



Makita Drill

10 mm ($\frac{3}{8}$ ") MODEL 6510LVR

Variable Speed/Reversing

INSTRUCTION MANUAL

Drill & Standard Equipment



- ① Tool body
- ② Chuck key



SPECIFICATIONS

MODEL NO.	Drilling capacities		Continuous rating		No load speed	Overall length	Net weight	Power supply cord
	Steel	Wood	Input	Output				
6510LVR	10 mm ($\frac{3}{8}$ ")	18 mm ($\frac{3}{4}$ ")	330 W	120 W	0 – 1,050 R/min.	242 mm (9-1/2")	1.48 kg (3.3 lbs)	2.5 m (8.2 ft.)

* Manufacturer reserves the right to change specifications of parts and accessories without notice.

* Note: Specifications of parts and accessories may vary from country to country.

**BEFORE CONNECTING YOUR TOOL
TO A POWER SOURCE**

**Be sure you have read all
GENERAL POWER TOOL SAFETY RULES**

GENERAL SAFETY PRECAUTIONS

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
2. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep work area well lit. Do not expose power tool in rain.
3. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place—out of the reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
6. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool.
7. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
8. **USE SAFETY GLASSES.** Use safety glasses with most tools. Also 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 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 best and safest performance. Follow instructions for lubricating and changing accessories.
13. **DISCONNECT TOOLS.** When not in use; before servicing; when changing bits.
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 ACCIDENTAL 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 suitable for use outdoors and so marked.
17. **REPLACEMENT PARTS.** When servicing use only identical replacement parts.
18. **USE INSULATED SURFACES.** A double insulated tool may be made live if the bit comes in contact with live wiring in a wall, floor, ceiling, etc. Always check the work area for live wires and hold the tool by the insulated surfaces when making "blind" or plunge cuts.

PRELIMINARY INSTRUCTIONS

Your electric tool is precision built and manufactured to satisfy the highest standards. For maximum performance, long tool life, and your safety, follow these instructions carefully.

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.

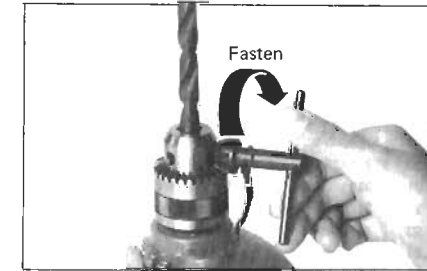
SPECIAL PRECAUTIONS WITH DRILL

Always make sure the motor is completely stopped before you throw the reverse switch. If you attempt to change direction of revolution while motor is running, harm will result to the tool.

HOW TO USE

1. Chuck

When installing a drill bit with the chuck key, notice that there are three holes in the chuck where the bit should be tightened, not just one. Tighten evenly at all three holes in order (as you would mount a tire).



2. Drilling in Wood

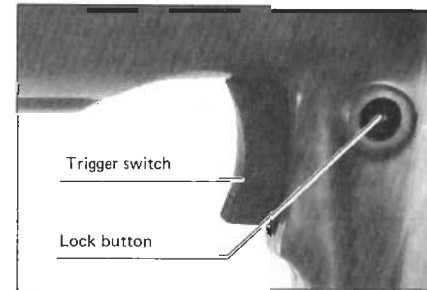
In drilling holes in wood using a wood drill with a guide screw, there is no need to bear down on the tool. The guide screw makes it bore naturally by itself.

3. Drilling in Metal

In general, use a cutting lubricant when drilling metal (But not with iron or brass).

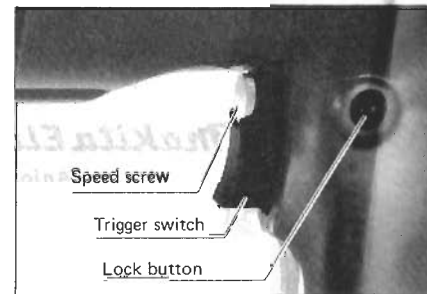
4. Speed Control Switch

- Motor speed is in terms of trigger-pressure. The tool stops when the trigger is released. Constant speeds are obtained by pushing in the lock button; the speed "locks" and the trigger may be released. Grasping it and releasing it again will stop the motor.



- Speed screw for continuous use at desired speed

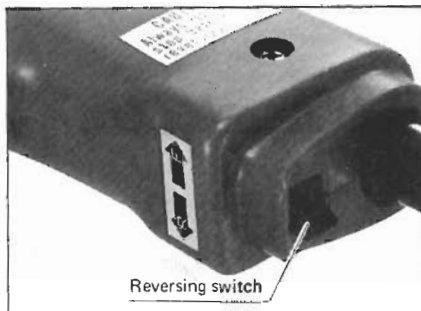
The speed screw on the trigger can be used together with the lock button to obtain convenient continuous operation at any speed setting from 0 — 1,050 RPM. This screw is first screwed in (for higher speeds) or out (for lower speeds) for the desired setting. Then the trigger is pulled as far as it will go, and in this position the lock button is pushed in. The trigger can now be released, and the tool will run continuously at the speed it is set for. To stop from this lock position, simply pull the trigger and then release it.



5. Reverse Switch

The reversing switch is found on the heel of the handle. To change the direction of revolution, switch to "F" for right, "R" for left. (Always check the direction before drilling).

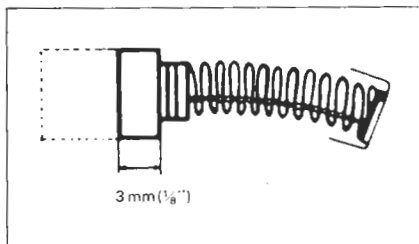
- * Never reverse directions (reversing switch) until the tool has come to a complete stop. Reversing before it stops may ruin the tool.



MAINTENANCE

● Carbon Brush

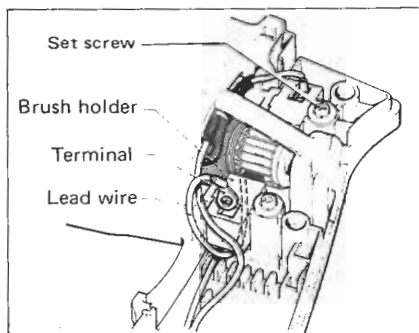
Replace carbon brushes when they wear down to about 3 mm (1/8") or sparking will occur. Both brushes should be changed at the same time.



● Carbon Brush Replacement

When replacing carbon brushes, follow the below-noted procedure carefully. Improper brush installation can be dangerous.

1. Unplug the tool from the power source.
2. Remove 3 screws on the handle.
3. Notice the way in which the lead wire is positioned and routed to the brush holder from the stator winding.
4. Then remove the brush holder set screw.
5. Remove the brush holder and take out the old carbon brush. When doing this, keep the terminal connected to the end of the lead wire inside the brush holder.
6. Insert the fresh carbon brush inside the brush holder and fit the brush holder back into its original position. Secure with the set screw.
7. Should the terminal connected to the end of the lead wire come out of the brush holder when you replace the brush, before reinserting it, route the lead wire of the brush holder that is near the switch **BENEATH THE BRUSH HOLDER** first. Then insert the terminal back inside the brush holder.



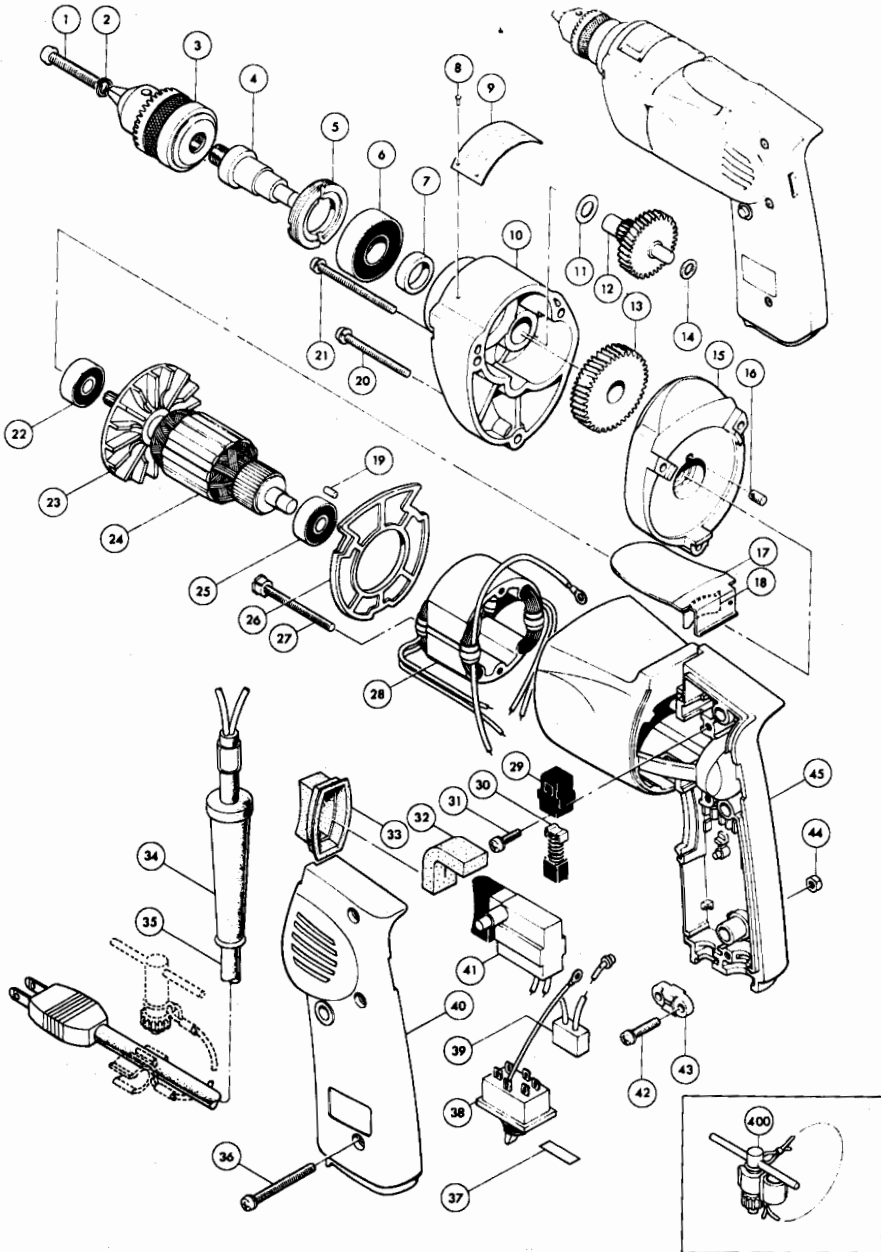
If you notice commutator wear from abrasion, contact your nearest Makita Service Center.

CAUTION: The use of any other accessories not specified in this manual might be hazardous.



Makita

10 mm ($\frac{3}{8}$ ") DRILL
Model 6510LVR



2
3
3'

ITEM NO.	PART NO.	NO. USED	DESCRIPTION	ITEM NO.	PART NO.	NO. USED	DESCRIPTION
MACHINE				MACHINE			
1	251277-2	1	P. H. Screw M5x18	32	685701-7	1	Sponge Sheet
2	942101-7	1	S. Washer 5	33		1	Dust Cover
3	763048-0	1	Drill Chuck S10		421144-7		100 V. - 130 V.
4	323685-8	1	Spindle		421145-5		200 V. - 250 V.
5	265804-3	1	Bearing Retainer 19-34	34		1	Cord Guard
6	211201-7	1	Ball Bearing 6002LLB		682504-0		For Black-White, Blue-Brown, UL & CSA Listed (SJT & SJ Type), SEV Listed and Draka Cord
7	257053-2	1	Ring 15				For SAA Listed, Spanish and Italian Cord
8	953106-2	2	Rivet 0-5		682502-4		CORD ASSEMBLY (Assembled Cord, Plug & Cord Guard)
9	815390-6	1	Name Plate	35		1	Black-White (With Plug)
10	156401-1	1	Gear Housing		541049-6		Black-White (With French Type Plug)
11	253215-0	1	F. Washer 8		542005-9		Black-White (Without Plug)
12	226032-1	1	Gear 13-40		545004-0		Blue-Brown (Without Plug)
13	221624-1	1	Helical Gear 53		548005-7		UL & CSA Listed (SJT Type With Plug)
14	253715-0	1	F. Washer 6		551006-6		UL & CSA Listed (SJ Type With Plug)
15	156402-9	1	Gear Housing Cover		551016-3		SEV Listed (With Plug)
16	263002-9	1	Rubber Pin 4		554005-7		SAA Listed (With Plug)
17	342422-1	1	Hook		546007-7		Draka (With Plug)
18	232034-7	1	Leaf Spring		553005-4		Italian Type (With Plug)
19	263002-9	1	Rubber Pin 4		552514-0		Spanish Type (With Plug)
20	911168-6	1	P. H. Screw M4x40 (With Washer)	36	911153-9	3	P. H. Screw M4x28 (With Washer)
21	911188-0	2	P. H. Screw M4x60 (With Washer)	37	816016-3	1	Indication Label
22	211033-2	1	Ball Bearing 608LB	38	651461-3	1	Reversing Switch
23	241802-9	1	Fan 58	39	645006-7	1	Noise Suppressor
24		1	ARMATURE ASSEMBLY (Assembled Items 22, 23, 24 & 25)	40	155300-4	1	Handle Cover
	511331 /		100 V.	41		1	Switch
	511332-5		115 V. - 130 V.		651313-8		Double Pole (With Lock Button 100 V. - 130 V.)
	511333-3		200 V.		651211-6		Single Pole (With Lock Button 200 V. - 250 V.)
	511334-1		220 V.	42	911131-9	2	P. H. Screw M4x18 (With Washer)
	511335-9		230 V. - 250 V.	43		1	Strain Relief
25	211028-5	1	Ball Bearing 627LB		687001-1		For Black-White, Blue-Brown, UL & CSA Listed (SJT Type), SAA Listed and Italian Cord
26	411219-0	1	Baffle Plate		687002-9		For UL & CSA Listed (SJ Type), SEV Listed, Draka and Spanish Cord
27	925173-7	2	H. Bolt M4x45 (With Washer)	44	931102-0	3	H. Nut M4
28		1	FIELD ASSEMBLY	45	156491-4	1	Motor Housing
	521231-3		100 V.	ACCESSORY			
	521232-1		115 V. - 130 V.	400	763203-4	1	Chuck Key S10
	521234 /		200 V.				
	521235-5		220 V.				
	521237-1		230 V. - 250 V.				
29	643862-4	2	Brush Holder				
30	643067-4	2	Carbon Brush CB-57				
31	911124-6	2	P. H. Screw M4x14 (With Washer)				



Makita Electric Works, Ltd.

Anjo, Aichi, Japan