



*BlockCutters*  
*On the cutting edge for customers' satisfaction*

# ***ORIT B.V.***

Verbal Manual

ELECTRIC HYDRAULIC STONE- AND  
TILECUTTER  
4300 EHP





## Foreword

We congratulate you with the purchase of your hydraulic cutter. This manual gives instructions about using and maintaining the 4300 EHP.

To make sure you will have years of pleasure with your block cutter, it is very important that you read this manual carefully.

First a few general observations:

- Check your machine at arrival.
- If the delivery is incomplete or damaged, you should report this immediately.
- Read the instruction and safety manual before usage.
- When neglected these instructions all kind of guarantee and/or liability become due.
- Modifications to the product will give no obligations for recent delivered products.
- By usage of non-original ORIT parts all kind of guarantee and/or liability become due.

ORIT will do everything to satisfy you as a customer.

If you notice any matters that should be altered, notify us.

Everyone who makes a good proposal for improvement will receive a nice consideration.

We would like to wish you a lot of pleasure with the 4300 EHP.

ORIT B.V.  
Juristenlaan 11  
5037 GJ Tilburg

tel. +31 (0)13 4679128 Fax: +31 (0) 13 4679127

e-mail: [info@orit.nl](mailto:info@orit.nl)

Website <http://www.orit.nl>

## Table of contents:

1. Preface;
2. Technical information;
3. Safety instructions;
4. Manual;
5. Maintenance;
6. Parts;
7. Guarantee conditions/ wrong usage of the machine;
8. CE-declaration of conformity;



## 1. Preface

The ORIT 4300 is an electric hydraulically powered cutting machine, especially built for cutting concrete tiles and blocks. Use for other purposes is strictly forbidden.

A 12-volt battery supplies the electrical power.

Because of safety reasons, we chose for a closed battery. Because the charging voltage of a closed battery may not be more than 13 volt, a special charger is delivered in addition.

It is strictly forbidden to charge the battery with an ordinary charger.

The battery could get damaged due to charging with an ordinary charger. In worst-case scenario it could leak battery acid.

When the battery and charger need to be transported they should be conveyed shock free. With persistent shocks because of (for example) transporting the goods in a trailer, the charger can get broken.

ORIT B.V. cannot accept any liability because of wrong or indiscriminate use of the machine.

## 2. Technical information

Hydraulic	: pump pressure 210 bar
Cylinder	: boring = 90 mm slag = 100 mm
Hydraulically oil	: Shell natural HFE 46
Battery	: Panasonic LC-X1242 AP, PB-AKU, closed 12V AH (measurements: 195 x 175 x 165 mm)
Battery charger	: max. charging voltage 13 volt max. charging power 8 A
Maximal cutting height	: 11 cm
Maximal cutting width	: 43cm
Machine measurements (LxWxH)	: 75 x 40 x 75 cm
<i>Weights:</i>	
Battery box	: 24 kg
Machine	: 93 kg
Total	: 117 kg

## 3. Safety instructions

The following safety instructions must be observed to have a safe functioning machine and at the same time be protected as a consumer.

- Youth, younger than 16 are not allowed not operate the machine.
- Put the machine on a stable underground and use the brake of the wheel as much as possible.
- The use of hearingprotection and safety glasses when operating the machine are obligated.
- It is forbidden to touch the moving parts of the machine when operating the machine.
- Make sure that block segments cannot hit people in the surroundings.
- Squinting hydraulic fluid under pressure can pierce the skin and cause blood poisoning and other injuries. Turn off the machine immediately when leaking and give it up for repair.
- Make sure the machine is turned off when transported and maintained (this means the connection plug between the battery and hydro-unit are disconnected, and the top knife is in the uppermost position).
- Make sure that when the machine is not used the emergency switch is activated, so that it is not possible that the machine can operate unintended.

### 3.1 Safety instructions as regards using the battery and charger

The machine is performed with a closed battery because of safety precautions.

This battery does still contain battery acid, so make sure that the battery does not get damaged.

Bodyparts, which get in contact with the battery acid, have to be washed properly with water and soap (battery acid can burn through clothing).

Wearing watches or metal bracelets are dangerous when working with the battery. If you cause a short circuit with such an object between the poles, this object will get red hot within a few seconds. Even if the battery is nearly unloaded.



If the battery needs to be substituted you should live up to the following instructions.  
Turn off the battery before loosening the battery brakes to prevent sparks. Remove the connecting terminal, which the battery is attached with to the bottom of the battery tank.  
Before removing the battery from the battery tank, you will first have to loosen the earth connection. Doing this will prevent a short circuit in the metal housing.  
After that the battery can partly be taken out, so the positive pole can be detached.

To replace the battery follow the process in reversed order. When replacing the battery the earth connection has to be attached at the end. Prevent causing a short circuit between the poles of the battery.

**The closed battery cannot be charged with an ordinary battery charger.**

That is why there is an electronic battery charger delivered in addition. This charger is connected with the battery. It will suffice to simply put the plug in the switch plug. It takes 10 hours to charge an empty battery. When the light blinks, the battery is charging. If the light burns continuously, the battery is fully charged.

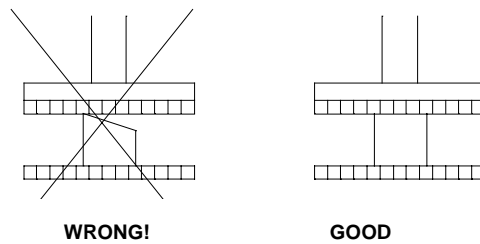
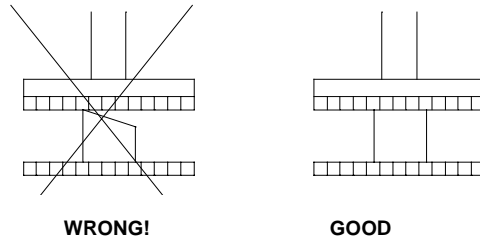
Would you presume that the charger is broken, you should check the charger. This charger should have a voltage base between 13.6 V and 13.8V in unloaded condition. This voltage can be measured by connecting a voltage meter parallel to the starting points of the charger. This charger should now be disconnected.

The emitted strength of current may come to 10A. A bigger strength of current indicates a short circuit. None or very little strength of current indicates a broken charger, broken cable or a bad connection. The strength of current is measured by establishing a galvanometer between the charger poles with the battery.

**4. Manual**

Always adjust the top knife, when cutting, at 0,5 cm above the block that needs cutting. This is possible by concealing the pins above the top knife. Lowering the top knife totally can conceal the pins (operate and hold on pushbuttons). The pins should be on the same height above the top knife. By establishing the top knife on this distance, the safety during work will increase. It will be possible to work faster and you will save the accessible energy in the battery. You must realize that cutting hard blocks like granite, will exhaust the battery. Furthermore, the machine cannot cut blocks, which require a force of compression of more than 13 thousand kilograms. Do not cut any blocks that for example only burden the middle knives. Knives can be restored in their original state by exercising pressure on a wooden beam in the length of the knife. Make sure that this beam does not damage the catching plates by exercising too much pressure. Make sure that the materials that need cutting lay under the cylinder to prevent wastage of the cylinder (see picture below).

The materials that need cutting, de surfaces have to be parallel (see picture).



When cutting, you should be on the same height as the battery cabinet.



### **The materials that needs cutting**

You should be able to cut all concrete products. It is possible that you are not able to cut granite tiles, which are extremely thick. The power of the machine is limited till 13 thousand kilograms. In that case the tiles or blocks needs to be sawn in a bit. It does happen sometimes that the machine pulverizes the tiles. This happens to blocks or tiles that have not been vibrated during the manufacturing process. This also happens with tiles and blocks that are re-used. These blocks often show hairline cracks that cause the stone to break. Please realize that the products are broken, not cut. This is only possible if the surface is flat and the products show no hairline cracks.

## **5. Maintenance**

The machine needs to be maintained according to the instructions mentioned bellow to assure a long durability. When maintaining the machine the battery needs to be disconnected by pulling the plug from the battery cabinet. Always use fitting keys and tools to prevent damaging.

### Daily maintenance

- Clean the machine at the end of a working day and check if there are any defects.
- Charge the battery with the additionally delivered battery charger, another kind of charger can damage the battery!

### Monthly maintenance

- Check the hydraulic oil level. On the outside of the black oil cask, under the catch plates there are two bolts. Via the top bolt you can check the oil level.
- Check the hydraulic system on leaks.
- Clean the battery poles and grease them with acid free Vaseline.

### Yearly maintenance

- Renew the hydraulic oil via the airing pipe.
- Cleaning and greasing the knifeholders.
- Grease turning parts.

Damaged or extremely worn out parts need to be replaced immediately by original parts unregarded the terms of maintenance. When using unoriginal parts all kind of guarantee are declined.

When the machine is stationary for a long period (for example winter storage):

- Disconnect the battery brakes.
- Store the battery frost-free and fill up every month to prevent the battery fluid from freezing. When the battery fluid gets frozen the battery cabinet will brake down and the plates in the battery will get damaged.
- Clean the machine and spray a mixture of diesel and motoroil to prevent corrosion.

## **Changing or replacing of the knives**

Taking apart the upper knife:

- Make sure the upper knife is totally in the highest position.
- Put two wooden blocks between the lower- and upper knife so this can fall down.
- Turn the bolts loose from the springs.
- Remove the checkplate from the cylinder pins and press the cylinder pins with a thin rod or axle from the upper knife.
- Remove the upper knife from the frame.

Taking apart the lower knife:

- Remove the worktable.
- Turn the bolts loose under the frame.
- The lower knife can now be taken out of the frame.

The separate knives can be removed from the holders by turn the screw key loose on the flank side of the holder and then remove the knives separately.

Fitting happens reversed order. With this process the knives and cylinder pins need to be greased. First you tighten the knife bolts.

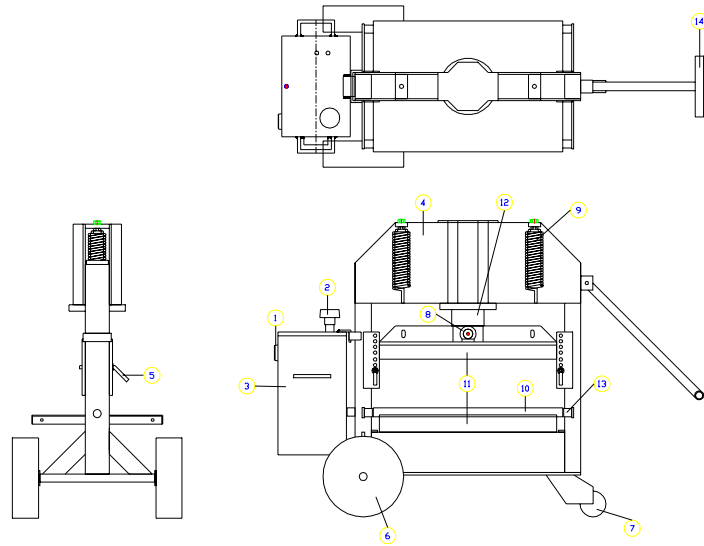
After that the screws are tightened on the flank side.

Tighten these screws so you can just move them.

Secure the screws. When securing the screws of the lower knife you use the lock nut. When securing the screws of the upper knife you use the second screw. At last you need to lute the seam between the knives and the knifeholder.



6. Partslist

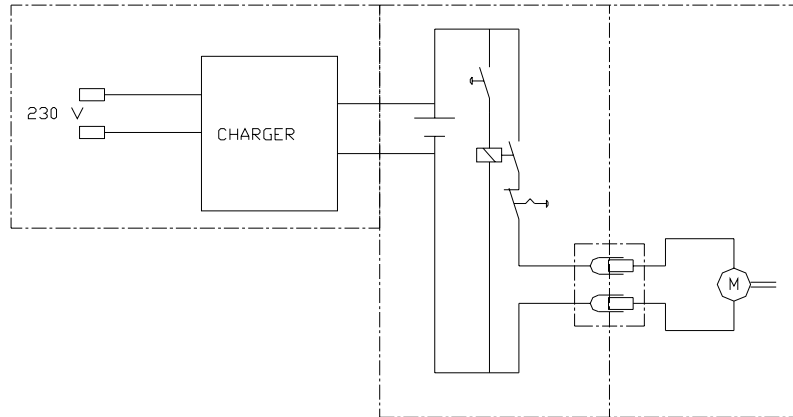


Explanation of the numbers:

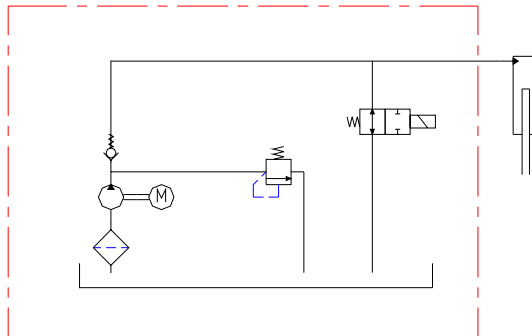
- 1. Operationbutton
- 2. Emmergency button
- 3. Battery/operation tank
- 4. Frame
- 5. Pin knife holder
- 6. Wheel
- 7. Frontwheel
- 8. Cylinderpins
- 9. Spring
- 10. Workingtable
- 11. Lower/upperknife
- 12. Cilinderrod
- 13. Holdingplate rubber
- 14. Lever



**Elektric schedule**



**Hydraulic schedule**





## **7. Guarantee**

ORIT gives a three month guarantee on the whole machine excluded battery, charger, knives and knifeholder. These parts are excluded because wastage or wrong use damages these articles. The battery and chargers are mostly damaged because of short circuits, extreme shocks and charging while cutting. Knives and knifeholders are usually damaged because the blocks are not cut in the midpoint. Because of this the knifeholders becomes round. This causes the blocks to pulverize, because all the power is executed on the middle most knives.

This guarantee only counts when usage under normal circumstances, when the instructions are imitated carefully. The machine is checked in the factory for material- and manufacture failures. Your invoice is also a warranty certificate and needs to be shown when guarantee is claimed. On this the machine number should be stated clearly. With possible complaints within the guarantee period we request that you turn to your ORIT dealer.

### **Guarantee conditions**

Explicitly excluded from guarantees are the charger and the additional battery. Hereby is explicitly mentioned that during the transport of the machine, the tank where the battery is placed, should be disconnected and transported shockproof.

During the guarantee period, we repair free of costs, provided that:

- The machine is used for the purpose it is produced.
- Professional and qualified staff of your dealer repairs de machine
- The purchase certificate is presented with noted the machine number.

Parts that show normal wastage are not covered.

### **Service**

Even after the guarantee period, we spend the largest possible attention to possible repairs. Though repairs are only executed with refunds. For service and/or repairs after the guarantee period you can go straight to ORIT B.V. in Tilburg.

## **8. CE-declaration of conformity**

**ORIT B.V. , Juristenlaan 11, 5037 GJ Tilburg**

Herewith declares that:

ORIT brickcutter type 4300 EHP

Is in conformity with the provisions of the Machinery Directive and with national implementing legislation

Directives:

98/37/EEG            89/336/EEG            73/23/EEG

This statement is valid considering this manual.

Tilburg, Tuesday 15 april 2003

**ORIT B.V.**

**Drs. F.A.M. Reijnen**  
**Director**