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FESTOOL

Instruction manual - Drywall Sander

Page 6

IMPORTANT: Read all instructions before using.

Guide d'utilisation - Ponceuses autoportées à rallonges

Page 19

IMPORTANT: Lire toutes les instructions avant de démarrer les travaux.

Manual de instrucciones - Lijadora de pared

Página 34

IMPORTANTE: Lea todas las instrucciones antes de usar.

**Instruction manual
Guide d'utilisation
Manual de instrucciones**

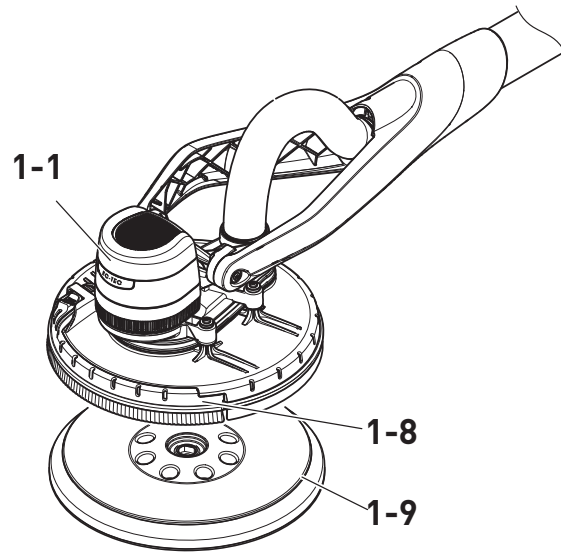
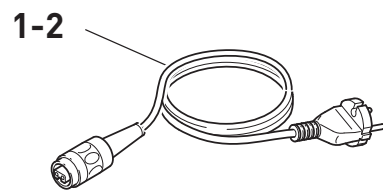
P L A N E X easy
LHS-E 225 EQ

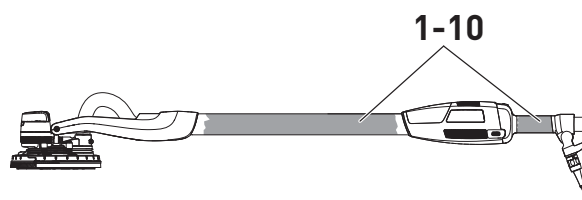
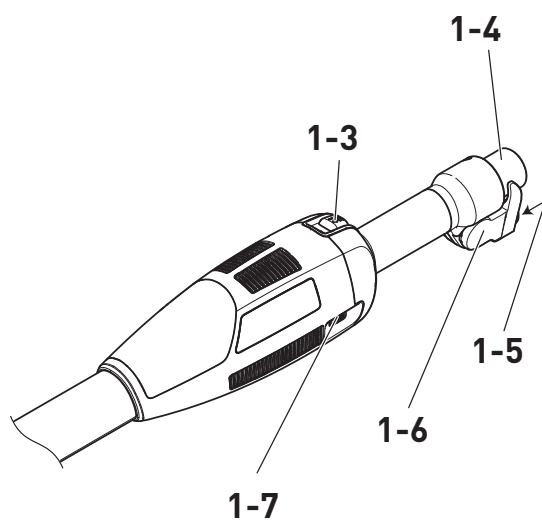


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Original operating manual




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About this manual

Save these instructions







It is important for you to read and understand this manual. The information it contains relates to protecting **your safety** and **preventing problems**. The symbols below are used to help you recognize this information.

	DANGER	Description of imminent hazard and failure to avoid hazard will result in death.
	WARNING	Description of hazard and possible resulting injuries or death.
	CAUTION	Description of hazard and possible resulting injuries.






	NOTICE	Statement including nature of hazard and possible result.
	HINT	Indicates information, notes, or tips for improving your success using the tool.

Symbols

Symbol Significance

	Warning of general danger
	Risk of electric shock
	Read operating instructions and safety notices!
	Wear ear protection.
	Wear a dust mask.
	Wear protective goggles.


Symbol Significance

	Disconnect from the power supply!
	Do not dispose of as domestic waste.
	Tip or advice
	Handling instruction
	Safety class II
V	volts
A	amperes
Hz	hertz

Symbol Significance	
~ a.c.	alternating current
lb.	pound
ft	foot
Ø	diameter
rpm min ⁻¹	revolutions per minute
n ₀	no load speed

Safety instructions

General safety instructions

 **WARNING** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- Never leave the power tool unattended.** Only leave the power tool when the tool in use has come to a complete standstill.

2 ELECTRICAL SAFETY

- 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.
- 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.

- Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 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 entangled cords increase the risk of electric shock.
- 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.
- 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.

3 PERSONAL SAFETY

- 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.
- Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- 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 energising 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 jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery 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 dust collection can reduce dust-related hazards.
- h. **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4 POWER TOOL USE 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 remove the battery pack, if detachable, 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.
- d. **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.
- e. **Maintain power tools and accessories. 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.

- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. **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.
- h. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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.
- b. **Only use original Festool parts for repair and maintenance.** The use of incompatible accessories or spare parts can result in electric shocks or other injuries.

Machine-related safety instructions

General safety instructions for sanding:

- a. **This power tool is designed to be used as a sander with sandpaper. Read all safety instructions, information, illustrations and technical data enclosed with the machine.** If the following instructions are not observed, this may lead to electrical shock, fire and/or serious injuries.
- b. **This power tool is not suitable for coarse sanding, sanding with a wire brush, abrasive cutting or polishing.** Applications for which the power tool is not intended can pose a serious risk and cause injuries.
- c. **Do not use any accessories that the manufacturer has not specially designed or recommended for this power tool.** Just because you can attach accessories to your power tool does not guarantee that they can be used safely.
- d. **The permissible speed of the insertion tool must be at least the maximum speed specified on the tool itself.** Accessories that rotate faster than the permitted speed can break and fly off.
- e. **The outer diameter and thickness of the insertion tool must correspond to the dimensions of your power tool.** Insertion tools which are mea-

sured incorrectly cannot be sufficiently shielded or controlled.

- f. **Sanding discs, flanges, sanding pads and other accessories must be fully compatible with the rotary spindle on your power tool.** Insertion tools which are not fully compatible with the rotary spindle on the power tool will rotate unevenly, vibrate strongly and may lead to a loss of control.
- g. **Do not use insertion tools that are damaged.** Before each use, check insertion tools such as sanding discs for chipping and cracks and sanding pads for cracks, wear or heavy abrasive wear. If the power tool or insertion tool is dropped, check whether it is damaged. Damaged insertion tools will generally break after a short time.
- h. **Make sure that any other persons in the vicinity are at a safe distance from your work area. Anyone entering the work area must wear personal protective equipment.** Fragments of the workpiece may fly off and even cause injuries outside the immediate work area.
- i. **Keep the mains cable away from rotating insertion tools.** If you lose control of the machine, the mains cable may be severed or caught and your hand or arm could get caught in the rotating insertion tool.
- j. **Never place the power tool down before the insertion tool has come to a complete halt.** The rotating insertion tool may make contact with the storage area, which could cause you to lose control of the power tool.
- k. **Do not leave the power tool running when you are carrying it.** Your clothing may accidentally come into contact with and get caught in the rotating insertion tool.
- l. **Clean the vents in your power tool on a regular basis.** The fan draws dust into the housing and a large accumulation of metal dust may create electrical hazards.

Kickbacks and corresponding safety instructions:

A kickback occurs as a result of using the power tool incorrectly or misguidedly. It can be prevented by taking appropriate precautions, as described below.

- a. **Hold the power tool firmly with both hands and move your body and arms into a position that allows you to intercept the kickback forces. Always use the additional handle, if there is one, so that you have the best possible control over the kickback forces or torque reactions during start-up.** The operator can control the kickback

and reaction forces by taking suitable precautionary measures.

- b. **Never place your hands near rotating tools.** The power tool may move across your hand in the event of a kickback.
- c. **Take particular care when working on corners and sharp edges, for example. Prevent the insertion tool from rebounding away from the workpiece and jamming.** The rotating insertion tool tends to get jammed when working on corners and sharp edges, or if it rebounds in the process. This results in loss of control or kickbacks.

Special safety instructions for sanding

- a. **Do not use oversized sanding discs. Follow Fes-tool's specifications when selecting sanding discs.** A sanding disc that is too large and protrudes over the sanding pad represents a cutting injury hazard and can cause catching, disc breakage or kickback.

Further safety instructions

- **Harmful/toxic dust can be produced during your work (e.g. lead-containing paint, some types of wood and metal).** Contact with this dust, especially inhaling it, can represent a hazard for operating personnel or persons in the vicinity. Comply with the safety regulations that apply in your country. Connect the electric power tool to a suitable extraction system.



To protect your health, wear a P2 protective mask.



Always wear protective goggles to protect against sanding hazards.

- If potentially explosive or self-igniting dust is produced during sanding, the machining instructions issued by the material manufacturer must always be followed.
- **Attention: Risk of fire! Avoid overheating the grinding material and the sander. Always empty the dust container before taking a break.** Swarf in the filter bag or filter of the mobile dust extractor may self-ignite in unfavourable conditions such as flying sparks when grinding metals. Particular danger exists if the swarf is mixed with paint, polyurethane residue or other chemical materials and the grinding material is hot after long periods of work.
- **Hold the power tool firmly with both hands and assume a stable stance when performing work.** Using both hands ensures that the power tool is guided safely.

- **Always use an antistatic suction hose with the power tool.** A slight electric shock may cause you to panic briefly and become distracted, which may result in an accident.
- **Always use original Festool sanding pads.** Foreign pads are not suitable for the speed of the sander and may break.
- **Keep the carry bag out of reach of children.** Children may suffocate or be strangled when playing with the carry bag.

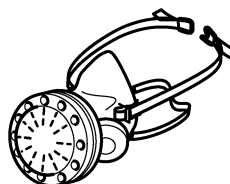
Health hazard by dust



WARNING! Various dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known (to the State of California) to cause cancer,

birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically treated lumber.



The 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 dust masks that are specially designed to filter out microscopic particles. Wash hands after handling.



WARNING

TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL.

Intended use

The drywall sander is designed for sanding primed drywall constructions, ceilings and walls indoors and also for removing carpet residue, coats of paint, coverings, adhesives and loose plaster. When sanding outside or in damp rooms, an isolating transformer must be used.

Always use an appropriate mobile dust extractor. The Festool CTL/M 36 E AC P L A N E X mobile dust

extractor is optimally designed for large quantities of dust.

The drywall sander is **not** suitable for wet sanding.



WARNING

The user will be liable for damage due to improper use.

Technical data

Drywall Sander	LHS-E 225 EQ
Power	400 W
No-load speed	400 - 920 min ⁻¹
Sanding pad diameter	8-15/32" (215 mm)
Abrasive diameter	8-27/32" (225 mm)
Tool holder	Dia. 13/10
Dust extractor connection	36 mm (27 mm)
Length	5.2 ft (1.59 m)
Weight (without mains cable, with sanding pad)	8.8 lbs (4 kg)
Safety class	□ /II

Functional description

The pictures for the functional description are on a fold-out page at the beginning of the instruction manual. While reading the manual you can fold out the page for comparison and quick reference.

- [1-1]** Sanding head
- [1-2]** plug it mains cable
- [1-3]** On/Off switch
- [1-4]** Extractor connector

- [1-5]** Plug it-connection
- [1-6]** Suction sleeve stop
- [1-7]** Speed control
- [1-8]** Detachable brush segment
- [1-9]** Insertion tool/sanding pad
- [1-10]** Gripping surfaces

Commissioning



WARNING

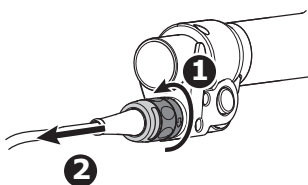
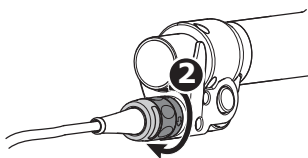
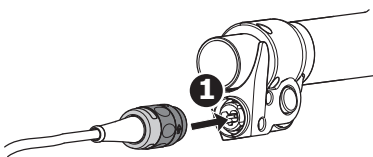
Unauthorised voltage or frequency!

Risk of accident

- The mains voltage and the frequency of the power source must correspond with the specifications on the machine's name plate.
- In North America, only Festool machines with the voltage specifications 120 V/60 Hz may be used.

- Connecting and disconnecting the mains cable - **[2]**

2

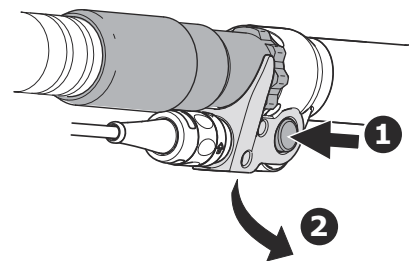
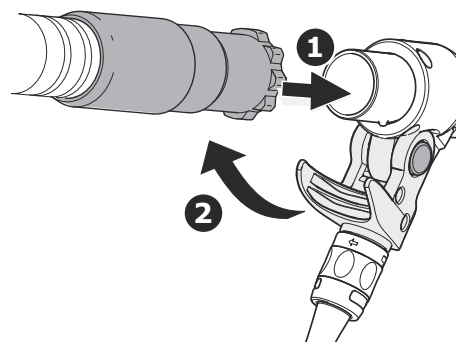


Before switching on the power tool, make sure that the bayonet fitting at the mains cable is closed fully and locked.

- To connect the suction hose **[3]**, see also Section Dust extraction.

Using a special vacuum sleeve, the P L A N E X suction hose guarantees a permanent fixing and better protection against kinking.

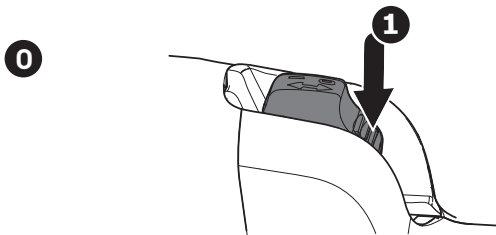
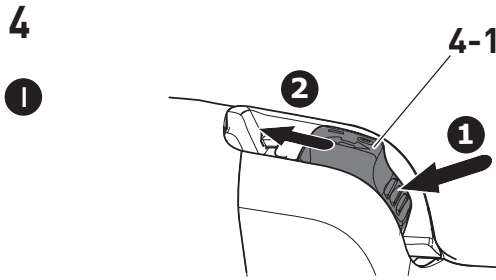
3



ON/OFF button **[4]**

- ON (I)** Push the on/off switch **[4-1]** down and forward.
On/off switch is locked.

OFF (0) Push the on/off switch **[4-1]** down and unlock it.
On/off switch moves back to the 0 position.



Extension Cord

Use only a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that accepts the plug on the product. Make sure your extension cord is not damaged.

If an extension cord is required, it must have sufficient cross-section to prevent an excessive drop in voltage or overheating. An excessive drop in voltage reduces the output and can lead to failure of the motor. The table below shows you the correct cord diameter as a function of the cord length for this tool.

Total Extension Cord Length (feet)	25	50	100	150
Cable size (AWG)	18	16	16	14

Use only U.L. and CSA listed extension cords.

Never use two extension cords together. Instead, use one long one.

❶ The lower the AWG number, the stronger the cord.

Settings



WARNING

Risk of injury, electric shock

► Always pull the mains plug out of the socket before performing any type of work on the machine!

Electronics

The power tool is equipped with a brushless EC-TEC motor for a long service life and power electronics with the following properties:

Smooth start-up

The electronically controlled smooth start-up ensures that the machine starts up jolt-free.

Constant speed

The preselected motor speed is kept constant through electronic control to ensure a uniform sanding speed up to a certain load.

Overload protection

If the pressure becomes too high while working, the power of the machine will be automatically reduced

to prevent overheating.

Speed control

You can regulate the speed steplessly within the speed range using the adjusting wheel **[1-7]** (see Technical data).

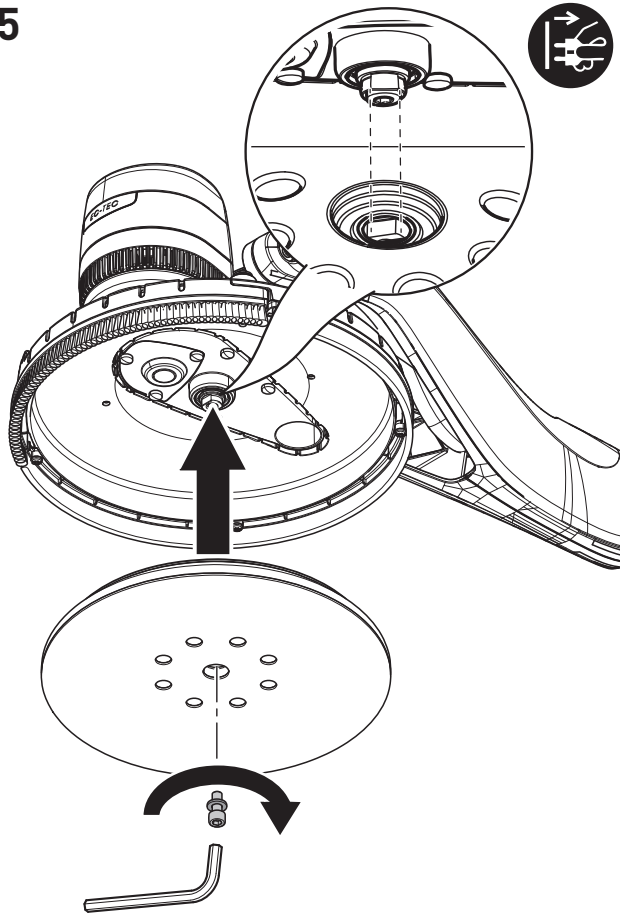
This enables you to optimise the sanding speed to suit the material you are working on.

Overheating protection

Overheating protection is triggered when the pressure is too high or the cool air openings are dirty. The power tool beeps three times and switches off. Let the power tool cool down for approx. 15 minutes before using it again.

Replacing the sanding pad [5]

5



Observe the following instructions:

- An optimal work result can only be achieved using original accessories and consumables. The use of non-original accessories or consumables invalidates the right to claim under warranty.
- Only fit and remove the sanding pads using the tool supplied.
- Make sure that both flat edges engage in the opening on the sanding pad.

Changing the sanding discs [6]

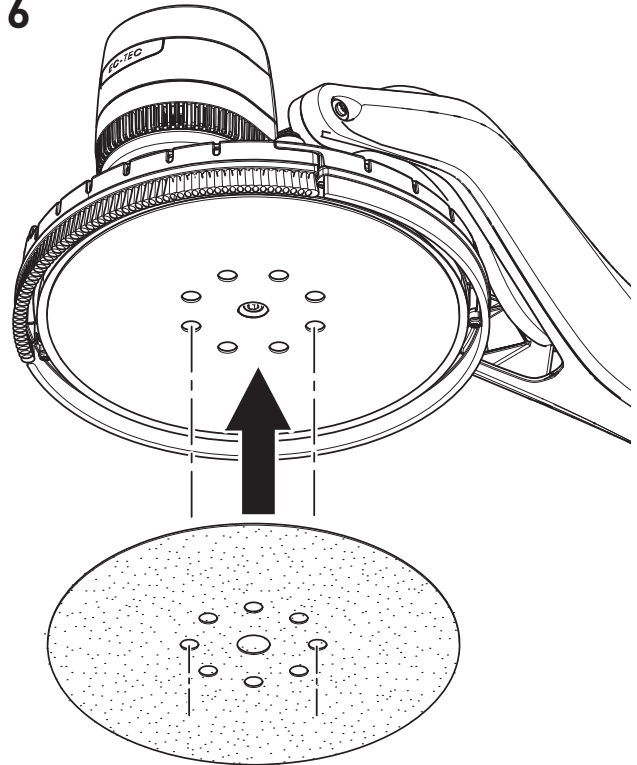
Compatible StickFix sanding discs are quick and easy to attach to the StickFix sanding pad.



CAUTION! The holes in the sanding disc must be aligned with the holes in the sanding pad. Otherwise, the suction power is impaired and there is more exposure to dust.

Do not use interface pads.

6



Sanding close to edges [7]

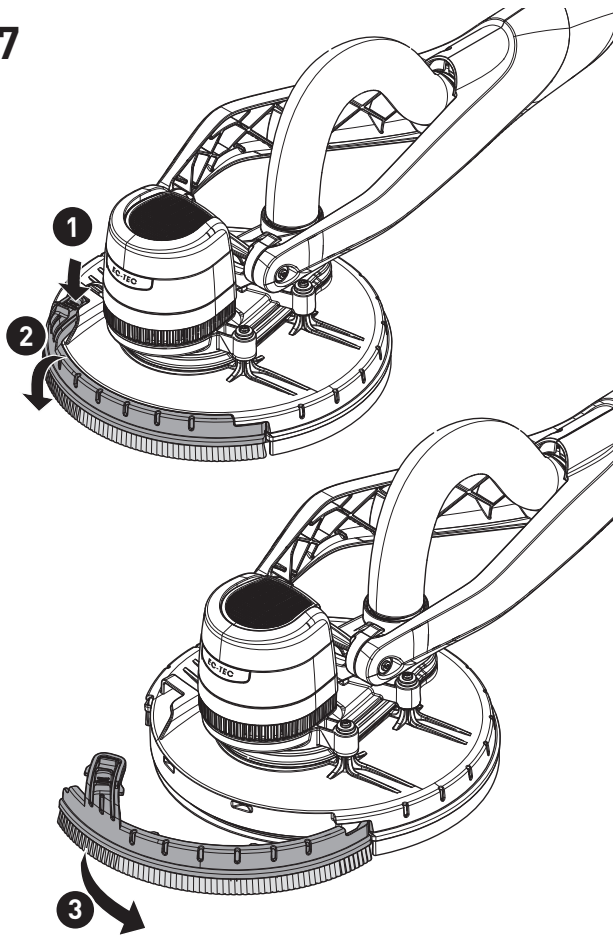
The removable brush segment means that the distance at the side between the wall/ceiling and the sanding pad is reduced.



CAUTION! Without a brush segment, there is more exposure to dust: Only remove it for specific applications.

The brush segment is fitted in reverse order to the process for removing it.

7



Dust extraction



WARNING

Health hazard posed by dust

- ▶ Always work with an extractor.
- ▶ Comply with national regulations.
- ▶ Wear a dust mask.

A Festool mobile dust extractor with an extractor hose diameter of 27 mm or 36 mm (36 mm recommended due to the reduced risk of clogging) can be connected to the extractor connector [1-4].

- ① Festool CTL/M 36 E AC *PLANEX* mobile dust extractors are adapted to the quantity of dust generated and permanently ensure the necessary suction power.

Recommendation: Use anti-static extractor hose! This helps reduce the electric charge.

Working with the power tool



WARNING

Risk of injury

- ▶ Do not hold the power tool by the sanding head.
- ▶ Hold the power tool with both hands using the gripping surfaces [1-10].

- ▶ To switch on the power tool, see Section Commissioning.
- ▶ Carefully place the sanding head onto the sanding surface.
- ▶ Perform the sanding work.
- ① Do not apply too much pressure on the power tool as this will cause overloading. The best sanding results are achieved with moderate ap-

plication pressure. The sanding performance and quality depend mainly on selecting the correct abrasive.

After finishing work

- ▶ Once you have finished the sanding work, set the power tool down.



CAUTION! Do not set the power tool down with the sanding head facing downwards – always lay it on the floor so that it is on its side with the brush ring facing down. Otherwise the sanding pad could be deformed.

- ① To protect the sanding pad and the sanding head, always transport and store the power tool in the accompanying carry bag without the sanding discs.



WARNING

Any maintenance or repair work that requires opening of the motor or gear housing should only be carried out by an authorised Customer Service Centre (name supplied by your dealer)!

- Maintenance or repair work carried out by an unauthorised person can lead to the wrong connection of the power cord or other components, which in turn can lead to accidents with serious consequences.



WARNING

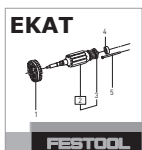
To prevent accidents, always remove the plug from the power supply socket before carrying out any changes or maintenance work on the tool!

- Do not use compressed air to clean the electrical tool! Do not try to clean parts inside the tool in this way, as you could let foreign objects in through the openings of the tool housing.



Customer service and repair only through manufacturer or service workshops: Please find the nearest address at:

www.festoolusa.com/service



Use only original Festool spare parts! Order No. at:

www.festoolusa.com/service

- Check the plug and the cable regularly and should either become damaged, in order to avoid a hazard, have them replaced by an authorised after-sales service workshop.

To ensure constant air circulation, always keep the cooling air openings in the motor housing clean and free of any obstruction.

In the event of a slowdown in performance or increased vibrations, blow and clean cooling air openings.

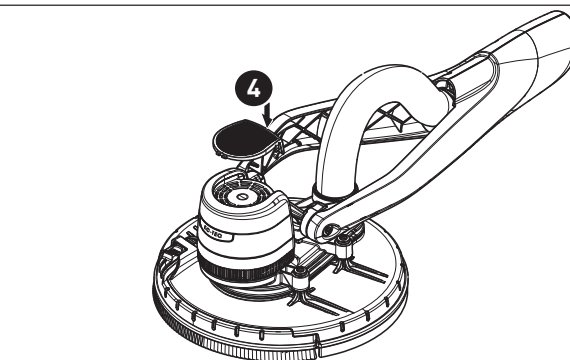
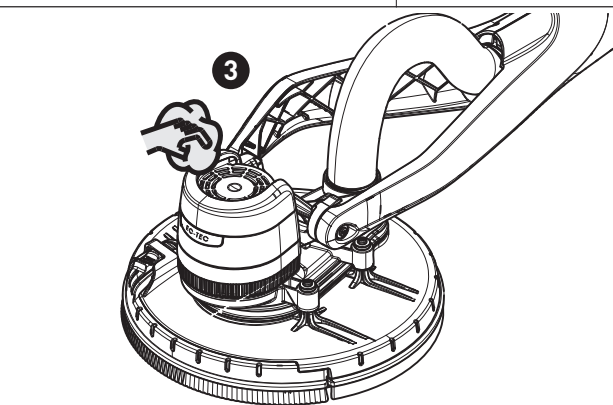
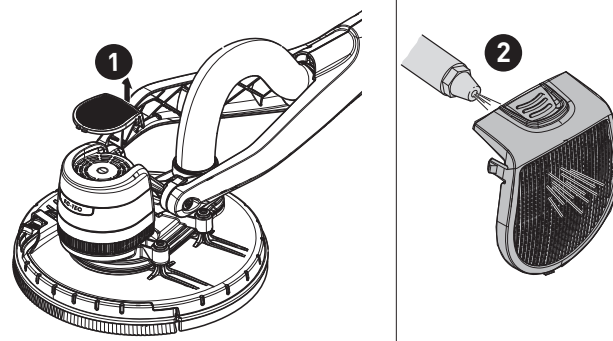
Cleaning the cool air filter [8]

If the cool air filter is blocked, the motor may not be sufficiently cooled and the power tool may switch off after three beeps because the temperature is too high.

- Clean all cool air openings on a regular basis.
- **1** Remove the filter sieve on the sanding head.
- **2** Remove any deposits in the sieve.
- **3** Remove any deposits in the openings in the housing.
- **4** Insert the filter sieve until it engages.

Let the power tool cool down for approx. 15 minutes before using it again.

8



Accessories

Use only original Festool sanding pads. Low-quality sanding and polishing pads may cause serious machine imbalances that decrease the quality of the work results and increase wear on the power tool.

Festool provides comprehensive accessories which allow you to use your power tool effectively and for diverse applications, e.g.

- Additional hand grip ZG-LHS 225
- Harness TG-LHS 225
- Mobile dust extractor CTL/M 36 E AC P L A N E X

The order numbers of the accessories and tools can be found in the Festool catalogue or on the Internet under "www.festoolusa.com".

Systainer

Many Festool products are shipped in a unique system container, called "Systainer". This provides protection and storage for the tool and accessories. The Systainers are stackable and can be interlocked together. They also can be interlocked atop Festool CT dust extractors.

To open the Systainer



Turn the T-loc [9-1] to this position.

To lock the Systainer



Turn the T-loc [9-1] to this position.

To connect two Systainers

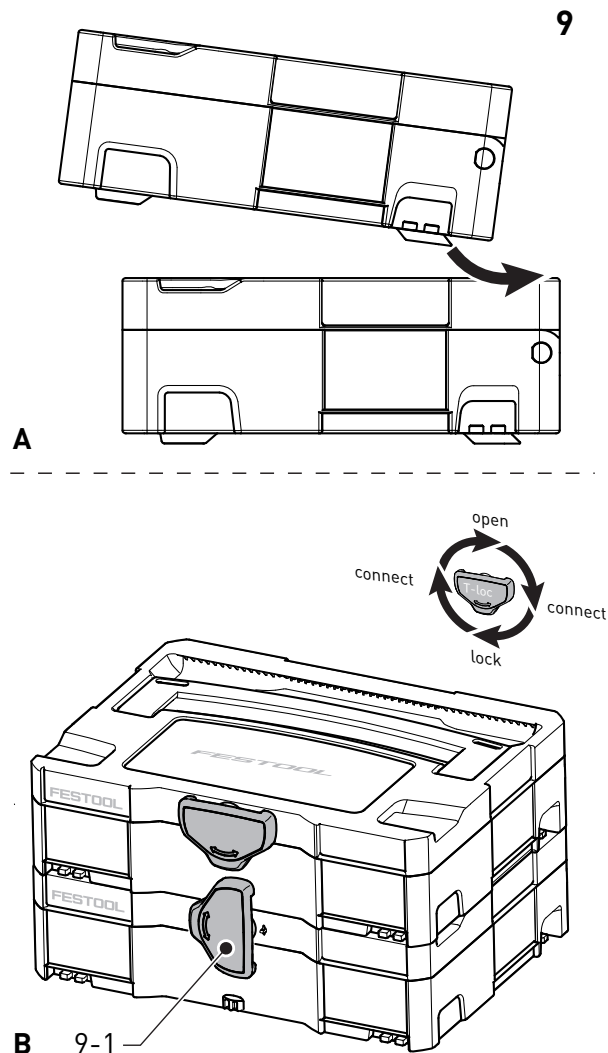
Place one Systainer on the top of the other (Fig. [9 A]).



Turn the T-loc [9-1] to one of this positions (Fig. [9 B]).

The Systainers are connected and locked.

- ① A new generation Systainer is connectable on top of a previous generation Systainer by the four latches of the previous Systainer.



Environment

Do not throw the power tool in your household waste! Dispose of machines, accessories and

packaging at an environmentally responsible recycling centre. Observe the valid national regulations.

Troubleshooting

Problem	Possible causes	Remedy
LHS-E 225 does not run smoothly over the surface.	Hard spackling paste or hard sub-layers	Reduce speed.
	Deformed sanding pad	Use a new sanding pad.
Extraction power is insufficient.	Filter element on the CTL/M 36 E AC P L A N E X is blocked/clogged.	Clean the filter element regularly: Option 1: Set the suction power adjustment to maximum. Using the surface of your hand, keep the nozzle, suction hose or suction opening on the mobile dust extractor covered for 10 seconds until automatic cleaning begins. Option 2: Manually clean the filter element (dust extraction). Option 3: Check the filter element for damage and clogging. Use a new filter element regularly.
	Disposal bag inserted incorrectly.	The holes punched in the disposal bag must be inside the container.
	Filter bag inserted instead of disposal bag.	Always work with the disposal bag when operating the PLANEX (grey bag).
	The suction power on the CTL/M 36 E AC P L A N E X is set too low.	Adjust the suction power to a higher setting.
	LHS-E 225 speed too high	Reduce speed.
	Suction hose blocked or kinked.	Remove blockage and straighten hose.
	Disposal bag full	Dispose of the bag.
	Brush segment open/not fitted.	Only remove the brush segment when sanding close to edges, refit it, see Section Sanding close to edges [7].
	The holes in the sanding discs are not aligned with the holes in the sanding pads.	Fit the sanding discs correctly, see Section Changing the sanding discs [6].
Excessive material removed from workpiece	LHS -E 225 speed too high	Reduce the speed, see Section Electronics
	Grit on abrasive too coarse	Select a finer grit.
Surface quality not perfect	Incorrect abrasive grit	Select a finer grit.
	Drying times of the spackling paste not observed.	Read the technical data sheets and manufacturer's recommendations.
	Spackling paste with a high percentage of filler/soft filler	Select a finer grit, e.g. P180.
	Power tool running when set down on the surface (groove formation).	Place the power tool in position and then switch it on.
		Always use a detachable brush segment when working on the surface.

Problem	Possible causes	Remedy
Sanding marks on the surface	Sanding pad is placed down on the surface at an angle	Place the sanding pad down so that it is level.
	The abrasive grit is too coarse for very soft spackling paste.	Choose a finer abrasive grit (abrasive Brilliant 2 available up to grit P 320).
LHS-E 225 switches off while working and after three beeps	Cool air filter on the LHS-E 225 is blocked.	Clean the cool air filter on the LHS-E 225, see Section. Cleaning the cool air filter [8].
	Excessive pressure -> power tool activates overheating protection.	Let the power tool cool down for approx. 15 minutes and then apply less pressure.
LHS-E 225 not working	plug it is not connected correctly.	Check that the plug it is securely connected.
	Interruption to power supply	Switch the power tool off and on again.
LHS-E 225 not working and beeps three times when an attempt is made to switch it on	Overheating protection active	Let the power tool cool down for approx. 15 minutes before switching it back on again.

If problems other than those listed occur, please contact your Festool service workshop or your local specialist dealer.

Information on data protection

The power tool contains a chip which automatically stores machine and operating data (RFID). This data saved cannot be traced back directly to an individual.

The data can be read using special (contactless) devices and shall only be used by Festool for fault di-

agnosis, repair and warranty processing and for quality improvement or enhancement of the power tool. The data shall not be used in any other way without the express consent of the customer.

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FESTOOL

Instruction manual

Page 6

IMPORTANT: Read all instructions before using.

Guide d'utilisation

Page 17

IMPORTANT: Lire toutes les instructions avant de démarrer les travaux.

Manual de instrucciones

Página 29

IMPORTANTE: Lea todas las instrucciones antes de usar.

Instruction manual
Guide d'utilisation
Manual de instrucciones

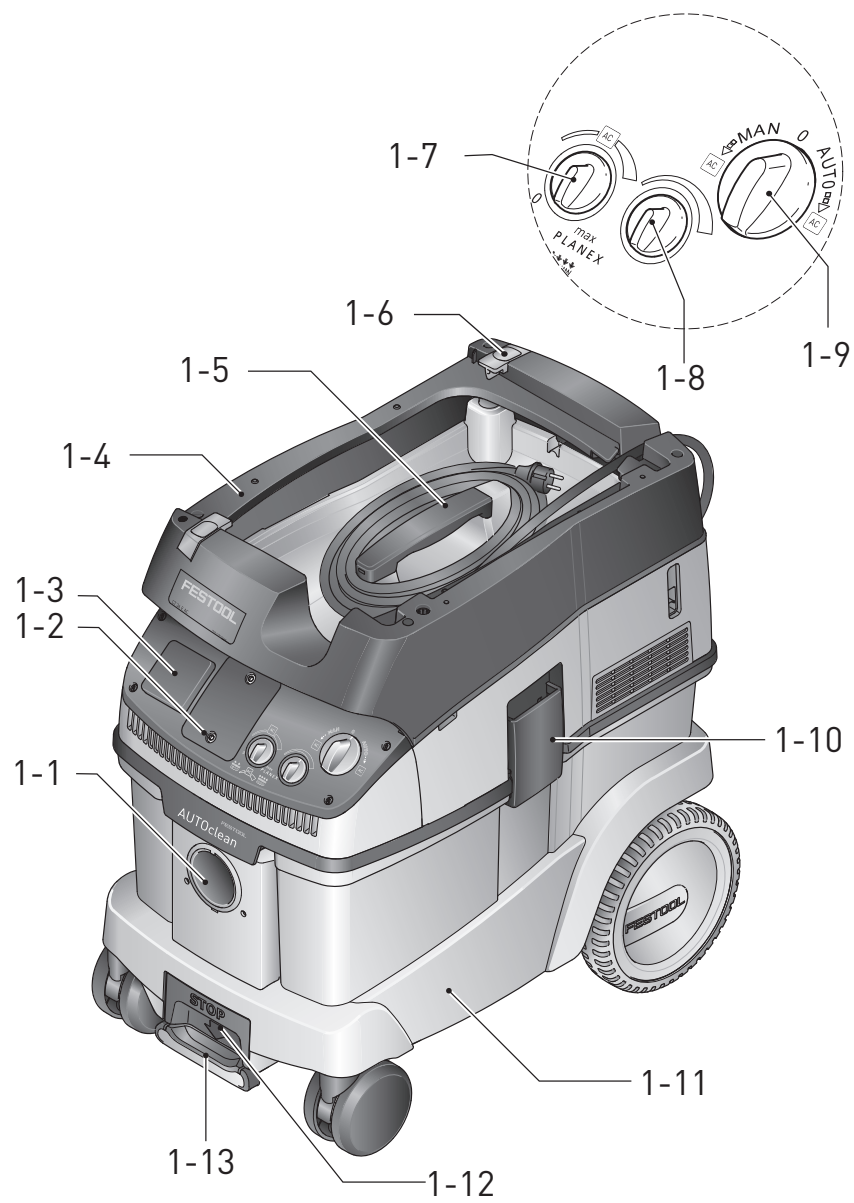
CT 36 E AC



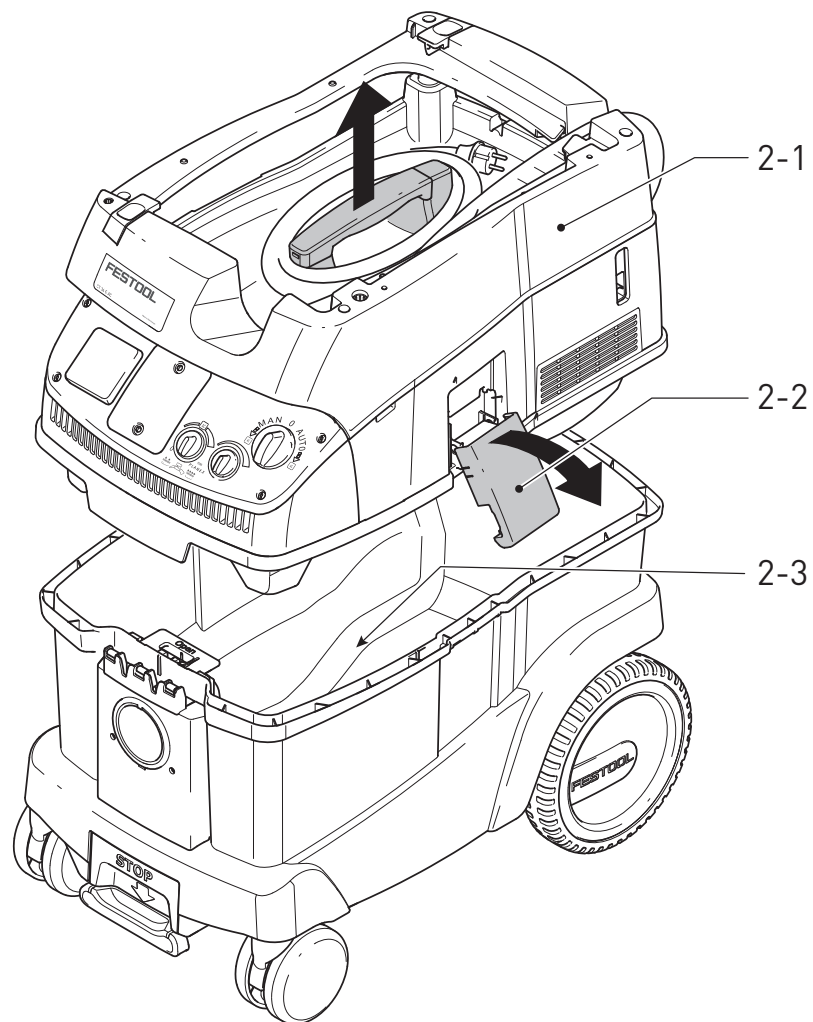
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Symbols




Sym- bol	Significance
	Warning of general danger
	Risk of electric shock
	Read operating instructions and safety notices!



Sym- bol	Significance
	Wear a dust mask.
	Tip or advice
	Handling instruction
W	watt
h	hour
min	minutes
s	seconds
kg	kilograms
Pa	pascal
dB	decibel
V	volts
A	amperes
Hz	hertz
~ a.c.	alternating current
--- d.c.	direct current
n_0	no load speed
	Class II construction
rpm min ⁻¹	revolutions per minute
"	inch
lbs.	pound
∅	diameter

About this manual

Save these instructions

It is important for you to read and understand this manual. The information it contains relates to protecting **your safety** and **preventing problems**. The symbols below are used to help you recognize this information.

	DANGER	Description of imminent hazard and failure to avoid hazard will result in death.
	WARNING	Description of hazard and possible resulting injuries or death.
	CAUTION	Description of hazard and possible resulting injuries.

	NOTICE	Statement including nature of hazard and possible result.
	HINT	Indicates information, notes, or tips for improving your success using the tool.

Safety instructions



IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS

BEFORE USING THIS DUST EXTRACTOR:



WARNING - To reduce the risk of fire, electric shock, or injury:

- Do not leave the dust extractor when plugged in. Unplug from outlet when not in use and before servicing.
- Use indoors only.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Use only as describes in this manual. Use only manufacturer's recommended attachments.
- Do not use with damaged cord or plug. If the dust extractor is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run dust extractor over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or dust extractor with wet hands.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- Connect to a properly grounded outlet only. See Grounding instructions.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes, hot chips or particles, sparks.
- Do not use without dust bag and/or filters in place.

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This dust extractor is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

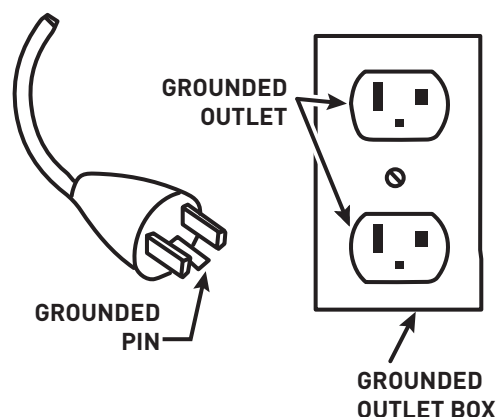


WARNING

- Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the dust extractor - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This appliance is for use on a nominal 120-V circuit and has a grounding attachment plug that looks like the plug illustrated in sketch A in Figure beside.

GROUNDING METHODS - SKETCH A



Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.

Polarization Instructions

To reduce the risk of electric shock, this vacuum cleaner has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the

outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

Further safety instructions

- This appliance must not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge. **Children** need to be supervised to ensure they do not play with the appliance.



CAUTION

This machine is for indoor use only.
This machine shall be stored indoors only.

Health hazard by dust



WARNING! Various dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically treated lumber.



The 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 dust masks that are specially designed to filter out microscopic particles. Wash hands after handling.



WARNING

TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL.

Technical data

Dust extractor CT 36 E AC

Power consumption (dust extractor only)		2.9 - 8.3 A (350 - 1000 W) ^{1.)}
Total connected load	max.	12 A (1440 W)
Max. rating of connected Power Tool		3.7 A ^{2.)}
Volume flow (air), turbine	max.	234 m³/h (8264 cu.ft./h)
Vacuum, turbine	max.	24000 Pa
Filter surface		6318 cm² (979.3 sq.in.)
Suction hose (diameter x length)		36 mm x 3.5 m (1-7/16" x 11.5')
Protection type		IP X4
Sound pressure level as per IEC 60704-2-1		71 dB(A)
Container capacity	CT 36 E AC	36 l (9.5 gal.)
Dimensions L x W x H	CT 36 E AC	630 x 365 x 596 mm (24.8 in. x 14.4 in. x 23.4 in.)
Weight	CT 36 E AC	15.2 kg (33.5 lbs)

^{1.)} 8.3 A (1000 W) is the medium value for different operation conditions, a maximum power consumption of 10 A (1200 W) is possible.

^{2.)} When the suction power adjuster [1-7] is adjusted to the lowest suction power (see page 11, chapter Settings - Adjusting the suction power) the maximal rating of a connected power tool can be 9.1 Amps.

Functional description

The pictures for the functional description are on a fold-out page at the beginning of the instruction manual. When reading of the manual you can fold out this page for having always an overview of the machine.

Accessories shown or described are sometimes not included in the scope of delivery.

[1-1] Intake opening

[1-2] Module slot

[1-3] Appliance socket

[1-4] Hose store

[1-5] Handle

[1-6] SysDoc

[1-7] Automatic cleaning

[1-8] Suction power adjuster

[1-9] Switch

[1-10] Locking clip

[1-11] Dust container

[1-13] Brake

Intended use

The dust extractor is designed for use as specified for the aspiration and evacuation of non-noxious dusts, dirt, sand, shavings etc..

The dust extractor is designed as specified for vacuuming water.

The dust extractor is designed for household, com-

mercial or both use.



WARNING

The user will be liable for damage due to improper use.

Operation



WARNING

Unauthorised voltage or frequency!

Risk of accident

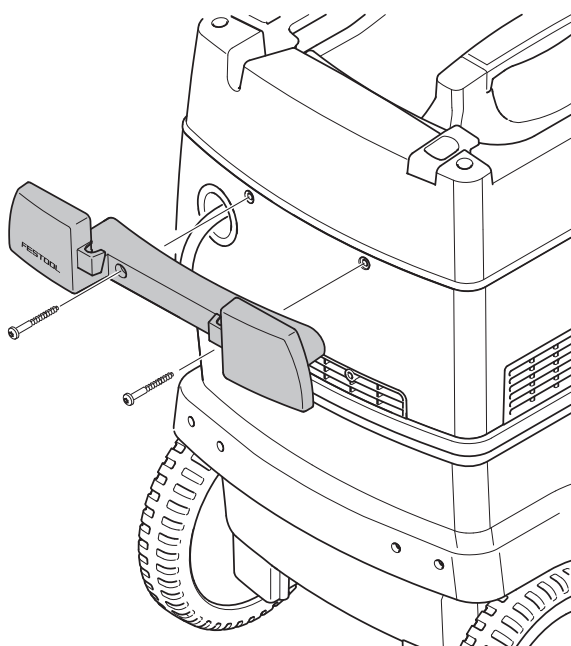
- ▶ The mains voltage and the frequency of the power source must correspond with the specifications on the machine's name plate.
- ▶ In North America, only Festool machines with the voltage specifications 120 V/60 Hz may be used.

Consider the pictures on the fold-out page.

Initial operation

- ▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.
- ▶ Remove the accessories from the dust container **[2-3]** and the packaging!
- ▶ Insert a filter or disposal bag in the dirt trap (see chapter Changing the filter bag and Changing the disposal bag).
- ▶ Attach the cable holder to the rear of the mobile dust extractor (see Fig. **[3]**).

3



- ▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.

- ▶ Connect the suction hose to the machine.

Switch on/off

- ▶ Insert the plug into an earthed socket.



CAUTION

Risk of injury from tools starting up unexpectedly

- ▶ Before setting the switch to the "AUTO" or "MAN" position, make sure that the connected tool is switched off.

The switch **[1-9]** serves as an On/Off switch. It has three positions:

Switch position "0"

Appliance socket **[1-3]** is disconnected from the power, mobile dust extractor is switched off.

"MAN" switch position

Appliance socket **[1-3]** is disconnected from the power, the mobile dust extractor starts.

"Auto" switch position

Appliance socket **[1-3]** is connected to the power, the mobile dust extractor starts when the connected tool is switched on.

Extension Cord

If an extension cord is required, it must have sufficient cross-section to prevent an excessive drop in voltage or overheating. An excessive drop in voltage reduces the output and can lead to failure of the motor. The table below shows you the correct cord diameter as a function of the cord length for this tool.

Total Extension Cord Length (feet)	25	50	100	150
Cable size (AWG)	14	12	not recommended	

Use only U.L. and CSA listed extension cords.

Never use two extension cords together. Instead, use one long one.

- ① The lower the AWG number, the stronger the cord.

The antistatic system

Friction inside the extraction hose causes static electricity to develop during extraction. Operating personnel may receive unpleasant electric shocks

while working. The mobile dust extractor is fitted with an antistatic system as standard to discharge any static electricity that may develop. However, always use the enclosed antistatic extraction hose.

Settings

Consider the pictures on the fold-out page.

Connecting electric power tools



WARNING

Risk of injury

- Observe the maximum appliance socket connected load (see chapter "Technical data")
 - Switch off the electric power tool.
-
- Connect the electric power tool to the appliance socket **[1-3]**.

Connecting pneumatic tools



WARNING

Risk of injury

- Make sure that the pneumatic tool is switched off before connecting or disconnecting.

If the compressed air module **[1-2]** (496141) is installed, the automatic switch-on function of the mobile dust extractor also works in combination with pneumatic tools.

We also recommend installing the VE service unit (495886). The service unit filters and lubricates the compressed air and enables an adjustment of the

air pressure. An IAS adapter (454757) is available to connect Festool pneumatic tools to the IAS system.

The operating pressure of the tool must be 6 bar for the automatic switch-on unit to function correctly.

Temperature cut-out

To prevent overheating, a temperature cut-out switches the mobile dust extractor off when it reaches a critical temperature.

- Switch off the mobile dust extractor and allow to cool for about 5 minutes.
- ❗ If the mobile dust extractor will not switch on again, please contact a Festool service workshop.

Adjusting the suction power

You can use the suction power adjuster **[1-8]** to adapt the machine suction power to different applications.

AUTOClean - Cleaning the main filter

To maintain a constant suction power when extracting fine dust, you can adjust the frequency of the automatic **[1-7]** cleaning system in infinite variables using the rotary knob. Always use the automatic cleaning system in combination with a disposal bag.



Before performing wet extraction tasks or working with a filter bag, set the **[1-7]** rotary knob to position 0.

- Set the automatic cleaning function to the highest setting when **[1-7]** extracting large quantities of dust.

Manual cleaning



If the suction power decreases, cleaning can be started manually by turning the switch **[1-9]** to the **AC** symbol positioned on either side of the switch.

We recommend cleaning the main filter completely if severely clogged:

- ▶ Cover the end of the nozzle or suction hose with your hand for 2 seconds.
- ▶ Turn the switch **[1-9]** to the **AC** symbol.
- ① When the CT-VS closing slide is used (order no.: 497926), the filter can be cleaned fully without removing the connected electric power tools.

In intensive applications that generate adherent dust, it may be necessary to clean the filter element

mechanically under certain circumstances (extract). Wear a dust mask!

Applying the brake

Folding out the brake lever **[1-13]** prevents the mobile dust extractor from rolling. To achieve this, lift the front end of the mobile dust extractor slightly and push the brake lever downwards until it latches into place. Push the lever **[1-12]** again to release.

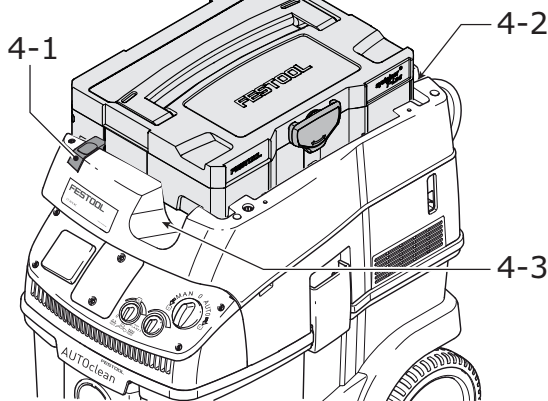
Working

Handling

Hose store: after finishing work, you can feed the suction hose through the recess **[4-3]** and place it in the hose store. You can do the same with the mains cable through the other recess **[4-2]**.

SysDoc Systainer attachment system: a Systainer can be attached to the storage area via the two slides **[4-1]**.

4



Extracting dry materials



WARNING

Not suitable to vacuum hazardous or toxic substances or dusts e.g. asbestos.

- ▶ The filters will not be able to capture all particles and may exhaust them back into the environment.

Remember: A damp main filter will clog more quickly when dry materials are extracted. Therefore, dry the main filter before extracting dust or replace the damp filter with a dry one.

Extracting fluids



WARNING

Risk of injury

- ▶ Do not evacuate combustible liquids!

- ① The main filter shall only be used for extracting dry materials.

Before extracting fluids, remove the filter or disposal bag (see chapter Changing the filter bag and Changing the disposal bag). We recommend using a special wet filter.

The dust extractor stops automatically when the maximum level is reached.



CAUTION

Escaping foam and fluids

- ▶ Switch off the machine immediately and empty the dust container.

Special features of the CT 36 E AC- LHS

To use the mobile dust extractor in combination with the PLANEX:

- ▶ Use kink-resistant suction hose D 36 mm x 3.5 m-AS.
- ▶ Use a special suction sleeve for connecting the PLANEX.
- ▶ Use closing slide CT-VS between the intake opening **[1-1]** and suction hose.
- ▶ Attach the tool holder.
- ▶ **Always use with a disposal bag!**



WARNING

Risk of injury

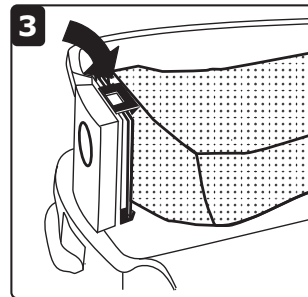
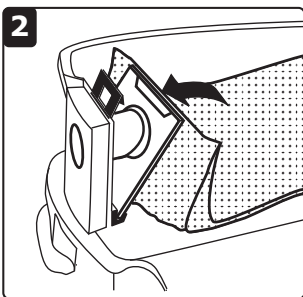
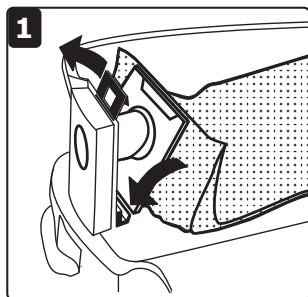
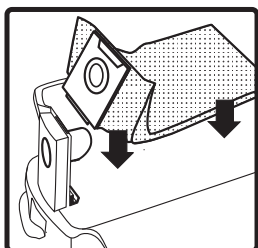
- ▶ During the following procedure, take care not to raise dust more than is unavoidable. Moisten the main filter with a water spray before removing it.

Changing the filter bag

Inserting the filter bag

- ▶ Open the locking clips [2-2] and remove the top section of the machine [2-1].
- ▶ Insert a new filter bag (SC-FIS-CT 26/36/48) (Fig. [5]) in the inlet port of the dust container and interlock it. **Important:** be aware that the locking engages.
- ① Make sure that the filter bag is not pinched between the top and bottom sections.
- ▶ Replace the top section [2-1] and close the locking clips [2-2].

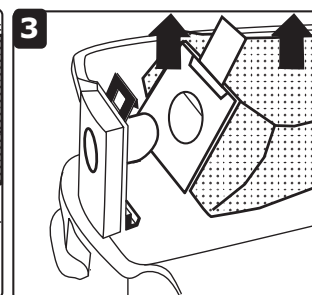
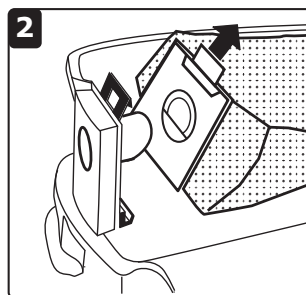
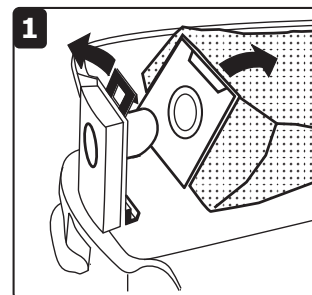
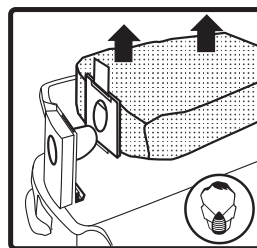
SC-FIS-CT 26/36/48



5

Removing the filter bag

- ▶ Open the locking clips [2-2] and remove the top section of the machine [2-1].



6

- ▶ Remove the filter bag (Fig. [6]).
- ▶ Dispose of the used bag in accordance with statutory regulations.
- ▶ Clean the dust container [2-3].
- ▶ Insert a new filter bag if necessary (see Inserting the filter bag).
- ▶ Replace the top section [2-1] and close the locking clips [2-2].

Changing the disposal bag

Inserting the disposal bag [7]

- ▶ Open the locking clips [2-2] and remove the top section of the machine [2-1].
- ▶ Insert a new disposal bag (ENS-CT26/36/48) on the inlet nozzle of the container and lock in position.

Important: The lateral openings on the disposal bag must be positioned inside the container. Make sure that the bolt engages.

- ▶ Place the disposal bag over the edge of the container.

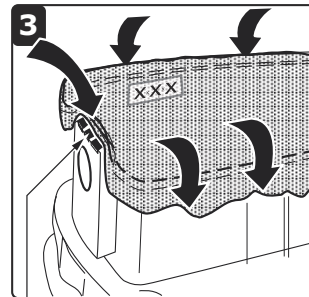
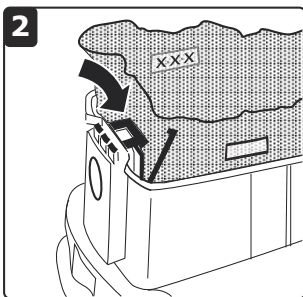
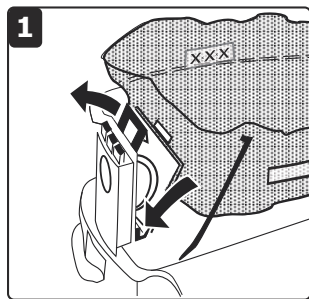
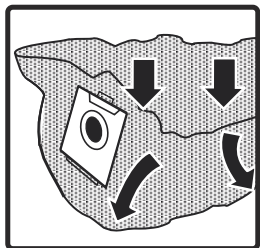


Make sure that the contacts [7-1] are free.

- ▶ Replace the top section [2-1] and close the

locking clips **[2-2]**.

ENS-CT 26/36/48

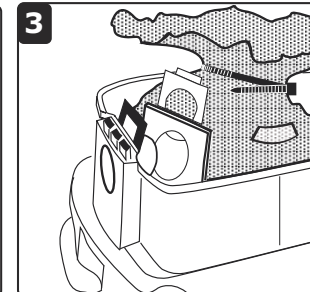
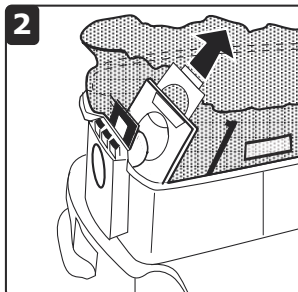
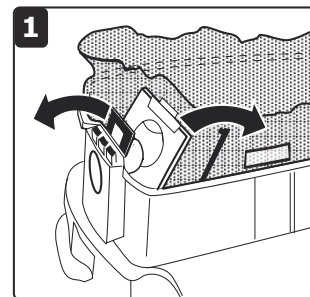
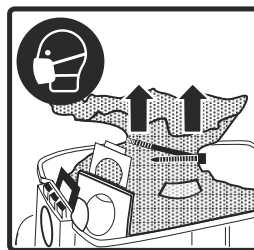


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7-1

Removing the disposal bag **[8]**

- ▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.
- ▶ Close the disposal bag.
- ▶ Remove the disposal bag.
- ▶ Dispose of the used disposal bag in accordance with statutory regulations.
- ▶ Clean the dust container **[2-3]**.
- ▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.



8

Changing the main filter

NOTE

Motor damage

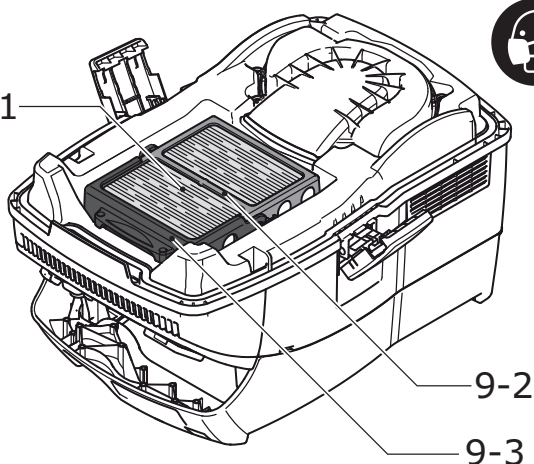
- ▶ Never operate the extractor without a main filter fitted as the motor may become damaged.

- ▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.
- ▶ Turn the top section of the machine so that the main filter is facing upwards (Fig.**[9]**).
- ▶ Fold over the lever **[9-3]** and remove the retainer **[9-2]**.
- ▶ Remove the used main filter **[9-1]** and replace with a new one.
- ▶ Dispose of the used main filter in accordance with statutory regulations.
- ▶ Insert the retainer **[9-2]** and fold over the lever **[9-3]** until it engages.
- ▶ Replace the top section **[2-1]** and close the

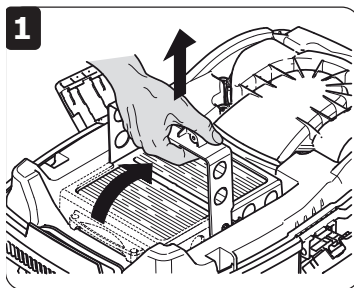
locking clips [2-2].

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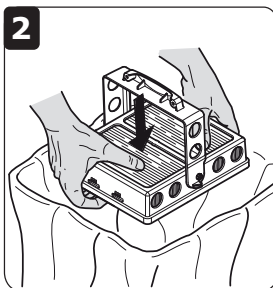
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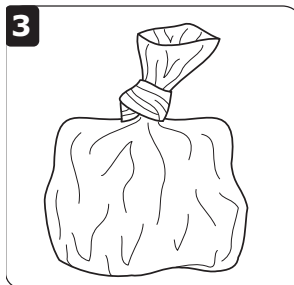
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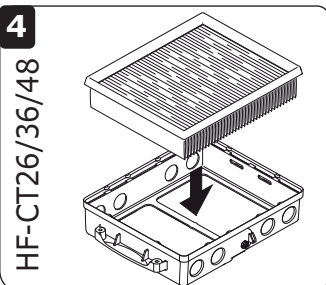
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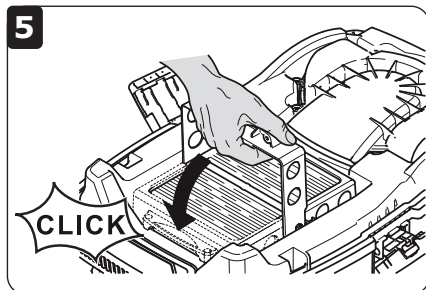
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4



5



After finishing work

- ▶ Switch off the mobile dust extractor and disconnect the plug.
- ▶ Wind up the mains power cable.
- ▶ Empty the dust container.



CAUTION

Hazardous dust

Damage to the respiratory passage

- ▶ Wipe down the mobile dust extractor and clean all accessories thoroughly using the extractor (inside and out) before removing from the working area.
- ▶ Parts that you were not able to clean thoroughly must be sealed in an airtight plastic bag prior to transportation.
- ▶ Wear a dust mask!

- ▶ Place the mobile dust extractor in a dry room inaccessible to unauthorised users.

Emptying the dust container

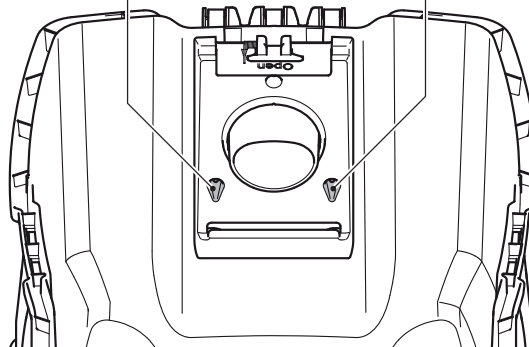
The dust container [2-3] can be emptied once the top section has been removed.

- ▶ After extracting fluids, clean the fill level sensors [10-1] regularly with a soft cloth and inspect for damage.

10

10-1

10-1



Service and maintenance



WARNING

Any maintenance or repair work that requires opening of the motor or gear housing should only be carried out by an authorised Customer Service Centre (name supplied by your dealer)!

- Maintenance or repair work carried out by an unauthorised person can lead to the wrong connection of the power leads or other components, which in turn can lead to accidents with serious consequences.



WARNING

To prevent accidents, always remove the plug from the power supply socket before carrying out any maintenance or repair work on the tool!

- Do not use compressed air to clean the electrical tool! Do not try to clean parts inside the tool in this way, as you could let foreign objects in through the openings of the tool housing.

A dust test must be performed at least once a year by the manufacturer or an instructed person. This test may include checks to determine whether the filter is damaged, the machine is sealed properly and the monitoring features are functioning correctly.

During maintenance and repair work, all components that cannot be cleaned satisfactorily must be replaced. The old components must be sealed in impermeable plastic bags prior to disposal in compliance with applicable regulations for this type of waste.



Customer service and repair only through manufacturer or service workshops: Please find the nearest address at:

www.festoolusa.com/service



Use only original Festool spare parts! Order No. at:

www.festoolusa.com/service

Accessories

Use only original Festool accessories and Festool consumable material intended for this machine because these components are designed specifically for the machine. Using accessories and consumable material from other suppliers will most likely affect the quality of your working results and limit any warranty claims. Machine wear or your own personal workload may increase depending on the application.

Protect yourself and your machine, and preserve your warranty claims by always using original Festool accessories and Festool consumable material!

The accessory and tool order number can be found in the Festool catalog or on the Internet under www.festoolusa.com.

Disposal

Do not throw the tool in your household waste! Dispose of machines, accessories and packaging at

an environmentally responsible recycling centre. Observe the valid national regulations.