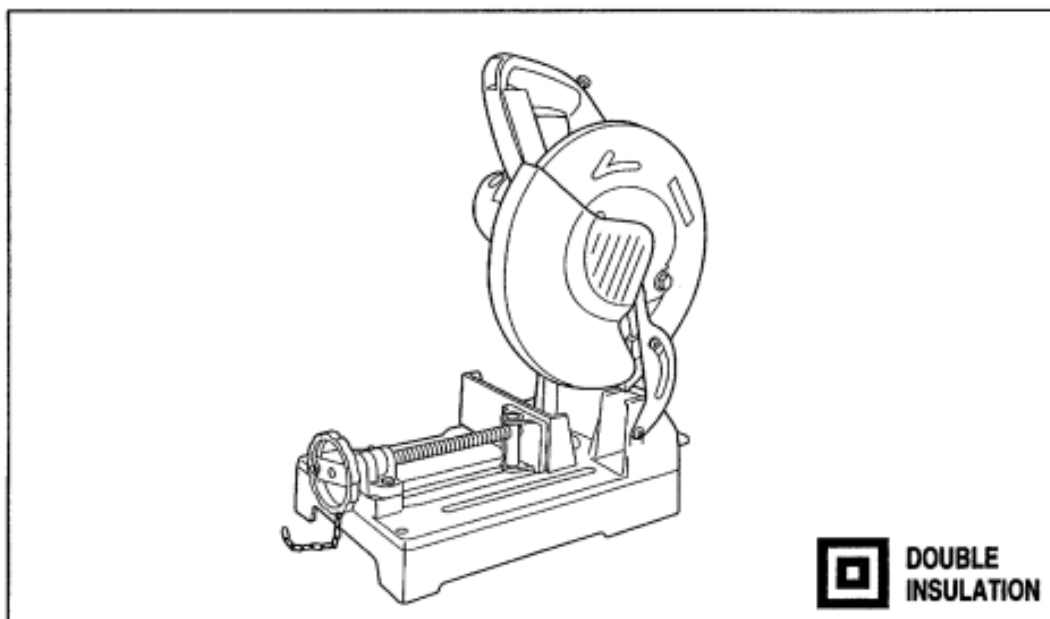




Metal Cutting Saw

305 mm (12") MODEL LC1230


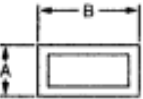
INSTRUCTION MANUAL



DOUBLE INSULATION

SPECIFICATIONS

Blade diameter	305 mm (12")
Hole (arbor) diameter	25.4 mm (1")
No load speed (RPM)	1,300
Dimensions (L x W x H)	516 mm x 306 mm 603 mm (20-1/3" x 12" x 23-5/8")
Net weight	19.0 kg (41.8 lbs)
Cutting capacity	

Workpiece shape	ØA	A x B
Cutting angle		
90°	115 mm (4-1/2")	75 mm x 150 mm (2-15/16" x 5-7/8") 100 mm x 100 mm (3-15/16" x 3-15/16")
45°	90 mm (3-1/2")	85 mm x 85 mm (3-5/16" x 3-5/16")

• 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.

For Your Own Safety Read Instruction Manual Before Operating Tool

Save it for future reference

GENERAL SAFETY PRECAUTIONS

(For All Tools)

1. **KNOW YOUR POWER TOOL.** Read the owner's manual carefully. Learn the tools applications and limitations, as well as the specific potential hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted. Don't use tool in presence of flammable liquids or gases.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
10. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **DISCONNECT TOOLS** before servicing; when changing accessories such as blades, bits, cutters, and the like.
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.

Ampere Rating		Volts	Total length of cord in feet			
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

17. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
18. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
19. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
20. **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.
21. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
22. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
23. When servicing use only identical replacement parts.
24. **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

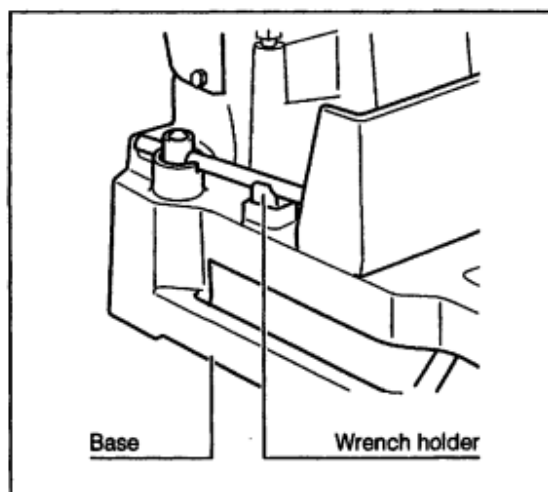
1. Wear eye protection.
2. Do not operate saw without guards in place.
3. Don't use the tool in the presence of flammable liquids or gases.
4. Check the blade carefully for cracks or damage before operation.
Replace cracked or damaged blade immediately.
5. Use only flanges specified for this tool.
6. Be careful not to damage the arbor, flanges (especially the installing surface) or bolt. Damage to these parts could result in blade breakage.
7. Make sure that the base is properly secured so it will not move during operation.
8. For your safety, remove the chips, small pieces, etc. from the table top before operation.
9. Make sure the shaft lock is released before the switch is turned on.
10. Be sure that the blade does not contact the base in the lowest position.
11. Hold the handle firmly. Be aware that the saw moves up or down slightly during start-up and stopping.
12. Do not perform any operation freehand. The workpiece must be secured firmly with the vise during all operations.
13. Keep hands out of path of saw blade. Avoid contact with any coasting blade. It can still cause severe injury.
14. Never reach around saw blade.
15. Make sure the blade is not contacting the workpiece before the switch is turned on.
16. 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.
17. Wait until the blade attains full speed before cutting.
18. Stop operation immediately if you notice anything abnormal.
19. Do not attempt to lock the trigger in the on position.
20. Shut off power and wait for saw blade to stop before servicing or adjusting tool.

21. Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Blades are extremely unforgiving.
22. Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.
23. Always use accessories recommended in this manual. Use of improper accessories such as abrasive wheels may cause an injury.
24. Don't abuse cord. Never yank cord to disconnect it from the receptacle. Keep cord away from heat, oil, water and sharp edges.
25. Never attempt to cut workpieces less than 14 Gauge (0.08") thick except pipe or workpieces which cannot be secured firmly with the vise. The piece cut off may be caught by the blade, causing dangerous scattering of chips and/or damage to the carbide-tips. Possible serious injury may result.
26. Unplug tool before changing blade or servicing.

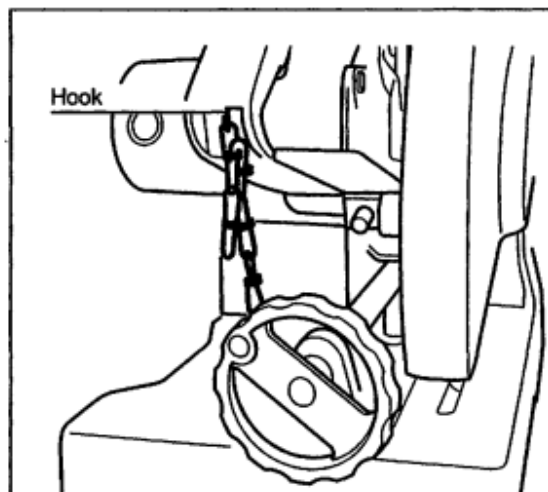
SAVE THESE INSTRUCTIONS.

Socket wrench

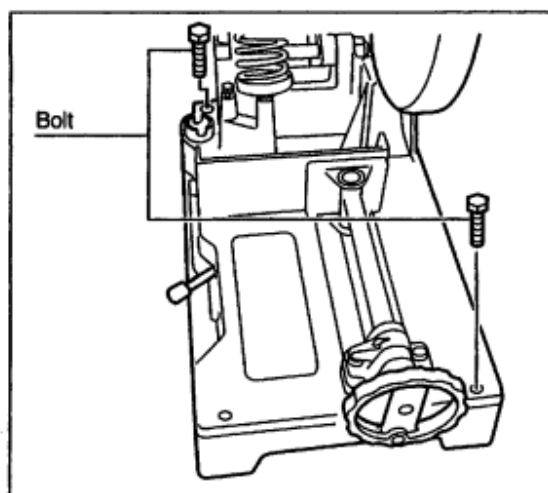
The socket wrench is stored on the left side of the tool base. When using the socket wrench, pull it out of the wrench holder. After using the socket wrench, return it to the wrench holder.

**Positioning the tool**

When the tool is shipped from the factory, the handle is locked in the lowered position. Release the handle from the lowered position by lowering it slightly and removing the chain from the hook on the handle.



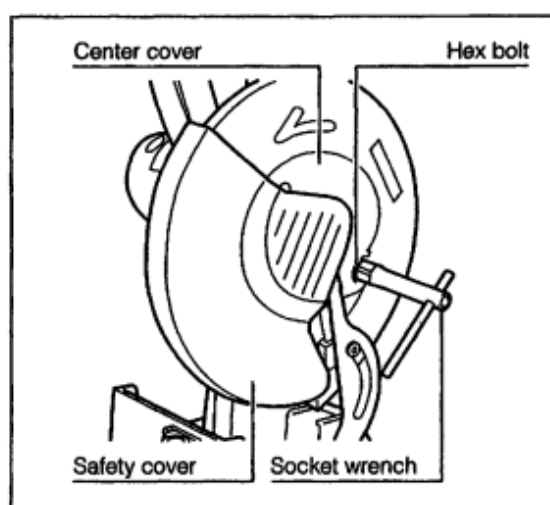
Bolt the tool with two bolts to a level and stable surface using the bolt holes provided in the tool base. This will help prevent tipping and possible injury.



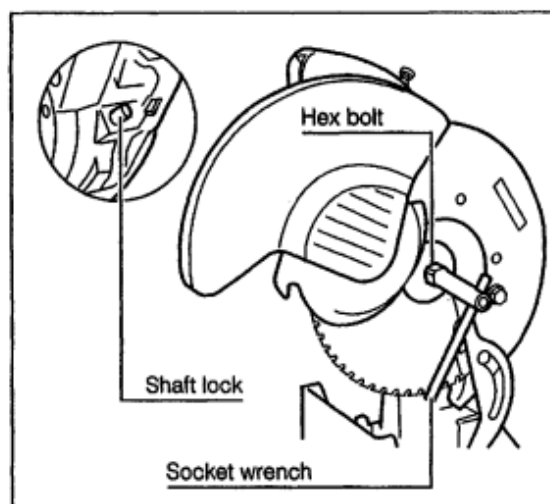
Removing or installing saw blade**CAUTION:**

- Always be sure that the tool is switched off and unplugged before removing or installing the blade.
- When mounting the blade, make sure that the direction of the arrow on the surface of the blade matches the direction of the arrow on the blade case.
- Use only the Makita socket wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause serious injury to operator or others in the general vicinity of the tool.
- Do not touch the blade immediately after operation; it may be extremely hot and could burn your skin.

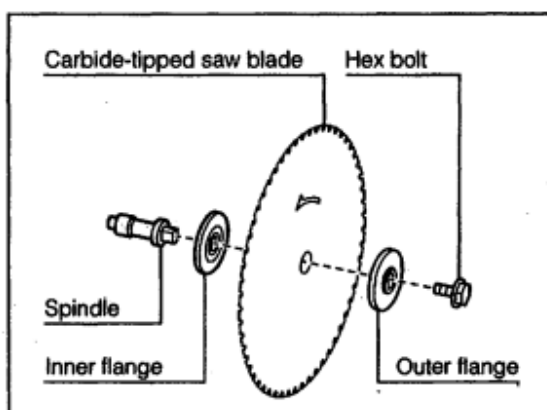
To remove the blade, loosen the hex bolt holding the center cover with the socket wrench. Raise the safety cover (safety guard) and center cover.



Press the shaft lock to lock the spindle and use the socket wrench to loosen the hex bolt by turning counterclockwise. Then remove the hex bolt, outer flange and blade.



To install the blade, mount the inner flange, saw blade, outer flange and hex bolt onto the spindle in that order. Tighten the hex bolt by turning clockwise while pressing the shaft lock. Return the safety cover and center cover to the original position. Then tighten the hex bolt clockwise to secure the center cover. Lower the handle to make sure that the safety cover moves properly.

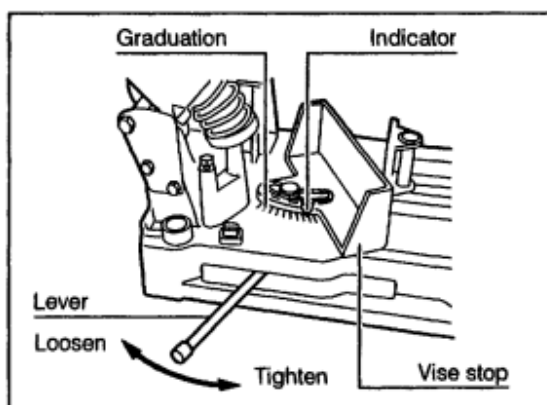


Setting for desired cutting angle

CAUTION:

Always tighten the hex bolt securely after changing the cutting angle.

To change the cutting angle, loosen the lever. Move the vise stop so that the indicator will point to the desired graduation. Then tighten the lever to secure the vise stop.

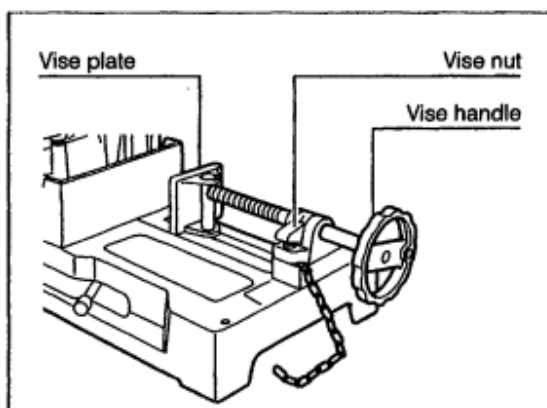


Securing workpieces

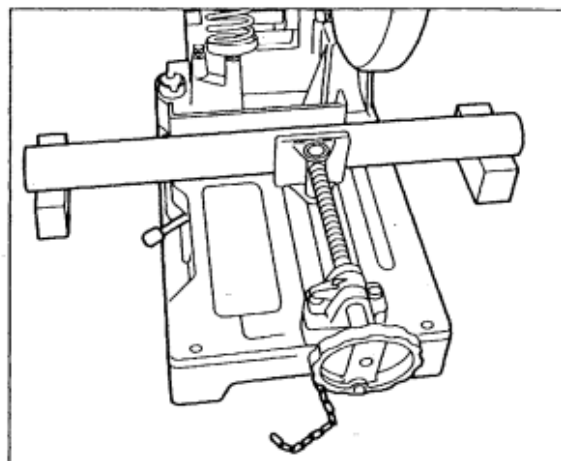
CAUTION:

Always set the vise nut to the right fully when securing the workpiece. Failure to do so may result in insufficient securing of the workpiece. This could cause the workpiece to be ejected or cause damage to the blade.

By turning the vise handle counterclockwise and then flipping the vise nut to the left, the vise is released from the shaft threads and can be moved rapidly in and out. To grip workpieces, push the vise handle until the vise plate contacts the workpiece. Flip the vise nut to the right and then turn the vise handle clockwise to securely retain the workpiece.



Long workpieces must be supported by blocks of non-flammable material on either side so that it will be level with the base top.



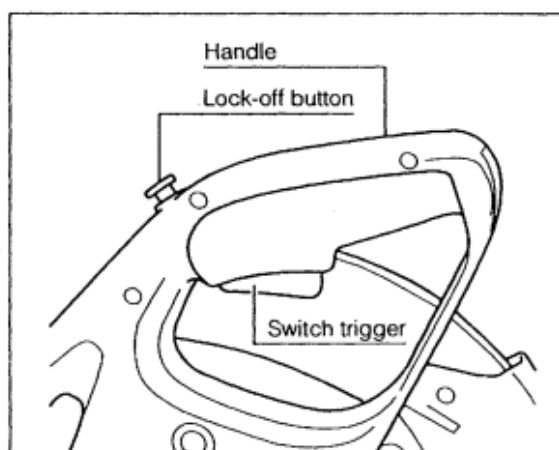
Switch action

CAUTION:

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

To prevent the trigger from being accidentally pulled, a lock-off button is provided. To start the tool, press in the lock-off button and pull the trigger. Release the trigger to stop.

When not using the tool, remove the lock-off button and store it in a secure place. This prevents unauthorized operation.



Cutting operation

CAUTION:

- Never attempt to cut workpieces less than 14 gauge (0.08") thick except pipe or workpieces which cannot be secured firmly with the vise. The piece cut off may be caught by the blade, causing dangerous scattering of chips and/or damage to the carbide-tips. Possible serious injury may result.
- Do not apply excessive pressure on the handle when cutting. Too much pressure may result in overload of the motor, decreased cutting efficiency and/or damage to the carbide-tips or blade itself.
- Too little pressure on the handle may result in more sparks and premature blade wear.
- Do not touch the blade, workpiece or cutting chips immediately after operation; they may be extremely hot and could burn your skin.
- If the blade stops during operation, makes an odd noise or begins to vibrate, switch off the tool immediately. Replace cracked or damaged blade with a new one.

Hold the handle firmly. Switch on the tool and wait until the blade attains full speed. Then lower the handle gently to bring the blade close to the workpiece. When the blade makes contact, ease into the cut gently at first, then gradually add pressure as the cutting position steadies. Your pressure on the handle should be adjusted to produce the minimum amount of sparks.

When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the handle to the fully elevated position. If the handle is raised while the blade is still rotating, the piece cut off may be caught by the blade, causing dangerous scattering of chips. When cutting only part of the way into a workpiece, raise the handle while the blade is rotating. Switching off during the cut may cause damage to the carbide-tips as they contact the workpiece.

Cutting angles

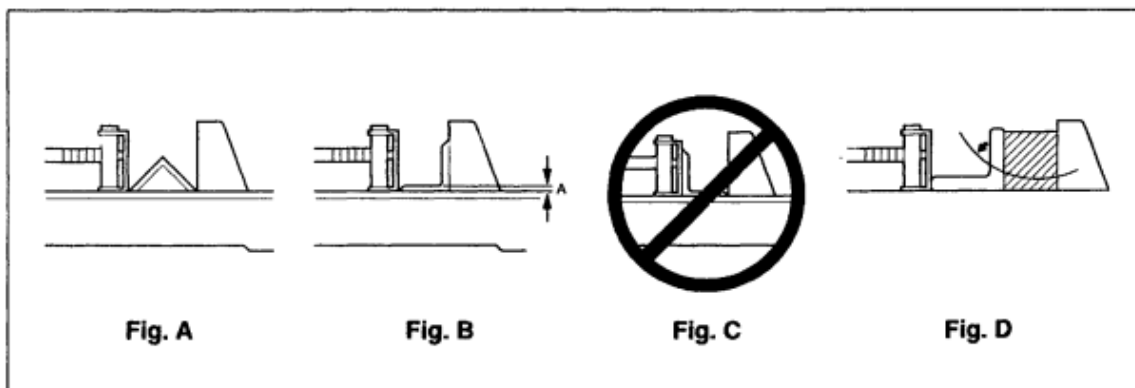
Secure the workpiece in the vise as shown in figure **A**, and proceed to cut it. The saw blade life will be shortened if the workpiece is cut as shown in figure **B**.

CAUTION:

Do NOT cut the workpiece as shown in figure **C** since this may cause it to be ejected from the vise, possibly resulting in injury.

The saw blade is subjected to greater wear when the area **A** in figure **B** is cut. Place a wooden block up against the workpiece as shown in figure **D** so that the saw blade will enter area **A** at an angle. This will help to extend the saw blade life.

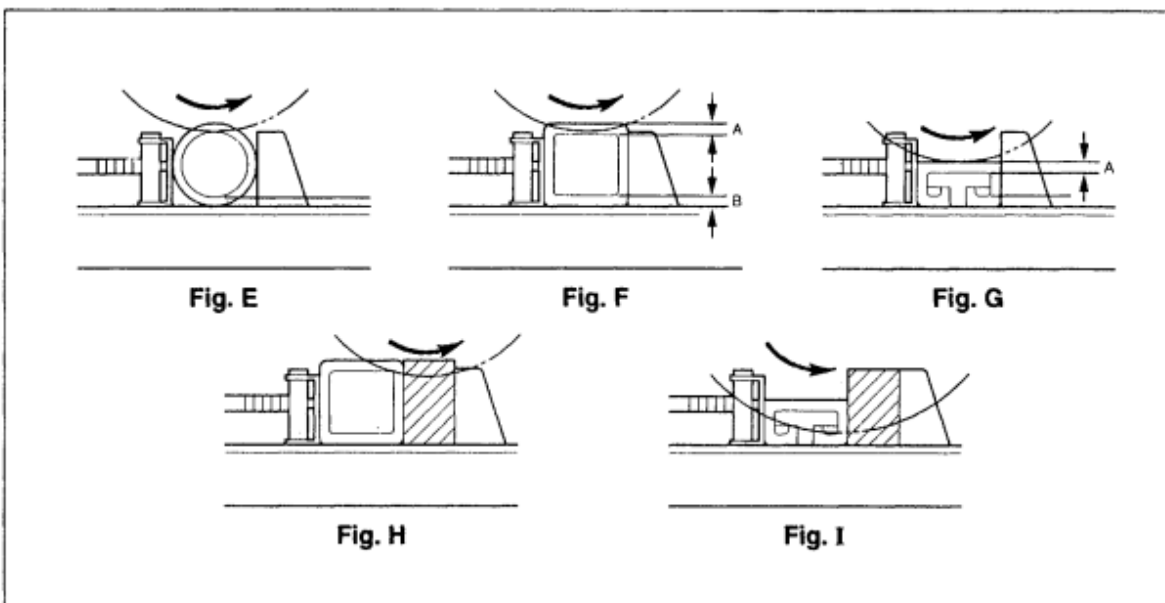
The allowable cutting dimensions are reduced when a wooden block is used. Use a wooden block whose dimensions are equivalent to the maximum allowable cutting dimensions minus the dimensions of the workpiece to be cut. This will further minimize the shortening of the saw blade life.



Cutting pipes, squares and channels

The saw blade is subjected to greater wear when the areas **A** and **B** in figure **F** and figure **G** are cut. Place a wooden block up against the workpiece as shown in figure **H** and figure **I** so that the saw blade will enter areas **A** and **B** at an angle. This will help to minimize the shortening of the saw blade life.

The allowable cutting dimensions are reduced when a wooden block is used. Use a wooden block whose dimensions are equivalent to the maximum allowable cutting dimensions minus the dimensions of the workpiece to be cut. This will further minimize the shortening of the saw blade life.

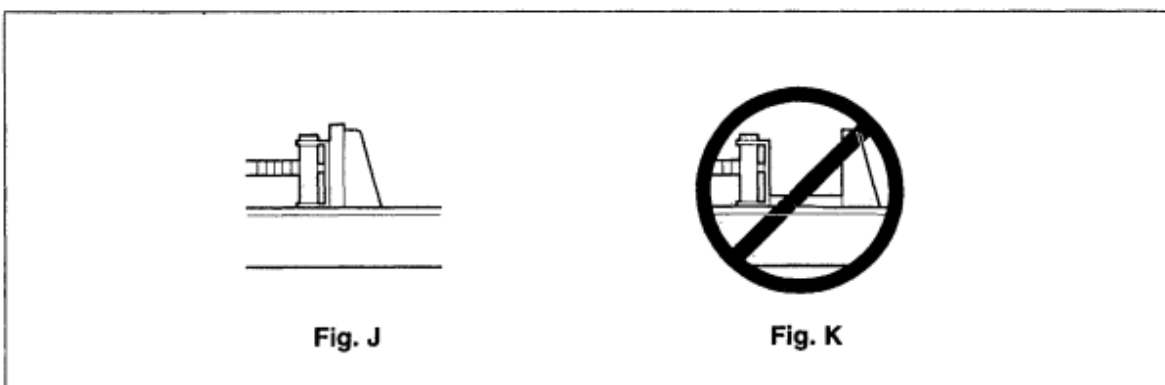


Cutting rectangles

Secure the workpiece in the vise as shown in figure **J**, and proceed to cut it.

CAUTION:

Do NOT cut the workpiece as shown in figure **K** since this may cause it to be ejected from the vise, possibly resulting in injury.

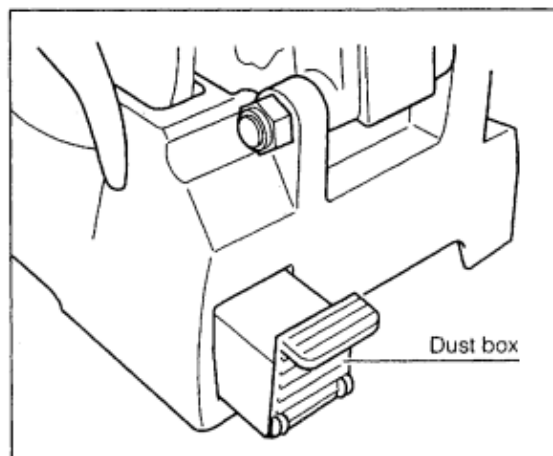


Dust collection

CAUTION:

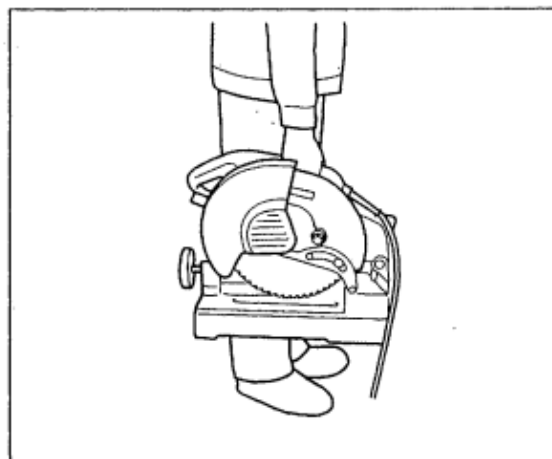
Do not touch any part of the dust box except its handle immediately after operation; it may be extremely hot and could burn your skin.

This tool is equipped with the dust box to collect dust and cut chips. When the dust box is full, hold the handle of the dust box and raise it slightly. Then pull the dust box out of the tool base. Empty the dust box of its contents.



Carrying the tool

Fold down the tool head to the position where you can attach the chain to the hook on the handle. Grasp the carrying grip when carrying the tool.



MAINTENANCE

CAUTION:

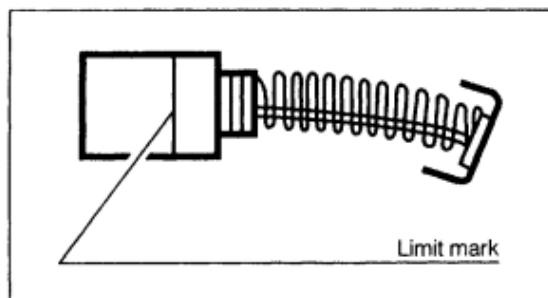
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

Replacing saw blade

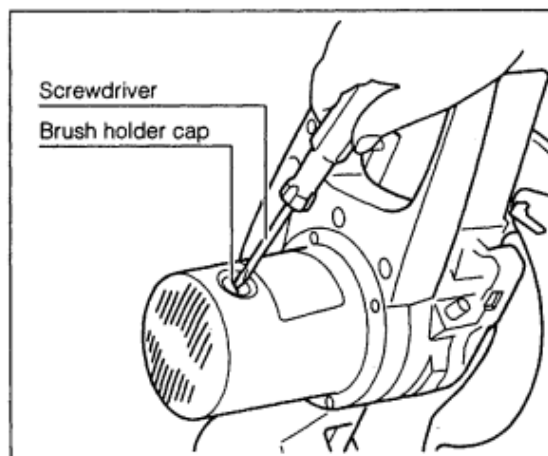
Continuing to use a dull and worn blade may cause motor overload and decreased cutting efficiency. Replace with a new blade as soon as it is no longer effective.

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, 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.

• Carbide-tipped saw blade



• 305 mm (12") Carbide-tipped saw blade & workpiece ranges

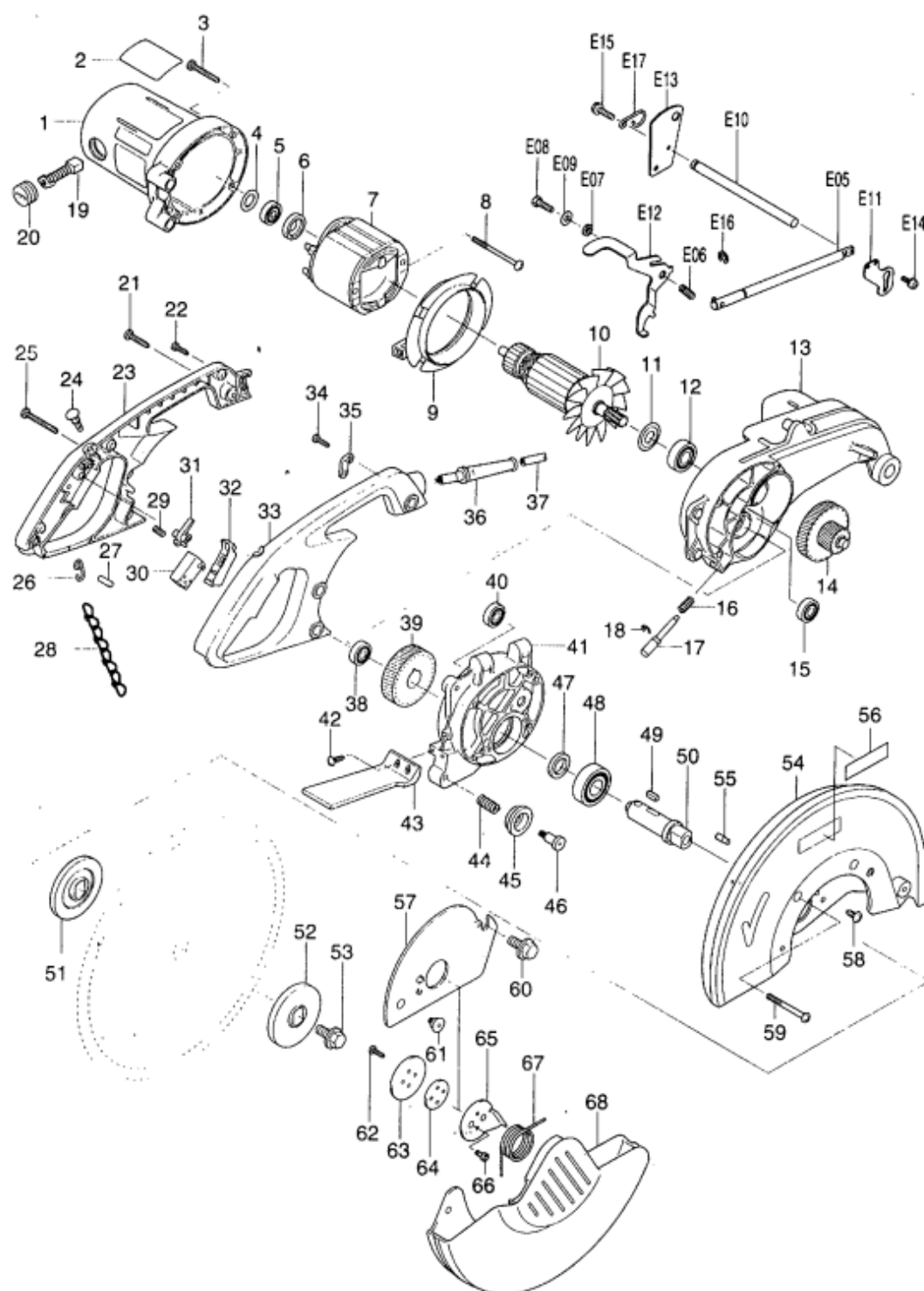
Part No.	Number of teeth	Application	Applicable workpiece & thickness range				
			Angles	Pipes	Channels	Stainless Pipes	Stainless Angles
A-90532	60	Mild Steel	5/32" or more	1/8" – 13/64"	5/32" or more	NA	NA
A-90722	60	Mild Steel (Lessened Noise Type)	5/32" or more	1/8" – 13/64"	5/32" or more	NA	NA
A-90875	78	Thin Mild Steel	1/8" – 15/64"	3/64" – 13/64"	5/64" or more	NA	NA
A-90847	78	Stainless Steel	1/8" – 15/64"	3/64" – 13/64"	5/32" or more	3/64" – 13/64"	1/8" – 5/32"

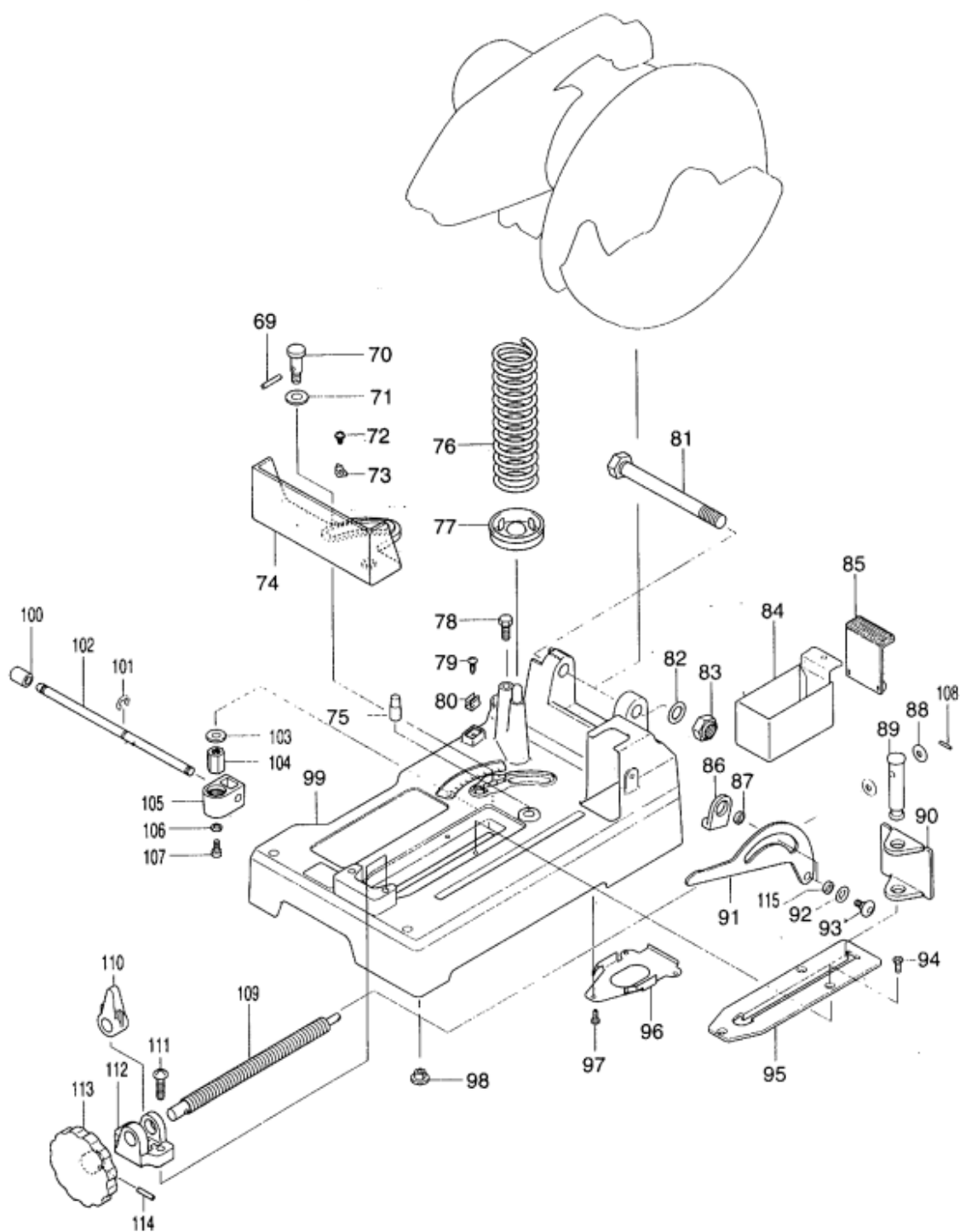
(NA ... Not applicable)

CAUTION:

- **Always use carbide-tipped saw blades appropriate for your job.**
Do not cut aluminum, wood, plastics, concrete, tiles, etc.
- **Carbide-tipped saw blades for metal cutting saw are not to be re-sharpened.**

305 mm (12") METAL CUTTING SAW Model LC1230





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

MODEL LC1230

June—7—'99 US

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MACHINE			MACHINE		
1	1	Motor Housing Complete	58	2	Tapping Screw Bind CT 5x12
2	1	Name Plate	59	4	Pan Head Screw M6x60
3	4	Tapping Screw Bind CT 5x40	60	1	Hex. Flange Head Bolt M10x20
4	1	Flat Washer 16	61	1	Flat Head Screw M6
5	1	Ball Bearing 629LLB	62	2	Tapping Screw CT 4x16
6	1	Insulation Washer	63	1	Center Support
7	1	Field	64	1	Center Washer
8	2	Tapping Screw 5x75	65	1	Center Plate
9	1	Baffle Plate	66	2	Hex. Socket Head Bolt M4x8
10	1	ARMATURE ASSEMBLY (With Item 5 & 6)	67	1	Torsion Spring 38
11	1	Washer 15-	68	1	Safety Cover
12	1	Ball Bearing 6202LLB	69	1	Pin 5
13	1	Gear Housing L	70	1	Collared Shaft 12
14	1	Gear Complete 16—44	71	1	Flat Washer 12
15	1	Ball Bearing 6000	72	1	Pan Head Screw M4x6
16	1	Compression Spring 9	73	1	Pointer
17	1	Shaft Lock	74	1	Vise
18	1	Stop Ring E—8	75	1	Pin 12
19	2	Carbon Brush	76	1	Compression Spring 45
20	2	Brush Holder Cap	77	1	Spring Holder
21	1	Tapping Screw Bind CT 5x30	78	1	Hex. Bolt M8x20
22	4	Tapping Screw 4x18	79	1	Tapping Screw CT 4x16
23	1	Handle Set (With Item 33)	80	1	Leaf Spring
24	1	Switch Button	81	1	Hex. Bolt M16
25	2	Tapping Screw Bind CT 5x50	82	1	Flat Washer 16
26	1	Hanger	83	1	Hex. Nut M16—24
27	1	Pin 5	84	1	Dust Box
28	1	Chain	85	1	Rubber Pad
29	1	Compression Spring 4	86	1	Cushion
30	1	Switch	87	1	Ring 8
31	1	Switch Lock	88	2	Flat Washer 8
32	1	Switch Lever Complete	89	1	Pin 16
33	1	Handle Set (With Item 23)	90	1	Vise Plate
34	2	Tapping Screw 4x18	91	1	Link Plate
35	1	Strain Relief	92	2	Flat Washer 8
36	1	Cord Guard	93	2	Pan Head Screw M6
37	1	Cord	94	3	Countersunk Head Screw M5x12
38	2	Ball Bearing 6000	95	1	Guide Plate
39	1	Helical Gear 38	96	1	Under Plate
40	1	Ball Bearing 6000LLB	97	3	Tapping Screw Bind CT 4x12
41	1	Gear Housing R	98	5	Cap 20
42	2	Tapping Screw CT 4x16	99	1	Base Complete
43	1	Protector	100	1	Cap 16
44	1	Compression Spring 11	101	2	Stop Ring E—8
45	1	Blade Guide	102	1	Lever Rod 10
46	1	Screw M6	103	1	Flat Washer 10
47	1	Ring 20	104	1	Hex. Nut M10—17
48	1	Ball Bearing 6204DDW	105	1	Lever Holder Complete
49	1	Key 5	106	1	Flat Washer 6
50	1	Spindle	107	1	Hex. Bolt M6x16
51	1	Inner Flange 70	108	1	Spring Pin 3—16
52	1	Outer Flange 70	109	1	Vise Screw
53	1	Hex. Flange Head Bolt M10x20	110	1	Vise Nut
54	1	Blade Case Set (With Item 56)	111	2	Pan Head Screw M8x30
55	2	Pin 6—7*	112	1	Screw Guide
56	1	Makita Mark	113	1	Handle 100
57	1	Center Cover	114	1	Spring Pin 5—24
			115	1	Ring 8

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

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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

Anjo, Aichi Japan
Made in China

884227C983