

# JUMBO 651 P6.5 HONDA

## OPERATING INSTRUCTIONS

Translation of the original instructions



**clipper**®





# Declaration of conformity

The undersigned manufacturer:

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

Declares that this product:

Masonry Saws: **JUMBO 651 P6.5**

Code: **70184610073**

is in conformity with the following Directives:

- **"MACHINES" 2006/42/CE**
- **"ELECTROMAGNETIC COMPATIBILITY" 2004/108/CE**
- **"NOISE" 2000/14/CE**

And European standard:

- **EN 12418 – Masonry and stone cutting-off machines – Safety**

Valid for machines as of serial number:

130400000

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, Luxembourg, 01.04.2013.

A handwritten signature in black ink, appearing to read "Olivier Plenert", written over a light blue horizontal line.

Olivier Plenert, executive officer.



# JUMBO 651 P6.5

## OPERATING INSTRUCTIONS AND SPARE PARTS LIST

<b><u>1</u></b>	<b><u>BASIC SAFETY INSTRUCTIONS</u></b>	<b><u>6</u></b>
1.1	<i>Symbols</i>	6
1.2	<i>Machine plate</i>	7
1.3	<i>Safety instructions for particular operating phases</i>	7
<b><u>2</u></b>	<b><u>MACHINE DESCRIPTION</u></b>	<b><u>8</u></b>
2.1	<i>Short description</i>	8
2.2	<i>Purpose of use</i>	8
2.3	<i>Layout</i>	8
2.4	<i>Technical Data</i>	10
2.5	<i>Statement regarding the vibration emission</i>	11
2.6	<i>Statement regarding noise emission</i>	12
<b><u>3</u></b>	<b><u>ASSEMBLY AND COMMISSIONING</u></b>	<b><u>13</u></b>
3.1	<i>Tool assembly</i>	13
3.2	<i>Starting the machine</i>	14
3.3	<i>Water cooling system</i>	15
<b><u>4</u></b>	<b><u>TRANSPORT AND STORING</u></b>	<b><u>15</u></b>
4.1	<i>Securing for transport</i>	15
4.2	<i>Transport procedure</i>	15
4.3	<i>Long period of inactivity</i>	15
<b><u>5</u></b>	<b><u>OPERATING THE MACHINE</u></b>	<b><u>16</u></b>
5.1	<i>Site of work</i>	16
5.2	<i>Cutting methods</i>	16
<b><u>6</u></b>	<b><u>MAINTENANCE AND SERVICING</u></b>	<b><u>18</u></b>
6.1	<i>Maintenance of the machine</i>	18
6.2	<i>Maintenance of the engine</i>	19
<b><u>7</u></b>	<b><u>FAULTS: CAUSES AND CURES</u></b>	<b><u>22</u></b>
7.1	<i>Fault-finding procedures</i>	22
7.2	<i>Trouble-shooting guide</i>	22
7.3	<i>Customer service</i>	23

# 1 BASIC SAFETY INSTRUCTIONS

The Jumbo 651 is exclusively designed for the cutting of construction products 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



Ear protection must be worn



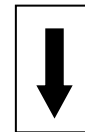
Hand protection must be worn



Eye protection shall be worn



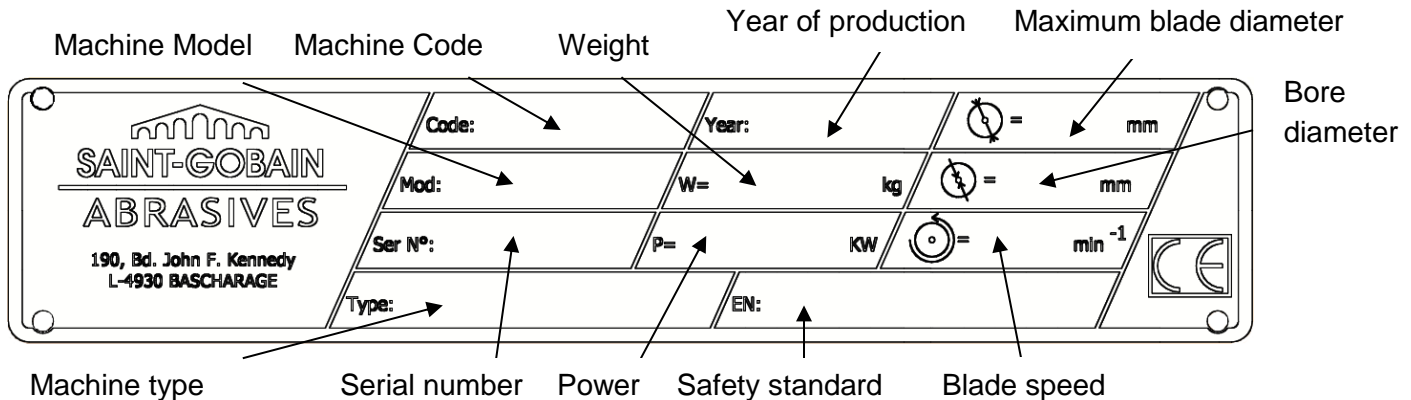
Danger: risk of cut



Rotation direction of the blade

## 1.2 Machine plate

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



## 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.
- Site the machine on an even, firm and stable base!
- During work, apply the brakes located on two of the four wheels.
- Check for correct mounting of the blade regularly.
- Immediately remove damaged or badly worn blades, as they endanger the operator whilst rotating.
- The material to be cut must be held securely in place on the conveyor cart to allow no movement during cutting operation.
- Always cut with the blade guard in position.
- Only fit NORTON diamond blades to the machine! The use of other tools can damage the machine!
- Read the blades' specifications carefully to choose the correct tool for your application.
- 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.

### Petrol powered machines:

- Always use the fuel advised.
- In confined areas, exhaust gases should be evacuated and the job site properly aerated.
- Petrol and diesel machines, which by their nature emit toxic exhaust gases, must not be used in places prohibited by the Health at Work etc. Act 1974 or which are prohibited by Factory Inspectors or Safety Officers.
- Fuel is flammable. Before filling the tank, shut down the engine, extinguish all open flames and do not smoke. Take care that no petrol is spilled on any motor part. Always wipe up spilled fuel.
- In case of danger, use the emergency stop button just in front of the machine.

## 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

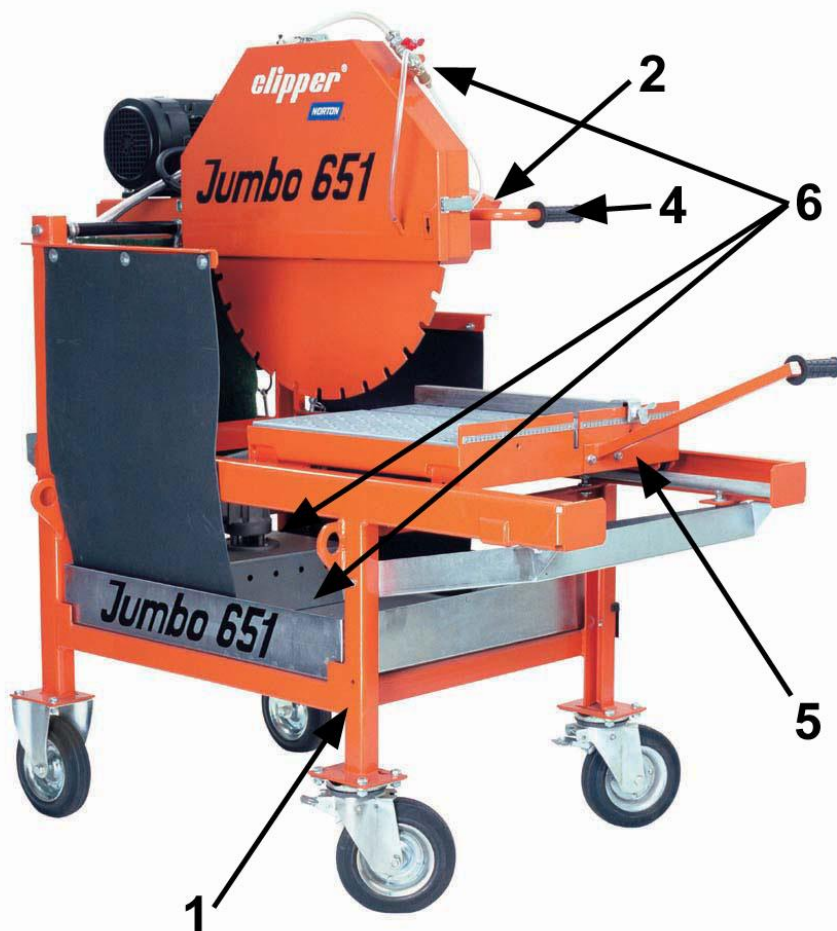
The JUMBO 651 block saw is designed for durability and high performance for onsite wet and dry cutting operations of a wide range of masonry, refractory and natural stone products.

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 machine is designed for cutting a large range of building and refractory materials. It is not designed for cutting wood or metals.

### 2.3 Layout





**Frame (1)**

Jig-welded, reinforced and all-steel construction ensures perfect rigidity. The frame includes a large capacity water tray with drain plug. Frame has built-in lift brackets for easy transportation and is mounted on 4 wheels, 2 of which have a locking device to secure the machine during cutting.

**Cutting head (2)**

Jig-welded steel console equipped with pivot bar fixed to frame upright and housed in heavy-duty bearings. Console supports the motor, the belt drive with its guard and the blade shaft assembly. Bearings are machined for perfect fit and alignment.

**Blade shaft**

Precision-machined blade shaft, held in ballbearings and is driven by three heavy-duty V-section drive belts. The blade shaft assembly is completely enclosed in a cutting head console, accessible for inspection by way of a removable plate. The removable blade flange is tightened by means of a hexagonal nut.

**Blade guard (3)**

Jig-welded steel construction with 650mm-diameter blade capacity, which offers maximum operator protection and increased visibility of the work piece. Incorporated in the blade guard is an outer detachable metal cover, which permits easy access to shaft for inspection and blade replacement when motor is switched off, while fully protecting the blade when in operation.

**Down feed and cutting depth adjustment (4)**

The spring-loaded cutting head, activated by hand with the grip on the blade guard ensures smooth lowering of the cutting head for shock-free penetration of the work piece and improved control of the cutting pressure. A depth-locking device fixed to cutting head and frame enables the operator to set the cutting head to desired or to maximum cutting depth.

**Conveyor cart (5)**

Large, heavy-duty and galvanised conveyor cart fitted with water flow-control vents, mounted on 2 locating rollers and 2 flat rollers to give maximum stability and smooth movement. The conveyor cart is equipped with graduated scale on the backstop and with a guide-a-cut device.

**Water cooling system (6)**

The coolant system comprises:

- A powerful, submersible water pump
- Plastic suction pipe delivering the water from the water pan to the cutting head
- A large capacity water pan (pan is galvanised) supplied with drain plug
- A water-tap, fitted to the blade guard, permitting controlled water flow
- Two water nozzles located on the blade guard ensure adequate flow of water to both sides of the cutting blade
- 3 water curtains, fixed to frame and blade guard to restrict water spray and to minimise water loss

**Petrol Motor**

The Honda GX160 motor is fitted out with an emergency stop button to ensure the safety of the operator while using the machine.

**2.4 Technical Data**

Motor	Honda GX200 4,8kW (6,5HP)
Fuel	Automotive unleaded gasoline
Oil	Honda 4-Stroke, or equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirement for service classification SG, SF. (SG, SF designated on the oil container). SAE 10W-30 recommended
Max. blade diameter	650 mm
Bore	25,4 mm
Cutting length mm	500 mm
Cutting depth mm	265 mm
Table dimension	600x500 mm
Flange diameter	118 mm
Blade shaft speed	1350 min <sup>-1</sup>
Machine dimensions	1700x800x1480 mm
Weight	212 kg
Max. operating weight	262 kg
Sound pressure level	93 dB (A) (following ISO EN 11201)
Sound energy level	105 dB (A) (following ISO EN 3744)

## 2.5 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
<b>JUMBO 651 P6.5 70184610073</b>	<2.5	0.5	Norton Pro BS - 12

- The vibration value is lower and does not exceed 2.5  $m/s^2$ .
- Values determined using the procedure described in the standard **EN 12418**.
- 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**.

<b>Machine Model / code</b>	<b>Sound Pressure level <math>L_{Peq}</math> EN ISO 11201</b>	<b>Uncertainty K (Sound Pressure level <math>L_{Peq}</math> EN ISO 11201)</b>	<b>Sound power level <math>L_{Weq}</math> NF EN ISO 3744</b>	<b>Uncertainty K (Sound power level <math>L_{Weq}</math> NF EN ISO 3744)</b>
<b>JUMBO 651 P6.5 70184610073</b>	93 dB(A)	2.5 dB(A)	105 dB(A)	4 dB(A)

- Values determined using the procedure described in the standard **EN 12418**.
- 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 and assembled (although without diamond blade) and is ready for operation after connection to the appropriate power supply.

#### 3.1 *Tool assembly*

Only NORTON blades with a maximum diameter of 650 mm can be used with the Jumbo 651.

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

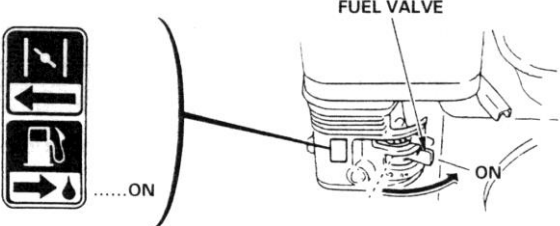
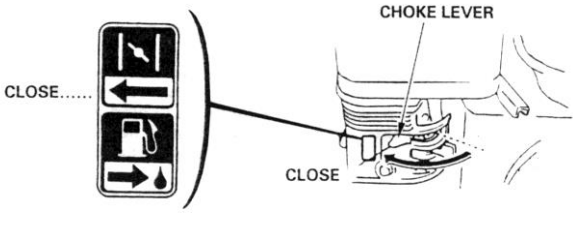
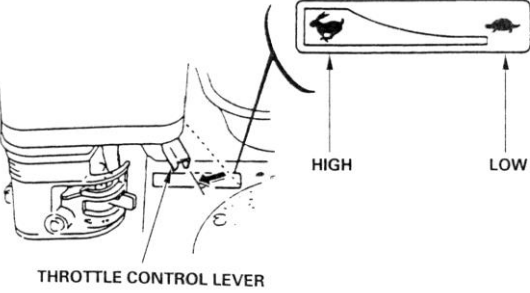
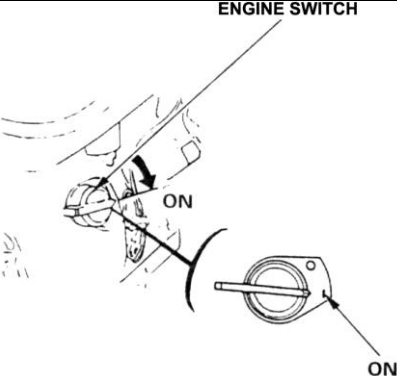
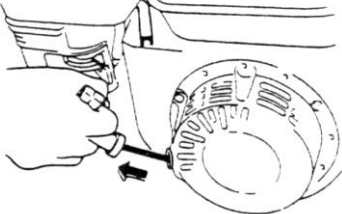
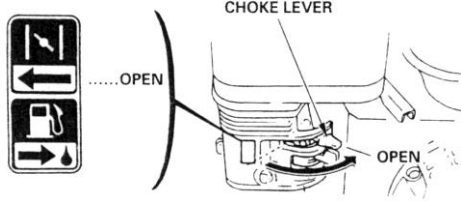
Before mounting a new blade into the machine, switch off the machine.

To mount a new blade, follow these steps:

- Retract outside cover of 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 arbor 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.
- Shut retractable blade guard cover.

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

### 3.2 Starting the machine

	
<p>Turn the fuel valve to the ON position.</p>	<p>Move the choke lever to the CLOSED position. NOTE: do not use the choke if the engine is warm or the air temperature is high.</p>
	
<p>Move the throttle control lever slightly to the left.</p>	<p>Put the engine switch on ON, and make sure the emergency switch on the board of the machine is in the correct position.</p>
	
<p>Pull the starter grip lightly until you feel resistance, then pull briskly. CAUTION: Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.</p>	<p>As the engine warms up, gradually move the choke lever to the OPEN position. Position the throttle control lever for the maximum engine speed.</p>

To stop the engine, move the throttle control lever fully to the right, then turn the engine switch to the OFF position. Turn the fuel valve to the OFF position.

### **3.3 *Water cooling system***

Fill the water pan with clean water to approximately 2,5cm from top (ensure that bottom of pump is fully immersed in 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 is delivered adequately to both sides of the blade, as insufficient water supply may result in premature failure of the diamond blade.

The water pump must never run without water. Always make sure that there is enough water in the pan and refill if necessary. In case of frost, empty the water cooling system.

## **4 TRANSPORT AND STORING**

Take the following measures in order to transport the Jumbo 651 securely.

### **4.1 *Securing for transport***

Before transporting or lifting the machine, always remove the blade and empty the water pan.

The conveyor cart must be secured:

- move the conveyor cart to the end of the machine
- fix it using the pin on the rear right post and the eye screw on the conveyor cart.

### **4.2 *Transport procedure***

The machine can be moved on a flat surface using its wheels. Only use the lift brackets to lift the machine, as other parts of the machine are not designed for this purpose.

### **4.3 *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
- Empty the water system
- Take the water pump out of the slurry and clean it thoroughly.

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

## 5 OPERATING THE MACHINE

### 5.1 Site of work

#### 5.1.1 Siting the machine

- 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.

#### 5.1.2 Space required for operation and maintenance

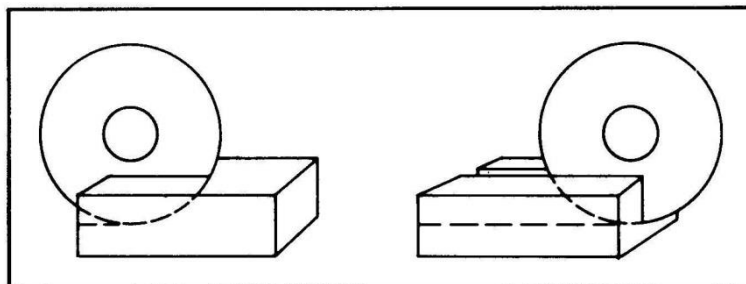
Leave 2 m in front of the machine and 1,5 m around it for usage and maintenance of the Jumbo 651.

### 5.2 Cutting methods

To use the machine correctly, you must face it with one hand on the handle of the cutting head, and the other on the handle of the conveyor cart. Always keep your hands away from the moving blade.

#### 5.2.1 Jam or fixed cutting

In jam or fixed cutting, the cutting head is locked in a fixed position and the material is pushed into it as shown.



- Lower the cutting head to the desired cutting depth (in “through cutting”, lower cutting head until blade periphery reaches max. 3-5mm under the surface of the conveyor cart) by means of the handle on the blade guard
- Fix position by tightening the clamping device
- Put material on conveyor cart
- Push the conveyor cart slowly and without undue pressure towards the rotating blade and cut the material.

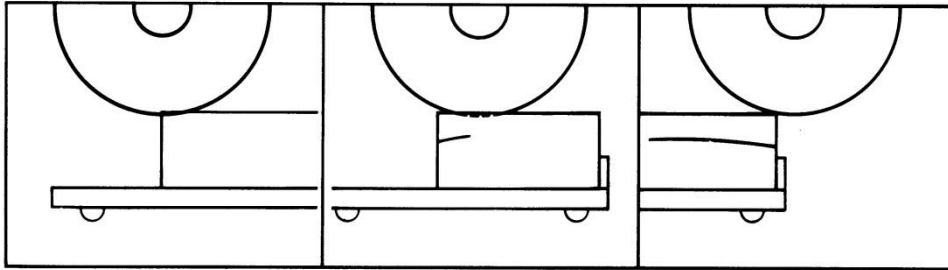
NOTE: While recommended, it is not absolutely necessary to lock the cutting head into a given depth position when jam cutting. The desired cutting depth can be maintained by holding firmly the depth feed handle on the blade guard.

If the full depth of cut requires excessive pressure (on very dense material e.g.) make 2 or 3 shallow cuts.



### 5.2.2 Multiple step cutting

Multiple step cutting consists of moving the conveyor cart with the material to be cut back and forward under the rotating blade,



- Place the material to be cut on the conveyor cart firmly against the guide-a-cut and the backstop, keeping the hands well away from the blade.
- Move conveyor cart forward near the blade and pull down the cutting head until blade is lowered to a point where it will lightly contact the surface of the material.
- Then pass the material beneath with rapid full length strokes, taking a shallow cut (approximately 3 mm deep) on the forward. On the backward stroke, lift the blade just clear over the cutting line.
- Complete each rapid stroke backward and forward by passing the material beyond the centre of the blade before starting the reverse movement of the conveyor cart.

NOTE: the harder the material, the more rapid should be the forward and backward strokes.

Step cutting lessens the area of the blade circumference in contact with the material, keeping the blade cool, running free and cutting at peak efficiency.

### 5.2.3 General advice for the cutting

- Material weighing under 50 kg and having dimensions smaller than 600x500x265mm can be cut with the Jumbo 651.
- Before commencing work make sure tools are firmly seated!
- Select the right tools 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 required efficiency.
- Apply cooling water continuously whilst cutting and in good time!
- When dry cutting, ensure sufficient dust extraction!
- When cutting work is finished, close the water-tap so you can remove the cut pieces from the conveyor cart without getting wet.

## 6 MAINTENANCE AND SERVICING

### 6.1 Maintenance of the machine

To ensure a long-term quality from the cutting with the Jumbo 651, please follow the maintenance plan below:

		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	Check tension and adjust						
Water pan	Clean						
Water pump	Clean						
Water hoses and nozzles	Clean						
Water pump filter	Clean						
Cart guiding bars	Clean						
Engine housing	Clean						
Reachable nuts and screws	Tighten up						

#### Maintenance of the engine

Always perform the maintenance of the motor with the machine switched off.

#### Adjustment and replacement of the belts

To adjust the belts, firstly remove the belt guard by unscrewing the 6 nuts. Loose the 4 engine bolts and shift the engine by using the two screws on the side.

To replace the belts, move the engine completely to the left. Adjust the belts and retighten them by shifting the motor to the left.

Always use a matched set of belts. Do not replace single belts.

#### Lubrication

The Jumbo 651 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 water pump, water pan, motor and blade flange.

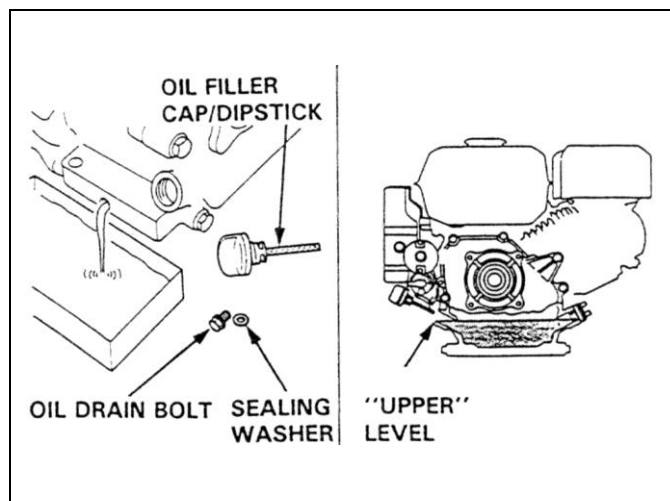
## 6.2 Maintenance of the engine

		Each use	First month or 20 hours	Every 3 months or 50 hours	Every 6 months or 100 hours
<p><b>Regular service period</b>                      Perform at every indicated month or operating hour interval, whichever comes first</p> <p style="text-align: right;">→</p>					
Engine oil	Check level				
	Change				
Air cleaner filter	Check				
	Clean				
Fuel strainer cup	Clean				
Spark plug	Check-Clean				
Fuel line	Check (Replace if necessary)	Every 2 years			

### Engine oil

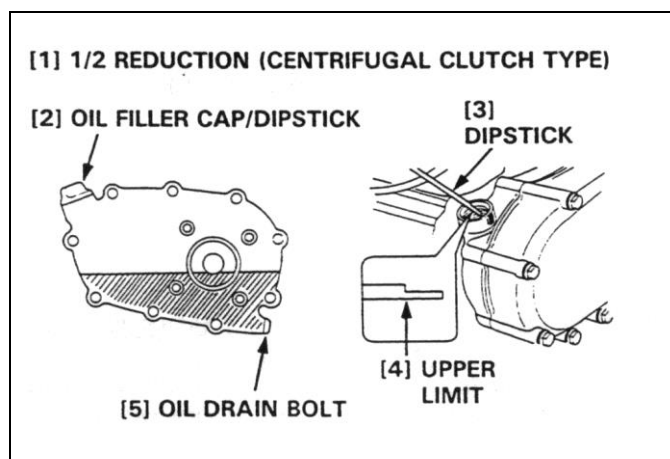
To change the oil,

- Remove the oil filler cap/dipstick and drain bolt.
- Allow the oil to drain completely.
- Reinstall the drain bolt, and tighten it to 18 N.m.
- Fill the crankcase with the engine oil to the outer edge of the oil filler neck.
- Reinstall the filler cap/dipstick.



### Reduction case oil

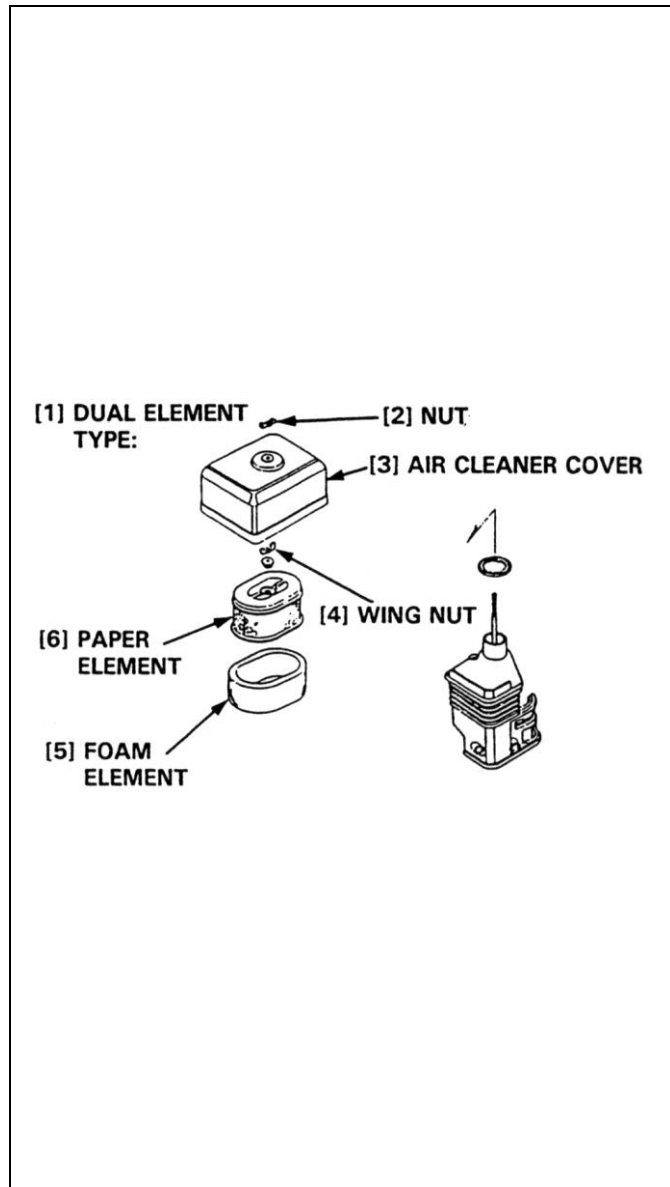
- Remove the oil filler cap/dipstick and drain bolt.
- Allow the oil to drain completely.
- Reinstall the drain bolt, and tighten it to 18 N.m.
- Fill the reduction case with the same oil that is recommended for the engine. Fill to the upper limit mark on the dipstick.



## Air cleaner

The Jumbo 651 has a dual type filter. To service the air cleaner filter, follow these instructions:

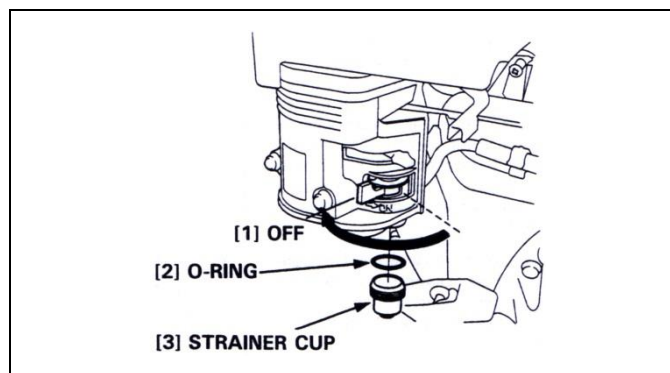
- Remove the nut, air cleaner cover and wing nut.
- Remove the pre air cleaner elements and separate them.
- Carefully check both elements for holes or tears and replace if damaged.
- **Paper element:** tap element lightly several times on a hard surface to remove excess dirt or blow compressed air lightly through the filter from the inside out. Never brush the dirt off; brushing will force dirt into the fibres.
- **Foam element:** clean in warm soapy water, rinse and allow to dry thoroughly. Dip the element in clean engine oil and squeeze out all the excess. The engine will smoke during initial start-up if too much oil is left in the foam.
- Shine a light through the elements, and inspect them carefully. Reinstall the elements if they are free of holes and tears.



## Fuel strainer cup

To service fuel strainer cup, follow these instructions:

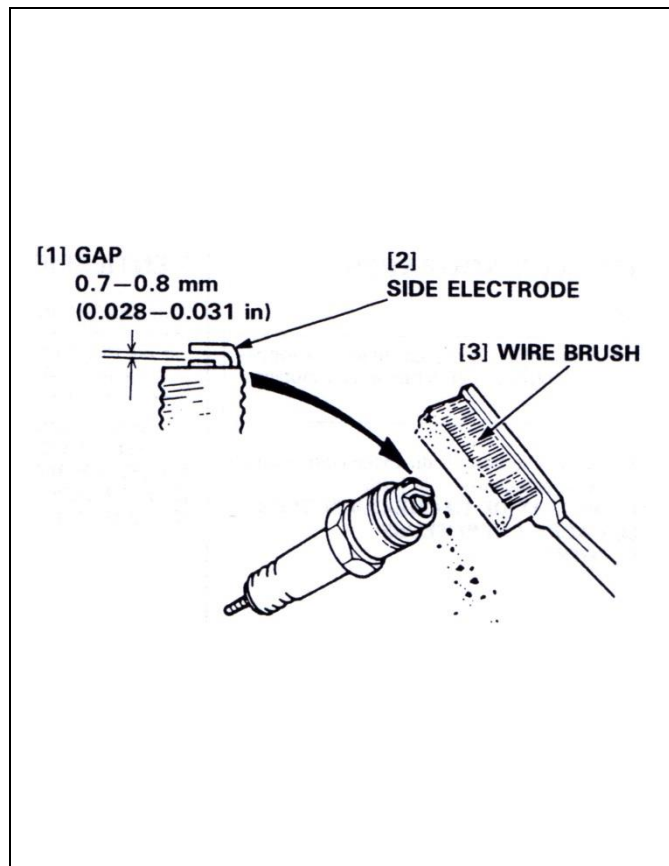
- Turn off the fuel valve and remove the strainer cup.
- Clean the strainer cup with solvent.
- Install the O-ring and strainer cup.
- Tighten the strainer cup to 4N.m.



## Spark plug

To service the spark plug, follow these instructions:

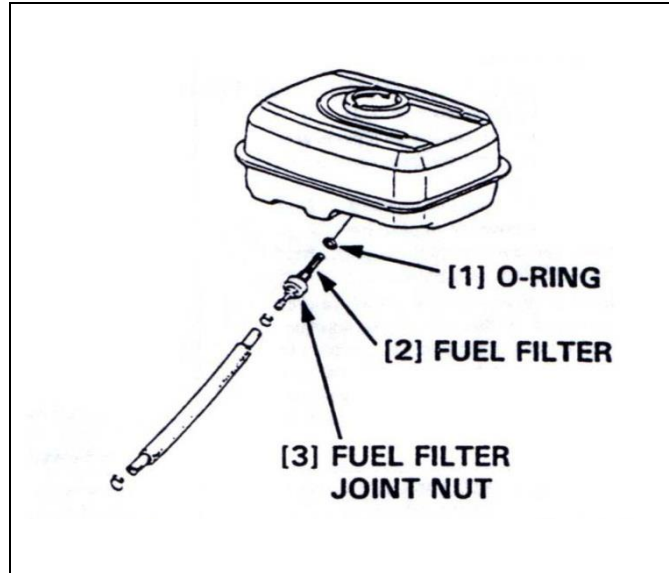
- Visually inspect the spark plug. Discard the plug if the insulator is cracked or chipped.
- Remove carbon or other deposits with a stiff wire brush.
- Measure the plug gap with a wire-type feeler gauge. If necessary, adjust the gap by bending the side electrode.
- Make sure the sealing washer is in good condition; replace the plug if necessary.
- Install the plug fingertight to seat the washer, then tighten with a plug wrench (an additional  $\frac{1}{2}$  turn if a new plug) to compress the sealing washer. If you are reusing a plug, tighten  $\frac{1}{8}$ - $\frac{1}{4}$  turn after the plug seats.



## Fuel line

To service the fuel line, follow these instructions:

- Drain the fuel into a suitable container, and remove the fuel tank.
- Disconnect the fuel line, and unscrew the fuel filter from the tank.
- Clean the filter with solvent, and check, that the filter screen is undamaged.
- Place the O-ring on the filter and reinstall. Tighten the filter to 2N.m. After reassembly, check for fuel leaks.



## Further maintenance

For further maintenance, please contact the nearest engine maintenance centre.

## 7 FAULTS: CAUSES AND CURES

### 7.1 *Fault-finding procedures*

Should any fault occur during the use of the machine, turn it off.

### 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
Blade is not turning	Belts not tightened or defective	Check the belts tension and change them if needed
Engine lacks power	Air filter restricted	Clean or replace air filter
	Stronger fault	Contact nearest engine maintenance centre
No water on the blade	Not enough water in the pan	Refill the water pan
	Water tap is closed	Open tap on blade guard
	Water supply system is blocked up	Clean water supply system
	Water pump is not working	<ul style="list-style-type: none"> <li>• Check if pump pulley is driven by the belts</li> <li>• Change the pump</li> </ul>

### **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. : 00352-50401-1

Fax : 00352- 50 16 33

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

e-mail: [sales.nlx@saint-gobain.com](mailto:sales.nlx@saint-gobain.com)

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 NV/SA  
INDUSTRIELAAN 129  
1070 ANDERLECHT/BRUSSEL  
BELGIUM  
TEL: +32 (0)2 267 21 00  
FAX: +32 (0)2 267 84 24

SAINT-GOBAIN ABRASIVES, S.R.O.  
POČERNICKÁ 272/96, MALEŠICE  
108 00 PRAHA 10  
CZECH REPUBLIC  
TEL: +420 255 719 326  
FAX: +420 255 719 321

SAINT-GOBAIN ABRASIVES A/S  
ROBERT JACOBSENS VEJ 62A  
2300 KØBENHAVN S  
DENMARK  
TEL: +45 4675 5244

PO BOX 643706  
FORTUNE TOWER OFFICE 2106  
JLT BLOCK C  
(NEXT TO METRO STATION)  
JUMEIRA LAKE TOWER, DUBAI  
UNITED ARAB EMIRATES  
TEL: +971 4 431 5154  
FAX: +971 4 431 5434

SAINT-GOBAIN ABRASIFS  
RUE DE L'AMBASSADEUR - B.P.8  
78 702 CONFLANS CEDEX  
FRANCE  
TEL: +33 (0)1 34 90 40 00  
FAX: +33 (0)1 39 19 89 56

SAINT-GOBAIN ABRASIVES GMBH  
BIRKENSTRASSE 45-49  
D-50389 WESSELING  
GERMANY  
TEL: +49 (0) 2236 703-1  
+49 (0) 2236 8996-0  
+49 (0) 2236 8911-0  
FAX: +49 (0) 2236 703-367  
+49 (0) 2236 8996-10  
+49 (0) 2236 8911-30

FÜR DEN FACHHANDEL  
ÖSTERREICH  
TEL: +43 (00) 662 430 076

SAINT-GOBAIN ABRASIVES KFT.  
1225 BUDAPEST  
BÁNYALÉG U. 60/B.  
HUNGARY  
TEL: +36 1 371 22 50  
FAX: +36 1 371 22 55

SAINT-GOBAIN ABRASIVI S.P.A  
VIA PER CESANO BOSCONI 4  
I-20094 CORSICO MILANO  
ITALY  
TEL: +39 02 44 851  
FAX: +39 02 44 78 266

SAINT-GOBAIN ABRASIVES S.A.  
190 RUE J.F. KENNEDY  
L-4930 BASCHARAGE  
GRAND DUCHE DE LUXEMBOURG  
TEL: +352 50 401 1  
FAX: +352 50 16 33  
NO. VERT (FRANCE) 0800 906 903

SAINT-GOBAIN ABRASIFS, S.A.  
2 ALLÉE DES FIGUIERS  
AIN SEBAË - CASABLANCA  
MOROCCO  
TEL: +212 5 22 66 57 31  
FAX: +212 5 22 35 09 65

SAINT-GOBAIN ABRASIVES BV  
GROENLOSEWEG 28  
7151 HW EIBERGEN  
P.O. BOX 10  
7150 AA EIBERGEN  
THE NETHERLANDS  
TEL: +31 545 466466  
FAX: +31 545 474605

SAINT-GOBAIN ABRASIVES AS  
POSTBOKS 11, ALNABRU,  
0614 OSLO  
BROBEKKVEIEN 84,  
0582 OSLO  
NORWAY  
TEL: +47 63 87 06 00  
FAX: +47 63 87 06 01

SAINT-GOBAIN HPM POLSKA SP. Z O.O.  
UL. NORTON 1  
62-600 KOŁO  
POLAND  
TEL: +48 63 26 17 100  
FAX: +48 63 27 20 401

SAINT-GOBAIN ABRASIVOS, L. DA  
ZONA INDUSTRIAL DA MAIA  
I-SECTOR VIII, NO. 122  
APARTADO 6050  
4476 - 908 MAIA  
PORTUGAL  
TEL: +351 229 437 940  
FAX: +351 229 437 949

SAINT-GOBAIN GLASS  
BUSINESS UNIT ABRASIVI  
PUNCT DE LUCRU: LOC.VETIS, JUD.  
SATU MARE 447355  
STR. CAREIULUI 11  
PARC INDUSTRIAL RENOVATIO  
ROMANIA  
TEL: 0040-261-839.709  
FAX: 0040-261-839.710

SG HPM RUS  
58, F. ENGELS STR.  
STROENIE 2  
105082 MOSCOW  
RUSSIA  
TEL: +74 955 408 355  
FAX: +74 959 373 224

SAINT-GOBAIN  
ABRASIVES (PTY) LTD  
2 MONTEER ROAD  
ISANDO 1600  
P.O. BOX 67  
SOUTH AFRICA  
TEL: +27 11 961 2000  
FAX: +27 11 961 2184/5

SAINT-GOBAIN ABRASIVOS, S.A.  
CTRA. DE GUIPÚZCOA, KM. 7,5  
E-31195 BERRIOPLANO (NAVARRA)  
SPAIN  
TEL: +34 948 306 000  
FAX: +34 948 306 042

SAINT-GOBAIN ABRASIVES AB  
BOX 495  
SE-191 24 SOLLENTUNA  
SWEDEN  
TEL: +46 8 580 881 00  
FAX: +46 8 580 881 01

SAINT-GOBAIN INOVATIF  
MALZEMELER VE AŞINDIRICI  
SAN. TIC. A.Ş.  
GOLD PLAZA, ALTAY ÇEŞME  
MAHALLESİ, ÖZ SOKAK, NO:19/16  
34843 MALTEPE-ISTANBUL,  
TURKEY  
TEL: 0090-216-217 12 50  
FAX: 0090-216-442 40 74

SAINT-GOBAIN ABRASIVES LTD.  
DOXEY RD  
STAFFORD  
ST16 1EA  
UNITED KINGDOM  
TEL: +44 1785 222 000  
FAX: +44 1785 213 487









[www.construction.norton.eu](http://www.construction.norton.eu)

**Saint-Gobain Abrasives**

190, Bd. J. F. Kennedy  
L-4930 BASCHARAGE  
LUXEMBOURG

Tel: ++352 50401-1

Fax: ++352 501633

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