

LOTUS[®]
Performance, Delivered.[™]



550W Palm Router 1/4"

LTPR550X

Made in China/Fabriqué en Chine
Lotus Tool Group (Philippines)
www.lotustoolworks.com



SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspections, maintenance and cleaning procedures. Write the product's Serial number in the back of the manual near the assembly diagram (or month and the year of purchase if product has no number). Keep this manual and receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which if not avoided could result in death or serious injury.

CAUTION

CAUTION used with the safety alert symbol indicates a hazardous situation which if not avoided could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION without the safety alert symbol, is used to address practices not related to personal injury.

General Power Tool Safety Warnings



WARNING Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. Work area safety

- a. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents
- b. **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes
- c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. Electrical Safety


- a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.** Unmodified plugs and matching outlets will reduce risk of electrical shock.
- b. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electrical shock if your body is grounded.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or enlarged cords increase the risk of electric shock.
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

3. Personal Safety

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b. **Use personal protective equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoe, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.
- h. **Only use safety equipment that has been approved by an appropriate standards agency.** Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.

4. Power tool used and care

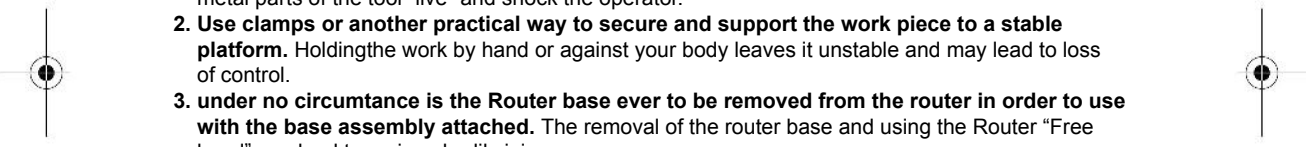
- a. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

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- d. **Store idle the power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool repaired before use.** Many accidents are caused by poorly maintained power tools
- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edge are likely to bind and are easier to control.
- g. **Use the power tool, accessories and tool bits etc. In accordance with these instruction, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5. Service

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Router and Trimmer Safety Warnings

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- 1. Hold power tool by insulated gripping surface when performing an operation where cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
 - 2. Use clamps or another practical way to secure and support the work piece to a stable platform.** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
 - 3. under no circumstance is the Router base ever to be removed from the router in order to use with the base assembly attached.** The removal of the router base and using the Router "Free hand" can lead to serious bodily injury.
 - 4. This Router as sharp, fast moving parts. Misuse can cause severe injury.**
 - Never operate the router if the clear plastic cover is not in place.
 - Never touch the bit, collet or any other moving parts while the router is in operation.
 - Never lay the router down until it has stopped rotating completely.
 - Hold the tool firmly when starting as start up rotation creates significant torque. This can cause you to drop the tool if you are not holding it firmly.
 - Secure the object being routed by clamping or holding in vise. Never hold by hand.
 - 5. Make sure the workpiece is free of nails or other debris.** these can interfere with the cutting process and possibly cause damage or injury.
 - 6. Be careful to use the power switch properly.** Be aware that the router will continue to operate while the power switch is on. You must manually turn the switch to off to stop the motor.
 - 7. Hold the tool firmly while cutting.** The action of the blade against the workpiece can cause it to "kick out" jumping rapidly away from the workpiece. If you experience excessive "kick out" check your blade to assure that it is the proper type for the material being cut and that it is sharp.
 - 8. Do not handle the router bit immediately after use.** It may be very hot, potentially causing burns or injury
 9. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact lotus authorized for replacement.
 10. Avoid unintentional starting. Prepare to begin work before turning on the tool.
 11. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
 12. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
 13. Do not depress the spindle lock when starting or during operation.

14. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool and unplug it from its electrical outlet before leaving.

15. Avoid overloading the tool.

- If the speed drops abnormally decrease the pressure on the bit immediately.
- Do not apply excessive pressure to the router while cutting.
- Always use sharpened bits. If the bit stops abruptly or the bit becomes blocked release the trigger switch immediately.
- Never start the router while the bit is in contact with any material. Allow the tool to reach its normal operating speed before applying it to the workpiece.

16 This product is not a toy. Keep it out of reach of children.

17. People with pacemakers should consult their physician before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition people with pacemakers should:

- Avoid operating alone
- Do not use with power switch locked on
- Properly maintain and inspect to avoid electrical shock
- Any power cord must be properly grounded. Ground fault circuit interrupter (GFCI) should also be implemented - It prevents sustained electrical shock.

18. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are

- Lead from lead-based paints
- crystalline silica from bricks and cement or other masonry products
- 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.


19. **WARNING:** Handling the cord on this product will expose you to lead a chemical known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling (California Health & Safety Code 25249.5 et seq.)

20. The warnings precaution and instruction discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury particularly to the hands, arms and shoulders. To reduce the risk of vibration related injury.

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand past hand injuries, nervous system disorders, diabetes or Raynaud's Disease. Should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness and white or blue fingers) seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers increasing increasing the risk of vibration related injury.

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3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice.
5. Include vibration-free periods each day of work
6. Let the tool do the work
7. To reduce vibration maintain the tool as explained in this manual. If any abnormal vibration occurs, Stop use immediately.

SAVE THESE INSTRUCTIONS

1. Using the large spanner wrench, loosen the collet nut but do not remove.
2. If there is already a bit in the collet cone, remove it.
3. Push the shank end of the new bit through the opening in the collet nut. There may be some resistance, so make sure that it goes in all the way
4. While holding the small spanner over the spindle tighten the collet nut with the large spanner.

Adjusting Cutting Depth

You can set the depth of cut using the scale marked on the side of the router

5. Install the router bit as previously described
6. Loosen the thumbscrew securing the clear plastic base to the motor housing. Slide the holder downward so the router bit is retracted within the base
7. Place the base on the flat surface and slide the router down in the base until the tip of the bit contacts the work surface. Tighten the thumbscrew knob.
8. The scale on the housing now shows the starting position. This starting position will vary depending on the bit used.
9. Add the desired depth of cut to the starting position. For example, If the starting position is 25mm and the desired depth of cut is 10mm, the correct adjustment on the scale is 35mm
10. Loosen the thumbscrew knob and raise the holder until the scale shows the correct reading in the example 35mm. Tighten the thumbscrew knob. You are now ready to cut
11. Make a test cut to assure that the router is adjusted properly before beginning to cut the final workpiece.

Work Place and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord must reach the work area with enough extra length to allow free movement while working.
3. Secure loose work pieces using a vise or clamps to prevent movement while working.
4. There must not be objects, such as utility lines nearby that will present a hazard while working.

General Operating Instructions

Before trimming run the tool for about 10 seconds to ensure that all moving parts are running smoothly and there are no loose parts, rattles or sparking that would indicate damage. Be sure the bit is firmly and properly installed bits may eject suddenly at high speed from the router, resulting in personal injury.

Using the straight Guide

The straight guide is used to make cuts parallel to the edge of a workpiece, or following a guide clamped into the workpiece



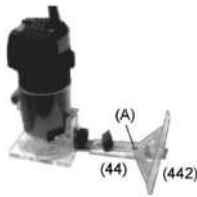
1. Assemble the straight guide (asm. 44) with the straight guide (442) facing inward and the flanges down.
2. Using the thumbscrew (39) attach the straight guide assembly to the Router, As shown..
3. After measuring the proper distance from the router bit to the guard tighten the straight guide using the thumb nut (445)
4. Adjust the cutting depth as previously described above.
5. Amke a test cut on a piece of scrap material to ensure that your measurement is correct.
6. Make you cut parallel to the edge of the workpiece with the straight guide following the edge.

Alternative guide method

You can make a straight cut which does not parallel the edge of the workpiece by calmping down a temporary guide.

1. Clamp a suitable straight board across the workpiece parallel to the desired location of the cut.
2. Assemble the straight guide (asm 44) with the straight guide (442) facing outward and up, as shown to the right.
3. After measuring the proper distance from the router bit to the guide, tighten the straight guide using the thumbscrew knob.
4. On a piece of scrap material make a test cut to ensure that your measurement is correct.
5. USING the straight guide to follow the straight board make your cut parallel to the guide.

Making circle cut



The center hole (A) in the straight guide (asm 44) shown above, can be used as pivot point to make circle cuts

1. Install the straight guide Asm as shown above
2. Drill a small pilot hole at the center point of the circle you wish to cut.
3. Set the distance from the center hole (A) in the straight guide(Asm 44) to the router bit equal to the radius of the circle you wish to cut. Lock the straight guide in place with the thumbscrew knobs.
4. Insert a pin (not included) through the center hole (A) in the Straight guide asm. and into the pilot hole.
5. With the pin located in the pilot hole plunge the router into the workpiece and rotate the router in a circle around the pilot hole.

Using the trim guide assembly



1. Assemble the edge trim guide assembly (42) as shown above, and attach to the base (32)
2. Since you will be trimming in relation to both the top surface, and the edge surface, you must adjust the router to cut accurately in two dimensions.
3. Adjust the base on the router so the cutting depth will be flush with the surface of the counter top or edge that you will be trimming to match.
4. Adjust the trim guide asm. so that the roller is below the router bit by approximately 3/4" to 1". Tighten it in position using thumbscrew (39).
5. Finally center the cutting bit over the edge to be trimmed by loosening thumbscrew (430) and sliding guide block (427) into position. Tighten thumbscrew (430). With thumbscrew (430) partially loosened fine adjustment can be made with adjusting set screw (424). When the adjustment are finalized, tighten thumbscrew (430).
6. Make a test cut on a piece of scrap material. Make any necessary adjustments before cutting the final workpiece.

Best Trim Routing Direction

The router bit rotates clockwise. you must adjust for this while cutting:

1. For most material it is best to move the router from left to right as you face the workpiece.
2. When cutting outside edges move the router counterclockwise. When cutting inside edges, move the router clockwise.
3. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean then store the tool indoors out of children's reach.

Maintenance and Servicing

Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING! To prevent serious injury from accidental operation:

Turn the power switch of the tool off, unplug the tool from its electrical outlet and allow the bit to cool completely before performing any inspection maintenance or cleaning procedures.

**TO PREVENT SERIOUS INJURY FROM THE TOOL FAILURE:
DO NOT USE DAMAGED EQUIPMENT. IF ABNORMAL NOISE OR VIBRATION OCCURS HAVE
THE PROBLEM CORRECTED BEFORE FURTHER USE.**

Cleaning, Maintenance and Lubrication

1. BEFORE EACH USE: inspect the general condition of the tool. Check for loose hardware, misalignment or binding of moving parts cracked or broken parts, damage electrical wiring and any other condition that may affect its safe operation.
2. AFTER USE, wipe external surfaces of the tool with clean cloth.
3. Periodically blow out the motor vent holes with compressed air to prevent the buildup of dust and particles.
4. Periodically wipe the collet, collet cones and cutting bits with a light oil to prevent rust.
5. Over time if the performance of the tool diminishes or its stop working completely. It may be necessary to replace the carbon brushes cap (5) This procedure must be completed by a qualifie technician.
6. WARNING!: if the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

TROUBLE SHOOTING

PROBLEM	Possible Causes	Likely Solutions
Tool will not start	<ol style="list-style-type: none"> 1. Cord not connected 2. No power at outlet 3. Tools thermal reset breaker tripped (If equiped) 4. Internal damage or wear carbon brushes or switch, for example) 	<ol style="list-style-type: none"> 1. Check the cord is plugged in. 2. Check power at outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads 3. Turn off tool and allow to cool. Press reset button on the tool. 4. Have technician service tool
Tool operates slowly	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use shorte/heavier gauge cord. See extension cords in grounding section.
Performance decreaseover time.	<ol style="list-style-type: none"> 1. Accessory dull or damaged 2. Carbon brushes worn or damaged. 	<ol style="list-style-type: none"> 1. Keep cutting accessories sharp. Replace as needed. 2. Have qualified technician replace brushes
Excessive noise or rattling	Internal damage or wear (carbon brushes or bearing for example.	Have technician service tool
	<ol style="list-style-type: none"> 1. Forcing tool to work too fast 2. Accessory misligned. 3. Accessory dull or damaged 4. Blocked motor housing vents. 5. Motor being strained by long or small diameter extension cord. 	<ol style="list-style-type: none"> 1. Allow tool to work at its own rate. 2. Check the correct accessory to fence and/or table alignment. 3. Keep cutting accessories sharp. Replace as needed. 4. Wear ANSI approved safety goggles and NIOSH-approves dust mask/respirator while blowing dust out of motor usingcompressedair 5. Eliminates use of extension cord. If an extension cord is needed use one with the pro per diameter for its lenght and load. See extension cords in grounding section.

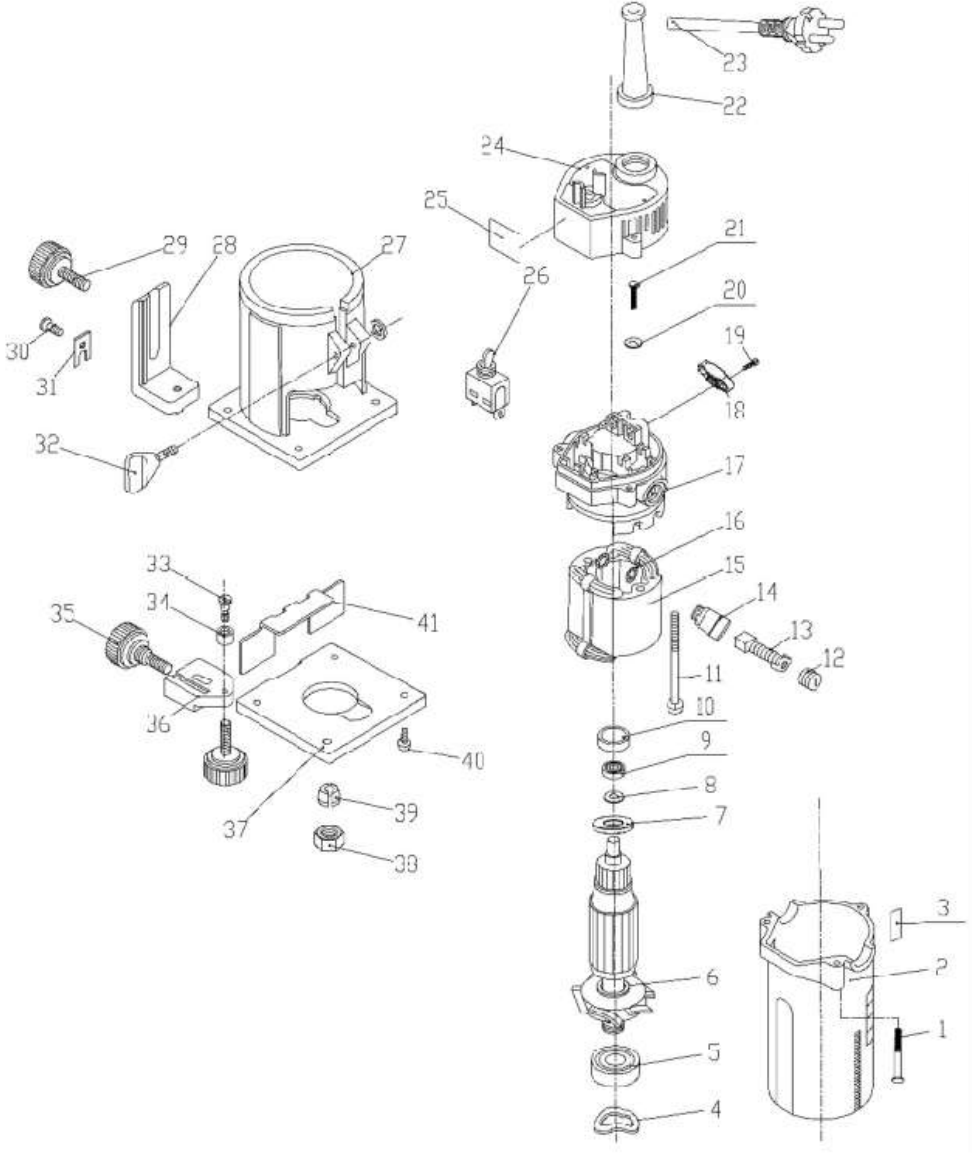
Follow all safety precaution whenever diagnostic or servicing the tool. Disconnect power supply before service.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS APPROVED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKE ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENT SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIAN AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERE TO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

SPECIFICATION

MODEL	LTPR550X
Rated Voltage	220-240V ~ 50/60Hz
Rated Power	550W
No Load Speed	35000rpm
Capacity	6mm



The explosive figure list

No	Name	QTY
1	tapping screw	4
2	housing	1
3	gauge ruler	1
4	wave washer	1
5	bearing 6002RS	1
6	armature	1
7	insulation washer	1
8	flat washer	1
9	bearing 607RS	2
10	bearing sleeve 607	1
11	tapping screw	2
12	brush cover	2
13	carbon brush	2
14	brush holder	2
15	stator	1
16	tension spring	2
17	center cover	1
18	strain relief	1
19	tapping screw	1
20	washer	1
21	tapping screw	1
22	cord guard	1
23	cable	1
24	rear cover	1
25	label	1
26	switch	1
27	transparent cover	1
28	guide block	1
29	pin button	2
30	screw	1
31	snap-gauge	1
32	knob	1
33	screw	1
34	guide pulley	1
35	sliding knob	1
36	sliding block	1
37	base plate	1
38	hex nut	1
39	collet	1
40	screw	4
41	dust-proof board	1

