

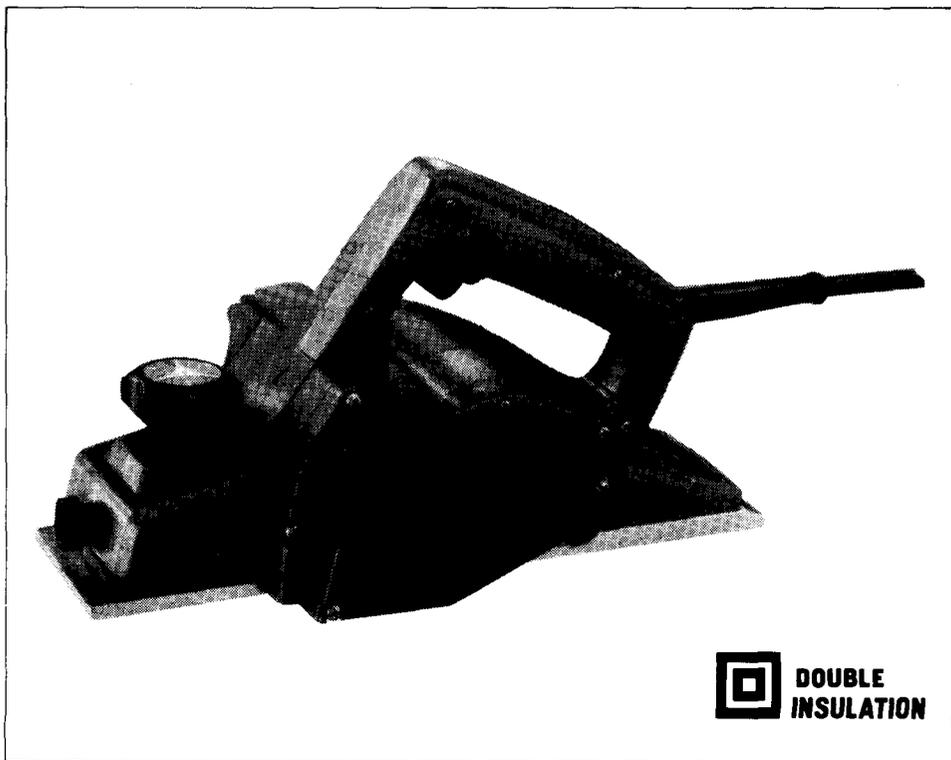


Makita Power Planer

82 mm (3-1/4") MODEL M102

アメリカ

INSTRUCTION MANUAL



 **DOUBLE
INSULATION**

SPECIFICATIONS

Planing width	Planing depth	No load speed (RPM)	Overall length	Net weight
82 mm (3-1/4")	1 mm (1/32")	16,000	295 mm (11-5/8")	2.5 kg (5.5 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. Rags, cloth, cord, string and the like should never be left around the work area.
2. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
3. Handle the blades very carefully.
4. Be sure the blade installation bolts are securely tightened before operation.
5. Hold the tool firmly with both hands.
6. Keep hands away from rotating parts.
7. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.
8. Make sure the blade is not contacting the workpiece before the switch is turned on.
9. Wait until the blade attains full speed before cutting.
10. Keep at least 200 mm (8") away from the tool at all times.
11. Always switch off and wait for the blades to come to a complete stop before any adjusting.
12. Never stick your finger into the chip chute. Chute may jam when cutting damp wood. Clean out chips with a stick.
13. Do not leave the tool running. Operate the tool only when hand-held.
14. When leaving the planer, switch off and set it with the front base up on a wooden block, so that the blades do not contact anything.
15. Always change both blades or covers on the drum, otherwise the resulting imbalance will cause vibration and shorten tool life.

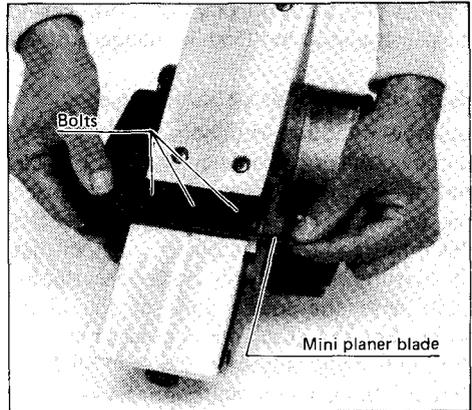
SAVE THESE INSTRUCTIONS.

Removing or installing mini planer blades

CAUTION:

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

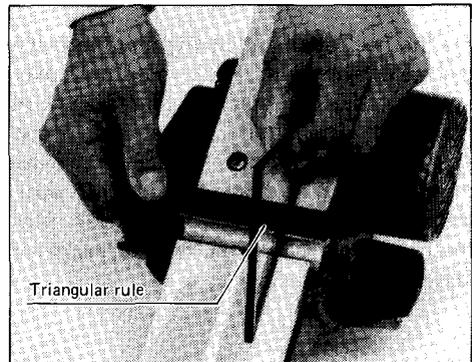
To remove the blade, loosen the three installation bolts with the socket wrench. Remove the blade by carefully sliding it from on the end of the drum.



WARNING:

Be extremely careful not to be cut by the sharp edges.

To install the blade, slide it inward from the end of the drum into the gap between the drum and the set plate. Adjust the blade lengthwise so that the blade ends are clear of the housing. Tighten the three installation bolts securely with the socket wrench. Adjust the front base to its highest position (maximum depth of cut) by turning the knob on the front of the tool clockwise. Place the triangular rule flush on the rear base. To check for proper blade protrusion, rotate the drum in the cutting direction by turning the planer drive belt while lightly holding the triangular rule flush against the rear base. The triangular rule



flush against the rear base. The triangular rule will be lifted very slightly and will be moved forward (toward the front base). The triangular rule should move forward 1–5 mm (3/64"–13/64"). Check the blade protrusion at both ends of the blade. The triangular rule should move forward equally at both ends. If the blade does not protrude properly, use the blade gauge to adjust the blade protrusion.

Repeat the same procedures for the other blade on the drum.

NOTE :

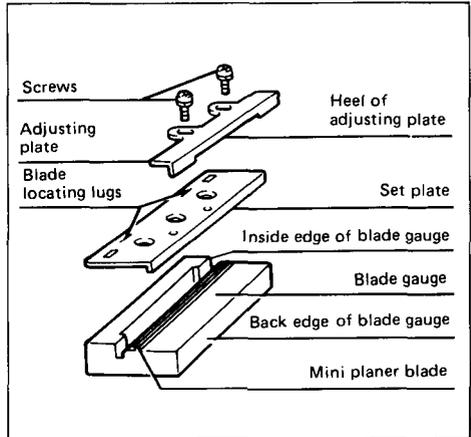
A mini planer blade has a cutting edge on both sides, making it reversible for double blade life and greater convenience.

CAUTION :

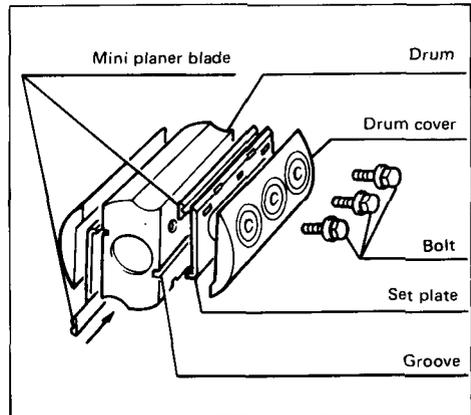
Tighten the blade installation bolts carefully when attaching the blades to the tool. A loose installation bolt can be dangerous. Always check to see they are tightened securely.

Blade adjustment using blade gauge

Unscrew the three installation bolts.
Remove the drum cover, the mini blade and the adjusting plate/set plate. Loosen the two screws on the adjusting plate. Set the mini blade on the blade gauge so that the cutting edge of the blade is perfectly flush with the inside edge of the blade gauge. Set the adjusting plate/set plate on the blade gauge and over the mini blade so that the blade locating lugs on the set plate rest in the mini blade groove. Press in the heel of the adjusting plate flush with the back edge of the blade gauge. Tighten the two screws on the adjusting plate.



Fit the heel of the adjusting plate into the groove of the drum. Place the drum cover over the adjusting plate/set plate. Screw in the three installation bolts so that a gap exists between the drum and the set plate to allow the mini blade to slide into position. Follow the same installation procedures covered in "Removing or installing mini planer blades".

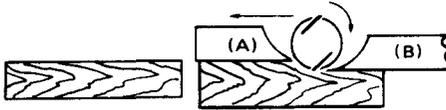


For the correct planer blade setting

Your planing surface will end up rough and uneven, unless the blade is set properly and securely. The blade must be mounted so that the cutting edge is absolutely level, that is, parallel to the surface of the rear base. Below are some examples of proper and improper settings.

- (A) Front base (Movable shoe)
- (B) Rear base (Stationary shoe)

Correct setting



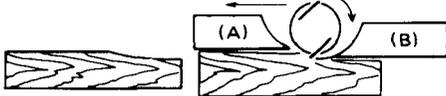
Although this side view cannot show it, the edges of the blades run perfectly parallel to the rear base surface.

Nicks in surface



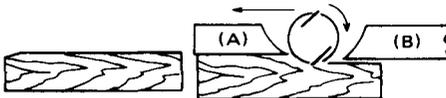
Cause: One or both blades fails to have edge parallel to rear base line.

Gouging at start



Cause: One or both blade edges fails to protrude enough in relation to rear base line.

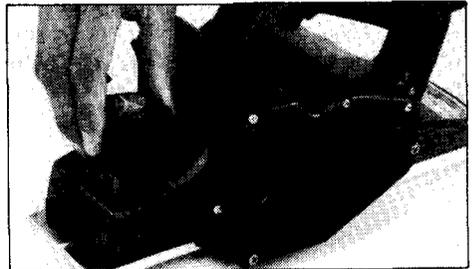
Gouging at end



Cause: One or both blade edges protrudes too far in relation to rear base line.

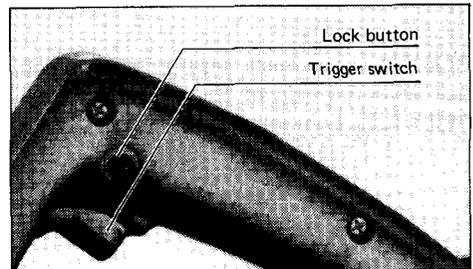
Adjusting depth of cut

Depth of cut may be adjusted by simply turning the knob on the front of the tool.



Switch action

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.

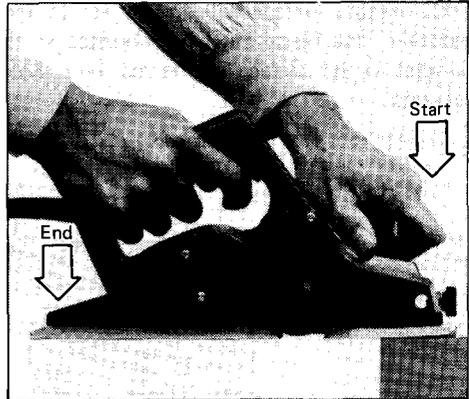


CAUTION:

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

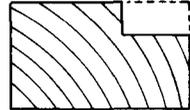
Planing operation

First, rest the tool front base flat upon the workpiece surface without the blades making any contact. Switch on and wait until the blades attain full speed. Then move the tool gently forward. Apply pressure on the front of tool at the start of planing, and at the back at the end of planing. Planing will be easier if you incline the workpiece in stationary fashion, so that you can plane somewhat downhill. The speed and depth of cut determine the kind of finish. The power planer keeps cutting at a speed that will not result in jamming by chips. For rough cutting, the depth of cut can be increased, while for a good finish you should reduce the depth of cut and advance the tool more slowly.

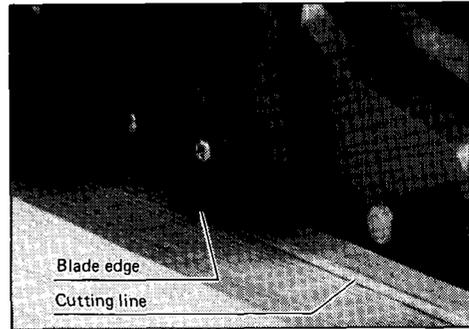


Shiplapping

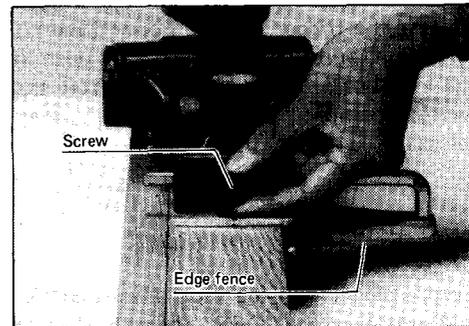
To make a stepped cut as shown at the right, use the edge fence.



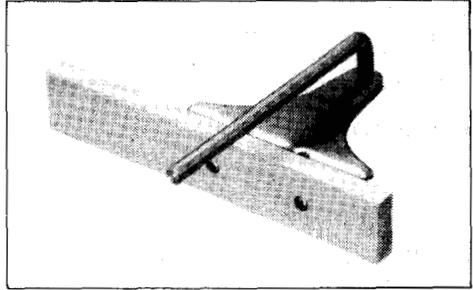
Draw a cutting line on the workpiece. Insert the edge fence into the hole in the front of the tool. Align the blade edge with the cutting line.



Adjust the edge fence until it comes in contact with the side of the workpiece, then secure it by tightening the screw.



You may wish to add to the length of the fence by attaching an extra piece of wood. Convenient holes are provided in the fence for this purpose, and also for attaching an extension guide (optional accessory).



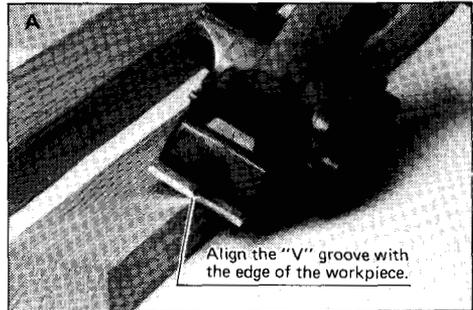
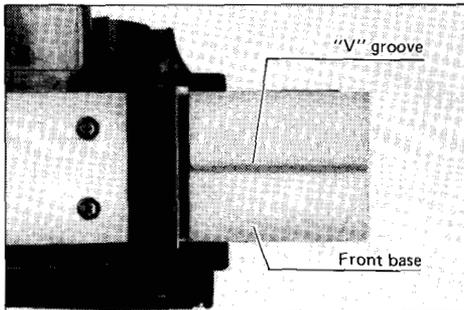
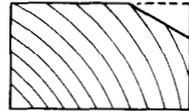
NOTE:

When planing, move the tool with the edge fence flush with the side of the workpiece. Otherwise uneven planing may result.

Max. shiplapping depth is 9 mm (11/32").

Chamfering

To make a cut as shown at the right, align the "V" groove in the front base with the edge of the workpiece and plane it as shown in the figure (A).



MAINTENANCE

CAUTION:

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

The tool will stop when the carbon brushes wear to a certain length. When this occurs, both carbon brushes should be replaced.

To maintain product SAFETY and RELIABILITY, repairs, carbon brush inspection and replacement, 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.

- **Planer blade**

Part No. 793209-0



- **Dust bag assembly**

Part No. 122269-7



- **Blade gauge**

Part No. 411175-4



- **Guide rule**

Part No. 191455-1



- **Screwdriver**

Part No. 783002-8



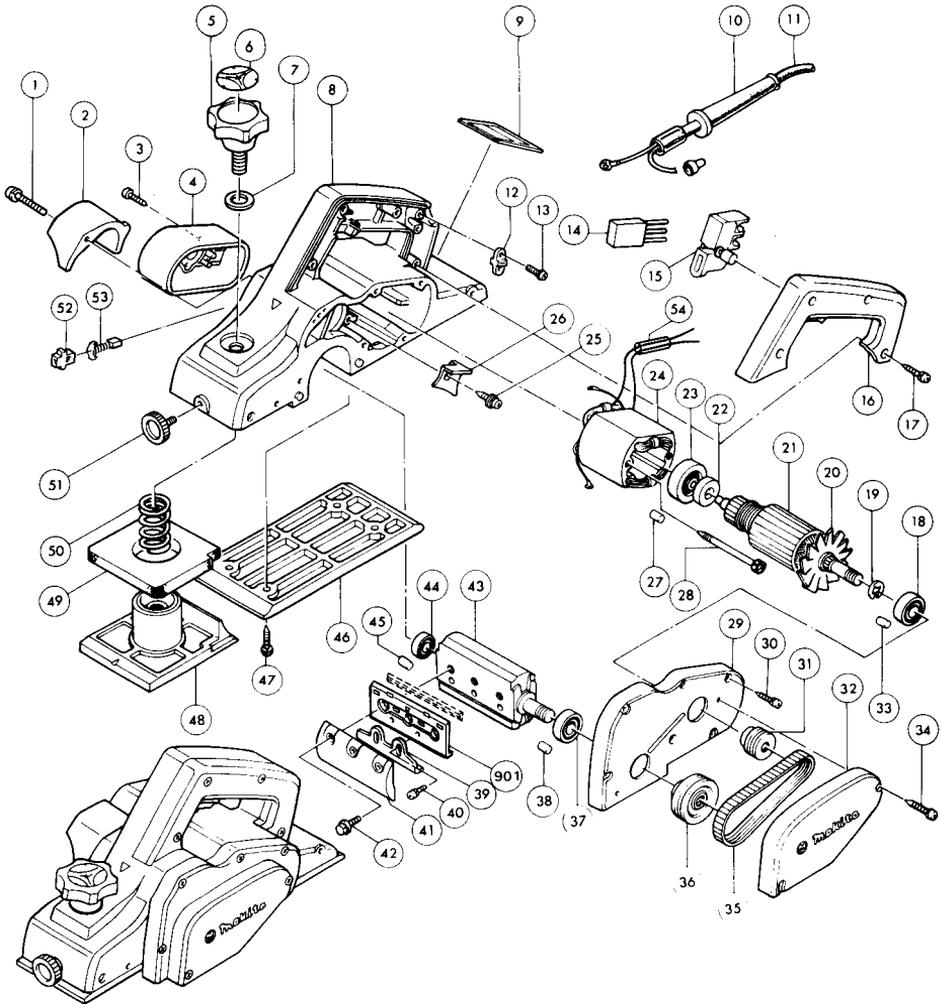
- **Socket wrench**

Part No. 798145-3





82 mm (3-1/4") POWER PLANER Model M102



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
MACHINE			MACHINE		
1	1	Tapping Screw BT 4x40	28	2	Tapping Screw BT 4x60
2	1	Chip Cover	29	1	Bracket
3	2	Tapping Screw BT 4x14	30	6	Tapping Screw BT 4x25
4	1	Rear Cover	31	1	V-Pulley 4-20L
5	1	Knob 46	32	1	Belt Cover
6	1	Scale Plate	33	1	Rubber Pin 4
7	1	Flat Washer 10	34	2	Tapping Screw BT 4x25
8	1	Main Frame	35	1	Poly V-Belt 4-241
9	1	Name Plate	36	1	V-Pulley 4-37
10	1	Cord Guard	37	1	Ball Bearing 6000ZZ
11	1	Cord	38	1	Rubber Pin 4
12	1	Strain Relief	39	2	Adjust Plate
13	2	Pan Head Screw M4x18	40	4	Pan Head Screw M4x5
15	1	Switch	41	2	Drum Plate
16	1	Handle Cover	42	6	Hex, Flange Head Bolt M6x17
17	4	Tapping Screw BT 4x25	43	1	Drum
18	1	Ball Bearing 6000LLB	44	1	Ball Bearing 608ZZ
19	1	Stop Ring E-9	45	1	Rubber Pin 4
20	1	Fan 52	46	1	Base
21	1	ARMATURE ASSEMBLY (With Item 18 - 23)	47	4	Tapping Screw BT 5x16
22	1	Insulation Washer	48	1	Front Base
23	1	Ball Bearing 627LB	49	1	Rubber Packing
24	1	FIELD ASSEMBLY	50	1	Compression Spring 18
25	1	Tapping Screw BT 4x16	51	1	Screw M5x10
26	1	Auxiliary Baffle Plate	52	2	Brush Holder
27	1	Rubber Pin 4	53	2	Carbon Brush
			901	2	Set Plate

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

MAKITA TWO YEAR LIMITED WARRANTY FOR HOME USE ONLY

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects for a period of **two years** from the date of original purchase. Should any trouble develop during this two 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:

- operation of the tool has **not** been restricted to Home Use
- 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 two-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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