

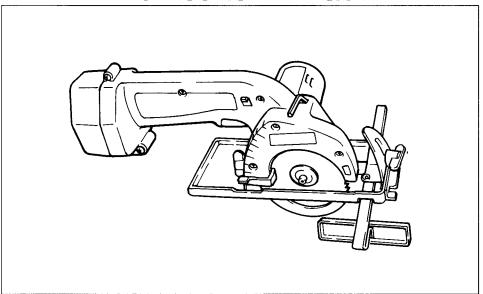
Cordless Circular Saw

85 mm (3-3/8") MODEL 5091DZ Without Battery or Charger

85 mm (3-3/8") MODEL 5091D With Battery Cartridge

85 mm (3-3/8") MODEL 5091DWH 85 mm (3-3/8") MODEL 5091DWG With Battery Cartridge and Fast Charger

INSTRUCTION MANUAL



SPECIFICATIONS

•	Model	5091D
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Blade diameter	Cutting depth		No load speed	Overall	Net
	90°	45°	(RPM)	length	weight
85 mm (3-3/8'')	0 — 24.5 mm (0 — 15/16'')	0 — 18 mm (0 — 11/16'')	1,000	316 mm (12-1/2'')	1.9 kg (4.2 lbs)

Battery Cartridge 1201 / 1201A	Model DC1201 Fast Charger				
Voltage	Input	Output	Charging time		
12 V	A.C. only 60 Hz	D.C. 7.2 V — 12 V	1 Hr.		

- * 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.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- 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.
- AVOID UNINTENTIONAL STARTING. Don't carry 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.
- 21. 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.

IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER & BATTERY CARTRIDGE

- 1. SAVE THESE INSTRUCTIONS This manual contains important safety and operating instructions for battery charger.
- 2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- CAUTION To reduce risk of injury, charge only MAKITA Battery Cartridge 7000, 7001, 9000, 9001, 9100, 9101, 9101A, 1200, 1201, 1201A, 1210 & 1211. Other types of batteries may burst causing personal injury and damage.
- 4. Do not expose charger to rain or snow.
- Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
- 6. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- 7. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - a. That pins on plug of extension cord are the same number, size, and shape as those of plug on charger;
 - b. That extension cord is properly wired and in good electrical condition; and
 - c. That wire size is at least as large as the one specified in the table below.

TABLE 1 RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS

Length of Cord (Feet)	25	50	100	150
AWG Size of Cord	18	18	18	16

- 9. Do not operate charger with damaged cord or plug replace them immediately.
- 10. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 11. Do not disassemble charger or battery cartridge; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- 12. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

ADDITIONAL SAFETY RULES FOR CHARGER & BATTERY CARTRIDGE

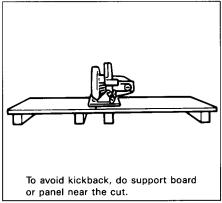
- 1. Do not charge Battery Cartridge when temperature is BELOW 10°C (50°F) or ABOVE 40°C (104°F).
- 2. Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
- 3. Do not allow anything to cover or clog the charger vents.
- Always cover the battery terminals with the battery cover when the battery cartridge is not used.
- 5. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
 - (1) Do not touch the terminals with any conductive material.
 - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
 - (3) Do not expose battery cartridge to water or rain.
- 6. Do not store the tool and Battery Cartridge in locations where the temperature may reach or exceed 35°C (95°F).
- 7. Do not incinerate the Battery Cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.

ADDITIONAL SAFETY RULES

- 1. Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.
- 2. Wear hearing protection.
- 3. Keep Guards In Place and In Working Order. Never wedge or tie lower guard open. Check operation of lower guard before each use. Don't use if lower guard does not close briskly over saw blade. CAUTION: If saw is dropped, lower guard may be bent, restricting full return.
- 4. Do not use blades which are deformed or cracked.
- Keep Blades Clean and Sharp.Sharp blades minimize stalling and kickback.
- DANGER: Keep Hands Away From Cutting Area.
 Keep hands away from blades. Don't reach underneath work while blade is rotating. Don't attempt to remove cut material when blade is moving.
 CAUTION: Blades coast after turn off.
- 7. Support Large Panels.

Large panels must be supported as shown in Fig. 1 to minimize the risk of blade pinching and kickback.

When cutting operation requires the resting of the saw on the work piece, the saw shall be rested on the larger portion and the smaller piece cut off.



Don't support board or panel away from the cut.

Fig. 1

Fig. 2

8. Use Rip Fence.

Always use a fence or straight edge guide when ripping.

9. Guard Against Kickback.

Kickback occurs when the saw stalls rapidly and is driven back towards the operator. Release switch immediately if blade binds or saw stalls. Keep blades sharp. Support large panels as shown in Fig. 1. Use fence or straight edge guide when ripping. Don't force tool. Stay alert exercise control. Don't remove saw from work during a cut while the blade is moving.

NEVER place your hand or fingers behind the saw. If kickback occurs, the saw could easily jump backwards over your hand, possibly causing severe injury.

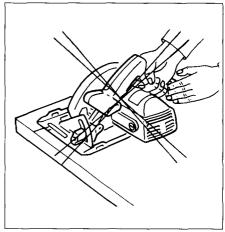


Fig. 3

- 10. Lower Guard. Raise lower guard with the retracting handle.
- 11. Adjustments. Before cutting be sure depth and bevel adjustments are tight.
- 12. Use Only Correct Blades In Mounting. Don't use blades with incorrect size holes. Never use defective or incorrect blade washers or bolts.
- 13. Avoid Cutting Nails. Inspect for and remove all nails from lumber before cutting.
- Operate with proper hand support and proper workpiece support.

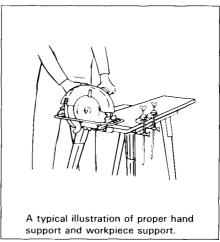


Fig. 4

WARNING:

It is important to support the workpiece properly and to hold the saw firmly to prevent loss of control which could cause personal injury. Fig. 4 illustrates typical hand support of the saw.

15. Place the wider portion of the saw base on that part of the workpiece which is solidly supported, not on the section that will fall off when the cut is made. As examples, Fig. 5 illustrates the RIGHT way to cut off the end of a board, and Fig. 6 the WRONG way. If the workpiece is short or small, clamp it down. DON'T TRY TO HOLD SHORT PIECES BY HAND!

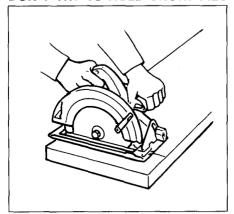


Fig. 5

Fig. 6

16. Never attempt to saw with the circular saw held upside down in a vise. This is extremely dangerous and can lead to serious accidents.

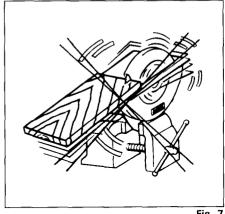


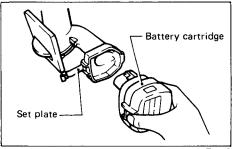
Fig. 7

17. Before setting the tool down after completing a cut, be sure that the lower (telescoping) guard has closed and the blade has come to a complete stop.

SAVE THESE INSTRUCTIONS.

Installing or removing the battery cartridge

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, pull out the set plate on the tool and grasp both sides of the cartridge while withdrawing it from the tool.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Snap the set plate back into place. Be sure to close the set plate fully before using the tool.



Fia. 8

 Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

Charging

- Your new battery cartridge is not charged. You will need to charge it before use. Use the fast charger Model DC1201 to charge the battery cartridge.
- Plug the fast charger into the proper A/C voltage source. The charging light will flash in green color.
- Insert the battery cartridge so that the plus and minus terminals on the battery cartridge are on the same sides as their respective markings on the fast charger.

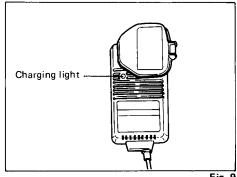


Fig. 9

- Insert the cartridge fully into the port so that it rests on the charger port floor.
- When the battery cartridge is inserted, the charging light color will change from green to red and charging will begin. The charging light will remain lit steadily during charging.
- When charging is completed, the charging light color will change from red to green and a tone will sound steadily for about 5 seconds.
- After charging, unplug the charger from the power source. Refer to the table below for the charging time.

Fast charger Battery cartridge	DC1201
1200	Approx. 45 min.
1201 / 1201A	Approx. 60 min.

CAUTION:

- The fast charger Model DC1201 is specifically designed to charge only Makita battery cartridges. Never use it for other purposes or for other manufacturer's batteries.
- When you charge a new battery cartridge or a battery cartridge which has not been used for a long period of time, it may not accept a full charge. This is a normal condition and does not indicate a problem. You can recharge the battery cartridge fully after discharging it completely and recharging a couple of times.
- If you charge a battery cartridge from a just-operated tool or a battery cartridge which has been left in a location exposed to direct sunlight or heat for a long time, the charging light may flash in red color. If this occurs, wait for a while. Charging will begin after the battery cartridge cools. The battery cartridge will cool faster if you remove the battery cartridge from the fast charger.
- If the charging light flashes alternately in green and red color and a tone sounds "beep, beep, beep, . . ." for about 20 seconds, a problem exists and charging is not possible. The terminals on the charger or battery cartridge are clogged with dust or the battery cartridge is worn out or damaged.
- If you wish to charge two battery cartridges, allow 15 minutes between chargings on the fast charger.

Removing or installing the saw blade

CAUTION:

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

To remove the blade, press the shaft lock so that the blade cannot revolve and use the hex wrench to loosen the bolt counterclockwise. Then remove the bolt, outer flange and blade.

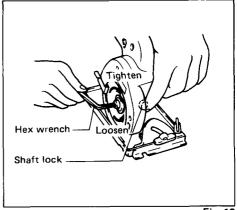


Fig. 10

To install the blade, follow the removal procedure in reverse.

BE SURE TO TIGHTEN THE BOLT SECURELY.

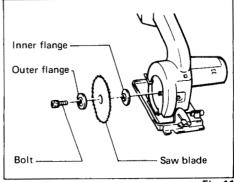


Fig. 11

CAUTION:

- Be sure the blade is installed with teeth pointing up at the front of the tool.
- Use only the Makita hex wrench to install or remove the blade.

Hex wrench storage

When not in use, the hex wrench can be conveniently stored.

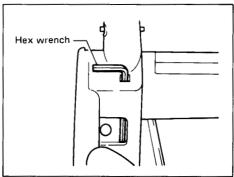
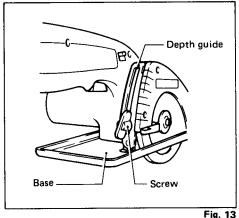


Fig. 12

Adjusting the depth of cut

Loosen the screw on the depth guide and move the base up or down. You can read the depth of cut by aligning the top of the notch in the depth guide with the graduations on its right side. (Note: This can be done for 0° bevel cutting only.) At the desired depth of cut, secure the base by tightening the screw.



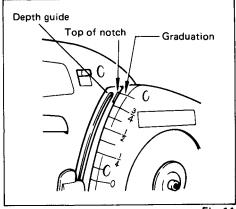


Fig. 14

CAUTION:

- Use a shallow depth of cut when cutting thin workpiece for cleaner, safer cuts.
- After adjusting the depth of cut, always tighten the clamp screw securely.

Bevel cutting

Loosen the screw on the bevel scale plate on the front of the base. Set for the desired angle $(0^{\circ}-45^{\circ})$ by tilting accordingly, then tighten the clamp screw securely.

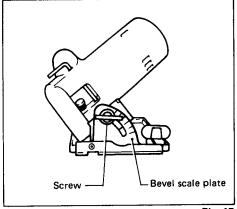


Fig. 15

CAUTION:

After adjusting the depth of cut and bevel cutting angle, be sure to tighten the screw.

Sighting

The front of the base is notched to provide two quide edges.

For straight cuts, align the edge with 0° engraved on it with your cutting line on the workpiece.

For 45° bevel cuts, align the edge with 45° engraved on it with your cutting line.

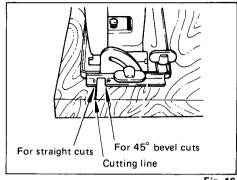


Fig. 16

Switch action

To prevent the trigger from being accidentally pulled, a lock-off lever is provided.

To start the tool, slide the lock-off lever in the direction of the arrow and pull the trigger. Release the trigger to stop.

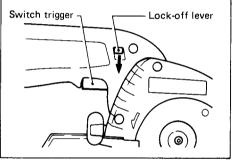


Fig. 17

CAUTION:

Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

Operation

Hold the tool firmly. Set the base plate on the workpiece to be cut without the blade making any contact. Then turn the tool on and wait until the blade attains full speed. Now simply move the tool forward over the workpiece surface, keeping it flat and advancing smoothly until the sawing is completed. To get clean cuts, keep your sawing line straight and your speed of advance uniform.

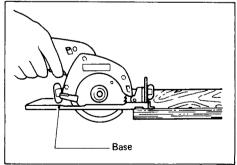


Fig. 18

CAUTION:

- Always gently keep the tool moving straight ahead when cutting. Forcing or twisting the tool will result in overheating of the motor and dangerous kickback, possibly causing severe injury.
- If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 15 minutes before proceeding with a fresh battery.

Guide rule

The handy guide rule allows you to do extra-accurate straight cuts. Simply slide the guide rule up snugly against the side of the workpiece and secure it in position with the clamp screw on the front of the base. It also makes repeated cuts of uniform width possible.

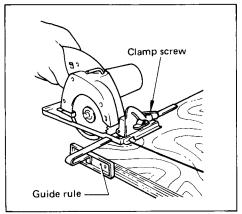


Fig. 19

MAINTENANCE

CAUTION:

Always be sure that the tool is switched off and the battery cartridge is removed before attempting of perform inspection or maintenance.

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

OPTIONAL ACCESSORIES

The accessories listed in this manual are available at an extra cost from your Makita distributor or Makita factory service center. Service centers are listed on the warranty card packed with your tool.

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.

Hex wrench

Part No. 783202-0



Fast charger Model DC1201

Part No. 113126-0



Battery cover

Part No. 414938-7



Tungsten carbide tipped saw blade

For wood



Battery cartridge 1200

Part No. 192271-4

High capacity battery 1201

Part No. 192296-8



• Power display battery (High cap.) 1201A

Part No. 192407-5

792623-5



Hole diameter No. Diameter Part No. (mm) (mm) teeth 85 (3-3/8") 15 (19/32") 20

Combination saw blade

For rip and cross-cut work. Has fewer teeth than cross-cut blade for faster cutting.



Part No.	Diameter (mm)	Hole diameter (mm)	No. teeth	
721003-8	85 (3-3/8'')	15 (19/32'')	50	

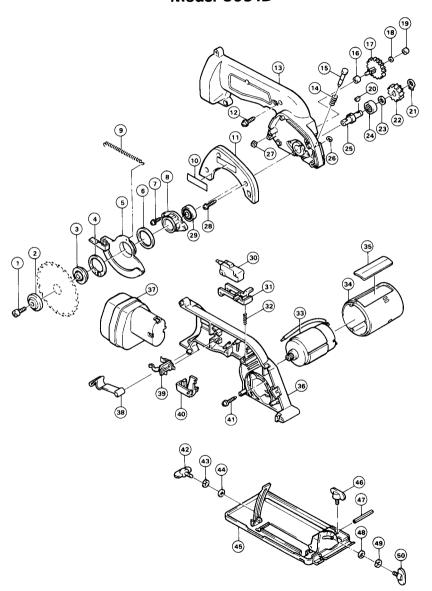
Plywood saw blade

For smooth splinter-free cutting of plywood and other thin laminates.



Part No.	Diameter (mm)	Hole diameter (mm)	No. teeth	
792299-8	85 (3-3/8")	15 (19/32'')	50	

85 mm (3-3/8") CORDLESS CIRCULAR SAW Model 5091D



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

MODEL 5091D Mar - 30 - '95 US

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MAC	MACHINE				
1	1 1 1	Hex. Socket Head Bolt M5x12	26	1 1	Stop Ring E - 4
2	1 1	Outer Flange 28	27	1	Hex. Nut M5
3	1 1	Inner Flange 28	28	3	Tapping Screw 4x18
4	1 1	Retaining Ring S - 28	29	1	Ball Bearing 6000VV
5	1 1	Safety Cover	30	1	Switch
6	1 1	Flat Washer 30	31	1	Lock Off Lever
7	6	Tapping Screw 4x18	32	1	Compression Spring 4
8	1 1	Bearing Box	33	1 1	DC Motor 12 V
9	1 1 1	Tension Spring	34	1 1	Motor Housing
10	1 1	Makita Label	35	1	Name Plate
11	1 1	Blade Case	36	1	Housing Set (With Item 13)
12	1 1	Tapping Screw 4x18	37	1	High Capacity Battery 1201
13	1 1	Housing Set (With Item 36)	38	1	Set Plate
14	1 1	Compression Spring 7	39	1 1	Battery Holder
15	1 1	Pin 5	40	1 1	Switch Lever
16	1 1	Plane Bearing 4	41	3	Tapping Screw 4x18
17	1	Gear Complete 8 - 68	42	1	Screw M5x10
18	1 1	Thin Washer 4	43	1	Spring Washer 5
19	lιl	Plane Bearing 4	44	1 1 1	Flat Washer 5
20	1 1	Woodruff Key 3	45	1 1	Base
21	1 1	Retaining Ring S - 8	46	1 1	Screw M5x10
22	1 1	Helical Gear 33	47	1 1	Spring Pin 4 - 40
23	1 1	Flat Washer 8	48	1 1	Flat Washer 5
24	1	Ball Bearing 608LB	49	1	Spring Washer 5
25	Lil	Spindle	50	1 1	Screw M5x10

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

Recycling the Battery

The <u>only</u> way to dispose of a Makita battery is to recycle it. The law prohibits any other method of disposal.



To recycle the battery:

- 1. Remove the battery from the tool.
- a). Take the battery to your nearest Makita Factory Service Center or
 - b). Take the battery to your nearest Makita Authorized Service Center or Distributor that has been designated as a Makita battery recycling location.
 - Call your nearest Makita Service Center or Distributor to determine the location that provides Makita battery recycling. See your local Yellow Pages under ''Tools-Electric''.

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.

Makita Corporation of America

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