MANUAL FOR USE AND MAINTENANCE
OF THE MACHINE
ANTAREX

It contains “E.E.C. DECLARATION OF CONFORMITY” of the ANTAREX
We Oma System S.r.l.
Via delle Scienze, 5
04011 Aprilia (LT)
Italia

We declare under our sole responsibility that the new machine:

Brand: OMA SYSTEM S.R.L.
Type: ANTAREX
Matriculation Nr. ------------------------
Manufacturing Year ------------------------

IS MADE IN CONFORMITY WITH EEC INSTRUCTION 89/392, AS MODIFIED BY EEC INSTRUCTION 91/368 EEC, 93/44 EEC AND 93/68 EEC.

IDENTIFICATION OF THE SIGNATORY

Name and First name: DE NONI ENRICO
Standing in the Manufacturing Company: MANAGER
Place and Date, Aprilia ____________

Stamp and Signature

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FOREWORD:

This manual, drafted up by the Manufacturer according to the EEC directive 89/392 and to its integrations, is aimed to informing the operator about the correct way of using and maintaining the machines.

The full reading of the manual is compulsory before undertaking any type of operation on the machine: installation, starting or maintenance.

For further information or requests for spare parts, the machine’s identification data are to be quoted (see next page), to facilitate our technical assistance.

The user is asked not to tamper with or take off the protection or other parts of the machine (except the exchangeable tools): any alteration would lead to the decadence of our Declaration of Conformity drafted in accordance with the EEC 89/392 Directive, and would also invalidate the Guarantee.

The producer can be held responsible for any incident, if the machine has been modified, tampered, deprived of its both removable and fixed protections; or if it has been used for operations not stated by the producer.

BEWARE!
This symbol is used to show the type of operations or manoeuvres, that may cause injury to the user, to other people or to the machines. Wherever this symbol appears, the instructions therein are to be read carefully and followed attentively.

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I INFORMATION & TECHNICAL DATA

1.1 Identification Data

BEWARE!

Do not spoil for any reason the data on the identification plate.

The identification tag of “ANTAREX” is to be found as on the picture nr. 2, detail nr. 13
1.02 WEIGHT, SIZE & TRANSPORT

The weight of “ANTAREX” is 20 kg, the machine is delivered wrapped in a bubbled plastic covering and put into a pasteboard box, whose size is: 66 x 36 x 42 cm. Delivering doesn’t require any special disposal, as the weight is not considerable.

1.03 Air noise data

The machine has been tested according to the Order in Council 277, dated 15/08/91, the gaugings were made on the Operator’s working place and the gave the following results:

The noise level is above 85 decibel (db).

ATTENTION!

Always use an earphone because of the noise, eye protection glasses and a heavy apron when the machine is to be operated.

1.04 Procedure for the Right of Guarantee

In each package containing the machines: Antarex, Auctor A. 92, Auctor CP 99 and Hydraulic Gearcase, there are the respective Certificate of Guarantee.

Together with it, there is a card, which is to be carefully filled up, signed and sent to the Manufacturing House address.

Besides quoting the identification data, it’s quite necessary to specify the date of purchase quoted in your fiscal document, in order to certify the beginning of the Guarantee.

The technical data required for filling up the card are to be taken off as showed at the point 1.1.
II. FUNCTIONALITY

2.1. Provided conditions of using and Working Place

The machines “ANTAREX” and HYDRAULIC GEARCASE are suitable for marble and granite in order to make:

- straight slab cutting, free hand cut outs of any shape and to follow templates of some millimetres placed on top of stone slab.
- drill pilot holes.

Any other use is forbidden. We don’t accept any responsibility in case of improper use of the machines.

The operator has to stand in front of “Antarex” as the machine is to be used by hands.

2.2. INSTALLATION

2.2.1

Fill the Hydraulic Gearcase with seven litres of oil “OSO 46” or similar, until 2 cm or so, from the hole (see picture nr. 5, detail nr.1)

2.2.2 Hydraulic connections

Link the pipes of Hydraulic Gearcase to “ANTAREX” by its special quick couplings (see picture nr. 5, detail nr. 2 and 3)

BEWARE!
Get sure of the proper linking of Hydraulic Gearcase with Antarex, while putting the quick couplings. The improper linking even of one only quick coupling could bring, while igniting serious damage to Hydraulic Gearcase, as well as to Antarex.
2.2.3 WATER CONNECTION

Link a water - pipe from a tap to hydraulic gearcase (see picture nr. 5 detail nr. 5). afterwards, couple the Hydraulic Gearcase to Antarex CP 99 by its quick coupling (see picture nr. 5 detail nr. 4)

BEWARE !
Never set Antarex going without running water inside of it, because the internal joints of the spindle could be spoiled.
2.2.4 Electric connections

a) Link Hydraulic Gearcase with the net by the plug (see picture 5 detail nr. 6), for the tension - see label on the switch box;

b) After to have connected the hydraulic clutches, give a small impulse to starting to the Hydraulic Gearcase by switch on - off, and to make sure that electric motor revolve in the direction of indicator put on it. In the case if it is going to go in the contrary direction, you have to take off the plug from the system (picture 7) and then to invert two lead in the same (see picture 7, L2, L3), subsequently repeat the operation from point “a”.

[Diagram of electrical connections]
CONTROL DESCRIPTIONS

1- OPEN AND CLOSING WATER KNOB
2- LEVER ON/OFF
3- ADJUSTMENT HEIGHT
4- RETURN OIL
5- OIL PRESSURE
6- WATER FASTENING
2.4. To Antarex going

After to have set the Hydraulic Gearcase by the lever on - off (picture 4) start Antarex bringing the lever on half between on-off (POSITION 1) and leave to turn for about 10 or 15 second, then gradually bring the lever in position on (4).

The procedure of starting, as soon as described, has to execute the first time that Antarex has stopped some hours or days and allow to bearings of spindle to warm up.

If the machine is working, for stopping the spindle or for starting it, is sufficient to bring the lever in position off (picture 4 POSITION 0) for going to arrest the spindle’s rotation, and in position on (picture 4 POSITION 4) for starting it.

**BEWARE !**

Do not approach never, for any reason to the diamond cutter when it is in workmanship with face, hands or other. The no respect of this message could be cause of accident for the operator.

**BEWARE !**

Never set Antarex going without running water inside of it, as the internal joints of the spindle could be damaged.
2.4. ASSEMBLAGE THE VARIOUS ACCESSORIES

a) To fix the "Template guide" on the machine see drawing 2 part nos. 42,43,51.

b) The machine, to cut complex shapes, is constructed to follow a template in pvc or plywood etc. of 3-6 mm. placed on the stone slab and held tight with a clamp as illustrated in drawing 9:

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Template</td>
</tr>
<tr>
<td>2)</td>
<td>Stone slab</td>
</tr>
<tr>
<td>3)</td>
<td>Template guide</td>
</tr>
<tr>
<td>4)</td>
<td>Cutter</td>
</tr>
</tbody>
</table>

III MAINTENANCE

3.1 Ball Rollers and Mandrel

Always keep clean the ball rollers with abundant water and compressed air to remove dust particles and to avoid ruling on the surface of stone. Clean rollers glide and guarantee quality jobs.

ATTENTION!
Do not blow air or any other substance into the mandrel because it is a very delicate instrument that works at a very high speed.

FOR CHANGE BEARINGS OF THE MANDREL SEE PICTURE N°8

3.2. Cleaning

3.2.1

When finished working, rinse out the rollers with plenty of water on working table, move the machine leading it around the flat surface, then dry the rollers with compress air, one by one.

3.2.2

After disconnecting the quick couplings put always the protection on them, getting sure that they have been carefully cleaned before hands.
IV WARNINGS & REMAINING RISKS

4.1 General notices of security

Do not use the machine for operations and aims not provided by the manufacturer.

Do not allow anybody not qualified to put hands into the machine.

Don’t wear rings, watch, jewels, unlaced or dangling clothes, such as ties, scarves, snatched clothes, unlaced jacket or blouse with opened zipper, which could get entangled with the machine by their dangling parts.

Do use if necessary personal protection disposals, according to the rules (glasses, masks, and so on).

Ask your employer about the security rules in force, and also about the security disposals against accidents.

Don’t set the machine forth in case of breakdown.

Before using the machine get sure that there isn’t any possibility of danger.

Inform the maintenance staff about any operation’s irregularity.

Never use the machine without its special protections provided by the manufacturer.

4.1.1 Reflux water after processing

Reflux water after processing can’t be conveyed into sewerage, not underground, nor on the ground.
It is to be collected and drained according to the law in force and to the local rules.

4.1.2 Putting out of order & dismantling

For machine’s dismantling follow the rules and law in force on matter.
as for the non-iron-made parts, they are to be sent to a qualified Company, while as the iron-made parts, can be sold.

4.2 Remaining risks

The Manufacturer considers that by using the provided protections there isn’t any risk left by using the machine.
The operator has anyway the duty to comply with the law in force, on matter of worker security, and specially with the Order in Council 19.09.94 nr. 626.
EXAMPLE FOR ORDER REPLACE PART:
Q.ty 1 PICES COD. 5CP04 SCHEMATIC SPARE PART AUCTOR CP 99 N°7

SCHEMATIC SPARE PART ANTAREX N°1
SCHEMATIC SPARE PART ANTAREX N°2
SCHEMATIC SPARE PART ANTAREX N°3
SCHEMATIC SPARE PART ANTAREX No 8
Assembling and Dismantling procedure about Antarex spindle

-Lift up the machine rolling the knob 3 fig.A a till to discover screws that fixed the cover 1 fig. B
-Unscrew the screws 2 fig.A that fixed the handle supports fig.A
-Unthread the handles fig 1 A
-Unscrew the screw 4 fig. A and unthread the knob 3 fig.A
-Unscrew the screw 6 and unthread the level on/off 5 fig.A
-Unscrew the knob water 7 fig. A
-Unscrew the 4 screws 1 fig. B that fixed the cover
-Unthread the cover 2 fig. B

-Dismantling the belt 1 fig.C lifting up from a side the belt rolling contemporary the pulley
-Release screws 1 and unscrew the screw 2

-Insert a screwdriver 2 fig.E in the proper carving and widen the seat of the spindle and slip out
-Insert the new spindle ant to centre the screw 3 fig.D with the hole on it 2 D
-Take away the screwdriver

-Press screws 1 and 2 fig. G and reinsert the belt 3 fig.G
-Assembling the cover 2 and fix it with the screws 1 fig.H, then reassembling the knob following the fig.A
Assembling and Dismantling procedure about Antares spindle bearings (ina tbh 6003 zz)

As you dismantled the spindle from the machine to make the substitution of bearing do work in the following way:

- Take the spindle on a vice and press on the pulley carvings pos.1
- Insert a bit on the spindle
- Unscrew the cover pos.2 taking hold the tree with the key to fix the tool pos.3
- Unscrew the metal ring pos.5
- Unthread the spindle tree pos.3
- Unthread bearings pos.6-7-8-9

Clean all the parts with petrol except the bearings

- Grease bearings as indicated in fig. A
- Insert bearings pos. 2 fig. A in the spindle body pos. 1 fig. A checking the position of screen
- Press the metal ring pos. 3 pos. A
- Insert bearings pos.2 fig. B on the spindle tree after greasing and take attention to the position of the screen
- Screw by hand the pulley pos.1 fig. B
- Insert the tree with the pulley in the body spindle
- Stop the pulley pos. 1 fig. C taking hold on the suitable carvings with a vice pos. 2 fig. C
- Press the pulley rolling the spindle tree taking hold over the carvings of the spindle to fix tools pos.5 fig. C
- Screw the cover pos.4 fig. C
- PICTURE N°9