

User Manual

FERREX®

RECIPROCATING SAW

FS 850-N



Original instructions

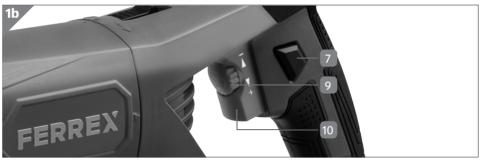


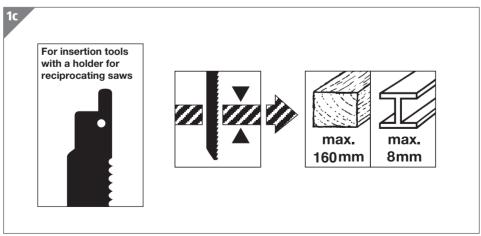
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Overview



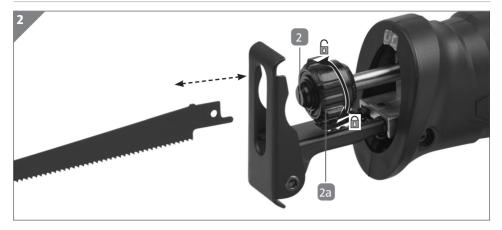




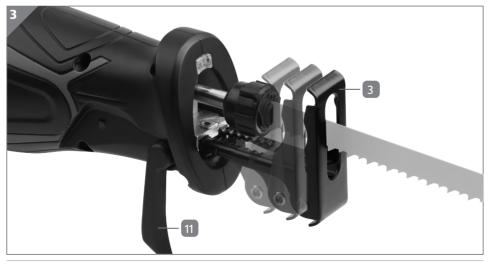
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Overview

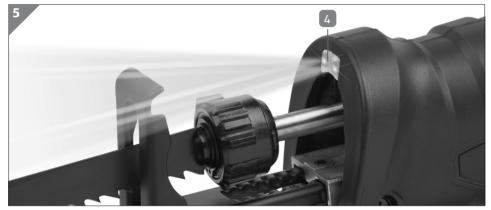






Overview









General power tool safety warnings

AWARNING!

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

- a **Keep work area clean and well lit.** Cluttered or 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.

2 Electrical safety

- a Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with 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 tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.





f If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3 Personal safety

- a Stay alert, watch what you are doing and use common sense when operating a power tool. 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 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.
- 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 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.





Safety instructions for reciprocating saws

- Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the workpiece by hand or against your body leaves it unstable and may lead to loss of control.
- Only use sharp, undamaged saw blades. Torn, bent or blunt blades should be replaced immediately.
- Match the insertion tool and stroke rate to the material in question. Make sure that the feed is even.
- Only operate the machine with a mounted saw shoe (3). When working, the saw shoe should always rest against the workpiece.
- Always switch on the machine before introducing it to the workpiece
- Do not machine materials containing asbestos. When working with any other materials containing fibres, use dust protection masks and extraction systems.
- If you wish to use the machine outdoors, ensure it is connected via a residual current circuit breaker. Extension cable and plug must be designated for use outdoors.
- Do not brake the saw blade by applying pressure to the sides.
- Make sure that cables always lead away from the area of work.
- During operation, always guide the machine with both hands and ensure that you are standing firmly.



- Never expose the machine to the rain.
- The machine should never be allowed to get wet and should not be operated in a damp environment.
- Prior to each use, check the machine, the cable and the plug. Any damage should only be repaired by a specialist. Only plug the machine into the socket when it is switched off.









When carrying out work that generates dust, wear a breathing mask and goggles - do not smoke, avoid naked flames.



- When handling saw blades and rough materials, wear gloves. When changing a saw blade, wear protective gloves to prevent injuries caused by the sharp cutting edges of the blade.
- If you pass this machine on to a third party, be sure to include these operating instructions with it.
- Before carrying out any work on the machine, always pull the plug out of the socket.
- Do not leave keys fitted.
- Observe the general safety notes with regard to operating power tools.

Symbols key



AWARNING!

read the operating instructions to reduce the risk of injury.



This symbol means that this machine conforms to protection rating class II. This means that the machine is equipped with a reinforced or double insulation between the power circuit and the output voltage or metal housing.



CE Stands for 'Conformité Européenne', which means 'in conformity with EU directives'. With the CE mark, the manufacturer confirms that this power tool corresponds to the applicable European Directives.



Important! Wear safety goggles!



Important! Wear hearing protection!



Do not dispose of power tool with household waste!





Suitable for use with wooden materials



Suitable for use with metal materials

Components

- Saw blade
- Saw blade holder
- 2a Lock
- Saw shoe, adjustable
- 4 LED working light
- 5 Handle
- 6 Lockable trigger for handle
- Stop button for continuous operation
- 8 Grip
- 9 Setting wheel for pre-selecting stroke rate
- 10 On/Off switch
- 11 Lockable lever for adjusting saw shoe (Fig. 3)

Intended use

Sawing in wood, metal and plastics. Only use suitable insertion tools and observe the relevant manufacturer specifications. Any other type of use is inappropriate. The machine is designed for household use, not for commercial use. The machine may not be used as a permanent installation.

Children should be supervised to ensure that they do not play with the machine.

ACAUTION!

Improper use or modifications to the machine, and the use of components that are

not tested and approved by the manufacturer, may result in unforeseen damages.







Improper use

All types of use carried out with the machine that are not listed in the 'Intended use' chapter will be considered improper use.

This power tool is not suitable for cutting down trees.

Uses for which the power tool is not intended may lead to danger and injuries. Do not use any accessories which are not specifically intended for this power tool. Just because you are able to attach an accessory to your power tool this does not quarantee that it is safe to use.

The permitted stroke rate of the insertion tool must be at least as high as the highest value specified on the power tool. Accessories that move faster than they are permitted to may break and fly.

There is a risk of injury. The user of the machine is liable for any damage to property or persons resulting from improper use.

The manufacturer's warranty becomes void if other and/or non-original parts are used with the machine.

Residual risks:

The operating instruction for this power tool contains comprehensive tips for the safe handling of power tools. However, every power tool carries certain residual risks which cannot be completely ruled out, even in the presence of protective equipment.

Therefore, you should always operate power tools with the necessary care.

Examples of residual risks are:

- Coming into contact with moving parts or insertion tools.
- · Injury from tools or tool parts flying around.
- Fire hazard if the motor is not sufficiently ventilated.
- Hearing impairment from working without hearing protection.
- Damage to lungs from inhaling dust

Safe work also depends on the familiarity of the operator with the power tool in question! Appropriate knowledge of the machinery and careful behaviour when working help to minimise the remaining risks.

AWARNING!

This power tool generates an electromagnetic field during operation. Under certain circum-

stances, this field may affect active or passive medical implants. In order to reduce the risk of serious or deadly injuries, we recommend persons with such a medical implant consult their doctor and the manufacturer of the medical implant before using the power tool.

Technical information

Technical data

Nominal voltage/frequency 230 V~/50Hz

Power consumption 850W

Idle stroke rate $n_0 = 500-2800 \text{ rpm}$

Saw stroke 28mm

Cutting depth

- Wood max. 160mm- Steel max. 8mmWeight approx. 2.5kg

Cable 300cm

Protection class II

Technical modifications reserved.



is a registered trademark of Conmetall Meister GmbH, 42349 Wuppertal, Germany

Noise emissions

Hand/arm vibrations

Noise/vibration information

The specified overall vibration value and specified noise emission values were measured in accordance with a normed test procedure (EN 62841-1 & EN 62841-2-11) and can be used in order to compare one power tool with another. They can be used to establish a preliminary evaluation of the load.

AWARNING!

The vibrations and noise emissions generated when the power tool is actually being used may

deviate from the specified values depending on the way in which the





power tool is used, and specifically, on the basis of the type of workpiece being machined.

It is necessary to specify safety measures for the protection of the user which are based on the vibration load incurred under conditions of real use (in doing so, all elements of the operating cycle are to be considered, for example, times in which the power tool is switched off, and those in which it is switched on but operating without load).

Try to keep the load caused by vibration and noise as low as possible. Examples of measures that may be taken to reduce the load include the wearing of gloves when using the tool, the restriction of working times and the use of accessories that are in good condition.

ACAUTION!

A certain noise load from this machine cannot be avoided. Ensure you carry out noise-inten-

sive work during authorised permitted times. Observe any applicable quiet periods and limit your work to the most necessary tasks.

ACAUTION!

The effect of noise may cause hearing damage. Therefore, you should only work with suitable

hearing protection. Bystanders must therefore also wear suitable hearing protection.

Unpacking and checking

Check the parts supplied

- Open the packaging and carefully remove the machine.
- Remove packaging material, and packaging and transport safeguards (if present).
- Check to make sure that the delivery contents are complete.
- Check the reciprocating saw and accessory parts for transport damage.
- Store the packaging until the warranty period expires.

ACAUTION!

The machine and packaging material are not toys. Children must not play with plastic bags,

film and small parts! There is a swallowing and suffocation hazard!

Delivery contents

- Reciprocating saw
- 1 saw blade for wood
- Operating instructions
- · Warranty certificate

Assembly and adjustment tasks

ACAUTION!

Before carrying out any work on the machine, always pull the plug out of the socket!
Changing the saw blade (Fig. 2/2a)

ACAUTION!

Disconnect the power before each saw blade change!

ACAUTION!

Wear gloves when changing the saw blade. Cutting and burning hazard.

Remove saw dust from the saw blade holder (2). Turn the lock (2a) of the saw blade holder (2) anticlockwise until it stops, and hold it in this position. Remove the saw blade from the saw blade holder, as per Fig. 2. Insert a new saw blade into the saw blade holder until it comes to a stop. Release the lock (2a) and check that the saw blade is firmly fixed. Repeat the process if necessary.



The saw blade holder is suitable for holding conventional accessories, with a mounting shaft for reciprocating saws.

Electronic stroke rate control/stroke rate pre-selection function

A maximum stroke rate (500-2800 rpm) can be preset for sawing the relevant material by turning the stroke pre-selection setting wheel (9) (Fig. 1b). The stroke rate of the machine is set up to a certain maximum by pressing the On/Off switch.

Reduce stroke rate

Increase stroke rate









Setting the saw shoe (Fig. 3)

ACAUTION!

Disconnect the power before carrying out any work!

The adjustable saw shoe makes it possible to select the optimal cutting depth, or move the area of use where the saw blade's teeth are operational. Select the cutting depth for the application so that the saw blade has full contact in each stroke position. Press the saw shoe locking lever (11) down and slide the saw shoe (3) lengthwise to the required position. The saw shoe must be placed as close to the marking in the machine as possible. Pull the locking lever back up. To adapt or to provide a safe rest for the various materials, the angle of the saw shoe can also be modified.

Setting the sawing position (Fig. 4)

ACAUTION!

Disconnect the power before carrying out any work!

The saw can be set in three positions (0°, +/-90°). Pull the lockable trigger (6) back to change the sawing position. Bring the saw shoe (3) to a desired position by turning the handle (5). Let the lockable trigger (6) engage.

LED working light (Fig. 5)

If the plug is inserted, the LED working light (4) will light up to make viewing easier and work safer. The LED working light goes out when the plug is pulled out of the socket.

ACAUTION!

LED working light! Do not look directly into the light beam, as this may damage your eyes.

Operation

Switching on

Only connect the saw when the socket's voltage matches the information on the type plate.

Press the On/Off switch (10).

The saw starts with a low stroke rate. The stroke rate can be increased to a preset value by pressing the switch hard (10).

Switch the machine off to adjust the stroke rate on the setting wheel (9) (Fig. 1b).





Release the On/Off switch (10) and wait for the machine to come to a stop.

Switching on continuous operation

Push the On/Off switch (10) as far as it will go, press the stop button for continuous operation (7) (Fig. 1b) and release the On/Off switch (10).

The machine starts at the set stroke rate.

Switch the machine off to adjust the stroke rate on the setting wheel (9) (Fig. 1b).

Switching off continuous operation

Stop the machine by pressing the On/Off switch (10). Release the On/Off switch (10) and wait for the machine to come to a stop.

Working methods and finishing work

Adjust the saw blade and stroke rate to each material. Remove any foreign objects from the workpiece.

We recommend carrying out test cuts on waste materials in order to determine the required machine settings.

ACAUTION!

Observe the safety notes!

ACAUTION!

Use a clamping device to protect the workpiece from slipping before cutting!

Observe the information about maximum cutting depths when machining materials!

Switch the machine on, and move it towards the workpiece to be machined. Place the saw shoe (3) on the surface of the workpiece and saw the material with even pressure and feed. If the saw blade becomes trapped, turn the machine off immediately. Use a suitable tool to open up the cut a little and remove the machine. When you have finished working, switch off the machine and only put it down when it has come to a complete standstill.

ACAUTION!

After working with a low stroke rate for a long period of time, operate at maximum revolu-

tions in idle mode for about 3 minutes to allow the machine to cool down! Pay close attention to ensure that the machine and saw blade do not cause any danger.









ACAUTION!

When sawing metal, and steel in particular, regular cooling breaks should be taken in order to

allow the saw blade to cool, or brush the blade with a cutting oil! This will considerably increase the durability and edge retention of the blade.

Finishing work

- Turn off the machine.
- Disconnect the machine from the power supply.
- Let the machine cool down sufficiently.
- Remove insertion tools before cleaning, maintenance or storage.

Cleaning, maintenance and repairs

Cleaning

ACAUTION!

Turn the machine off, disconnect it by pulling the plug from the power supply and allow the

machine to cool down before carrying out inspection, maintenance or cleaning work!

- Keep the machine and air vents clean to ensure safe and proper work.
- Check regularly whether dust or foreign objects have entered the openings near the motor and around the On/Off switch. Use a soft brush to remove any accumulated dust. Wear safety goggles when cleaning.
- Clean the machine casing with a soft damp cloth. You can use a mild cleaning product, but not one containing alcohol, petrol or other cleaners.
- Never use solvents to clean plastic parts.
- Lubricate all moving parts regularly.

Maintenance

- Check the machine and accessories (e.g. insertion tools) for wear and damage before and after each use. Change them for new ones if necessary, as described in these instructions. Observe technical requirements for this.
- Check all fastenings regularly. They may become loose over time due to vibration.
- If the power cable of this device is damaged, it may only be replaced by the manufacturer, their customer service department or a similarly qualified person, in order to prevent risks.



List of replacement parts

The following parts may be purchased from the customer service department: saw shoe, adjustable (3)



After carrying out any maintenance or cleaning work, always make sure that all protective

equipment, if available, has been reattached properly and safely! Never use the machine without protective equipment!

Repairs

There are no parts within the machine that can be repaired by the user. Contact a qualified person to check the machine and repair it.

Storage and transportation

Storage

- Clean the machine as described above.
- Store the machine and its accessories in a dry, frost-free place.
- Always keep the machine out of the reach of children. The ideal storage temperature is 10-30 °C.
- We recommended storing the machine in its original packaging or covering it with a suitable cloth to protect it from dust.

NOTE!

Check the machine before each use for any signs of wear or damage, using these instructions.

Transport

- Turn the machine off and disconnect it from the power supply before transportation.
- Attach transport protectors if available.
- Always hold the machine by the grips/handles provided.
- Protect the machine from damage and heavy vibrations, which are especially likely to occur during transportation in vehicles.
- Secure the machine to prevent it slipping or tipping.







Disposal and recycling

ACAUTION!

Electrical and battery-powered devices which are no longer usable must not be disposed of with

household waste! They must be sorted separately, in accordance with Directive 2012/19/EU on Waste Electrical and Electronic Equipment, and recycled in an appropriate and environmentally friendly manner.



Please do not take electrical devices which are no longer usable to a local collection point. Sort packaging materials separately according to type, and dispose of them in accordance with local conditions. Please contact your local council for details.

Faults and remedies

Facilta

Faults	Possible causes and remedles
Saw blades have no power	– Check the plug connection.
Saw blade has become loose.	 Saw blade was not inserted correctly. Insert the saw blade until it fits into the clamping device.
	 Quick clamping device is not back in the starting position. Insert the saw blade until it fits into the clamping device and manually press the lever into the correct position.
Saw blade does not saw straight	 Too much power/pressure being exerted on the saw blade.
	 The reciprocating saw settings are wrong for the material to be sawed. Check the speed.
	 The saw blade is twisted or blunt. Change the saw blade.

In the event of any other faults and errors, consult the customer service department detailed in the warranty documentation.





Service notes

- Store the machine, operating instructions and any accessories in the original packaging. You will then have all information and parts close at hand.
- If connection cables are damaged, they must in order to reduce the safety risks be replaced by the manufacturer or by their customer service representative.
- Ferrex machines generally do not need maintenance; a damp cloth is enough for cleaning the casing.
- Ferrex machines are subjected to strict quality controls. However, should you notice any faults, please send the machine to our service address. Repairs will be carried out immediately.
- A short description of the defect will reduce the time to locate the defect and its repair. Please enclose the warranty certificate and receipt with the machine during the warranty period.
- If you do not claim for a warranty repair, we will bill you for the cost of repairs.

ACAUTION!

Opening the machine will invalidate the warranty claim.

ACAUTION!

We expressly remind you that the product liability laws do not cover damages caused by

our machines if they have been subject to incorrect repair attempts, or in the event of parts replaced that are neither original nor approved by us, and when the repairs have not been carried out by the Conmetall Meister GmbH Customer Service or an authorised specialist! The same applies for accessory parts used.

- Pack the machine safely or use the original packaging to avoid damage during transport.
- We will be available to help you even after the warranty period has expired, and will carry out any repairs to Ferrex machines at a reasonable price.







Declaration of Conformity





Conmetall Meister GmbH Oberkamper Str. 39 42349 Wuppertal Germany



EU Declaration of Conformity

We declare with sole responsibility, that the product listed below...

Reciprocating Saw FS 850-N

Ferrex©

WU5908213/WU5908214 · 06/2020 · Bj.04/2020

...meets all of the requirements

of the listed directives.

2006/42/EC (MD) 2014/30/EU (EMC) 2011/65/EU (RoHS)

Applied, harmonized standarts:

EN 62841-1:2015 EN 62841-2-11:2016

EN 62471:2008 EN 55014-1:2017 EN 55014-2:2015

EN 61000-3-2:2014 EN 61000-3-3:2013 EN 62233:2008

EN 50581:2012

Wuppertal, ...14.01.2020

Ingo Heimann (M.Sc.)

Technical direction/Product development

 $Conmet all\,Meister\,GmbH\cdot Oberkamper\,Straße\,39\cdot 42349\,Wuppertal\cdot Germany$

Person authorised to store technical documents.











Great care has gone into the manufacture of this product and it should therefore provide you with years of good service when used properly. In the event of product failure within its intended use over the course of the first 3 years after date of purchase, we will remedy the problem as quickly as possible once it has been brought to our attention. In the unlikely event of such an occurrence, or if you require any information about the product, please contact us via our helpline support services, details of which are to be found both in this manual and on the product itself.





PRODUCED IN CHINA FOR:

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ALDI STORES (IRELAND) LTD. PO BOX 726, NAAS, CO. KILDARE. Visit us at www.aldi.com



YEAR WARRANTY



