

**RYOBI**

# OWNER'S OPERATING MANUAL

## HEAVY DUTY ROUTER / R-600, RE-600

DOUBLE INSULATED

スタンダード  
6981531 (D) (A)



### SAFETY INSTRUCTIONS

**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.

**SAFETY FIRST**—Read all instructions thoroughly and learn the applications, operating limitations and potential hazards of this tool before attempting to operate it.

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Do not use tool in presence of flammable liquids or gases.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place—out of reach of children.
6. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
7. **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.
8. **DRESS PROPERLY.** Do not 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.
9. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. **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.
12. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **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.
14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **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. Do not use tool if switch does not turn it on and off.
20. **ACCESSORIES.** The use of accessories or attachments other than recommended might present a hazard.
21. **REPLACEMENT PARTS.** When servicing use only identical replacement parts.
22. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

## ● SUPPLEMENTARY INSTRUCTIONS FOR SAFE HANDLING

1. Make sure a tool is only connected to the voltage marked on its name plate.
2. Never use a tool if its cover or any bolts are missing. If the cover or bolts have been removed, replace them prior to use. Maintain all parts in good working order.
3. Always secure tools when working at elevated positions.
4. Never touch the blade or other moving parts during use.
5. Never start a tool when its rotating component is in contact with the workpiece.
6. Never lay a tool down before its moving parts have come to a complete stop.

## ■ SAFETY PRECAUTIONS ROUTER

1. Install router bit securely as described in the operating instructions. An improperly installed bit may break or fly off during operation.
2. Do not touch bits with bare hands immediately after operation, since they will be extremely hot.
3. Hold securely when starting since inertia from the motor can cause the router to jump from the operator's grasp.
4. One-hand operation is dangerous. Hold securely with both hands.
5. Make sure workpiece is free from nails and other foreign objects, which can damage the router bit or other components.

## ■ SPECIFICATIONS

	R-600	RE-600
Collet	12mm (1/2")	12mm (1/2")
Input	2,050 watt	2,050 watt
No load speed	22,000 r.p.m.	10,000~22,000 r.p.m.
Plunge capacity	60mm (2-3/8")	60mm (2-3/8")
Overall dimensions	167×292×248 mm (6-9/16"×11-1/2"×9-3/4")	
Net weight	6.2kg (13.6 lbs.)	

## ■ STANDARD ACCESSORIES

Wrench, Bit adapter, Roller attachment, Template guide, Straight guide, Guide holder.

## ■ APPLICATIONS

(Use only for the purposes listed below)

1. Grooving, flushing, chamfering, jointing etc. wood.

## ■ MOUNTING THE ROUTER BIT

Always unplug the electric cord from the power supply outlet before mounting the router bit.

Turn the router upside down.

Put the bit into the chuck and push the spindle lock button located in the back side of the body to lock the spindle.

The button must be fully pushed in to lock it properly.

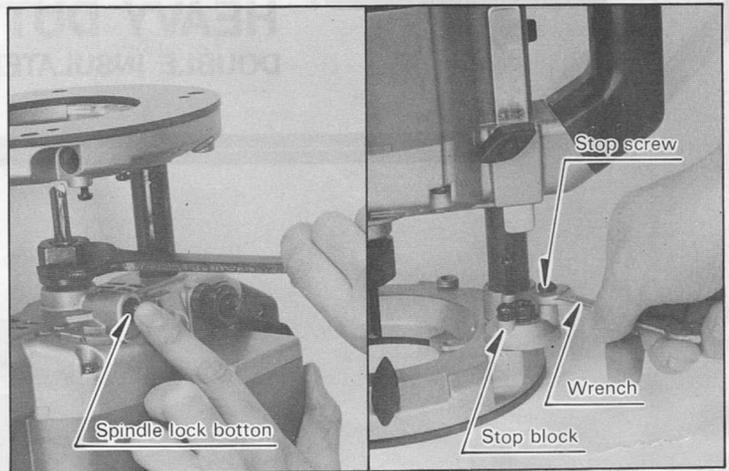
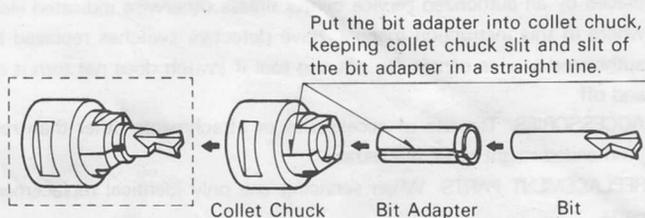
Then tighten the chuck by using a wrench.

When using a 6mm, 8mm, 1/4", 5/16" or 3/8" diameter bit, use the proper adapter for the bit.

First, align one slot on the bit adapter with one slot on the collet chuck, and put the bit adapter into the collet chuck.

Mount the desired bit.

See illustration. Be sure not to move them when mounting the bit.



## ■ ADJUSTING THE CUTTING DEPTH

Adjust the cutting depth by using the scale.

First, loosen the knob bolt for the scale and lower the scale until it contacts the stop screw.

Next, loosen the clamp lever and lower the router body holding the two grips by hand until the tip of the bit lightly contacts the surface of the lumber.

Here, tighten the clamp lever.

The cutting depth is zero at this time.

Lift the scale to the graduation on the scale of the desired cutting depth from the position where the scale indicator contacts to the stop screw, and tighten the knob bolt.

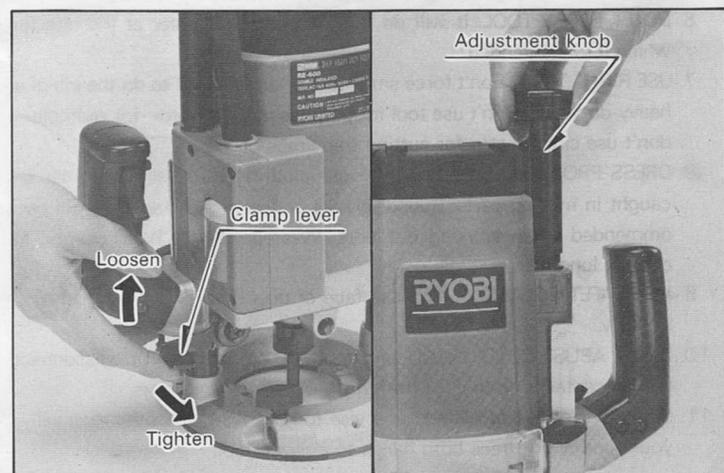
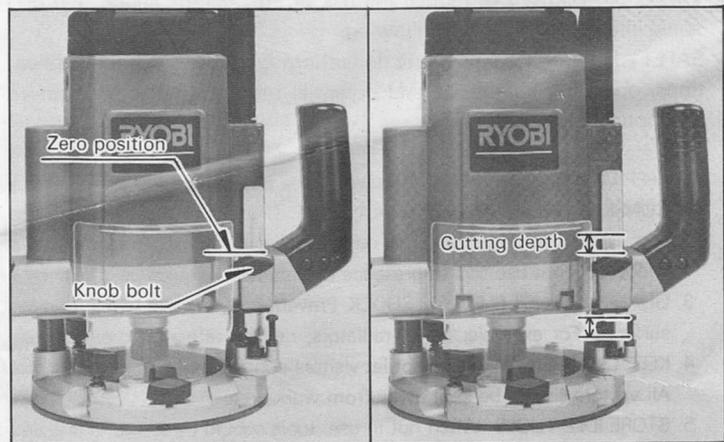
After that, loosen the clamp lever and push the router body until the scale contacts the stop screw.

The desired cutting depth will be set.

You may adjust the depth of cutting also by turning the adjustment knob instead of pressing down the body.

Besides, if the three screws of the stop block are adjusted to different heights, you may get three different depths of cutting.

When the stop block is not in use, keep the scale raised upwards.



## SWITCH

### (Toggle Type)

ON/OFF switch is located in the side of the body. Holding the two grips with both hands, when shifting the switch to non-operation side, the switch is ON.

### (Trigger Type)

The ON/OFF switch is located in the handle. Always be sure you are holding the router properly before depressing the trigger switch to turn on the unit. For continuous operation, press the lock button located on the left side of grip while switch is depressed. Depress switch to release the lock.

(RE-600)

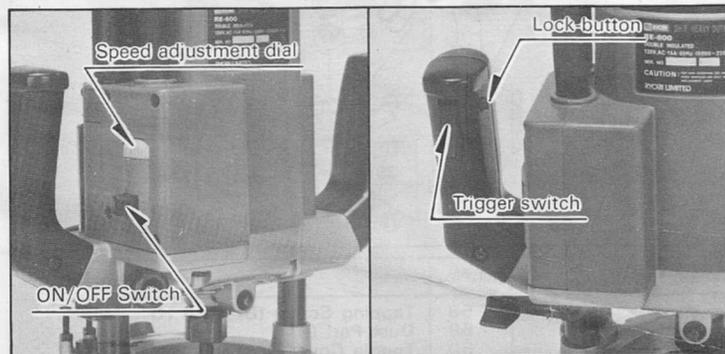
By using the electronic control circuit, adjustment dial the router speed can be freely adjusted within the range of 10,000 to 22,000 r.p.m. and high power can be obtained when r.p.m. is reduced.

The most suitable r.p.m. can be selected by using the six-step speed adjustment scale. (A~E).

This control circuit makes it possible to obtain the cutting speed most suitable for the bit diameter and the work and ensures the safe and highly efficient operation.

CUTTER DIA FROM TO		CONTROL SETTING			
		SOFT WOOD	HARD WOOD	PLASTICS	ALUMINUM
1/8" (3mm)	1/4" (6mm)	F	E	C	C
1/4" (6mm)	5/16" (8mm)	E	D	C	B
5/16" (8mm)	3/8" (10mm)	D	C	B	A
3/8" (10mm)	1/2" (12mm)	D	B	A	A
1/2" (12mm)	3/4" (20mm)	C	B	A	A
3/4" (20mm)	1" (25mm)	C	B	A	A
* 1" (25mm)	2" (50mm)	C	B	A	A

**CAUTION:** DO NOT use any 25mm (1") through 50mm (2") diameter router bit for anything except chamfering.



## OPERATION

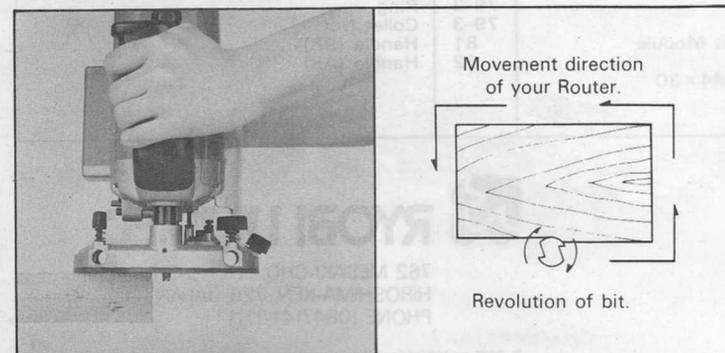
BEFORE TURNING ON THE ROUTER, BE SURE THE CLAMP LEVER IS TIGHTEN AND THE BIT IS NOT IN CONTACT WITH ANYTHING.

Make a few cuts on a piece of scrap lumber to set the desired depth or shape of cut before cutting the good lumber.

To assure straight cuts, be sure that the guide plate and base are flat on the lumber while firmly holding the handles with your hands and with the motor running at full speed.

To obtain good results or finish, move your router from left to right, that is against the rotation direction of the router bit.

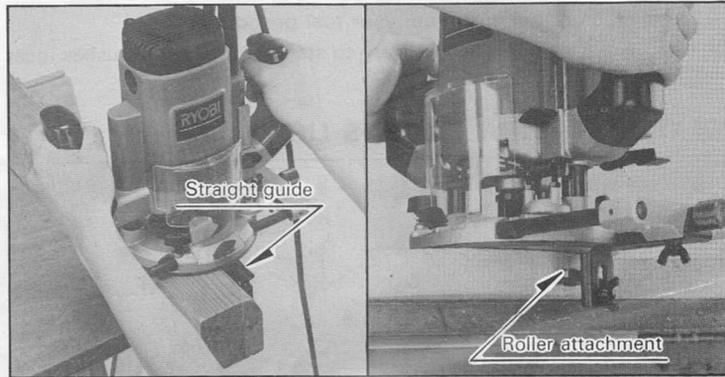
Be sure not to move the router too rapidly.



## HOW TO USE ACCESSORIES

### STRAIGHT GUIDE & CIRCULAR GUIDE

Available for the satisfactory chamfering and grooving of various shapes by straight guide & circular guide.

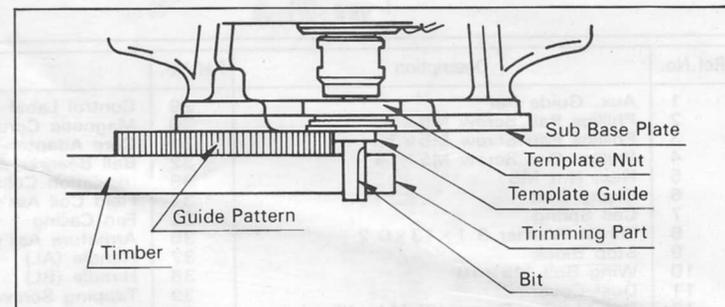
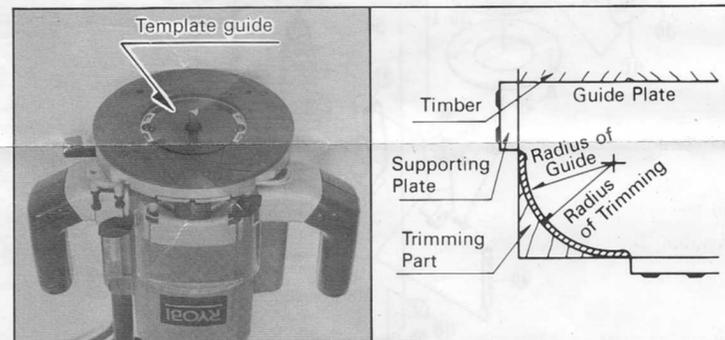


### ROLLER ATTACHMENT

Available for the satisfactory chamfering and grooving of various shapes by roller attachment. Roller attachment gives the edge chamfering and grooving of irregular table or board.

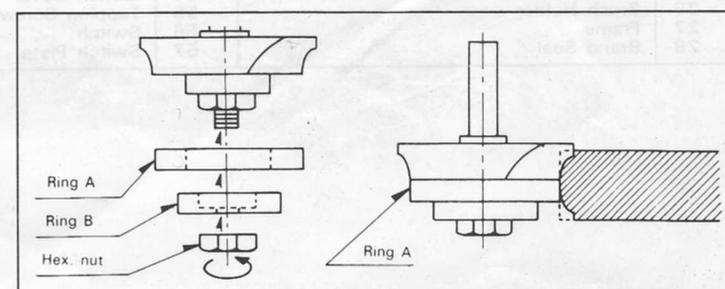
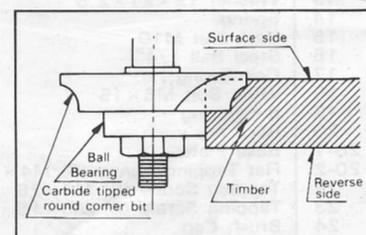
### TEMPLATE GUIDE

For mass production with one pattern, the template guide is most useful. Move your router along template guide, from left to right. Guide pattern is to be made to make "A" smaller than full size.



### ROUND CORNER BIT

First, round the window frame etc., using ball bearing as guide. Next, turn timber upside down. Work as above, using ring (A) as guide.

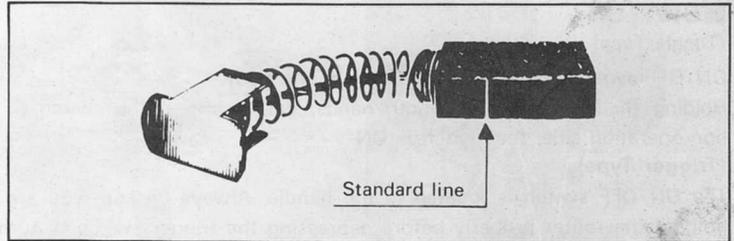


## MAINTENANCE

ALWAYS REMOVE THE ELECTRIC CORD FROM THE LINE BEFORE MOUNTING THE BIT, CHANGING BRUSHES, LUBRICATING OR WHEN WORKING ON THE UNIT.

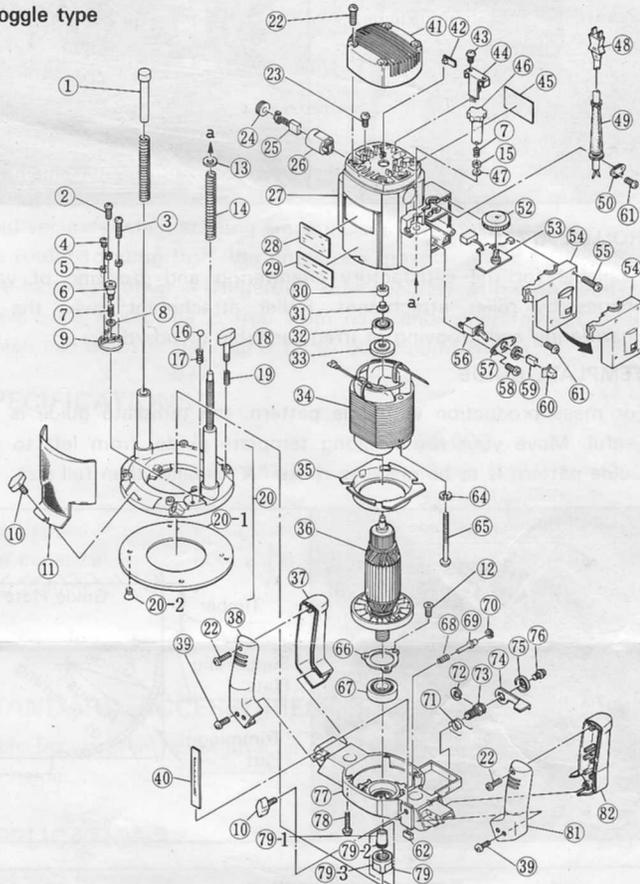
After use, check your tool to make sure if it is in top condition.

- Clean accumulated dust from your tool periodically.
- When either carbon brush is worn to standard line both brushes must be replaced.

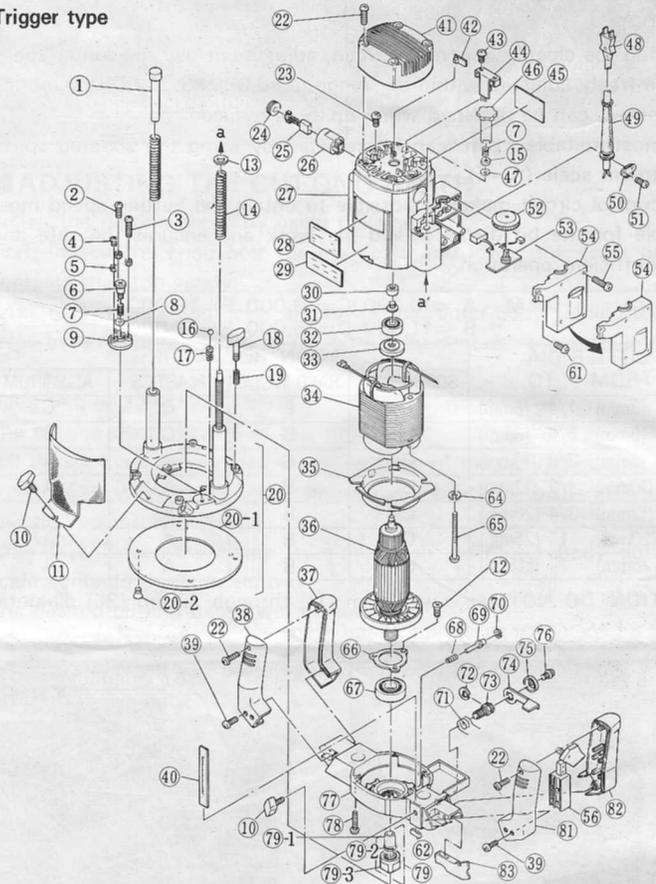


## EXPLODED VIEW & PARTS LIST

### Toggle type



### Trigger type



Ref. No.	Description	Ref. No.	Description	Ref. No.	Description
1	Aux. Guide Bar	29	Control Label	58	Tapping Screw (B) M4×10
2	Phillips Pan Screw M5×20	30	Magnetic Core	59	Dust Pad (B)
3	Phillips Pan Screw M5×30	31	Core Adapter	60	Toggle Cover
4	Phillips Pan Screw M5×14	32	Ball Bearing #6200LLB	61	Tapping Screw (B) M4×16
5	Hex. Nut M5	33	Insulation Collar	62	Sleeve
6	Clamp Bolt	34	Field Coil Ass'y.	64	Spring Washer M5
7	Coil Spring	35	Fan Casing	65	Tapping Screw (B) M5×85
8	Thrust Washer 9.1×13×0.2	36	Armature Ass'y.	66	Bearing Clamp
9	Stop Block	37	Handle (AL)	67	Ball Bearing #6004LLB
10	Wing Bolt M5×10	38	Handle (BL)	68	Coil Spring
11	Dust Cover	39	Tapping Screw (S) M5×20	69	Stopper Pin
12	Flat Tapping Screw (S) M4×12	40	Gauge	70	Retaining Ring
13	Washer 12×21×2.5	41	Motor Cover	71	Spring
14	Spring	42	Speed Control Circuit Module	72	Retaining Ring E-10
15	Hex. Nut M10	43	Tapping Screw (B) M3×8	73	Clamp Screw Ass'y.
16	Steel Ball 1/4"	44	Triac Ass'y.	74	Clamp Lever
17	Coil Spring	45	Name Plate	75	Washer
18	Wing Bolt M6×15	46	Adjustment Knob	76	Phillips Pan Screw M6×10
19	Set Spring	47	Washer	77	Bracket
20	Base Ass'y.	48	Cord Ass'y.	78	Tapping Screw (B) M5×35
20-1	Base Plate	49	Cord Holder 9.5mm	79	Chuck Ass'y. 1/2"
20-2	Flat Tapping Screw (S) M4×12	50	Cord Clamp 11.1mm	79-1	Collet Sleeve 1/2"
22	Tapping Screw (B) M4×25	51	Tapping Screw	79-2	Ring
23	Tapping Screw (B) M5×16	52	Dial	79-3	Collet Nut
24	Brush Cap	53	Speed Control Circuit Module	81	Handle (BR)
25	Carbon Brush (1 Pair)	54	Switch Cover	82	Handle (AR)
26	Brush Holder	55	Tapping Screw (B) M4×30		
27	Frame	56	Switch		
28	Brand Seal	57	Switch Plate		