



GB

Operator's manual

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.

ES

Manual de instrucciones

Lea detenidamente el manual de instrucciones y asegúrese de entender su contenido antes de utilizar la máquina.

DE

Bedienungsanweisung

Lesen Sie die Bedienungsanweisung sorgfältig durch und machen Sie sich mit dem Inhalt vertraut, bevor Sie das Gerät benutzen.

FR

Manuel d'utilisation

Lire attentivement et bien assimiler le manuel d'utilisation avant d'utiliser la machine.

PP 440 HF



GB ES DE FR

KEY TO SYMBOLS

Symbols on the machine:

WARNING! The machine can be a dangerous tool if used incorrectly or carelessly, which can cause serious or fatal injury to the operator or others.



Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



Always wear:

- Approved protective helmet
- Approved hearing protection
- Protective goggles or a visor
- Breathing mask



This product is in accordance with applicable EC directives.



WARNING! High current.



Environmental marking. Symbols on the product or its packaging indicate that this product cannot be handled as domestic waste. It must instead be submitted to an appropriate recycling station for the recovery of electrical and electronic equipment.

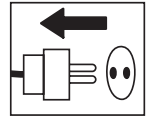


By ensuring that this product is taken care of correctly, you can help to counteract the potential negative impact on the environment and people that can otherwise result through the incorrect waste management of this product.

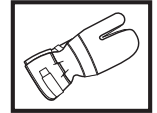
For more detailed information about recycling this product, contact your municipality, your domestic waste service or the shop from where you purchased the product.

Symbols in the operator's manual:

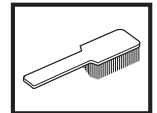
Inspection and/or maintenance should be carried out with the motor switched off and the plug disconnected.



Always wear approved protective gloves.



Regular cleaning is required.



Visual check.



Protective goggles or a visor must be worn.



CONTENTS

Contents

KEY TO SYMBOLS

Symbols on the machine:	2
Symbols in the operator's manual:	2

CONTENTS

Contents	3
----------------	---

WHAT IS WHAT?

What is what on the power unit?	4
---------------------------------------	---

SAFETY INSTRUCTIONS

Steps before using a new power unit	5
Personal protective equipment	5
Machine's safety equipment	6
General safety precautions	7
General working instructions	7

PRESENTATION

PP 440 HF	8
-----------------	---

ASSEMBLY

Assembling/Installing equipment	9
---------------------------------------	---

SETTINGS AND ADJUSTMENTS

Start menu	10
Operations menu	10

STARTING AND STOPPING

Before starting	11
Starting	11
Stopping	12
After work is completed	12

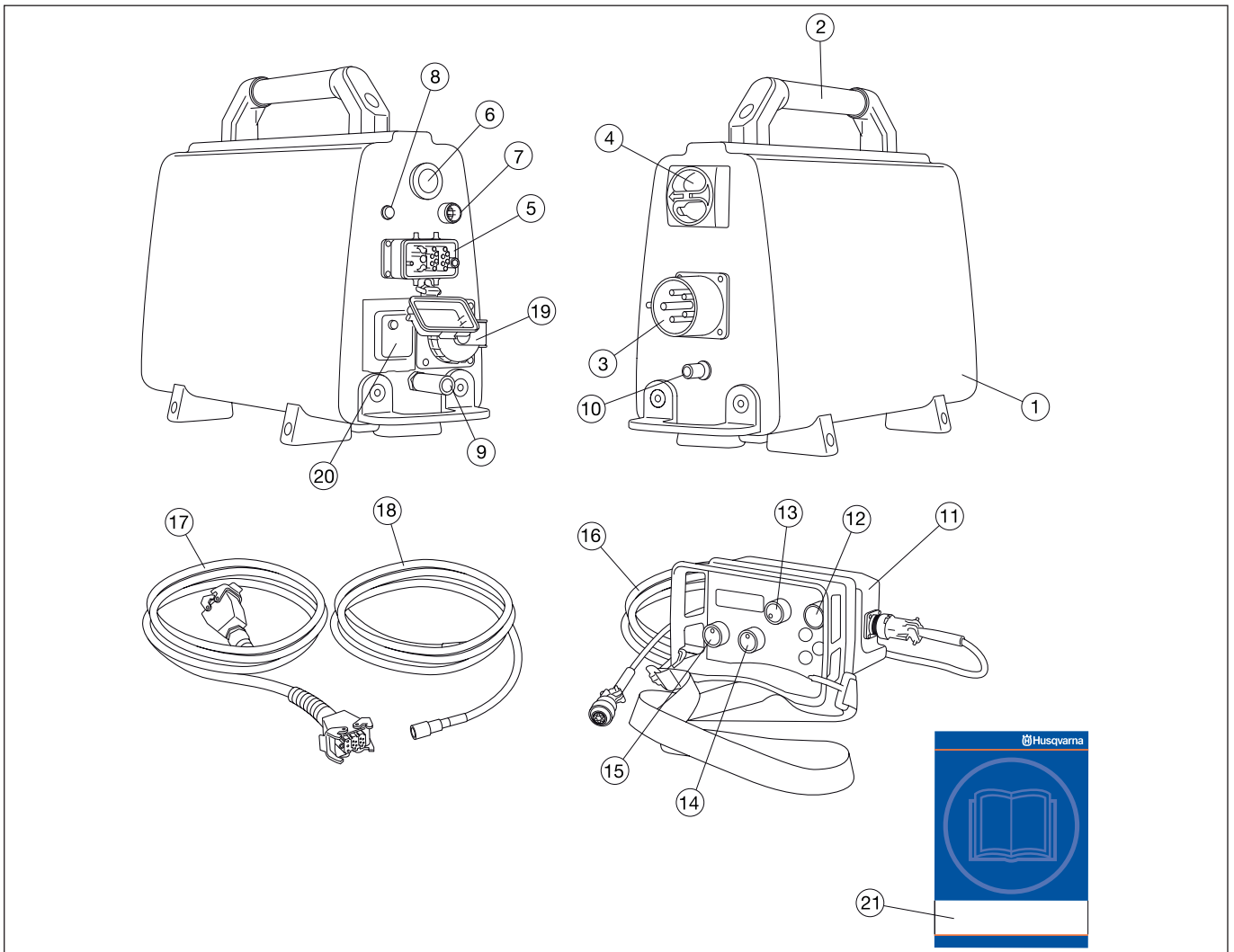
MAINTENANCE

Service	13
Daily maintenance	13

TECHNICAL DATA

PP 440 HF	14
EC-declaration of conformity	15

WHAT IS WHAT?



What is what on the power unit?

- | | |
|------------------------|--|
| 1 Power unit | 12 Start button |
| 2 Handle | 13 Blade rotation and start water coolant |
| 3 Electrical socket | 14 Travel feed |
| 4 Main switch | 15 Depth feed |
| 5 Cable connection | 16 Canbus cable |
| 6 Emergency stop | 17 Power lead |
| 7 Canbus port | 18 Water hose |
| 8 Power indicator | 19 Single phase socket - Only 5-pin machines |
| 9 Water connector, out | 20 Earth-fault circuit breaker - Only 5-pin machines |
| 10 Water connector, in | 21 Operator's manual |
| 11 Remote control | |

SAFETY INSTRUCTIONS

Steps before using a new power unit

- Please read the operator's manual carefully and make sure you understand the instructions before using the machine.
- This machine is only intended for use together with a Husqvarna WS 440 HF. All other use is forbidden.
- Read through the manual supplied with the wall saw before starting to use the hydraulic unit.
- The machine can cause serious personal injury. Read the safety instructions carefully. Learn how to use the machine.

Always use common sense

It is not possible to cover every conceivable situation you can face. Always exercise care and use your common sense. Avoid all situations which you consider to be beyond your capability. If you still feel uncertain about operating procedures after reading these instructions, you should consult an expert before continuing.

Do not hesitate to contact your dealer if you have any more questions about the use of the machine. We will willingly be of service and provide you with advice as well as help you to use your machine both efficiently and safely.

Let your Husqvarna dealer regularly check the machine and make essential adjustments and repairs.

All information and all data in the Operator's Manual were applicable at the time the Operator's Manual was sent to print.



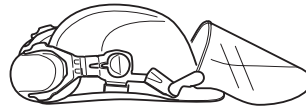
WARNING! Under no circumstances should you modify the original design of the machine without approval from the manufacturer. Always use original spare parts. Unauthorised modifications and/or accessories may lead to serious injury or death to the user or others.

Personal protective equipment

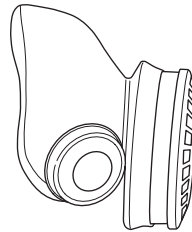


WARNING! You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.

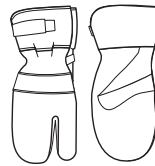
- Protective helmet
- Hearing protection
- Protective goggles or a visor



- Breathing mask



- Heavy-duty, firm grip gloves.



- Tight-fitting, heavy-duty and comfortable clothing that permits full freedom of movement.



- Boots with steel toe-caps and non-slip sole.



- Always have a first aid kit nearby.



SAFETY INSTRUCTIONS

Machine's safety equipment



This section describes the machine's safety equipment, its purpose, and how checks and maintenance should be carried out to ensure that it operates correctly. See the "What is what?" section to locate where this equipment is positioned on your machine.

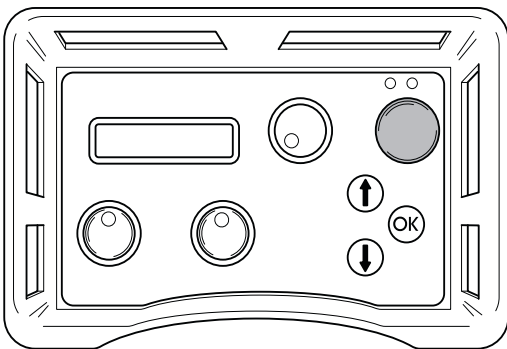


WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.

IMPORTANT! All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of professional repairs and service. If the retailer who sells your machine is not a servicing dealer, ask him for the address of your nearest service agent.

Start button

The start button must be pushed and held to be able to start the blade rotation. This in order to prevent unintended starting of the blade rotation.

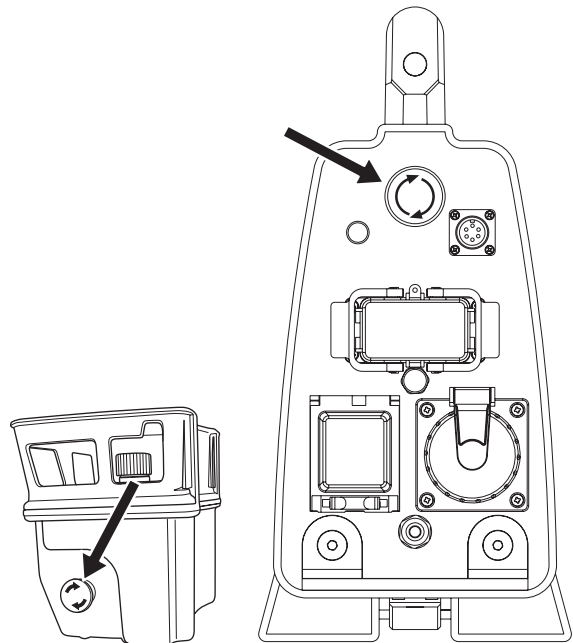


Checking the start button

- Turn the knob for blade rotation without pushing and holding the start button.
The blade rotation must not start.
- Push and hold the start button and turn the knob for blade rotation.
Now the blade rotation shall start.

Emergency stop and stop button

The power unit is equipped with an emergency stop and the remote control with a stop button. These are used to be able to quickly shut down the power unit.

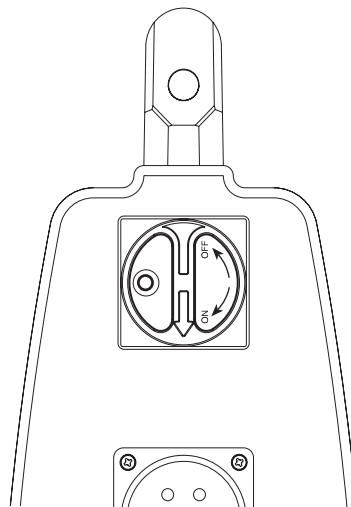


Check the emergency stop and stop button

- Start the blade rotation.
- Push the emergency stop on the power unit and check that the blade rotation stops. Check the stop button on the remote control in the same way.

Main switch

The main switch is used to switch the electricity supply to the power unit on and off. The main switch must be in the "0"-position when the incoming cable is connected.



Checking the main power switch

- Turn the main switch to the "0"-position.
- Try to start the saw.
The saw must not start.

SAFETY INSTRUCTIONS

General safety precautions

Do not use the machine without first reading and understanding the contents of this Operator's Manual.



WARNING! There is always a risk of shocks from electrically powered machines. Avoid unfavourable weather conditions and body contact with lightning conductors and metal objects. Always follow the instructions in the Operator's manual to avoid damage.

- Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination.
- Wear personal protective equipment. See instructions under the heading Personal protective equipment.
- Never carry the machine by holding the cable and never pull the plug by pulling the cable.
- Keep all cables away of water, oil and sharp edges. Make sure the cable is not pinched in doors, fences or the like. It can cause the object to become live.
- Check that the cables are intact and in good condition.
- Never use the machine if any cable is damaged, but hand it in to an authorized service workshop for repair.
- The machine should be connected to an earthed outlet socket.
- Check that the mains voltage corresponds with that stated on the rating plate on the machine.
- Keep all parts in good working order and ensure that all fixtures are properly tightened.
- Never use a machine that is faulty. Carry out the checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists. See instructions under the heading Maintenance.
- Do not modify safety equipment. Check regularly that they function as they should. The machine must not be run with defective or disassembled safety equipment.
- Never allow anyone else to use the machine without first ensuring that they have understood the contents of the operator's manual.
- People and animals can distract you causing you to lose control of the machine. For this reason, always remain concentrated and focused on the task.
- Be careful as clothing, long hair, and jewellery can get caught in moving parts.
- Observe care when lifting. You are handling heavy parts, which implies the risk of pinch injuries or other injuries.

Transport and storage

- Always switch of the power unit and pull out the electric cable before moving the equipment.
- Store the equipment in a lockable area so that it is out of reach of children and unauthorised persons.
- If there is a risk of freezing, the machine must be drained of any remaining water coolant.
- Use the cases provided to store the equipment.

General working instructions

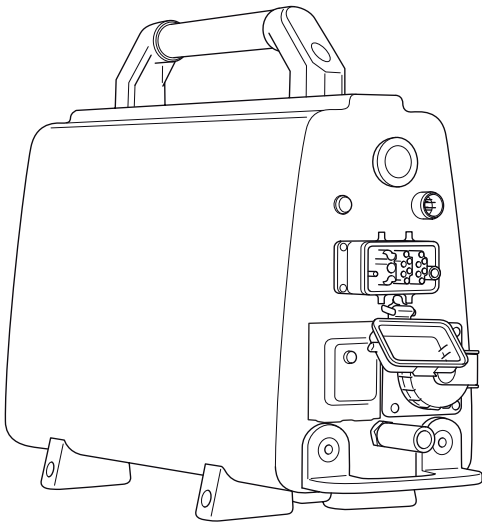


WARNING! This section describes basic safety directions for using the machine. This information is never a substitute for professional skills and experience. If you get into a situation where you feel unsafe, stop and seek expert advice. Contact your dealer, service agent or an experienced power cutter user. Do not attempt any task that you feel unsure of!

- All operators shall be trained in the use of the machine. The owner is responsible for ensuring that the operators receive training.
- Check that all couplings, connections and cables are intact and free from dirt.
- Check that all cables and the water supply are correctly connected to the machine before starting it.
- Never pull out the power cable without first switching off the power unit and waiting for the engine to come to a complete halt.
- If an emergency situation should arise anyway, push the red emergency stop button on the power unit or the stop button on the remote control.
- Always check and mark out where gas pipes are routed. Cutting close to gas pipes always entails danger. Make sure that sparks are not caused when cutting in view of the risk of explosion. Remain concentrated and focused on the task. Carelessness can result in serious personal injury or death.
- Make sure that no pipes or electrical cables are routed in the area to be cut.
- Check that electrical cables within the working area are not live.
- Never leave the machine unsupervised with the engine running.
- Always saw in a manner that permits easy access to the emergency stop.
- Make sure that there is always another person close at hand when you use the machines, so that you can call for help if an accident should occur.
- Do not use the machine in bad weather, such as dense fog, rain, strong wind, intense cold, etc. Working in bad weather is tiring and can lead to dangerous conditions, e.g. slippery surfaces.
- Ensure that the working area is sufficiently illuminated to create a safe working environment.
- Always ensure you have a safe and stable working position.
- Observe care when lifting. You are handling heavy parts, which implies the risk of pinch injuries or other injuries.

PRESENTATION

PP 440 HF



It is our wish that you will be satisfied with your product and that it will be your companion for a long time. Think of this operator's manual as a valuable document. By following its' content (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you will sell this machine, make sure that the buyer will get the operator's manual.

A purchase of one of our products gives you access to professional help with repairs and services. If the retailer who sells your machine is not one of our authorised dealers, ask him for the address of your nearest service workshop.

Husqvarna Construction Products has a policy of continuous product development. Husqvarna reserves the right to modify the design and appearance of products without prior notice and without further obligation introduce design modifications.

General

- PP 440 is a power unit specially developed to be used with the electric wall saw WS 440 HF.
- It has a compact design and weighs just 18 kg.
- Use 32 A for a 400 V system for full power.
- The power unit is connected to the saw with only one power lead.
- Equipped with a 230 V power outlet and a terminal for Canbus-cable.
- Equipped with an electric water valve which is controlled from the remote control.
- Through the remote control the operator receives information on power output, can measure the time and other things about the sawing process. The remote control also allows free movement around the workplace.

PP 440 HF is supplied with the following equipment:

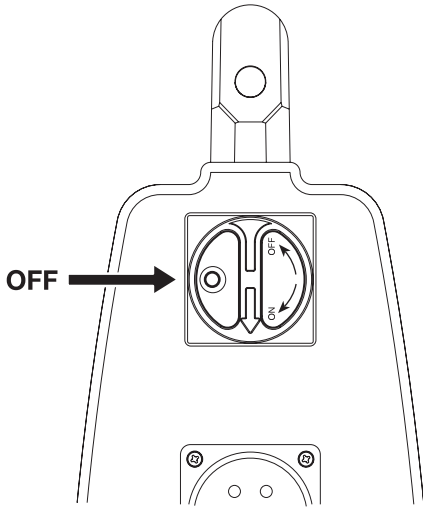
- 1 x power unit
- 1 x remote control
- 1 x power lead
- 1 x Canbus cable
- 1 x water hose
- Transport boxes for smooth transport.

ASSEMBLY

Assembling/Installing equipment

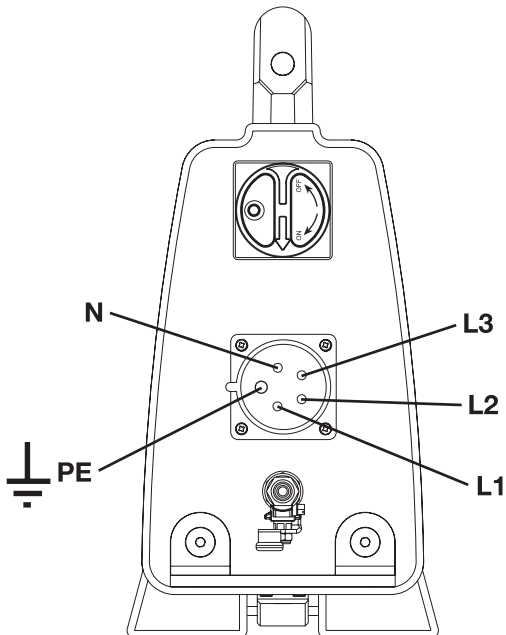
When the machine has been transported to a suitable site, it should be connected:

- Turn the main switch to the "0"-position.



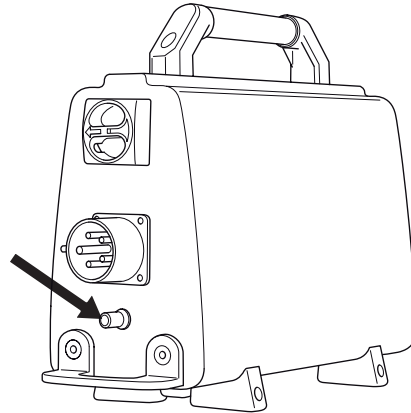
- Connect the incoming power cable (380-480 V, 32 A European connector). Power units equipped with a single phase socket (230 V) must also have a neutral wire.

To be able to use full power output, the power unit must be connected to a 32 A fuse. With a 16 A or 25 A fuse the power output is lower so as not to overload the fuse. This is selected when starting up the power unit.

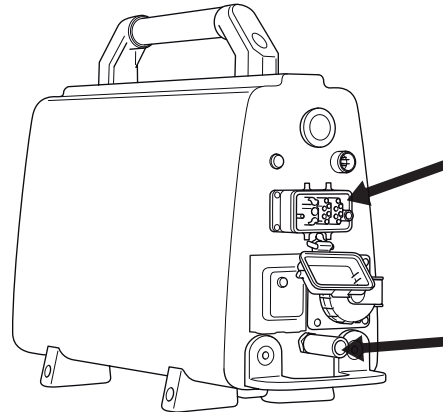


- Connect the water hose to the incoming water connector.

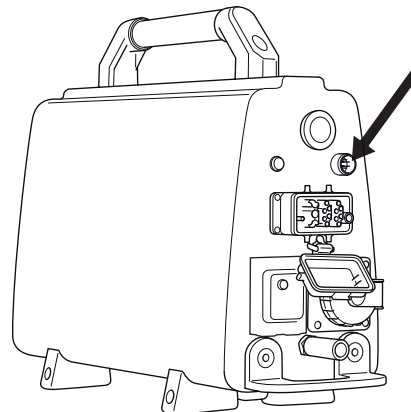
The power unit is equipped with an electric water valve, which is closed when the power pack is activated. When the power pack is without electricity, the valve is open to be able to drain water coolant if there is a risk of freezing.



- Connect the supplied power lead and water hose from the power unit to the saw unit.



- Connect the remote control using the supplied Canbus cable. Tighten the cable connector screws by hand.



SETTINGS AND ADJUSTMENTS

Start menu

The start menu is displayed every time the voltage to the power unit is switched on. In this menu the user must select the fuse.

The remote control display shows "SELECT FUSE".

If the available fuse is 32 A, confirm this by pressing the membrane key marked "OK". If no 32 A fuse is available, you can select 25 or 16 A instead by pushing the arrow down. The display now shows "SELECT FUSE" 25 A or 16 A. Press OK to confirm the selection.

The display now shows "Husqvarna PP-440 HF PRESS START".

Operations menu

As long as the power unit has voltage but the blade rotation stands still, the display shows "Husqvarna PP-440 HF PRESS START".

Before starting, all controls must be turned to zero position. If this is not done, a message in the display will prompt this when the start button is pushed. "TURN OFF TRAVEL FEEDING" or "TURN OFF DEPTH FEEDING" or "TURN OFF BLADE".

When the blade rotation is started, "XX RPM/ B.YY mm ZZ% RPM" is displayed, where XX represents the number of revolutions, B stands for blade, YY represents the recommended blade size and ZZ the power output in percent of max. output.

By navigating with the arrow keys, the following settings can be reached:

- Water coolant
- Select language
- Id power unit
- Time
- Total machine time
- Rotation direction

Water coolant

Turn the water coolant on or off by pressing OK.

Select language

Using this sub-menu you can set the language you wish to use on the display.

Scroll using the arrow keys until the required language is shown. Confirm with "OK".

Id power unit

The display shows the identity number for the power unit.

Time

The function is used to measure the amount of time a job takes. The time is counted from when the saw starts working.

Select:

- ON, to enable.
- OFF, to disable.
- RESET TIME, to reset.

Browse with the arrow keys and confirm with "OK".

Total machine time

Here the total operation time of the power unit is shown. The time is shown in hours and minutes (hhhh:mm).

Rotation direction

Here you can set the rotation direction of the blade. Select standard or backwards by pressing "OK".

STARTING AND STOPPING

Before starting



Before starting the saw, check that:

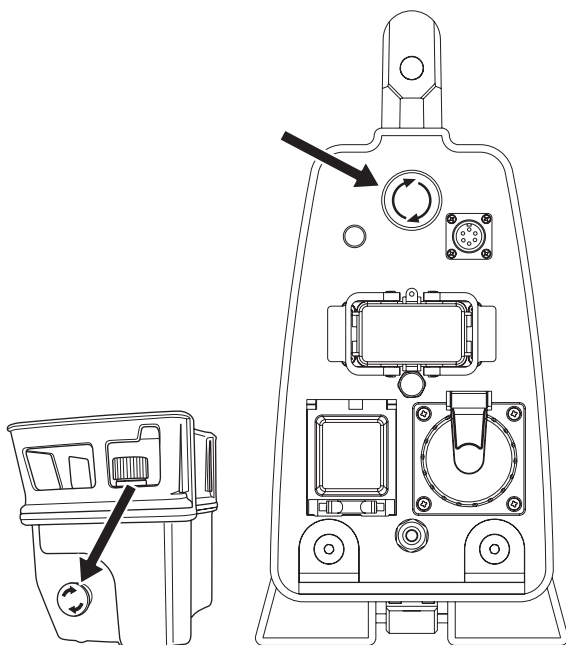
- The incoming electrical cable has been connected to a fuse rated at least 16 A.
- The power lead is connected to the saw unit.
- The 32 A, 25 A or 16 A power setting is chosen.
- All controls on the remote control have been set to zero position. If this is not done, a message in the display will prompt this when the start button is pushed.
- Enclose the area to be cut so that unauthorised persons can not be injured or disturb the operator.

IMPORTANT! A higher speed than the recommended speed can result in personal injury and damage to the equipment.

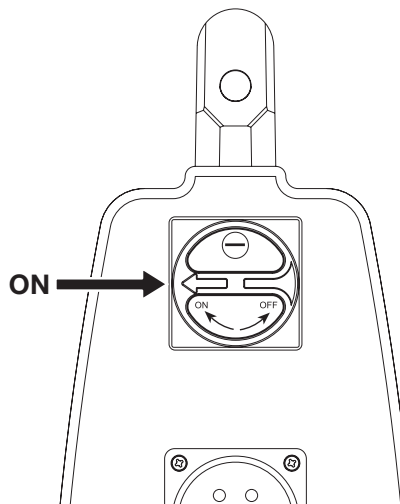
Starting



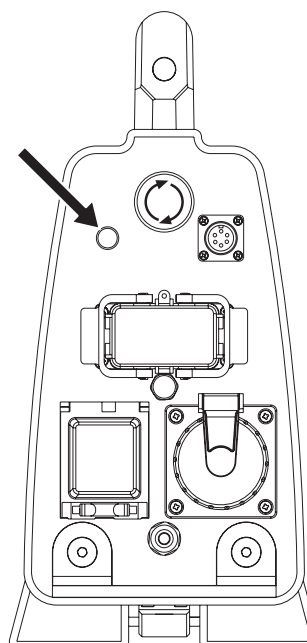
- Check that the emergency stop button on the power unit and the stop button on the remote control are not pressed by turning them clockwise.



- Turn the main switch to "1"-position.



- The power unit is activated and this is shown by the indicator light shining.



The water valve in the power unit is now closed. This valve opens again when the blade rotation is started.

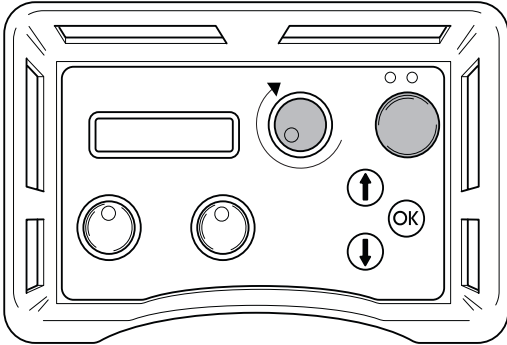
- The remote control display shows "SELECT FUSE".
If the available fuse is 32 A, confirm this by pressing the membrane key marked "OK".
- If no 32 A fuse is available, you can select 25 or 16 A instead by pushing the arrow down. The display now shows "SELECT FUSE" 25 A or 16 A.
With a 25 A fuse you can use approx. 70% of the full output. With 16 A you can use approx. 50% of full output. The function is intended to obtain as high output as possible without overloading the fuse.
The power output in percent is shown on the display during sawing.
- Press OK to confirm the selection.
- The display now shows "Husqvarna PP-440 HF PRESS START".

STARTING AND STOPPING

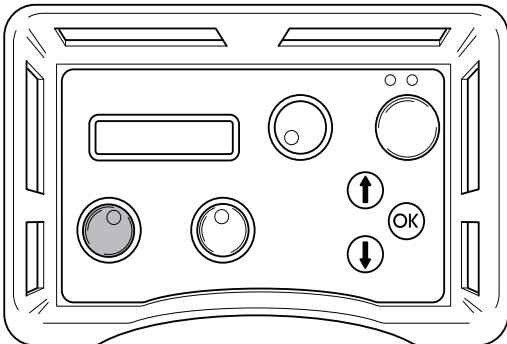
- On the saw unit WS 440 HF, the blade's rotation direction is adjustable.

Press "arrow up" on the remote control unit's membrane key to select the direction. The display shows "BLADE ROTATION? STANDARD" or "BLADE ROTATION? REVERSE". To change the current selection, press "OK". This must only be done when the blade is not moving.

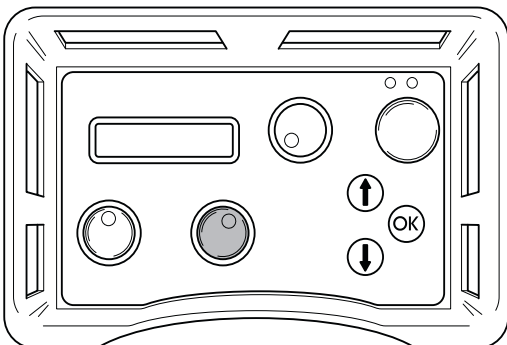
- Start the blade rotation by pushing and holding the green start button while turning the control for rotation direction clockwise. When the blade rotation has started, you can release the start button. Turn the control to the desired position. The number of revolutions is shown on the display.



- For more information on blade rotation and suitable blades for various revolution speeds, see table in technical specifications.
- The water cooling starts automatically when the blade starts to rotate. The water flow is adjusted with the ball valve at the incoming water connector on the power unit.
- Start the depth feeding of the blade by turning the depth feeding control in the desired direction.



- Start the saw unit's travel feed by turning the travel feed control in the desired direction.

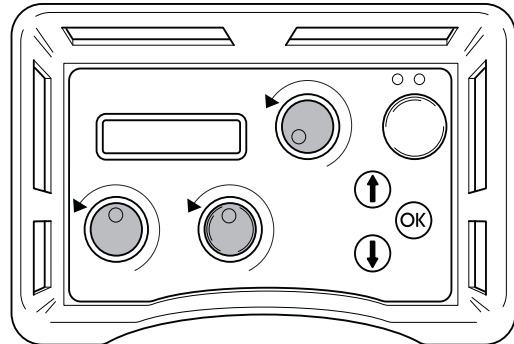


- Read through the manual supplied with the wall saw for further instructions in sawing technique.

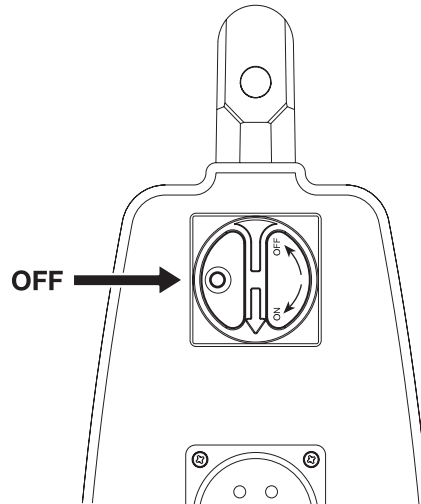
Stopping



- To switch off the blade rotation, turn the blade rotation control anti-clockwise back to its zero position. Also turn the depth feeding and travel feeding controls to their zero positions.



- Turn the main switch on the power unit to "0"-position.



After work is completed

Dismantling the equipment

- Disconnect the incoming power lead and incoming water hose.
- Disconnect the power lead and water hose between the power unit and the saw unit.
- If there is a risk of freezing, the machine must be drained of any remaining water coolant.

Cleaning



Make sure to keep the connectors and pins clean. Clean with a rag or brush.

Do not use a high pressure washer to clean the power unit.

MAINTENANCE

Service



IMPORTANT! All types of repairs may only be carried out by authorised repairmen. This is so that the operators are not exposed to great risks.

After 100 hours of operation, the message "Time for servicing" is displayed. The entire equipment shall then be taken to an authorized Husqvarna dealer for servicing.

Error messages

In case of any defects, an error message appears on the display. Follow the directions supplied or contact an authorized dealer.

Error message	Cause	Steps
MOTOR OVERHEATED	Water coolant lacking/insufficient to saw motor.	Check that the water coolant flows to the saw motor and that it is max. 25°C and min 3.5 l/min.
POWER OVERHEATED	Water coolant lacking/insufficient to power unit.	Check that the water coolant flows to the power unit and that it is max 25°C and min 3.5 l/min.
LOW VOLTAGE	Low voltage supply to the power unit.	Check the voltage during operation. Check that all three phases exist. Check that incoming cables have sufficient cross-sectional area.
HIGH VOLTAGE	High voltage to the power unit.	Check the voltage during operation. This message is shown mainly when using a generator as power source.
OVER CURRENT	Over current to saw motor	Check that the power lead is fitted correctly and that it is not damaged. The message can appear in case of a loose contact.
H SENSOR TRAVEL	Fault on HAL-sensor card for travel feed	Take the equipment to an authorized service shop.
H SENSOR DEPTH	Fault on HAL-sensor card for depth feeding	Take the equipment to an authorized service shop.
NO CONTACT CHECK CAN-CABLE	No contact between power unit and remote control	Replace the Canbus-cable.

Daily maintenance



Regularly check:

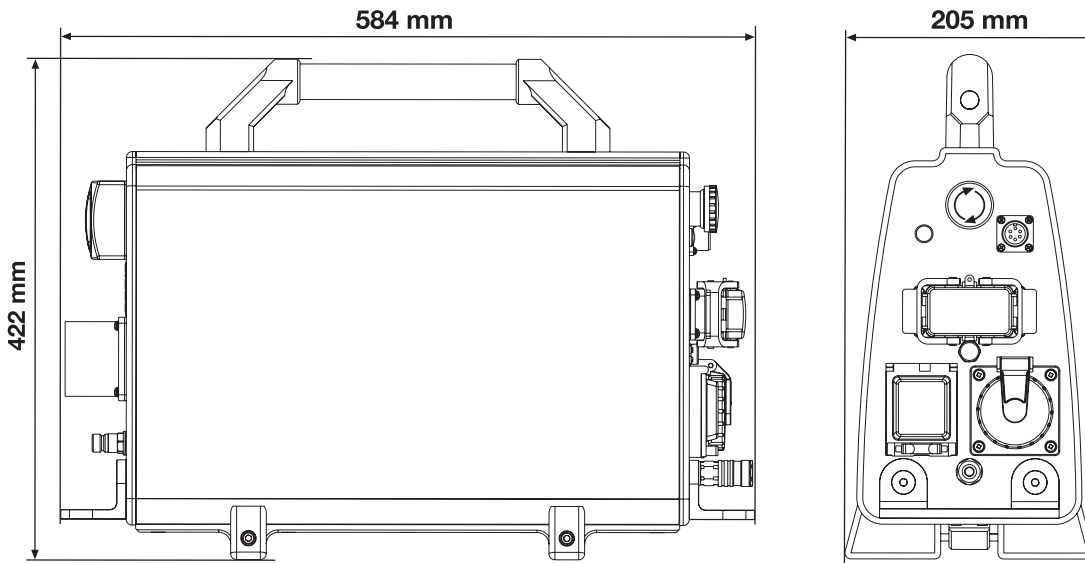
- Any abnormal noises.
- Make sure to keep the connectors and pins clean. Clean with a rag or brush.
- Do not use a high pressure washer to clean the power unit.

TECHNICAL DATA

PP 440 HF

Max. output, kW	15
Rated current, A	32
Input voltage, V	380-480 V, 50-60 Hz
Output voltage, V	340 V, 0-500 Hz
Sec. output voltage, V	24 V, 0-1500 Hz
Power supply	3P+PE (4-pin) / 3P+N+PE (5-pin)
1x230V one phase outlet	Only 5-pin machines
Weight, kg	18
Max cooling water temperature at 3,5 l/min, °C	25
Max cooling water pressure, bar	7

Dimensions



Blade

Max. peripheral speed, m/s

	600 mm	700 mm	800 mm*	900 mm	1000 mm*	1200 mm*
600 rpm	19	22	25	28	31	38
700 rpm	22	26	29	33	37	44
800 rpm	25	29	33	38	42	50
900 rpm	28	33	38	42	47	57
1000 rpm	31	37	42	47	52	63
1100 rpm	35	40	46	52	58	69
1200 rpm	38	44	50	57	63	75

*Recommended blade size.

TECHNICAL DATA

EC-declaration of conformity

Husqvarna Construction Products, SE-433 81 Gothenburg, Sweden, tel: +46-31-949000, declares under sole responsibility that the power unit **Husqvarna PP 440 HF** from 2008's serial numbers and onwards (the year is clearly stated in plain text on the type plate with subsequent serial number) is in conformity with the requirements of the COUNCIL'S DIRECTIVES:

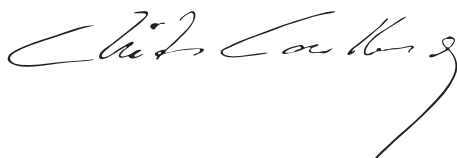
- of June 22, 1998 "relating to machinery" **98/37/EC**, annex IIA.
- of December 15, 2004 "relating to electromagnetic compatibility" **2004/108/EC**.
- of December 12, 2006 "relating to electrical equipment" **2006/95/EC**.

The following standards have been applied:

SS-EN 60204-1, EN 61000-6-2:2005, EN 61000-6-4:2001.

The supplied power unit conforms to the example that underwent EC type examination.

Göteborg January 5, 2008



Christer Carlberg
Managing Director



www.husqvarnacp.com

1151108-20



2008-02-20