

CS 352 B

OPERATING INSTRUCTIONS

Translation of the original instructions



NORTON

SAINT-GOBAIN

clipper



The undersigned manufacturer:

**SAINT - GOBAIN ABRASIVES S.A.
190, BD. J. F. KENNEDY
L-4930 BASCHARAGE**

Declares that this product:

« Floor saw »: **CS 352 B**

Code : **70184632546**

is in conformity with the following Standards:

- **"MACHINES" 2006/42/CE**
- **"ELECTROMAGNETIC COMPATIBILITY" 2014/30/UE**
- **"NOISE" 2000/14/CE**

And the European standard:

- **EN 13862 – Floor cutting-off machines – Safety**

Valid for machines as of serial number: 221000014

Storage site for the technical documents:

Saint-Gobain Abrasives 190, Bd. J. F. Kennedy 4930 BASCHARAGE, LUXEMBOURG

This declaration of conformity loses its validity when the product is converted or modified without agreement.

Bascharage, 15/03/2023.

A handwritten signature in blue ink, appearing to read "F. Chianese".

François Chianese, executive officer and responsible for the technical file.
Bascharage, Luxembourg.



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« Floor saw »: **CS 352 B**

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is in conformity with the following standard:

- ***Supply of Machinery (Safety) Regulations 2008***
- ***Electromagnetic Compatibility Regulations 2016***
- ***Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001***

and European standard:

- ***EN 13862 – Floor cutting-off machines – Safety***

Valid for machines with a serial number greater than: 221000014

Authorised Representative:

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Unicorn House • Unit 1, Amison Close

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Bascharage, 18/10/2022.

François Chianese, executive officer and responsible for the technical file.
Bascharage, Luxembourg.

CS 352 B

OPERATING INSTRUCTIONS

1	BASIC SAFETY INSTRUCTIONS	6
1.1	<i>Symbols</i>	6
1.2	<i>Machine plate</i>	7
1.3	<i>Safety instructions for particular operating phases</i>	8
2	GENERAL DESCRIPTION OF THE CS 352 B	9
2.1	<i>Short description</i>	9
2.2	<i>Layout</i>	9
2.3	<i>Technical data</i>	12
2.4	<i>Statement regarding the vibration emission</i>	13
2.5	<i>Statement regarding noise emission</i>	14
3	ASSEMBLY AND COMMISSIONING	15
3.1	<i>Assembly</i>	15
3.2	<i>Tool assembly</i>	15
3.3	<i>Quick reference guide for operation</i>	16
3.4	<i>Battery fixation and starting the machine</i>	17
3.5	<i>Charging the battery</i>	18
3.6	<i>Water cooling system</i>	18
4	OPERATING THE CS 352 B	19
4.1	<i>Site of work</i>	19
4.2	<i>Cutting method</i>	19
5	TRANSPORT AND STORING	20
5.1	<i>Securing for transport</i>	20
5.2	<i>Transport procedure</i>	20
5.3	<i>Long period of inactivity</i>	20
6	MAINTENANCE AND SERVICE	21
6.1	<i>Maintenance of the machine</i>	21
6.2	<i>Maintenance of the engine</i>	22
7	FAULTS: CAUSES AND CURES	23
7.1	<i>Fault-finding procedures</i>	23
7.2	<i>Trouble-shooting guide</i>	23
7.3	<i>Customer service</i>	24
7.4	<i>Spare parts</i>	25

1 BASIC SAFETY INSTRUCTIONS

The CS 352 B is exclusively designed for the cutting of floors made of asphalt, green and cured concrete (reinforced or not) as well as of industrial cement.

Uses other than the manufacturer's instructions shall be considered as contravening the regulations. The manufacturer shall not be held responsible for any resulting damage. Any risk shall be borne entirely by the user. Observing the operating instructions and compliance with inspection and servicing requirements shall also be considered as included under use in accordance with the regulations.

1.1 Symbols

Important warnings and pieces of advice are indicated on the machine using symbols. The following symbols are used on the machine:



Read operator's instructions



Ear protection must be worn



Hand protection must be worn



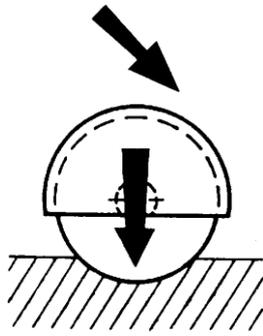
Eye protection shall be worn



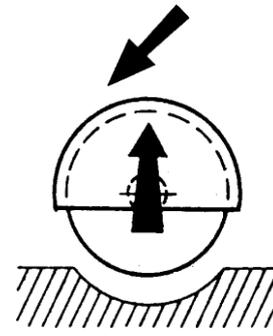
Cutting depth indicator



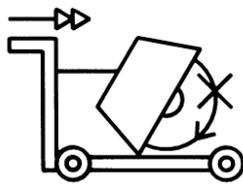
Danger: risk of cut



Rotation of the wheel in the indicated direction lowers the blade



Rotation of the wheel in the indicated direction raises the blade



Never move the machine with the blade running idle.



Rotation direction of the blade



Emergency Stop

1.2 Machine plate

Important data can be found on the following plate located on the machine:

 190, Bd. J.F. Kennedy L-4930 BASCHARAGE LUXEMBOURG	Code: Machine Code	Year: Year of production	 = Ø Maximum blade mm	UK CA CE EAC
	Mod: Machine Model	W= Weight kg	 = Ø Bore mm	
	EN: Safety standard	P= Power kW	 = Blade speed RPM	
	Type: Machine type	Serial N°: Serial number		

1.3 Safety instructions for particular operating phases

Before commencing work

- Before commencing work, make yourself familiar with the working environment at the place of use. The working environment includes: obstacles in the area of work and manoeuvre, the firmness of the floor, necessary protection at the site relating to public thoroughfares and the availability of help in the event of accidents.
- Check for correct mounting of the blade regularly.
- Immediately remove damaged or badly worn blades, as they endanger the operator whilst rotating.
- Only fit NORTON diamond blades to the machine! The use of other tools can damage the machine!
- Attention is drawn to the use of BS2092 safety goggles in conformity with specified Processes No.8 of the Protection of Eyes Regulation 1974, Regulation 2(2) Part 1.
- For security reasons, never leave the machine unattended, untied or unlocked.

While the engine is running

- Do not move the machine whilst the blade is running idle.
- Always cut with the blade guard in position.
- Apply cooling water continuously whilst cutting and in good time!

Battery powered machine

- Always turn off the machine and separate it from the battery before any work on the machine is done.
- Avoid contact of the electric connections with water projection or humidity.
- In case of emergency, you can stop the machine by pushing on the emergency stop.
- In the event of the machine breaking down or stopping for no apparent reason, switch off the machine and separate it from the battery. Only a qualified electrician is allowed to investigate the trouble and remedy the fault.

2 GENERAL DESCRIPTION OF THE CS 352 B

Any modification, which could lead to a change in the original characteristics of the machine, may be done only by Saint-Gobain Abrasives S.A. who shall confirm that the machine is still in conformity with the safety regulations. Saint-Gobain Abrasives S.A. keeps the right of making technical or design modification without prior notification.

2.1 *Short description*

The **Floor Saw CS 352 B** you have chosen, is used for small repair works in concrete and asphalt, for cutting induction loops and installing cables as well as for cutting expansion joints. It can be used for either wet or dry cutting operations.

Being of small construction, it can be transported in a car or van, the handle can be removed, reversed or retracted. The water container is also removable.

All component parts on **the CS 352 B** are assembled to a high quality standard, ensuring long life, reliability and a minimum of maintenance.

Special types of blades are available for asphalt, green concrete, cured concrete (reinforced or not) as well as for industrial cement flooring.

2.2 *Layout*



Made of jig welded open profile steel, the **CS 352** is stable but at the same time, easily transportable.

The one-piece blade guard (1) fully protects the operator and his working environment. It is firmly fixed to the main frame but can be opened by rotation to change blades.

A manually operated hand wheel mechanism (2) enables graduated depth setting. Turning the hand wheel clock- or anti-clockwise will raise or lower the cutting blade.

The handle (3) is detachable or can be reversed for easy transportation. The height is adjustable.

The motor frame (4), supporting the blade shaft, the motor, the blade guard and the belt guard, is articulated on the rear axle.

The precisely manufactured blade shaft is fitted into two heavy-duty self-aligning pillow block bearings, including grease nipples.

The steel belt guard (5) is a sealed two pieces unit. The backing plate is bolted to the mainframe of the machine and two locking nuts are welded to it. The outer guard, covering the drive belt and pulleys, is held in place by two locking bolts.

The pointer (6) allows the operator to make precise cut easily.

The water tank (7), with a capacity of 25 litres, can be easily removed from the machine, allowing the tank to be refilled without having to move the machine.

The eGX battery (9) engine from Honda which integrates the battery directly on the engine

On the control panel you can find:

- The Power button
- The ON/OFF switch
- The 3 LEDs (green, orange and red) to indicate the state of the motor
- Emergency stop (8)

2.3 Technical data

Technical data	
Battery motor	1,8 kW
Max. blade diameter	350mm
Bore	25,4mm
Rotation speed of the blade	2750 min ⁻¹
Cutting depth	125mm
Flange diameter	100mm
Sound pressure level	93,3 dB (ISO EN 11201)
Sound energy level	113,3 dB (ISO EN 3744)
Machine dimension	900x520x970 mm
Weights	
Machine without battery	75 kg
Machine with battery	81,5 kg
Battery technical data	
Type de battery	Battery lithium ion rechargeable
Tension	DC 72V
Power capacity	720Wh
Rated capacity	10.0Ah
Temperature range	
Charging	5 à 30°C
Operating	-15 à 40°C
Storage	-5 à 30°C
Charger technical data	
Charger type	CC/CV quick charger
Input voltage	AC 100 à 240V
Input frequency	50/60Hz
Output voltage	DC 82.8V
Output current	8.5A

2.4 Statement regarding the vibration emission

Declared value of vibration emission following **EN 12096**.

Machine Model / code	Measured value of vibration emission at m/s ²	Uncertainty K m/s ²	Tool used Model / code
CS 352 B HONDA 70184632546	1.99	0.26	Classique Béton Ø350

- Values determined using the procedure described in the standard **EN 13862**.
- The measurements are made with new machines. Actual values may vary with site conditions, in terms of:
 - Materials worked
 - Wear Machine
 - Lack of maintenance
 - Inappropriate tool for application
 - Tool in poor condition
 - Unskilled operator
 - Etc...
- The exposure time to vibration is based on the performance of work (related to the adequacy Machine / Tool / worked material / operator)
- When evaluating risks due to hand-arm vibration, you need to take into account effective usage at rated power of machine during a full day of work; quite often you will realise that effective utilisation time represents around 50% of overall duration of work. You have to consider, of course, breaks, water feeding, preparation of work, time to move the machine, disk mounting...

2.5 Statement regarding noise emission

Declared value of noise emission following **EN ISO 11201** and **NF EN ISO 3744**.

Machine Model / code	Sound Pressure level L_{Peq} EN ISO 11201	Uncertainty K (Sound Pressure level L_{Peq} EN ISO 11201)	Sound power level L_{Weq} NF EN ISO 3744	Uncertainty K (Sound power level L_{Weq} NF EN ISO 3744)
CS 352 B 70184632546	93,3 dB	2,5 dB	113,3 dB	2,5 dB

- Values determined using the procedure described in the standard **EN 13862**.
- The measurements are made with new machines. Actual values may vary with site conditions, in terms of:
 - Wear Machine
 - Lack of maintenance
 - Inappropriate tool for application
 - Tool in poor condition
 - Unskilled operator
 - Etc...
- Measured values relate to an operator in normal use, as described in the manual position.

3 ASSEMBLY AND COMMISSIONING

Before beginning the work with the CS 352 B, you have to assemble some parts.

3.1 Assembly

Secure the operator's handle in a comfortable user position by using the locking nut.

3.2 Tool assembly

Only use NORTON blades with the CS 352 B.

A blade with a maximum diameter of 350 mm can be fitted in the CS 352 B.

All tools used must be selected with regard to their maximum permitted cutting speed for the machine's maximum permitted rotation speed.

Before mounting a new blade, switch the machine off.

To mount a new blade, follow these steps:

- Turn the wheel until the cutting head is in the raised position.
- Disconnect the water tank.
- Loosen the side screw and remove the blade guard.
- Loosen the hexagonal nut on the blade shaft, which holds the removable outer flange.
- Remove the outer flange.
- Clean the flanges and blade shaft and inspect for wear.
- Mount the blade on the shaft ensuring that direction of rotation is correct. Wrong direction of rotation blunts the blade quickly.
- Replace outer blade flange.
- Tighten hexagonal nut with spanner supplied for this purpose.
- Remount the blade guard.

The blade bore must correspond exactly to the blade shaft. Cracked or damaged bore is dangerous for the operator and for the machine.

3.3 Quick reference guide for operation

BATTERY CHARGE LEVEL

Pre-operation check!

* Read and understand the Owner's Manual before operating the DC Power Unit

Safety Precaution

Attach Battery Pack

BATTERY CHARGER

Charging temperature range **5 to 30 °C**

Charge

How to stop

1 Press **STOP**

Green LED OFF

How to start

1 Press **STOP**

2 Press **POWER**

3 Press **START**

4 Change **Speed**

Operating temperature range **-15 to 40 °C**

BATTERY PACK

CHECK

MOTOR UNIT

How to start

1 Press **STOP**

2 Press **POWER**

3 Press **START**

4 Change **Speed**

Operating temperature range **-15 to 40 °C**

How to stop

1 Press **STOP**

Green LED OFF

Attach Battery Pack

BATTERY CHARGER

Charging temperature range **5 to 30 °C**

Charge

BATTERY CHARGE LEVEL

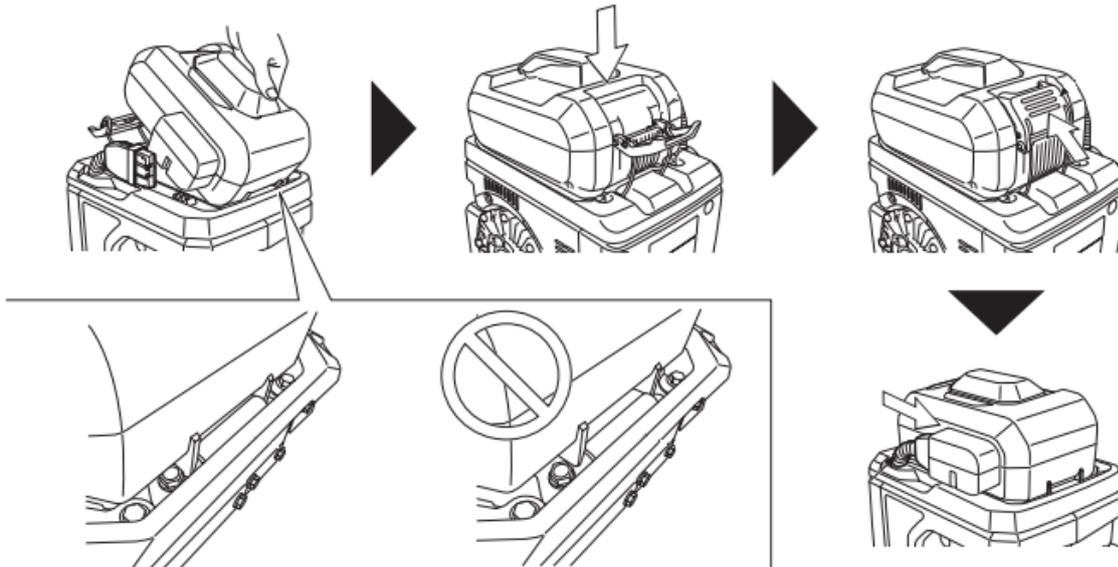
Pre-operation check!

* Read and understand the Owner's Manual before operating the DC Power Unit

Safety Precaution

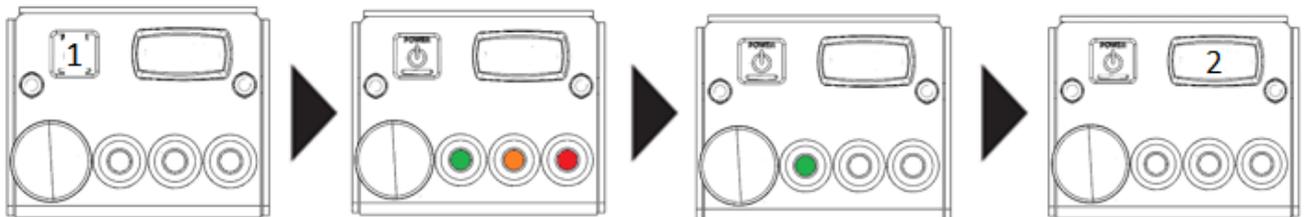
Attach Battery Pack

3.4 Battery fixation and starting the machine



- Switch on the battery by pressing the Power button (1) (the switch must be in the OFF position) the 3 LEDs will lit.
- Wait until the green LED on the control panel is the only one lit
- Put the switch to ON to start the motor and the rotation of the blade (2)

NOTE: When removing the battery, remember to replace the plastic cover on the motor plug to keep it clean.



NOTE: These operations must be done each time the motor is restarted (even if the engine has just been stopped)

To stop the machine, put the switch on the control panel to OFF or press the emergency stop.

3.5 Charging the battery

This machine works with a battery, so you have to think about charging it. A fast charger is available for this. It will take between 1h and 1h30 to recharge a full battery charge. When charging the battery, the charger fan turns on to prevent the battery from heating up. The charger will stop automatically once the battery is fully charged, but the fan will remain on for a while to keep the battery cool.

Indicator Display	Charge Level	
	Fully charged.	
	High ↑ Low	Charging.
	Charging has stopped.	

■: On, ✱: Flashing, □: Off

NOTE: The battery must not be charged at a temperature equal to or lower than 5°C.

3.6 Water cooling system

Fill the water tank with clean water.

Open water-tap at blade guard (note that handle on water-tap should be in line with water-flow).

Ensure that water is flowing freely in the circuit and delivered adequately to both sides of the blade, as insufficient water supply may result in premature failure of the diamond blade.

In case of frost, empty the water cooling system.

4 OPERATING THE CS 352 B

4.1 Site of work

Before you start working, please check the following points:

- Remove from the site anything, which might hinder the working procedure.
- Make sure the site is sufficiently well lit.
- Make sure you have a continual adequate view of the working area so you can intervene in the working process at any time.
- Keep other staff out of the area, so you can work securely.

4.2 Cutting method

In this section, you can find instructions to make a straight cut at the desired depth.

4.2.1 Preparing your cut

Before starting the machine,

- Draw a line on the floor over the cutting length.
- Make sur the battery is charged.
- Make sure you have mounted the correct blade as recommended by the manufacturer depending on the material to be worked, the working procedure (dry or wet cut) to be carried out, and the efficiency required.
- Make sure that the flanges securely hold the diamond blade.
- Make sure that the blade is not touching the floor before starting.
- Bring the handle in a comfortable position.
- Roll the machine until the blade is over the line.
- Lower the guide-a-cut so it touches the line.

4.2.2 Cutting the floor

You can now start the engine. To make your cut,

- Turn on the water tap according to the type of blade used and the cut required:
 - Water cutting: a sufficient amount of water should be used continuously throughout the cutting process to cool the disc properly.
 - Dry cutting: if possible, a small amount of water should be used to limit the creation of dust.
- Turn the depth hand wheel until the blade slightly touches the floor.
- To lower blade into the cut, turn hand wheel anti-clockwise. Each turn of the hand wheel will raise or lower the blade by 7.5mm.
- Push the machine forward with steady and gentle pressure and follow the line with the pointer. The feed speed must be adjusted depending on the material being cut, and depth of cut.
- At the finish of the cut, raise the blade out of the cut by turning the hand wheel clockwise, shut-off the water and switch off the engine.

5 TRANSPORT AND STORING

Take the following measures in order to transport and store the CS 352 B securely.

5.1 *Securing for transport*

Before transporting the machine:

- Remove the blade.
- Empty the water tank.
- Lower the handle in its fixing tube and secure it using the locking nut.
- Raise the guide-a-cut in its upright position.
- Raise the cutting head to its highest position using the hand wheel.

5.2 *Transport procedure*

The machine can be moved on a flat surface using its wheels. Only use the lifting hook on the water tank support to suspend the machine. The use of any other device (especially the handle) to suspend the machine is absolutely forbidden.

5.3 *Long period of inactivity*

If the machine is not going to be used for a long period, please take the following measures:

- Completely clean the machine.
- Loosen the drive belts.
- Grease the threaded shaft.
- Empty the water system.
- Disconnect the battery from the motor
- Ideally store the battery half-charged

The storage site must be clean, dry and at a constant temperature.

6 MAINTENANCE AND SERVICE

ATTENTION: to perform maintenance on the machine, always switch it off. Always wear a face mask and safety goggles while performing the maintenance of machine.

6.1 Maintenance of the machine

To ensure a long-term quality from the cutting with the CS 352 B, please follow the maintenance plan below:

		Regular service period Perform at every indicated period →						
		After one hour of work	Begin of the day	During the changing of the tool	End of the day	Every week	After a fault	After a damage
Whole machine	Visual control (general aspect, watertightness)							
	Clean							
Flange and blade fixing devices	Clean							
Belts tension	Control							
Water hoses and nozzles	Clean							
Depth screw	Grease							
Engine housing	Clean							
Reachable nuts and screws	Tighten up							

Adjustment and replacement of the belt

After one hour of work, the belt heat and stretch. Therefore, you have to re-tension them.

To adjust the belt, firstly remove the belt guard by unscrewing the 2 nuts. Loose the 4 engine bolts and shift the engine by using the two screws on the front.

To replace the belt, move the engine completely to the front. Adjust the belt and retighten them by shifting the motor to the rear.

When replacing the belt, please set a distance of 30 mm between the motor plate and the plate where the tensioning screws are fixed at the front of the machine (for our specific belt in spare parts) for optimal belt tension.

Lubrication

The CS 352 B uses life-lubricated bearings. Therefore, you don't need to lubricate them at all.

Grease the depth screws every day.

Cleaning of the machine

Your machine will last longer if you clean it thoroughly after each day of work.

6.2 Maintenance of the engine

Maintenance Schedule

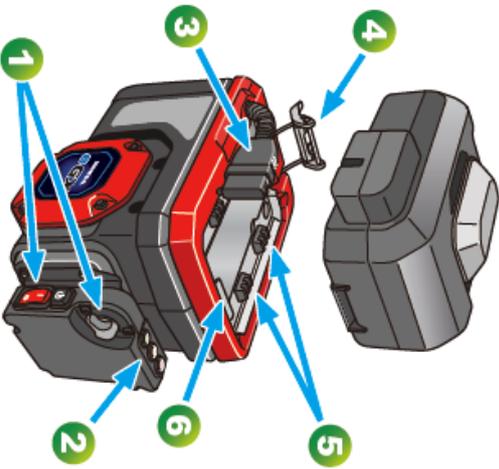
	🔧 : Check	🔄 : Change	🧽 : Clean
Regular Service Period			Every 5 years or 500 hrs.
Each use			
1 Exterior	🔧	🔄	🧽
2 Switch Speed control lever	🔧	🔄	🧽
3 LED	🔧	🔄	🧽
4 Power cable	🔧	🔄	🧽
5 Battery fastener	🔧	🔄	🧽
6 Rubber support	🔧	🔄	🧽
Battery hook	🔧	🔄	🧽
Wire harness	🔧	🔄	🧽
Battery fastener	🔧	🔄	🧽
Rubber support	🔧	🔄	🧽
Battery hook	🔧	🔄	🧽
Rubber mount	🔧	🔄	🧽
Stopper bolt	🔧	🔄	🧽
Stopper rubber	🔧	🔄	🧽
Drain hole	🔧	🔄	🧽
Set speed	🔧	🔄	🧽

Take the DC Power Unit to your Honda servicing dealer.

1 Switch Speed control lever

Check work properly (start and stop) (change speed)

2 LED Check all LED light ON when POWER is turned on



Storage Storage temperature range **-5 to 30°C**

- Long-term storage is not possible
- Use Battery Pack to discharge
- Long-term storage is possible
- Long-term storage is not possible
- Charge Battery Pack

Remove the Battery Pack

CHECK

Unplugged

* Read and understand the Owner's Manual before operating the DC Power Unit.

7 FAULTS: CAUSES AND CURES

7.1 *Fault-finding procedures*

Should any fault occur during the use of the machine, turn it off. Let only qualified staff make any intervention other than the one described in the previous section.

7.2 *Trouble-shooting guide*

Trouble	Possible source	Resolution
Hard starting	Not enough fuel	Fill fuel tank
	Fuel filter clogged	Clean fuel filter
	Spark plug faulty	Inspect spark plug
	Stronger fault	Contact nearest engine maintenance centre
Engine lacks power	Air filter restricted	Clean or replace air filter
	Stronger fault	Contact nearest engine maintenance centre

7.3 *Customer service*

When ordering spare parts, please mention:

- The serial number (7 digits).
- The code of the part.
- The exact denomination.
- The number of parts required.
- The delivery address.
- Please indicate clearly the means of transportation required such as "express" or "by air". Without specific instructions, we will forward the parts through the means which seem appropriate to us --- but which is not always the quickest way.

Clear instructions will avoid problems and faulty deliveries.

If not sure, please send us the defective part.

In the case of a warranty claim, the part must always be returned for evaluation.

Spare parts for the motor can be ordered with the manufacturer of the motor or with their dealer, which is often quicker and cheaper.

This machine has been manufactured by: Saint-Gobain Abrasives S.A.

190, Bd. J. F. Kennedy

L- 4930 BASCHARAGE

Grand-duché de Luxembourg.

Tel.: 00352-50 401-1

Fax: 00352- 50 16 33

<http://www.construction.norton.eu>

e-mail: sales.nlx@saint-gobain.com

7.4 Spare parts

In order to consult the spare parts lists, we invite you to visit the after-sales website of Norton Clipper by using the following address:

<https://spareparts.nortonabrasives.com>

For a quick access, you can also use the QR Code shown below using your mobile phone:



This electronic catalogue provides exploded views and spare parts lists for different machines designed by Norton Clipper so you can find references you need.

Guarantee can be claimed and technical support obtained from your local distributor where machines, spare parts and consumables can be ordered as well:

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