



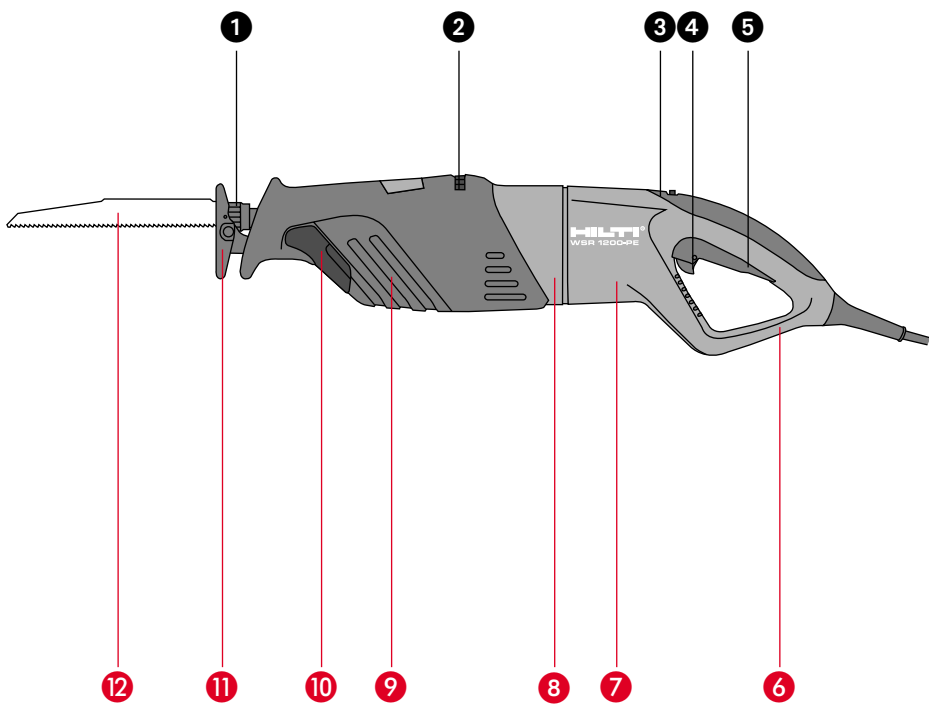
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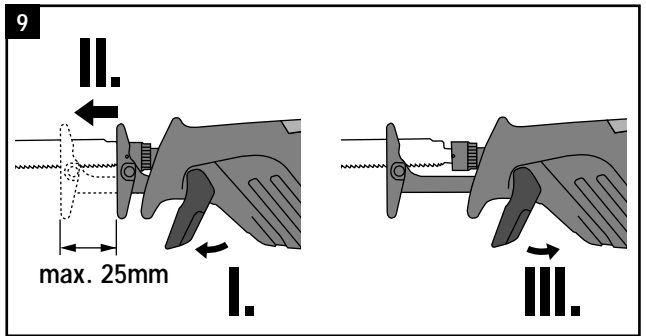
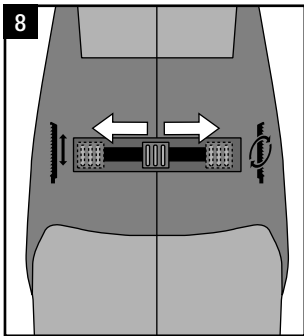
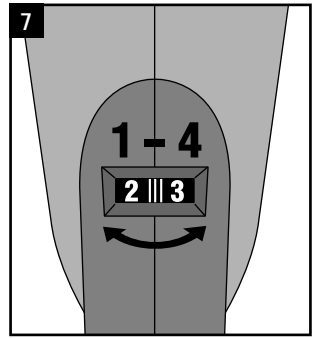
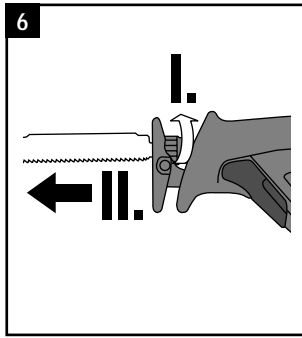
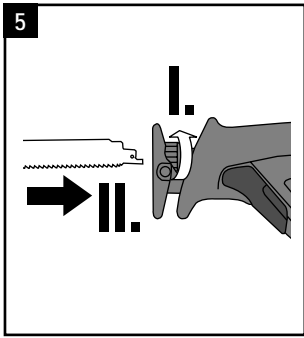
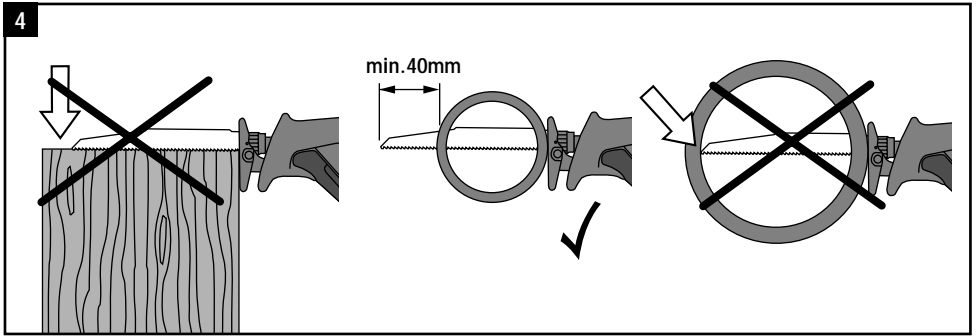
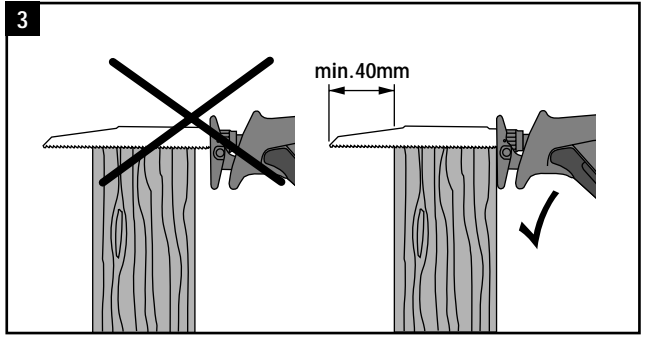
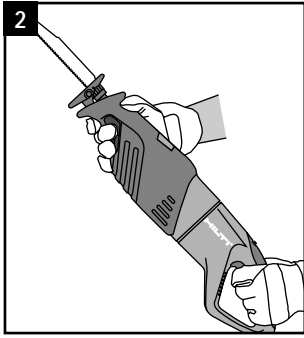


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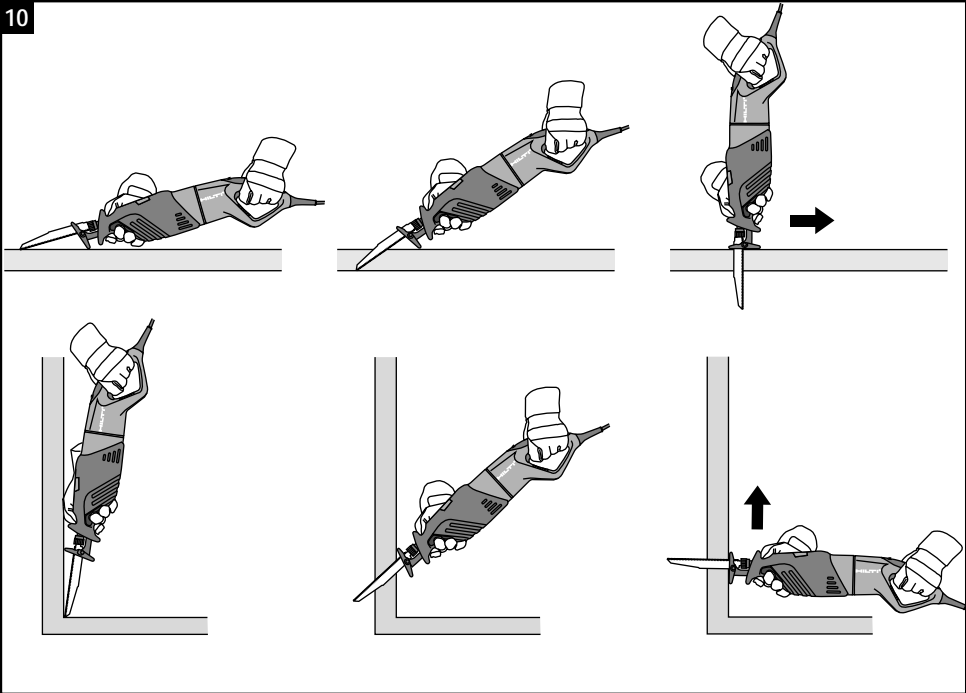
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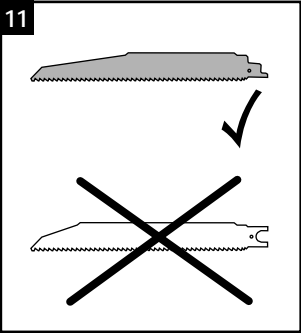




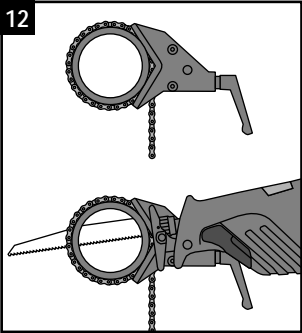
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WSR 1200-PE reciprocating saw

It is essential that the operating instructions are read before the tool is operated for the first time.

Always keep these operating instructions together with the tool.

Ensure that the operating instructions are with the tool when it is given to other persons.

General information

In these operating instructions, this symbol indicates points of particular importance to safety. The instructions at these points must always be observed in order to avoid the risk of serious injury.



Caution: high voltage

1 The numbers refer to the illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while you read the operating instructions.

In these operating instructions, the power tool to which these operating instructions apply is referred to as “the tool”.

WSR 1200-PE operating controls **1**

- 1 Blade clamp / blade holder
- 2 Function selection switch
- 3 Stroke rate regulator
- 4 Switch interlock
- 5 Control switch

Component parts **1**

- 6 Type plate
- 7 Motor
- 8 Gearing section
- 9 Front-end grip area
- 10 Clamping lever
- 11 Contact shoe
- 12 Saw blade

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Description

The WSR 1200-PE is an electrically powered tool for cutting wood, metal, plastics and composites. It is intended for professional use.

The following items are supplied: electric tool, operating instructions, saw blade, toolbox.



The following conditions must always be observed when the tool is in use:

- The tool must be connected to an alternating current electric supply in compliance with the information given on the type plate.
- The tool is for hand-held use only.
- The tool must not be used in places where the surrounding conditions may present a risk of explosion.

Main features of the tool

Class II electrical protection (double insulated) \square (as per EN 50144)
Anti-vibration system (additional operator protection)
Mechanical slip clutch (additional gearing protection)
Vibration-absorbing grip
Keyless blade clamp
Saw blade inversion possible
Keyless contact shoe adjustment
Infinitely variable stroke rate preselection with speed control switch
Orbital action
Constant-speed electronics

Right of technical changes reserved

The tool is designed for the following uses

Applications	Range of uses
Cutting wood	Cutting openings for door and window frames Cutting wood with embedded nails and screws Cutting squared timber up to 220 mm thick Cutting composites (wood, insulation material, metal) Cutting softwoods and hardwoods Rip sawing of materials in sheet form Cutting concrete forming components to length and to size
Cutting metal	Cutting metal pipes of up to 35 mm dia. to length Cutting plastic pipes of up to 150 mm dia. to length Cutting openings in metal and plastic pipes Cutting composites to length (wood, insulation material, metal)
Demolition	Cutting through metal and plastic pipes Cutting through cable trays, ventilation ducts and installation channels Cutting up sheet metal and sheet metal trays Cutting through gas concrete blocks Cutting drywall / plasterboard panels

Technical data

WSR 1200-PE (orbital action / constant-speed electronics)

Nominal power rating	1150 W
Nominal voltage \star	110 V 220 V 230 V 240 V
Nominal current input \star	11.7 A 5.6 A 5.4 A 5.2 A
Mains frequency	50–60 Hz
Weight of tool	3.95 kg
Dimensions (l×w×h)	550×95×190 mm
Stroke rate	1200–2600/min.
Stroke	32 mm
Stroke rate regulation	Constant-speed electronics with variable stroke rate, 4 stroke rate settings
Blade clamp	Keyless, for standard 1/2" blades
Noise (pressure) level	< 92 dB (A)
Typical vibrational acceleration (weighted)	< 5.0 m/s ² under no load
Orbital action	Selectable

\star The tool is offered in different versions for various mains voltages. Please refer to the information on the type plate for the nominal voltage and nominal current input of your tool.

Safety precautions

When using electric tools, the following fundamental safety precautions must always be observed in order to avoid the risk of injury, electric shock and fire hazards. Please read and observe the instructions below before using the tool.

1. Use protective equipment.



Wear ear protection



Wear goggles



Wear protective gloves



Wear respiratory protection when the work causes dust

2. Wear suitable working clothing.

Don't wear loose clothing, loose long hair or jewellery as it can become caught up in moving parts of the electric tool. Wear non-slip shoes.

3. Make the working area safe.

Objects which could cause injury should be removed from the working area. Ensure that the area is well lit. When working, keep other persons outside the range of the tool you are using.

4. Take the influences of the surrounding area into account.

Don't expose the tool to rain or snow and don't operate it in the vicinity of flammable liquids or gases.

5. Check the tool each time before use.

Check the condition of the tool, the supply cord and mains plug. Don't use it if it is damaged, incomplete or if the controls cannot be operated correctly. 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 or moving parts, free running 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 centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

6. Use the correct insert tool.

Ensure that the insert tools (saw blades etc.) are equipped with the appropriate connection end to fit the blade holder on the electric tool and that they are clamped in position correctly in the blade holder.

Use only the recommended original Hilti accessories and auxiliary equipment.

7. Use the tool only for the purposes for which it is intended.

Do not force small tools or attachments to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example, do not use circular saws to cut tree limbs or logs.

8. Apply a safe working method.

Avoid unfavourable body positions. Always ensure you have a safe stance. Always hold the tool in both hands when it is in use **2**. To ensure optimum efficiency and safety when working, the contact shoe of the tool must always be pressed against the workpiece **3**.

Always use saw blades of adequate length. To avoid kick-back, the end of the blade must always project at least 40 mm beyond the workpiece throughout the entire stroke **4**. It will do the job better and safer at the rate for which it was intended.

The blade may become stuck unexpectedly. Switch off the tool if your attention is distracted from your work.

When the tool is in use, always guide the supply cord away from the tool to the rear.

Never carry the tool by the supply cord. Don't unplug the tool by pulling on the supply cord. Don't expose the supply cord to heat, oil or sharp edges. If the supply cord becomes damaged while working, don't touch it - unplug the mains plug immediately.

Never place your fingers or a hand in front of the saw blade when working with the saw.

9. Take care to avoid concealed cables and pipes.

Concealed electric cables or gas and water pipes present a serious hazard if damaged while you are working. Accordingly, check the area in which you are working beforehand (e.g. using a metal detector). Avoid contact between your body and earthed / grounded objects such as pipes or radiators. External metal parts of the tool may become live, for example, when an electric cable is cut into inadvertently.

10. Avoid unintentional starting.


Don't carry the tool with your finger on the control switch while it is connected to the mains supply. Check that the tool is switched off before connecting it to the mains supply. Pull the plug out of the mains socket when the tool is not in use, e.g. during pauses between work, before maintenance and when changing insert tools.

11. Keep the electric tool and insert tools in good condition.

Follow the care and maintenance instructions and replace insert tools in good time. Never operate the tool when it is dirty or wet. When not in use, tools should be stored in a dry, high or locked-up place, out of reach of children. Dust or dampness on the surface of the tool make it slippery and difficult to hold and may, under unfavourable conditions, present a risk of electric shock.

Repairs to the tool may be carried out only by an authorised electrical specialist using original Hilti spare parts.

Failure to observe this point may result in damage to the tool or present a risk of accident. Accordingly, if necessary, have the tool repaired at a Hilti service centre or authorised Hilti repair workshop.


12.  Always wear protective gloves and suitable protective goggles when working as saw blades may break or splinter.


Use clamps or a vice to hold the work. It is safer than using your hand and it frees both hands to operate the tool.

Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before switching it on.

Preparation for use

  It is essential that the safety precautions printed in these operating instructions are read and observed.

 The supply voltage must correspond to the information on the type plate.

 If extension cords are used: Only extension cords of a type approved for the intended use and of adequate cross section may be used. Failure to observe this point may result in reduced performance of the tool and overheating of the cord. Damaged extension cords must be replaced. The recommended cross-sections and max. length for extension cords are:

Mains voltage	Conductor cross-section	
	1.5 mm ²	2.5 mm ²
100 V	20 m	40 m
230 V	50 m	100 m

Extension cables outdoors

Only suitable approved and correspondingly marked cables may be used outdoors.


Always stay alert

Always concentrate on your work. Proceed logically and do not use the tool when your full concentration is not on the job.

Operation

Inserting the blade

Use only blades with a standard 1/2" shank connection end.


-  Unplug the supply cord from the mains socket to prevent unintentional starting.
- Check that the connection end of the blade is clean.


Always ensure that the blade clamping mechanism is kept clean.

- Turn the blade clamp locking sleeve in a counter-clockwise direction. Insert the blade in the blade clamp and press in the locking sleeve. Release the locking sleeve until it is heard to engage. Check that it is held securely by pulling on the blade **5**.

Note: If the saw blade cannot be inserted into the blade clamp, turn the locking sleeve a little until the blade is in the correct clamping position and then release the locking sleeve.

Removing the insert tool

-  Unplug the supply cord from the electrical socket to prevent unintentional starting.
- Turn the locking sleeve and pull out the blade **6**.

  Wear protective gloves. The insert tool may be very hot after long periods of use.

Sawing

Setting the stroke rate

The recommended stroke rate can be pre-selected by turning the stroke rate adjusting wheel **7** to the desired setting. When the operating switch is pressed the saw will then run at the pre-selected stroke rate. The pre-selected stroke rate remains almost constant, even under load, thanks to the tool's built-in constant-speed electronics, which also prevent overheating of the machine when working with the pipe-cutting adaptor. The machine switches itself off automatically as soon as the motor is overloaded. It can be restarted by pressing the operating switch again. The recommended stroke rate settings and information concerning the correct choice of saw blade can be found in the information supplied with these products and in the corresponding table of applications.

Stroke rate selection

(1 = low stroke rate, 4 = high stroke rate)

Material cut	Recommended stroke rate
Wood	4
Wood with embedded nails	4
Drywall, interior finishing	3
Plastic	1-3
Steel	1-3
Non-ferrous metals	2-3
Aluminium	2-3
Stainless steel	1

The above settings are recommendations intended to ensure optimum cutting performance. The optimum setting may differ from these recommendations depending on the saw blade used, the mains supply voltage and the sawing technique employed. Use of the wrong stroke rate setting may result in increased saw blade wear.

Orbital action



Orbital action
off



Orbital action
on

The cutting performance under certain conditions, e.g. when cutting wood materials or thin sheet steel, can be increased through use of the orbital action. The orbital action is switched off or on by moving the function selection switch **8** to the corresponding end position. The switch may be operated while the motor is running or when it has stopped.

Adjusting the contact shoe



Unplug the supply cord from the mains socket in order to prevent unintentional starting.

Adjustment of the shoe does not require the use of tools and is thus quick and convenient **9**. Correct adjustment of the contact shoe ensures that the full length of the saw blade can be used optimally and may also improve access in corners.

Plunge sawing

The plunge sawing technique should be used only on soft materials and when the orbital action is switched off. A little practise is required in order to be able to plunge the blade into the material while the saw is running and thus make cut-outs without first drilling a hole. Plunge sawing is possible only with short saw blades. Plunge cuts may be started with the saw in one of two different positions: in the normal position **10** or in the reversed position **10**.

Hold the saw with the front edge of the contact shoe against the workpiece and switch on. Press the saw firmly against the workpiece and begin the plunge movement by reducing the angle of the saw (contact shoe) to the workpiece.

When the blade has passed through the workpiece, bring the saw into the normal working position (the entire surface of the shoe in contact) and then continue sawing along the line.

Blades and accessories

Use only saw blades with a standard '1/2" connection end **11**. The pipe-cutting adaptor, used to obtain perfect cuts in pipes, is shown in the illustration **12**.

Hilti power tools have been designed to work optimally as a system together with Hilti insert tools. Accordingly, highest performance and longest life expectancy can be achieved when you use this power tool with Hilti insert tools. A comprehensive program of insert tools and accessories is available. The most important insert tools for this saw are shown on the inside of the toolbox. Details of the entire programme can be found in the current Hilti product catalogue.

Should you require insert tools not included in the standard programme, please contact the Hilti customer service department or your Hilti sales representative. Hilti offers a comprehensive range of special insert tools in professional quality.



Check your insert tools at regular intervals and replace them in good time. A damaged or badly worn connection end may result in damage to the power tool.

Please observe the instructions on care and maintenance of your insert tools given in the following section.



Take care to ensure that saw blades are always stowed away in their own compartment in the toolbox. Damage to the supply cord caused by the sharp teeth of the saw blades can thus be avoided.

The Hilti Corporation accepts no liability for damage of this kind or any resulting consequential damage.

Care and maintenance

Care of the tool

The outer casing of the tool is made from impact-resistant plastic. Grip sections, the dust shield and the supply cord protective sleeve are made from an elastomer material.



Clean the outside of the tool at regular intervals using a slightly damp cloth. Don't use a spray, steam pressure cleaning equipment or running water for cleaning. This may negatively affect the electrical safety of the tool. Always keep the grip surfaces of the tool free from oil and grease. Don't use cleaning agents which contain silicone.



Never operate the tool when the ventilation slots are blocked. Clean the ventilation slots carefully using a dry brush. Don't permit foreign objects to enter the interior of the tool.

Clean off dirt and dust deposits and protect your insert tools from corrosion by wiping them from time to time with an oil-soaked rag. Always keep the connection end clean and lightly greased.

Maintenance



Regularly check all external parts of the tool for damage and check that all controls operate faultlessly. Don't operate the tool when parts are damaged or when the controls do not function faultlessly. Have your tool repaired by a Hilti service center.

Repairs to the electrical sections of the tool may be carried out only by trained electrical specialists.

Warranty

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, all warranty claims are made within 12 months from the date of the sale (invoice date), and the technical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.

For repair or replacement, send tool and/or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.

Disposal



Most of the materials from which Hilti power tools are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back your old electric tools for recycling. Please ask your Hilti customer service department or Hilti sales representative for further information.

Should you wish to return the electric tool yourself to a disposal facility for recycling, proceed as follows: Dismantle the tool as far as possible without the need for special tools. Use absorbent paper to wipe lubricated parts clean and to collect the grease that runs out (total quantity approx. 50 ml). This paper should also be disposed of correctly. **On no account should grease be allowed to enter the waste water system or to find its way into the ground.**

The individual parts should be separated as follows:

Part / assembly	Main material	Recycling
Toolbox	Plastic	Plastic
Outer casing	Plastic / elastomer	Plastic
Gear housing	Magnesium alloy	Scrap metal
Grip	Plastic	Plastic
Electronics module and switch	Various	Electronics scrap
Fan	Plastic	Plastic
Motor (rotor and stator)	Steel and copper	Scrap metal
Supply cord	Copper, elastomer sheath	Scrap metal
Gearing parts	Steel	Scrap metal
Screws, small parts	Steel	Scrap metal

Troubleshooting

Symptom	Possible cause	Possible solution
The tool doesn't start	Fault in the electric power supply	Plug in another electric tool and check whether it starts
	Defective supply cord or plug	Have it checked by an electrical specialist and replace if necessary
	Switch defective	Have it checked by an electrical specialist and replace if necessary
Tool doesn't produce full power	Cross-section of the extension cord is inadequate	Use an extension cord of adequate cross-sectional area. See section "Preparation for use"
	Stroke rate regulator set to "low"	Set stroke rate regulator to position 4 (fig. 7)
	Control switch is not pressed fully	Press the control switch as far as it will go
Orbital action does not react	Function switch not set to  orbital action	Set function switch to orbital action  Orbital action is perceptible only when sawing.
	Saw blade cannot be removed from the blade clamp	Locking sleeve not turned as far as it will go

Konformitätserklärung

Bezeichnung:	Säbelsäge
Typenbezeichnung:	WSR 1200-PE
Konstruktionsjahr:	2000

Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den folgenden Richtlinien und Normen übereinstimmt: EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-11 gemäss den Bestimmungen der Richtlinien 73/23/EWG, 89/336/EWG und 98/37/EWG

EC declaration of conformity

Description:	Reciprocating saw
Designation:	WSR 1200-PE
Year of desing:	2000

We declare, under our sole responsibility, that this product complies with the following directives and standards: EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-11 according to the provisions of the directives 73/23/EWG, 89/336/EWG und 98/37/EWG

Déclaration de conformité CE

Désignation:	Scie sabre
Modèle/type:	WSR 1200-PE
Année de conception:	2000

Nous déclarons sous notre seule et unique responsabilité que ce produit est conforme aux directives et normes suivantes: EN 55014-1, EN 55014-2, EN 50144-1 et EN 50144-2-11, conformément aux dispositions des directives 73/23/CEE, 89/336/CEE et 98/37/CEE.

Dichiarazione di conformità CE

Designazione:	Seghetto frontale
Modello:	WSR 1200-PE
Anno di costruzione:	2000

Dichiariamo, con nostra unica responsabilità, la conformità di questo prodotto con le seguenti direttive e norme: EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-11 conformemente alle disposizioni delle direttive 73/23/EWG, 89/336/EWG, 98/37/EWG

EG-försäkran om överensstämmelse

Beteckning:	Tigersåg
Typbeteckning:	WSR 1200-PE
Konstruktionsår:	2000

Vi försäkrar härmed under exklusivt ansvar att denna produkt överensstämmer med följande direktiv och standarder: EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-11 enligt bestämmelserna i direktiven 73/23/EWG, 89/336/EWG, 98/37/EWG

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