# CT 601 B

### **OPERATING INSTRUCTIONS** Translation of the original instructions







VERS.2023.02.28

### CT 601 B\_MAN\_EN



The undersigned manufacturer:

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

Declares that this product: Power Float: *CT* **601 B** 

Code: 70184632582

is in conformity with the following Directives:

• "MACHINES" 2006/42/CE

• "ÉLECTROMAGNÉTIC COMPATIBILITY" 2014/30/CE

And the European standard

• EN 12649 – Concrete compactors and resurfacing

Valid for machines as of serial number: 230400011

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, 28.02.2023.

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



The undersigned manufacturer:

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

Declares that this product: Masonry Saw: *CT 601 B* 

Code: 70184632582

is in conformity with the following standard:

- Supply of Machinery (Safety) Regulations 2008
- Electromagnetic Compatibility Regulations 2016

and European standard:

• EN 12649 – Concrete compactors and smoothing machines – Safety

Valid for machines with a serial number greater than: 230400011

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

Bascharage, Luxembourg, 28.02.2023

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## CT 601 B OPERATING INSTRUCTIONS

<u>1</u>	BASIC SAFETY INSTRUCTIONS	6
1.1	Symbols	6
1.2	Machine plate	7
1.3	Safety instructions for particular operating phases	7
<u>2</u>	MACHINE DESCRIPTION	8
2.1	Short description	8
2.2	Purpose of use	8
2.3	Layout	8
2.4	Technical Data	10
2.5	Statement regarding the vibration emission	11
2.6	Statement regarding noise emission	12
<u>3</u>	ASSEMBLY AND COMMISSIONING	13
3.1	Tool assembly	13
3.2	Quick reference guide for operation	14
3.3	Battery fixation and starting the machine	15
3.4	Charging the battery	15
<u>4</u>	OPERATING THE MACHINE	16
4.1	Site of work	16
4.2	Preparing the site	16
4.3	Floating and finishing operation	16
<u>5</u>	TRANSPORT AND STORING	18
5.1	Securing for transport	18
5.2	Transport procedure	18
5.3	Long period of inactivity	18
<u>6</u>	MAINTENANCE AND SERVICING	19
<u>7</u>	FAULTS: CAUSES AND CURES	21
7.1	Fault-finding procedures	21
7.2	Trouble-shooting guide	21
7.3	Customer service	22
7.4	Spare parts	23

### **1 BASIC SAFETY INSTRUCTIONS**

The CT 601 B is exclusively designed for the finishing of wet concrete floors mainly on construction sites.

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



Turn the knob in the indicated direction to tilt (UP) or flatten (DOWN) the blades.



Ear protection and safety goggles must be worn



To prevent severe injuries, keep the feet and fingers away from the rotating tool

### 1.2 Machine plate

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

	Code: Machine Code	Year of Year: production	Ø Maximum blade mm	UK	
SAINT-GOBAIN	Mod: Machine Model	W= Weight kg	🔕 = Ø Bore mm	CA	
190, Bd. J.F. Kennedy	EN: Safety standard	P= Power KW	See Blade speed RPM	rmr	
LUXEMBOURG	Type: Machine type	Serial Nº: Serial number			

### 1.3 Safety instructions for particular operating phases

### Before commencing work

- Read the present operator's instructions booklet carefully.
- 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 tool regularly.
- Immediately remove damaged or badly worn tools, as they endanger the operator whilst rotating.
- Always use the machine with the safety guard ring, protection guards and electric box cover in position.
- Only fit NORTON blades or plates 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.

### 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 releasing the dead-man handle.
- 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 MACHINE DESCRIPTION**

Any modification, which could lead to a change in the original characteristics of the machine, may be done only by Saint-Gobain Abrasives who shall confirm that the machine is still in conformity with the safety regulations.

### 2.1 Short description

The Mechanical Trowel CT 601 B is designed for durability and high performance for onsite finishing operations on wet concrete floors.

As with all other NORTON products, the operator will immediately appreciate the attention given to detail and quality of materials used in construction. The machine and its component parts are assembled to high standards assuring long life and minimum maintenance.

### 2.2 Purpose of use

The Clipper Mechanical Trowel CT 601 B is designed for onsite finishing operations on wet concrete floors. It is not designed for any other purpose.

### 2.3 Layout



### Handle (1)

Jig welded steel construction including 2 rubber grips. A dead-man handle (7) allows the operator to work safely and to stop the machine at any moment. The angle of the machine arm can be adjusted to operate the machine comfortably.

### Pitch of the blades (2)

The pitch of the blades is controlled over a knob on the handle.

### Belt drive and belt cover (3)

A centrifugal clutch inside the motor pulley drives the gear shaft through V-Belts. It allows to gradually engage the tool rotation. The drive assembly is enclosed in a guard.

### Safety guard ring (4)

A safety guard ring protects the operator from the rotation of the tool while offering an optimum view of the working progress. This ring can rotate, in order to ease the finishing of floor up to walls.

### Battery motor and control panel (5)

The eGX battery 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

#### Lifting eye (6)

To lift the machine easily and safely, a lifting eye is located over the motor. This allows a balanced lifting of the machine.

### 2.4 Technical Data

Technical data				
Battery motor	1,8kW			
Max. tool diameter	600mm			
Rotation speed of the tool shaft	65-130 tr.min <sup>-1</sup>			
Sound pressure level	61,6 dB (A) (ISO EN 11201)			
Sound energy level	81,6 dB (A) (ISO EN 3744)			
Type of tool	Blade or plate			
Machine dimensions (LxWxH)	1560x650x1060mm			
Weight (without battery)	68,5 kg			
Weight (with battery)	75 kg			
Battery techr	nical data			
Type of 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			

### 2.5 Statement regarding the vibration emission

Machine	Measured value of vibration	Uncertainty K	Tool used		
Model / code	emission at m/s <sup>2</sup>	m/s <sup>2</sup>	Model / code		
CT 601 B 70184632582	<2.5	0.5	Original Pale		

- The vibration value is lower and does not exceed 2.5 m/s<sup>2</sup>.
- Values determined using the procedure described in the standard EN 12649.
- 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...

### 2.6 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 <sub>Peq</sub> EN ISO 11201	Uncertainty K (Sound Pressure level L <sub>Peq</sub> EN ISO 11201)	Sound power level L <sub>weq</sub> NF EN ISO 3744	Uncertainty K (Sound power level L <sub>weq</sub> NF EN ISO 3744)
<b>CT 601 B</b> 70184632582	61,6 dB	2,5 dB	81,6 dB	2,5 dB

- Values determined using the procedure described in the standard EN 12649.
- 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**

The machine is delivered fully equipped. It is ready for operation after assembly of the tool and adjustment of the machine arm.

When you receive the machine, screw the Rubber bloc with your hand at this location (see picture below) to prevent damage on the battery with the control panel when the handle is folded.



### 3.1 Tool assembly

Only NORTON blades or plate with a maximum diameter of 600 mm can be used with the CT 601 B. Before mounting a new tool into the machine, switch off the machine and isolate it from the main source of electricity. Make sure the tools are not rotating anymore.

Screw 2 M6-screws per blade using a 10mm wrench to assemble the blade on the arm. To assemble a plate, place the machine with the blades assembled on the plate, and turn it until the blades are located in the hooks on the plate.

### 3.2 Quick reference guide for operation



### 3.3 Battery fixation and starting the machine



- Set the machine arm in a comfortable position. To that purpose, loosen the handle on the arm and set the arm at a comfortable position, then retighten the handle.
- Press the dead-man handle
- 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 release the dead-man handle.

### 3.4 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.

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

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

🔳 : On, 🔆 : Flashing, 🛛 : Off

### **4 OPERATING THE MACHINE**

### 4.1 Site of work

- Remove from the site anything, which might hinder the working procedure!
- Make sure the site is sufficiently well lit!
- Observe manufacturer's conditions for connecting to power supplies!
- 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 Preparing the site

Prepare the concrete as for manual trowelling. Assure a well levelled surface (we recommend the use of a beam or better a vibrating screeder). When slab has set sufficiently firm so that the operator can walk on it, leaving only a slight impression (approx.3mm), it is ready for the floating operation.

### 4.3 Floating and finishing operation

To use the machine correctly, you must face it with the two hands on the handle.

### Handling the machine

Operate the machine from right to left as shown in the following drawing:



To move the machine:

- Forward (I on the following drawing), turn the handle clockwise.
- Backward (II), turn the handle counter clockwise.
- To the left (III), pull up the handle.
- To the right (IV), push down the handle.



#### **Tilting the blades**

Floating the slab is done with the blades nearly flat on the surface of the concrete; however, it is recommended that the blades are just slightly tilted to avoid the suction and drag created in normal operation of float blades on wet concrete. For the finishing operation, tilt the blades. Start with a small pitch of 4 to 6 mm. After each finishing pass, continue to tilt blades.

#### Depression or high spot

To fill a depression or cut down a high spot, simply move the machine back and forward over the area until the desired surface is obtained.

IMPORTANT: Do not allow the machine to stand in one spot on wet concrete – remove the machine from the slab when it is not used.

CAUTION: when the machine is switched off, the tools will continue turning slowly to complete stop. Be therefore very careful to avoid injuries.

### 5 TRANSPORT AND STORING

### 5.1 Securing for transport

Before transporting the machine, always remove the blades and the plate.

### 5.2 Transport procedure

lifting eye.

Conform yourself to work regulations, in order to transport the machine safely. To lift the machine, use the lifting eye. Make sure that your lifting device is securely fastened to the

### 5.3 Long period of inactivity

If the machine is not going to be used for a long period, completely clean the machine and disassemble the tools. 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 SERVICING**

To ensure a long-term quality from the use of the CT 601 B, please follow the maintenance plan below:

		Begin of the day	During the changing of tool	End of the day or more often if required	Every week	After a fault	After a damage
Whole machine	Visual control (general aspect, water tightness)						
	Clean						
Surface of blades or plate	Clean						
Tension of the blade	Check						
Motor cooling fan	Clean						
Motor housing	Clean						
Reachable nuts and screws	Tighten up						

### Maintenance of the machine

Always perform the maintenance of the machine with the machine isolated from the electrical supply and with tools idle.

### Lubrication

The CT 601 B uses life-lubricated bearings. Therefore, you don't need to lubricate the machine at all.

### Cleaning of the machine

Your machine will last longer if you clean it thoroughly after each day of work, especially motor and blades or pan.

### Control and change of the belt

To control the tension of belts, open the belt guard, and push on the belt. You should be able to gape the belt as thick as a finger. If the tension is incorrect, loosen the nuts securing the motor on the machine and move the motor until the correct tension is reached. Make sure that the pulleys are aligned correctly. Then retighten the nuts.

To change the belt, loosen the nuts securing the motor on the machine and move the motor forward until you can remove the old belt and put a new belt on the pulleys. Move the motor in order to tighten the belt in a suitable way. Make sure the pulleys are aligned correctly. Then retighten the nuts to assemble the motor securely.

After the control or the change of the belt, always reassemble the belt guard.

#### Maintenance du moteur



### 7 FAULTS: CAUSES AND CURES

### 7.1 Fault-finding procedures

Should any fault occur during the use of the machine, turn it off, and isolate it from the electrical supply. Any works dealing with the electrical system or supply of the machine can only be carried out by a qualified electrician.

### 7.2 Trouble-shooting guide

Trouble	Possible source	Resolution
Motor is not running	Battery low	Check the battery charge (if necessary recharge it)
	Defective switch	CAUTION : can only be solved by qualified electrician
	Defective motor	Change motor or contact motor manufacturer

### 7.3 Customer service

When ordering spare parts, please mention:

- The serial number (seven 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 : 00331 83717792

### 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:

SAINT-GOBAIN ABRASIVES INDUSTRIEWEG 21 9420 ERPE-MERE BELGIUM TEL: +32(0) 2 267 21 00

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