# **H**Usqvarna



操作手册 FS 400 LV

在使用动力切割机前请仔细阅读操作手册,并确保理解这些说明。



# 符号说明

The use of symbols on machines (in color) and in the manual identify advice concerning your safety.

#### WARNING

Danger symbol



#### OBLIGATION

Blue background, white marking : obligatory safety + red marking : movement forbidden



#### WARNING

Black triangle and marking on a yellow background: danger if not adhered to. Risk of injury to the user or third parties, with possibility of damage top the machine or the tool.



#### INTERDICTION

Red circle with or without bar : use or presence prohibited.



#### INDICATION

Information - Instruction: special instructions concerning use and inspection.



This symbol indicates that the machine is in conformance with the applicable European directive.



The manufacturer declines any responsibility resulting from improper use, or modifications.

#### Environmental Information

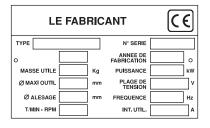
环境标记产品或其包装上的符号指示本产品不能作为生活垃圾处理。必须将它提交给相应的回收站以回收利用电气和电子设备。

对本产品进行不当的废物管理可能会对环境和 人身造成负面影响,请确保正确处理本产品, 帮助避免此问题。

帮助避免此问题。 有关回收本产品的更详细信息,请与您的市政 当局、生活垃圾处理机构或销售本产品的商店 联系。

有关机器上的其他符号/图案,请参考适用于 特定市场的特殊认证要求。

#### Instruction plate



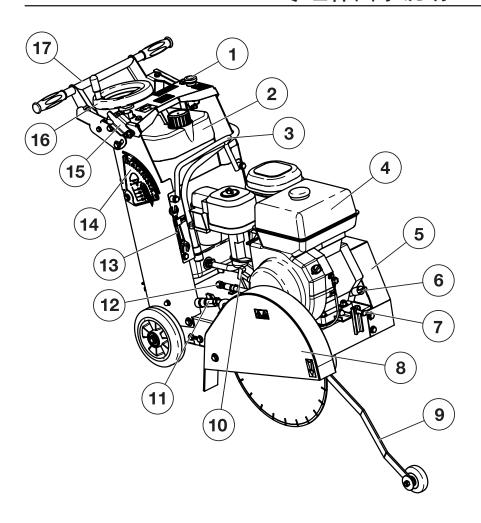


# 目录

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符号说明2	,
目录3	3
目录3	}
零组件图示说明4	ļ
What is what on the machine4	ļ
安全须知5	5
Before using a new machine5	5
人身保护装备5	5
安全须知6	)
一般安全警告6	)
使用金刚石锯片执行干切割6	)
组装7	7
Fitting the blade7	7
启动与停止8	}
启动与停止g	)
维修1	0
Incidents during sawing1	0
Maintenance1	0
Scrapping1	0
技术资料1	1
技术资料1	1
技术资料1	2
TC	2

# 零组件图示说明





#### What is what on the machine

- 1. Handle
- 2. Lowering wheel
- 3. Graduated scale
- 4. Water intake tap
- 5. Service spanner
- 6. Engine Moteur
- 7. Disk casing Carter de disque
- 8. Front guide Guide avant
- 9. Lifting ring Anneau d'é lingage
- 10. Belt cover Carter de courroies

- 11. Engine oil Sortie de vidange moteur
- 12. Motor tensioning screw
- 13. Tank
- 14. Motor stop
- 15. Circuit breaker
- 16. Connector
- 17. RCCB
- 18. RCCB connector
- 19. Wheel Lock

# 安全须知

#### Before using a new machine

Before leaving our factory every machine passes an exacting inspection programme in which everything is checked minutely.

Following the instructions will ensure that your machine gives long service, in normal operating conditions.

The user advice and spare parts mentioned in this document are given as an indication, and do not constitute an undertaking. No warrantee will be granted in the event of errors or omissions, or for damage occurring during delivery, or caused by the design or use of the machine. We are very concerned about the quality of our products and we reserve the right to make any technical modifications to improve them, without warning.

#### This document will:

- provide the user with: information about the machine
- information about its possible uses
- prevent accidents due to unsuitable use, by an untrained person, during maintenance, repairs, overhauls, handling or transport
- improve the reliability and durability of the machine
- ensure correct use, regular maintenance, and fast fault finding in order to reduce repair costs and downtime.



The manual should always be available at the place of work. It should be read and used by any person installing or using the machine.



The obligatory technical regulations in force in the country where the machine is used must also be adhered to for maximum safety.

#### 人身保护装备



警告!使用动力切割机时,一定要使用经检验 合格的人身保护装备。人身保护装备不能避免 发生意外的风险,但当意外发生时,可降低伤 害程度。选择保护装备时,请向代理商查询。

- 保护头盔
- 听觉保护设备
- 护目镜或面具



• 通气口罩



• 耐用可抓紧的保护手套。



• 可让您活动自如,合身耐穿的衣物。



- 使用针对切割基材的护腿。
- 附钢制脚趾防护的防滑靴子。



• 急救箱随伺在侧。



## 安全须知

#### 一般安全警告



FAILURE TO COMPLY WITH THESE WARNINGS COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.



At the work station, the sound pressure level may exceed 85 db (A). In this case, individual protection measures must be taken.



When working in a limited or closed area, make sure that the ventilation is adequate. The exhaust gases contain carbon monoxide (exposure to this toxic gas can cause loss of consciousness and can be fatal).



D0

- DO carefully read and understand all the instructions before operating the saw.
- DO always keep all guards in place.
- DO aways wear safety approved hearing, eye, head and respiratory protection.
- DO keep all parts of your body away from the blade and all other moving parts.
- DO know how to stop the saw quickly in case of an emergency.
- DO shut off the engine and allow it to cool before refueling.
- DO inspect the blade, flanges and shafts for damage before installing the blade.
- DO use only blades marked with a maximum operating speed greater than the blade shaft speed.
- DO use caution and follow the instructions when loading and unloading the saw.



#### DO NOT

- DO NOT allow other persons to be near the saw when starting, refueling or when cutting.
- DO NOT operate gasoline engines in an enclosed area unless it is properly vented.
- DO NOT use damaged equipment or blades.
- DO NOT operate the saw in areas of combustible material. Sparks from the saw could cause a fire or an explosion.
- DO NOT allow blade exposure from the guard to be over 180 degrees.
- DO NOT leave the saw unattended with the motor running.
- DO NOT operate the saw while under the influence of drugs or alcohol.

#### 电气安全

Machine with electric motor.

Check the following:



Operate this machine only on a supply equipped with a 30 mA earthed current-limiting circuitbreaker. Otherwise, consult our catalogue for appropriate models.

- The RCCB must be used correctly, including testing it regularly. For tools supplied with an integral RCCB in the cable or in the mains plug, if the cable or plug has been damaged, repairs must be carried out by the manufacturer, one of his agents or by a qualified repair workshop to avoid any risks resulting from errors.
- Motor power supply: reinforced electric cable with 4 (3P+E) or 5 (3P+N+E) conductors 2.5 mm<sup>2</sup> for lengths less than 100 m.
- Earthing of the machine (mandatory).
- Mains voltage (400 V).
- Direction of rotation of the motor: Direction of rotation on the right hand side of the cover if the motor does not turn in the direction required reverse two of the supply wires.

#### 使用金刚石锯片执行干切割

Use: Wet sawing new and old concrete and asphalt.

The disc cutter is designed to provide safe and reliable service in operating conditions corresponding with the instructions, but it can present dangers for the user and risks of damage, consequently regular on site inspection is necessary to ensure:

- Perfect technical condition (use for the purpose for which it is intended and taking into account any risks, and correction of any malfunction detrimental to safety).
- Use a diamond disk for cutting with water (sawing new or old concrete, tarmac or asphalt). No other type of disk is allowed (abrasive, saw, etc . . .).
- Competent staff (qualifications, age, training)
  who have read and understood the manual in detail
  before starting work: any electrical, mechanical
  or other problem should be investigated by a
  qualified maintenance engineer (electrician
  maintenance manager, approved dealer, etc...).
- That the warnings and instructions marked on the machine are followed (adequate personal protection, correct use, general safety instructions, etc).
- That no modification, transformation or addition is detrimental to safety and that it is carried out without prior authorization from the manufacturer.
- Respect of the maintenance intervals and periodical checks recommended.
- That only genuine spare parts are used for repairs.

#### Fitting the blade



Motor off.



Disconnect by removing the plug.

- Set the machine in the high position.
- Disconnet the water pipe from the blade guard.
- Unscrew the nut (K) from the guard.
- Lift up guard (A).
- Fit the diamond blade.



Take care about the direction of rotation which is shown by an arrow on one of the faces (direction of rotation on the right side of the guard) Make sure the contact faces of flanges (B and C) of blade and the axle are clean.

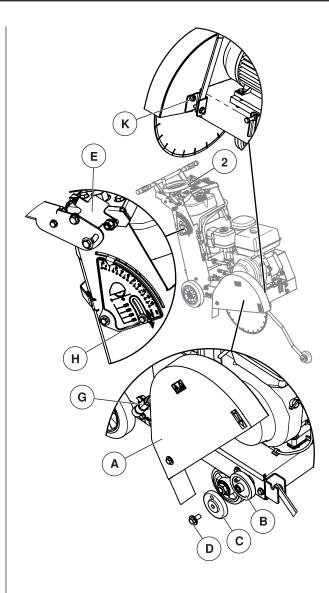
- Firmly lock screw (D) using the spanner supplied with the machine whilst immobilising the blade byhand.
- Replace the protection guard (A).
- Close the guard water tap (G) [Fig 2].
- Reconnect the water pipe (G).
- Tighten nut (K).



Replace all protective covers for your safety and that of other persons.

Note : how to adjust the <<zero>> according to the diameter of the blade :

- The blade must be closed to the floor.
- Loosen the screw (H).
- Line up the <<zero>> with the pointer, then tight the screw (H).



# 启动与停止

#### 开始前



Use only blades marked with a maximum operating speed greater than blade shaft speed.



Take into account the working conditions from health and safety point of wiew.



Please read the instructions for use prior to operating the machine for the first time.



Moteur off.



The working area must be completely cleared, well lit and all safety hazards removed (no water or dangerous objects in the vicinity).





The operator must wear protective clothing appropriate to the work he is doing.



The use of ear protection is mandatory.



Any persons not involved in the work should leave the working area.



Danger: risk of injury.



Always pay extreme care and attention to the preparation of the machine before starting up.



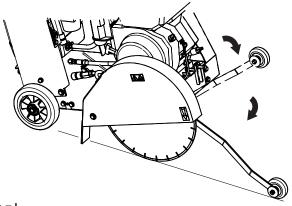
Remove all adjustment tools and wrenches from floor and machine.



Always keep blade guard in place.

- · Check that the fuel tank is full.
- Check that the engine oil level is correct. As the engine often operates at an angle, check the oil level (with the engine horizontal) frequently to ensure that it never falls below the second mark on the dipstick.
- Fill the tank with water, or connect with the water network.
- Mark the floor by drawing a line in the place to be cut.

 Fold down the front guide and position the machine so that the guide and the blade line up with the mark.



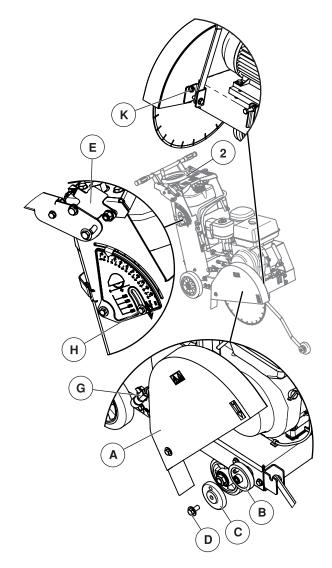
#### 启动



Ensure that the water supply is abundant, when cutting wet.

#### Engine:

- Start the engine: refer to the instructions in the manufacturer's service manual.
- · Allow the engine to warm up.



# 启动与停止

#### Electric motor :

- Switch on by pressing knob I on the circuit breaker.
- Open the water inlet tap (G).
- · Increase the engine speed to maximum.
- Low the wheel lock (E), in order to turn the wheel
  (2).
- Lower the blade to the desired depth indicated on the side scale on the ratchet placed on the side.
   We recommend a slow descent to avoid stalling the engine.
- Start moving down to the depth of cut required, indicated on the gradiated scale fitted on the side. A slow descent is recommended to prevent stalling the motor.
- Once the required depth is reached, lock the wheel (2) by raising the block wheel (E).

#### 停止



Moteur off.

- Low the block wheel (E) and turn the whell (2) to release the blade from the groove.
- Lock the machine in the high position by means of the block wheel (E).
- Turn off the water supply.
- · Allow the engine to turn at low speed.
- Stop the engine (consult the engine maintenance manual).
- · After use, clean the machine.



Emergency stop (engine) : Operate the switch on the machine's control panel.



Emergency stop (electric motor) : Press the red knob (circuit breaker).

#### Transport ans storage



Switch off the disk prior to moving the machine on jobsite.



Remove the disk prior to hoisting, loading, unloading and transporting the machine on jobsite.

- Height of the handle bar adjustable by pivoting.
- To position the floorsaw on the site, simply push it. It will move easily on its four wheels without starting the engine.
- For transporting by vehicle or by any kind of lifting gear, there is a factory-fitted hoisting point on the machine.



Store in a safe place out ot reach of children.

Remove all adjustment tools and wrenches.

Store diamond tool in a safe place so it cannot be bent or damaged.

#### Incidents during sawing

Several causes can result in the blade stopping in the sawing groove or the machine stopping:

- Tension of the belt.
- · Lack of fuel.
- · Excessively fast feed or descent, etc.
- In all cases remove the blade from the groove and check the machine thoroughly. Entrust repairs to authorised dealer only.

#### Maintenance



"Engine Maintenance": refer to the engine maintenance booklet.

#### Lubrication



Dispose of the old oil as laid down by the regulations in force.

- Apply a moderate amount of bearing lubricant to the nipples in the depth adjustment chassis (depending on the frequency of use).
- The spindle bearings must be greased after 8 hours of use, with a grease gun by pumping three to five times the grease into the greaser of the bearings. Only use a Super lithium 12 based grease in compliance with the NLG1 GRADE 2 consistency.
- Every 40 hours grease: depth control adjustment screw.

#### Motor belt tension



Never set belts beyond original tension.

After several hours of use it may be necessary to adjust the tension of the belts (moderately). To do this proceed as follows :

- Release the screws fixing the motor to the chassis.
- Turn the tensioning screw (N) at the front of the machine one quarter turn; this screw pushes the motor backwards [FIG. 1].
- At normal tension, counterlock the nut of the screw (N).
- · Relock the motor fixing screws.

# 10 - Chimes

#### Important recommendations



The manufacturer declines all responsibility for loss or damage resulting from misuse or any modification, alteration or powering that does not conform to the manufacturer's original specifications.

- Periodically tighten all nuts and bolts, particularly after the first few hours of operation.
- Check the tension of the belt. Tighten it, as instructed.
- When storing the machine, we recommend removing the blade and storing it carefully.
- Check that the blade is properly sprayed by inspecting the holes in the fork regularly.
- · Tighten the blade firmly.
- Make sure the contact faces of flanges, blade and axle are clean.

#### Repairs

We carry out all repairs in the shortest possible time and at the most economical prices (see overleaf for our address).

#### Spare parts

For quick supply of spare parts and to avoid any lost time it is essential to quote the data on the manufacturer's plate fixed to the machine and the part number of the part to be replaced with every order.

Note! The instructions for use and spare parts found in this document are for information only and are not binding. As part of our product quality improvement policy, we reserve the right to make any and all technical modifications without prior notice.

#### Scrapping



In the event of deterioration and scrapping of the machine, the following items must be disposed of in accordance with the requirements of the legislation in force.

#### Main materials :

- Motor: Aluminium (AL) Steel (AC), Copper (CU), Polyamide (PA)
- Machine: Steel sheet (AC), Cast iron (FT) Aluminium (AL)

# 技术资料

#### 技术资料

Depths of cut 125 mm / 140 mm / 165 mm.

Nominal weight (empty) 91 kg to 99 kg (depending on model)

Operating weight 121 to 135 kg

Dimensions (L  $\times$  W  $\times$  H) 1220  $\times$  600  $\times$  1000 mm

Blade shaft RPM 2.950

MODEL	POWER LEVEL	PRESSURE LEVEL	VIBRATION LEVEL
	Lwa (dB)EN ISO 3744	Lpa (dB) EN ISO 4871	Aeq (m/s²) ISO 5349
HONDA GX390	106	93	3
ROBIN EH 34 DL / SH	106	93	3, 5
4 KW 400 V	99	75	3

Tools : Diamond Blades - water cooled  $\varnothing$  350 mm or 400 mm or 450 mm - bore 25.4 mm

## EC 一致性声明

#### ( 仅适用于欧洲 )

Manufacturer, HUSQVARNA CONSTRUCTION PRODUCTS FRANCE, 433 81 Partille, Sweden, herewith declares that the machine FS400LV conforms to the DIRECTIVES :

- "MACHINES" modified (89/392/CEE)
- "LOW VOLTAGE" modified (73/23/CEE)
- "EMC" (89/336/CEE)
- "NOISE" (2000/14/CEE)

Christer Carlberg, Operations Manager

Electrolux Construction Products



www.husqvarnacp.com

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