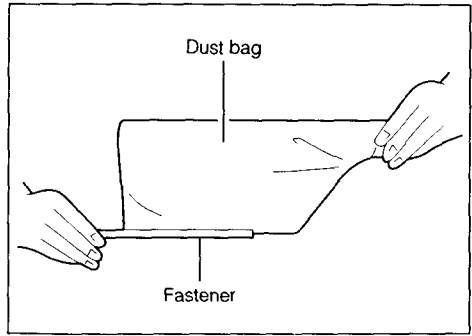
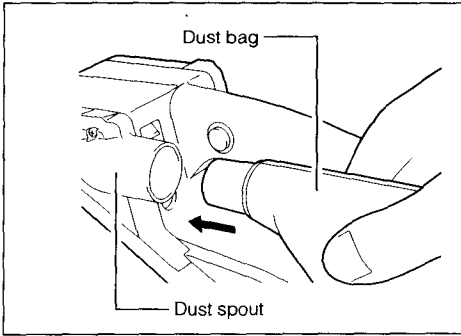
Switch on the tool and make sure that the belt is aligned properly. If the edge of the belt extends beyond the edge of the steel plate or the edge of the belt retracts more than 6 mm (1/4") away from the edge of the steel plate, use the adjusting knob to adjust the belt tracking.



### Dust bag

Attach the dust bag onto the dust spout. The dust spout is tapered. When attaching the dust bag, push it onto the dust spout firmly as far as it will go to prevent it from coming off during operation.

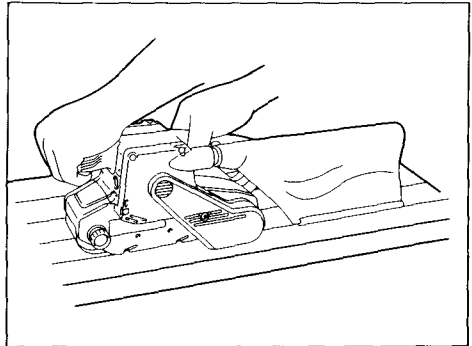
For the best results, empty the dust bag when it becomes about half full, tapping it lightly to remove as much dust as possible.



### OPERATION

#### Sanding operation

Hold the tool firmly with both hands. Turn the tool on and wait until it attains full speed. Then gently place the tool on the workpiece surface. Keep the belt flush with the workpiece at all times and move the tool back and forth. Never force the tool. The weight of the tool applies adequate pressure. Excessive pressure may cause stalling, overheating of the motor, burning of the workpiece and possible kickback.

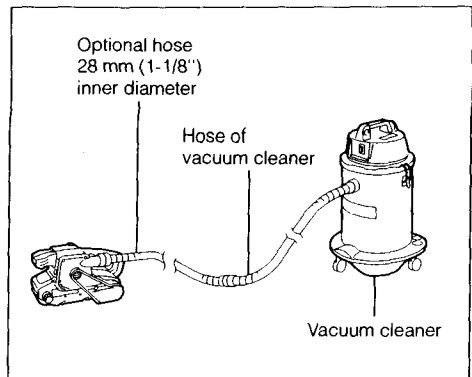


#### Connecting to Makita vacuum cleaner or dust collector

Cleaner sanding operations can be performed by connecting the belt sander to Makita vacuum cleaner or dust collector.

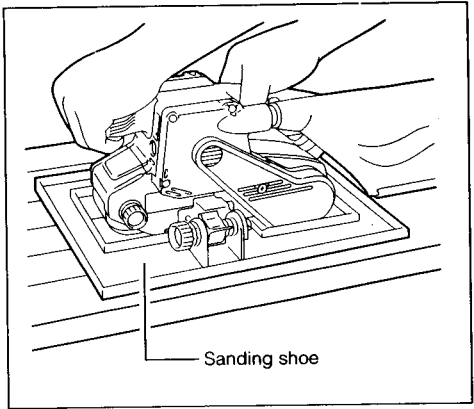
When connecting to Makita vacuum cleaner (Model 406), an optional hose 28mm (1-1/8") in inner diameter is necessary.

When connecting to Makita dust collector (Model 420S), the optional hose is not necessary. You can connect the belt sander directly to the hose of the dust collector.



**Sanding shoe (optional accessory)**

The sanding shoe readily allows you to sand workpieces more evenly.





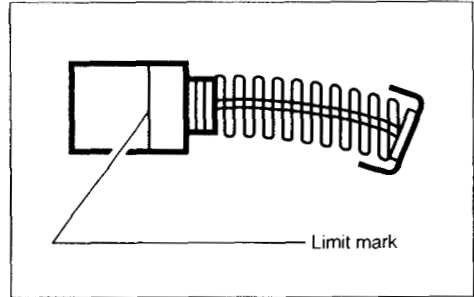
## MAINTENANCE

### CAUTION:

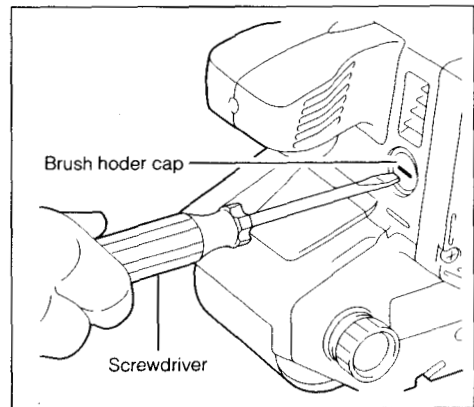
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

### 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.



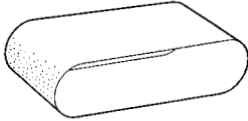
To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

# ACCESSORIES

**CAUTION:**

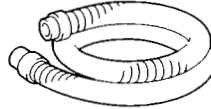
These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

• **Abrasive belts** (10 pcs. per pkg.)



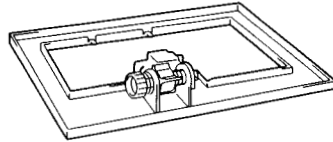
• **Hose**

28 mm (1-1/8") in inner diameter

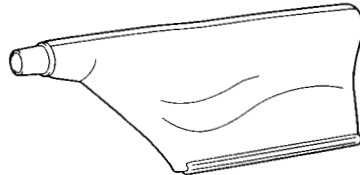


For Model	Size (mm)	Grit	Part No.
9902 9903	76 x 533 (3" x 21")	# 40	742306-7
		# 60	742307-5
		# 80	742308-3
		# 100	742309-1
		# 120	742310-6
		# 150	742311-4
9920	76 x 610 (3" x 24")	# 40	742312-8A
		# 60	742312-8B
		# 80	742312-8C
		# 100	742312-8D
		# 120	742312-8E
		# 150	742312-8F
9404	100 x 610 (4" x 24")	# 40	742320-3
		# 60	742321-1
		# 80	742322-9
		#100	742323-7
		# 120	742324-5
		# 150	742325-3

• **Sanding shoe**



• **Dust bag**



## 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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