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Cordless Planer

LP820

Tools for Every Home



TEH

TECHNICAL SPECIFICATION

Model	LP820
Rated Voltage	DC 20V
Motor	Brush
No-Load Speed	15000r/min
Planing Width	82mm
Planing Depth	0-2mm
Rabbeting Depth	0-10mm
Compatible Battery	LB4.0Ah

COMPONENTS AND ACCESSORIES



SAFETY INSTRUCTIONS

WARNING

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or other serious injury. The term “power tools” in all of the warnings listed below refers to mains-operated (corded) power tool or battery operated (cordless) power tool.

WORK AREA

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, 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.

ELECTRICAL SAFETY

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or 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 tools. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increases 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 residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce the risk of 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 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 jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) Store idle 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.
- h) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

l) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

n) Use the power tool, accessories and tool bits etc. in accordance with these instructions, 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.

USE AND HANDLING OF THE CORDLESS ELECTRICAL POWER TOOL

a) Charge a rechargeable battery unit using only the charger recommended by the manufacturer. Chargers are often designed for a particular type of rechargeable battery unit. There is the danger of fire if other types of rechargeable battery units are used.

b) Only the rechargeable battery units supplied are to be used with an electrical power tool. The use of other rechargeable battery units may lead to the danger of injury or fire.

c) When they are not being used, store rechargeable

battery units away from paperclips, coins, keys, nails, screws or other small metal objects that could cause the contacts to be bridged. Short-circuiting the contacts of a rechargeable battery unit may result in heat damage or fire.

d) Fluids may leak out of rechargeable battery units if they are misused. If this happens, avoid contact with the fluid. If contact occurs, flush the affected area with water. Seek additional medical help if any of the fluid gets into your eyes. Escaping battery fluid may cause skin irritation or burns.

SERVICE

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.

SPECIAL SAFETY DIRECTIONS FOR BATTERY-OPERATED TOOLS

a) Ensure that the device is switched off before inserting the battery. Inserting a battery into a power tool that is switched on may result in accidents.

b) Recharge the batteries indoors only because the battery charger is designed for indoor use only.

c) To reduce the electric shock hazard, unplug the battery charger from the mains before cleaning the charger.

d) Do not subject the battery to strong sunlight over long periods and do not leave it on a heater. Heat damages the battery and there is a risk of explosion.

e) Allow a hot battery to cool before charging.

f) Do not open up the battery and avoid mechanical damage to the battery. Risk of short circuit and fumes may be emitted that irritate the respiratory tract. Ensure fresh air and seek medical assistance in the event of discomfort.

g) Do not use non-rechargeable batteries!

CORRECT HANDLING OF THE BATTERY CHARGER

a) This device can be used by children aged 8 and over and by people with reduced physical, sensory or mental capacities or with a lack of experience or knowledge, if they are supervised or have been instructed regarding safe use of the device and understand the resulting risks. Children are not permitted to play with the device. Cleaning and user maintenance are not to be undertaken by children without supervision.

b) Children should be supervised to ensure that they do not play with the appliance.

c) To charge the battery, use only the charger supplied. Risk of fire and explosion. This ensures that the safety of the device is maintained.

d) Before each use, check the charger, cable and plug and have them repaired by qualified professionals and only with original parts. Do not use a defective charger and do not open it up yourself. This ensures that the safety of the device is maintained.

- e) Connect the charger only to a socket with an earth. Ensure that the mains voltage matches the specifications on the charger rating plate. Risk of electric shock.
 - f) Disconnect the charger from the mains before closing or opening connection to the battery / power tool / device.
 - g) Keep the charger clean and away from wet and rain. Do not use the charger outdoors. Dirt and the entry of water increase the risk of electric shock.
 - h) Operate the charger only with the appropriate original batteries. Charging other batteries may result in injuries and risk of fire.
 - i) Avoid mechanical damage to the charger. This can result in internal short circuits.
 - j) Do not operate the charger on a combustible surface (e.g. paper, textiles). Risk of fire due to heating during charging.
 - k) If the power cable for this equipment is damaged, it must be replaced by the manufacturer, a customer service agent of the same or a similarly qualified person in order to prevent hazards.
 - l) The battery of the appliance is not fully charged at the time of delivery. It therefore needs to be fully recharged before you use it for the first time. For the first recharge cycle we recommend that you charge the battery for about 1 hour. Slot the battery into the base and plug the battery charger into a mains outlet.
 - m) When the battery is fully charged, unplug the charger from the mains and from the appliance. Charging time is approx. 1 hour.
 - n) Do not charge the battery continuously since this may damage the battery cells.
- Note: Repeatedly charging small capacities may damage the battery cells. Recharge the battery only if the appliance is becoming slow.
- o) Do not use the charger to charge non-rechargeable batteries.

RESIDUAL RISKS

Even if properly operating and handling this electric tool, some residual risks will remain. Due to its construction and build, this electric tool may present the following hazards:

- a) Cuts
- b) Ear damage if working without ear protection.
- c) Damage to your health caused by swinging your hands and arms when operating the appliance for longer periods of time or if the unit is not held or maintained properly.

WARNING ⚠

During operation, this electric tool generates an electromagnetic field which, under certain circumstances, may impair the functionality of active or passive medical implants. To reduce the risk of serious or lethal injuries, we recommend that persons with medical implants consult their doctor and the manufacturer of their medical implant before operating the machine.

CORDLESS PLANER SAFETY WARNINGS

1. Wait for the cutter to stop before setting the tool down. An exposed rotating cutter may engage the surface leading to possible loss of control and serious injury.
2. Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.
3. Rags, cloth, cord, string and the like should never be left around the work area.
4. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
5. Use only sharp blades. Handle the blades very carefully.
6. Be sure the blade installation bolts are securely tightened before operation.
7. Hold the tool firmly with both hands.
8. Keep hands away from rotating parts.
9. 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.

10. Make sure the blade is not contacting the workpiece before the switch is turned on.
11. Wait until the blade attains full speed before cutting.
12. Always switch off and wait for the blades to come to a complete stop before any adjusting.
13. Never stick your finger into the chip chute. Chute may jam when cutting damp wood. Clean out chips with a stick.
14. Do not leave the tool running. Operate the tool only when hand-held.
15. Always change both blades or covers on the drum, otherwise the resulting imbalance will cause vibration and shorten tool life.
16. Use only blades specified in this manual.
17. Always use the correct dust mask/respirator for the material and application you are working with.

WARNING ⚠

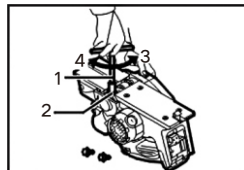
Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

INSTALLATION INSTRUCTION**WARNING** ⚠

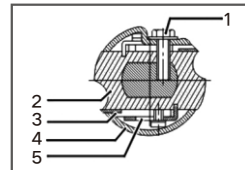
Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

REMOVING OR INSTALLING PLANER BLADES**WARNING** ⚠

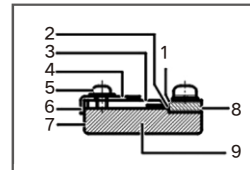
1. **Tighten the blade installation bolts carefully when attaching the blades to the tool. A loose installation bolt can be dangerous. Always check to see they are tightened securely.**
2. **Handle the blades very carefully. Use gloves or rags to protect your fingers or hands when removing or installing the blades.**
3. **Use only the wrench provided to remove or install the blades. Failure to do so may result in over tightening or insufficient tightening of the installation bolts. This could cause an injury.**

FOR TOOL WITH CONVENTIONAL PLANER BLADES

1. Socket wrench
2. Bolt
3. Loosen
4. Tighten



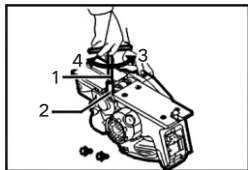
1. Bolts
2. Drum
3. Planer blade
4. Drum cover
5. Adjusting plate



1. Inside edge of gauge plate
2. Blade edge
3. Planer blade
4. Adjusting plate
5. Screws
6. Heel
7. Back side of gauge base
8. Gauge plate
9. Gauge base

1. To remove the blades on the drum, unscrew the installation bolts with the socket wrench. The drum cover comes off together with the blades.
2. To install the blades, first clean out all chips or foreign matter adhering to the drum or blades. Use blades of the same dimensions and weight, or drum oscillation/vibration will result, causing poor planing action and, eventually, tool breakdown.
3. Place the blade on the gauge base so that the blade edge is perfectly flush with the inside edge of the gauge plate. Place the adjusting plate on the blade, then simply press in the heel of the adjusting plate flush with the back side of the gauge base and tighten two screws on the adjusting plate. Now slip the heel of the adjusting plate into the drum groove, then fit the drum cover on it.
4. Tighten all the installation bolts evenly and alternately with the socket wrench.
5. Repeat the above procedures for the other blade.

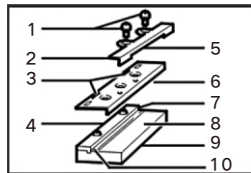
FOR TOOL WITH MINI PLANER BLADES



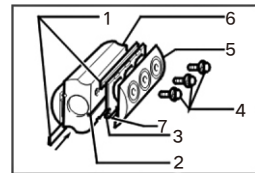
1. Socket wrench
2. Bolt
3. Loosen
4. Tighten

1. Remove the existing blade, if the tool has been in use, carefully clean the drum surfaces and the drum cover. To remove the blades on the drum, unscrew the three installation bolts with the socket wrench. The drum cover comes off together with the blades.

1. Pan head screw
2. Adjusting plate
3. Planer blade locating lugs
4. Gauge base
5. Heel of adjusting plate
6. Set plate
7. Inside flank of gauge plate
8. Gauge base
9. Back side of gauge base
10. Mini planer blade



2. To install the blades, loosely attach the adjusting plate to the set plate with the pan head screws and set the mini planer blade on the gauge base so that the cutting edge of the blade is perfectly flush with the inside flank of the gauge plate.
3. Set the adjusting plate/set plate on the gauge base so that the planer blade locating lugs on the set plate rest in the mini planer blade groove, then press in the heel of the adjusting plate flush with the back side of the gauge base and tighten the pan head screws.
4. It is important that the blade sits flush with the inside flank of the gauge plate, the planer blade locating lugs sit in the blade groove and the heel of the adjusting plate is flush with the back side of the gauge base. Check this alignment carefully to ensure uniform cutting.
5. Slip the heel of the adjusting plate into the groove of the drum.



1. Mini planer blade
2. Groove
3. Set plate
4. Hex. flange head bolts
5. Drum cover
6. Drum
7. Adjusting plate

6. Set the drum cover over the adjusting plate/set plate and screw in the three hex flange head bolts so that a gap exists between the drum and the set plate to slide the mini planer blade into position. The blade will be positioned by the planer blade locating lugs on the set plate.
7. The blade's lengthwise adjustment will need to be manually positioned so that the blade ends are clear and equidistant from the housing on one side and the metal bracket on the other.
8. Tighten the three hex flange head bolts (with the socket wrench provided) and rotate the drum to check clearances between the blade ends and the tool body.
9. Check the three hex flange head bolts for final tightness.
10. Repeat procedures 1 - 9 for the other blade.

FOR THE CORRECT PLANER BLADE SETTING

Your planing surface will end up rough and uneven, unless the blade is set properly and securely. The blade must be mounted so that the cutting edge is absolutely level, that is, parallel to the surface of the rear base. Refer to some examples below for proper and improper settings.

A Front base (Movable shoe)
B Rear base (Stationary shoe)

Correct setting  Although this side view cannot show it, the edges of the blades run perfectly parallel to the rear base surface.

Nicks in surface  Cause: One or both blades fails to have edge parallel to rear base line.

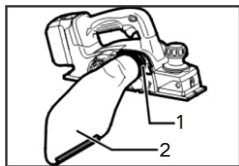
Gouging at star  Cause: One or both blade edges fails to protrude enough in relation to rear base line.

Gouging at end  Cause: One or both blade edges protrudes too far in relation to rear base line.

DUST BAG (ACCESSORY)

For tool without nozzle

Remove the chip cover and install the nozzle (optional accessory). Attach the dust bag onto the nozzle. The nozzle is tapered. When attaching the dust bag, push it onto the nozzle firmly as far as it will go to prevent it from coming off during operation.

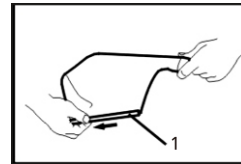


1. Nozzle 2. Dust bag

When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag of its contents, tapping it lightly so as to remove particles adhering to the insides which might hamper further collection.

NOTE

If you connect a vacuum cleaner to this tool, more efficient and cleaner operations can be performed.

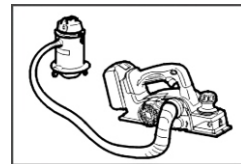


1. Fastener

CONNECTING A VACUUM CLEANER

For tool without nozzle: When you wish to perform clean planing operation, connect a vacuum cleaner to your tool. Before connecting the vacuum cleaner, remove the chip cover from the tool. Then connect a hose of the vacuum cleaner to the nozzle (optional accessory) as shown in the figures.

For tool with nozzle: When you wish to perform clean planing operation, connect a vacuum cleaner to your tool. Then connect a hose of the vacuum cleaner to the nozzle as shown in the figures.

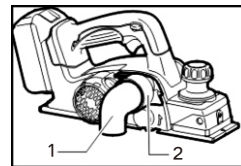


ELBOW (OPTIONAL ACCESSORY)

Use of elbow allows change of chip discharge direction to perform cleaner work

For tool without nozzle: Remove the chip cover and install the nozzle (optional accessory). Attach the elbow (optional accessory) on the nozzle of the tool by just slipping on it. To remove it, just pull it out.

For tool with nozzle: Attach the elbow (optional accessory) on the nozzle of the tool by just slipping on it. To remove it, just pull it out.

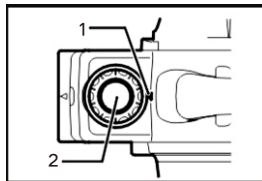


1. Elbow 2. Nozzle

OPERATION INSTRUCTION

ADJUSTING DEPTH OF CUT

Depth of cut may be adjusted by simply turning the knob on the front of the tool so that the pointer points the desired depth of cut.



1. Pointer 2. Knob

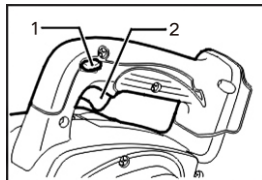
SWITCH ACTION

WARNING ⚠

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

Do not pull the switch trigger hard without pressing the lock off lever. This can cause switch breakage.

To prevent the switch trigger from being accidentally pulled, a lock off lever is provided. To start the tool, slide the lock-off lever and pull the switch trigger. Release the switch trigger to stop.



1. Lock-off Lever 2. Switch Trigger

WARNING ⚠

1. For your safety, this tool is equipped with lock-off lever which prevents the tool from unintended starting. never use the tool if it runs when you simply pull the switch trigger without pressing the lock-off lever. Return tool a service center for proper repairs before further usage.

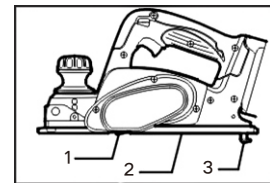
2. Never tape down or defeat purpose and function of lock -off lever.

To prevent the switch trigger from being accidentally pulled, a lock. off button is provided.

To start the tool, depress the lock-off button and pull the switch trigger. Release the switch trigger to stop.

FOOT

After a cutting operation, raise the back side of the tool and a foot comes under the level of the rear base. This prevents the tool blades to be damaged.



1. Planer blade 2. Rear base 3. Foot

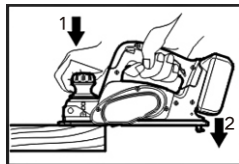
PLANING OPERATION

Hold the tool firmly with one hand on the knob and the other hand on the switch handle when performing the tool.

First, rest the tool front base flat upon the workpiece surface without the blades making any contact. Switch on and wait until the blades attain full speed. Then move the tool gently forward. Apply pressure on the front of tool at the start of planing, and at the back at the end of planing. Planing will be easier if you incline the workpiece in stationary fashion, so that you can plane somewhat downhill.

The speed and depth of cut determine the kind of finish.

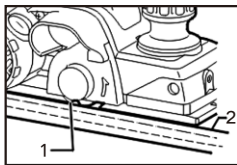
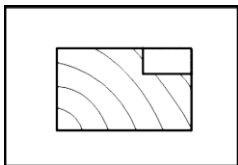
The power planer keeps cutting at a speed that will not result in jamming by chips. For rough cutting, the depth of cut can be increased, while for a good finish you should reduce the depth of cut and advance the tool more slowly.



1. Start 2. End

SHIPLAPPING (RABBETING)

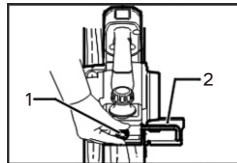
To make a stepped cut as shown in the figure, use the edge fence (guide rule) which is obtained as accessory.



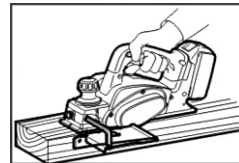
1. Blade edge 2. Cutting line

Draw a cutting line on the workpiece. Insert the edge fence into the hole in the front of the tool. Align the blade edge with the cutting line.

1. Screw
2. Edge fence

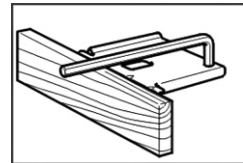


Adjust the edge fence until it comes in contact with the side of the workpiece, then secure it by tightening the screw.



When planing, move the tool with the edge fence flush with the side of the workpiece. Otherwise uneven planing may result.

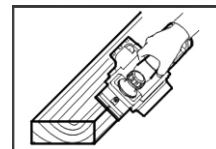
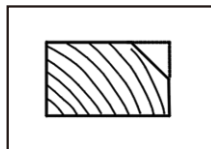
Maximum shiplapping (rabbeting) depth is 9 mm.



You may wish to add to the length of the fence by attaching an extra piece of wood. Convenient holes are provided in the fence for this purpose, and also for attaching an extension guide.

CHAMFERING

To make a chamfering cut as shown in the figure, align the "V" groove in the front base with the edge of the workpiece and plane it.



MAINTENANCE

WARNING

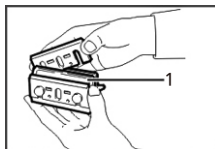
Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

Never use gasoline, benzene, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

SHARPENING THE PLANER BLADES

For conventional blades only

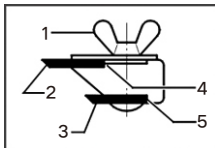
Always keep your blades sharp for the best performance possible. Use the sharpening holder (optional accessory) to remove nicks and produce a fine edge.



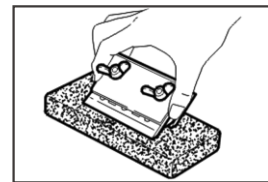
1. Sharpening holder

First, loosen the two wing nuts on the holder and insert the blades (A) and (B), so that they contact the sides (C) and (D). Then tighten the wing nuts.

1. Wing nut
2. Blade (A)
3. Blade (B)
4. Side (D)
5. Side (C)



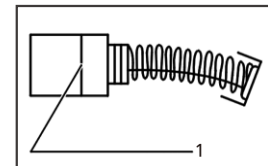
Immerse the dressing stone in water for 2 or 3 minutes before sharpening. Hold the holder so that the both blades contact the dressing stone for simultaneous sharpening at the same angle.



REPLACING CARBON BRUSHES

Remove and check the carbon brushes regularly.

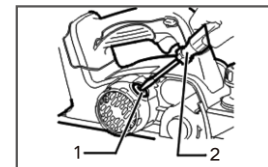
Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes



1. Limit mark

Use a screwdriver to remove the brush holder. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product SAFETY and RELIABILITY, repairs any other maintenance or adjustment should be formed by TEH Authorized Service Centers, always using TEH replacement parts.



1. Brush holdercap 2. Screwdriver

WARRANTY CARD

Dear customers, the warranty service for purchasing TEH products is as follows:

Under normal use, within one year from the date of purchase. It is guaranteed that the damage is caused by the quality of the tool.

The following conditions occur during the warranty period, not covered by the warranty:

- a. Any valid legal document (single ticket) certifying the date of purchase
- b. Any damage caused by natural wear and overload
- c. Any damage caused by the use of low-priced inferior accessories
- d. Any damage caused by improper carrying, transportation or storage
- e. Any product that has been opened, repaired, replaced, or modified by itself
- f. Any damage caused by misuse, beyond the scope of use of the tool, and failure to use and maintain in accordance with the instructions

 ladies/gentlemen: _____ employer: _____

contact number: _____ fax number: _____

contact address: _____

warranty record: _____

post code: _____

IMPORTANT NOTE

1. The invoice and warranty card must be presented at the time of warranty.
2. The fuselage number on the invoice is the same as the fuselage number on the warranty card.
3. Once this warranty card is issued, if it is lost, it will not be reissued. Please keep it properly.

Note: The company reserves the right to amend the above provisions and has the final interpretation right in the case that the warranty service does not violate national laws.