

FORASPEED 2008



Use and maintenance manual

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DECLARATION OF CONFORMITY

(According to Council Directive 2006/42/EC Annex II.a)

THE MANUFACTURER

Raimondi S.p.A.

Company

Via dei Tipografi, 11

Address

Modena

City

41122

Zip code

MO

Province

Italia

Country

DECLARES THAT THE MACHINERY

XXXX

Description

XXXX

Type

XXXX

Serial number

XXXX

Year of constr.

XX XX/XX/XXXX

Revision

XXXX

Trade name

XXX

Intended use

IS IN CONFORMITY WITH THE REQUIREMENTS

Directive 2006/42/EC of the European Parliament and of the Council of 17 may 2006 on machinery, and amending directive 95/16/EC.

in addition to:

Directive 2014/30/CE (Electromagnetic compatibility); Directive 2014/35/CE (Low voltage); Directive 2001/95/CE (Directive on general product safety)

Reference to technical standards harmonized:

EN ISO 13857:2019; EN ISO 13850:2015; EN ISO 13849-1:2015; EN 842:1996+A1:2008; EN ISO 14118:2018; EN 894-1:1997+A1:2008; EN 894-2:1997+A1:2008; EN 894-3:2000+A1:2008; EN ISO 14120:2015; EN 12418:2000+A1:2009; EN ISO 12100:2010; EN 60204-1:2018.

Reference to technical standards not harmonized:

UNI EN 13236:2019; 10893:2000; EN 10241:2002.

AND HE AUTHORIZES

Gianni Lorenzani

Name

c/o G.L. Comunicazione S.r.l.

Address

Noceto

City

43015

Zip code

PR

Province

Italia

Country

TO PREPARE THE TECHNICAL FILE FOR IT

Place and date of issue

Modena

The manufacturer

Mr. Ivan Raimondi



The Declaration of Conformity shown here in facsimile is attached to the manual but is not included inside it. This attached Declaration, and any others, must be kept and made available to anyone who requests it.

1.1 Testing, warranty and responsibility

Testing

The whole machine is sent to the customer ready for the installation, after passing the tests provided for by the manufacturer, in compliance with the laws in force.

Warranty

During the 12-month warranty, RAIMONDI S.p.A. undertakes to supply, free of charge, those parts of its production found to be defective, in terms of material or processing.

Such parts will have to be returned to RAIMONDI S.p.A., shipped carriage free.

By warranty, we mean supply of defective parts, if any.

The warranty does not cover all the expenses as to travel, board, lodging, transport and manpower concerning the replacement of parts by the RAIMONDI S.p.A. technicians, which will be charged entirely on the Customer.

The warranty does not cover all the parts subject to wear.

As to purchased components, the supplier warranty will apply.

No compensation will be granted for expenses, damages or loss of profits incurred by customer.

Installation of purchased parts not complying with the specifications of RAIMONDI S.p.A., if purchased or not supplied by RAIMONDI S.p.A., if manufactured by it, as well as improper use of the machine, will make the warranty null and void.

Responsibility

RAIMONDI S.p.A. is in no case responsible for operation anomalies or generic failures, caused by unauthorized use of the machine or by interventions and/or modifications carried out by external persons not authorized by RAIMONDI S.p.A. itself.

1.2 Environmental conditions

The environmental working conditions of the machine shall comply with the following indications:

Temperature	10°C ÷ +55°C	50°F ÷ 131°F
Humidity	10% ÷ 90% (not condensed)	



THE MACHINE SHALL BE POSITIONED IN PREMISES PROPERLY PROTECTED FROM THE RAIN.

Environmental conditions other than those specified herein can cause serious damage to the machine and, in particular, to the electrical equipments.



POSITIONING THE MACHINE IN ENVIRONMENTS NOT COMPLYING WITH THE INDICATIONS HEREIN WILL MAKE THE WARRANTY NULL AND VOID.

Storage of the machine, while not working, allows for a temperature variation ranging between +10°C (50°F) and +70°C (158°F) all the other precautions still valid.



USE IN ENVIRONMENTS WITH EXPLOSIVE ATMOSPHERE OR FIRE RISK IS STRICTLY FORBIDDEN.

1.3 Intervention request - Technical Service

Each intervention request to the Technical Service shall be send, by fax, to:

RAIMONDI S.p.A.

Technical Service

Telefax (39) 059 282 808

E.mail: info@raimondispa.com

Specifying:

1. type of machine, registration number, serial number and year of installation;
2. detected defects;
3. retailer where the machine was bought;
4. receipt for item purchased certifying the date of purchase by the user.

1.4 Spare parts orders

Each request of spare parts shall be sent, by fax, to:

RAIMONDI S.p.A.

Technical Service

Telefax (39) 059 282 808

E.mail: info@raimondispa.com

specifying:

1. Machine model;
2. Registration number (see manual title page);
3. Code of the part to be ordered (see spare parts manual enclosed);
4. Requested quantity;
5. Shipping modality.

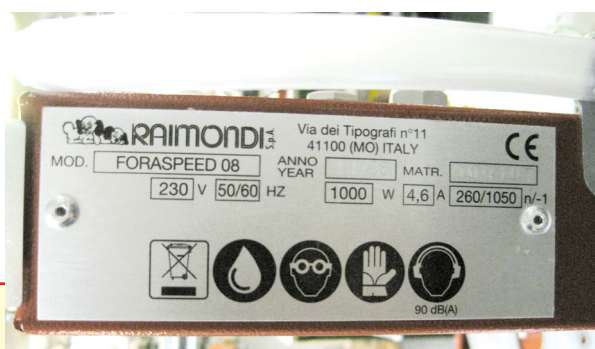
1.5 Marking

The machine identification data are engraved on the plate and shall always be indicated on every communication document exchanged between the user and the manufacturing company, for example in every assistance request or request of spare parts, etc.

The identification plate is placed on the machines.



**REMOVING OR TAMPERING WITH THE IDENTIFICATION
PLATE IS STRICTLY FORBIDDEN.**



2.1 Safety general rules



THE RULES LISTED BELOW SHALL BE CAREFULLY READ AND SHALL BECOME THE CORE OF THE DAILY PRACTICE IN THE OPERATION AND MAINTENANCE OF ALL THE EQUIPMENT, WITH A VIEW TO PREVENTING ANY TYPE OF INJURY TO PEOPLE AND/OR DAMAGING OF OBJECTS.

1. Do not try to start the machine until its operation has been fully understood.
2. In case of doubts, despite having carefully and entirely read this manual, please contact the RAIMONDI S.p.A. Technical Service.
3. Make sure all the personnel involved in the use of machine are made aware of all the safety-related instructions.
4. Before starting the machine, the operator shall verify the possible presence of visible defects on the safety devices and on the machine. In this case, immediately inform RAIMONDI S.p.A. or the closest Technical service Centre on every evident breaking.
5. Never start the machine until all the personnel in the areas surrounding the machine have been warned and moved away.
6. Daily check the correct operation of all the safety devices and switches.
7. Safety devices shall never be removed nor made ineffective.
8. During maintenance, adjustment or repair interventions, it might be necessary to disable some of the safety devices. This operation shall be carried out by authorized personnel only.
9. All the plates and signs applied on the machine shall be kept in perfect conditions. In case of damage, they shall be promptly replaced.
10. The operator shall be familiar with the function and position of the **STOP** and **START** buttons.
11. Replace parts deemed to be broken with original spare parts, warranted by the manufacturing company.
12. Never try reckless solutions!
13. Any intervention on live parts shall be carried out by authorized personnel only, who will have to operate exclusively with the machine disconnected from the mains
14. Do not make any joint in the electrical connections of electric circuits.
15. Never intervene on moving parts, not even to unblock a jam.
16. Do not wear clothes, ornaments or accessories that might get entangled in the moving members.
17. Keep the area surrounding the machine clear.
18. Always wear protective glasses, hearing protectors, particulate respirator suitable for the product to be worked and any other personal protection equipment in the areas where such equipment is required.
19. Always pay the greatest attention to all the warning and danger signs placed on the machine.
20. Always comply with and ensure compliance with the safety rules; in case of doubts, please consult this manual again before taking any action.
21. The machine shall be used exclusively for the uses it was intended for and in compliance with the provisions set forth in the contract with **RAIMONDI S.p.A.**



DO NOT USE THE MACHINE FOR USES OTHER THAN THOSE INDICATED IN THIS MANUAL. DO NOT HANDLE PRODUCTS OTHER THAN THOSE INDICATED IN THE MANUAL. DO NOT INCREASE THE MACHINE SPEED BEYOND THE VALUE INDICATED IN THE MANUAL.

Improper use of the machine can cause dangers for the personnel in charge of the machine operation and damage the machine itself.

For any problem that might arise during the machine life, and in any case not included in this manual, please contact our **Technical Service**, with a view to solving the problem in the shortest time possible.

2.2 Definition of safety-related terms

In this manual, the following terms will be employed as to safety:

Dangerous area	each area within and/or close to the machine, where the presence of an exposed person constitutes a risk for the safety and health of this person.
Exposed person	anybody standing, either partially or totally, in a dangerous area.
Operator	person in charge of the installation, operation, adjustment, maintenance, cleaning, repair, transport of parts of the machine and all the other activities required for its operation.
Safety component	component specifically designed by the manufacturer and sold separately from the machine, aimed at ensuring safety. Consequently, the device whose failed operation jeopardizes the safety of exposed persons will be considered as a safety component.

2.3 Correct use of the machine

The machine was designed and manufactured to drill and core single- and double-fired ceramic tiles, porcelain gres, marble, natural stone, Tuscan terracotta tiles, cement agglomerates.



THE MACHINE CANNOT BE USED FOR OTHER TYPES OF PRODUCTS WITHOUT PREVIOUS AUTHORIZATION BY RAIMONDI S.P.A., WHICH WILL NOT BE HELD RESPONSIBLE FOR DIRECT OR INDIRECT DAMAGE DERIVING FROM AN IMPROPER USE OF THE MACHINE.

Use

The machine is semi-automatic, the tool feeding is set by human force therefore its feeding speed shall be proportional to the hardness and to the thickness of the material which has to be drilled or cored.

The material processing must be executed with sharp milling cutters or diamond drills and water which must always be present in the required quantity.



THE MACHINE CANNOT BE USED WITH INEFFECTIVE CUTTING MILLS AND DIAMOND DRILLS.

2.4 Characteristics of the machine

Types of milling cutters and drills to be used

A series of milling cutters and drills suitable for the FORASPEED 2008 machine, will ensure optimization of the activity as well as good results.

Characteristics of milling cutters and diamond drills:

External Diameter of diamond cutters	20 mm - 120 mm (3/4" - 4 3/4")
External Diameter of diamond drills	6 mm - 12 mm (1/4" - 15/32")
Maximum cut thickness	30 mm (1 3/16")
Direction of rotation	Clockwise
Rotation speed	rpm ⁻¹ 260 to 1050



USE OF CUTTERS AND DRILLS OTHER THAN THOSE DESCRIBED HEREIN IS FORBIDDEN.

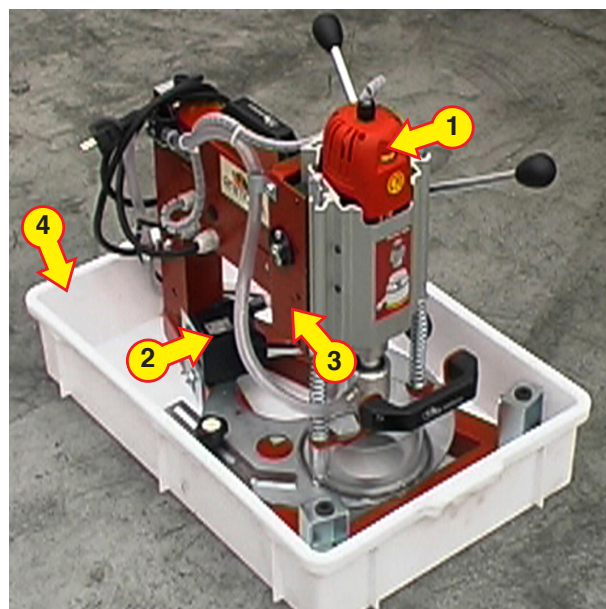
Technical characteristics

The characteristics of FORASPEED 2008 are outlined below:

<i>Model</i>		<i>Foraspeed 2008</i>
Unladen mass (<i>transport</i>)	kg	21,5
	U.S. lb t	57,6
Mass - running (<i>stationary</i>)	kg	41,5
	U.S. lb t	111,2
Tank capacity	Lt	24
	U.S. gal	7,60
Maximum drilling thickness		30 mm (1 3/16")
Maximum material size		70 cm (2 3/4")

2.5 Description of machine groups

The FORASPEED 2008 series are made up of a series of groups. These interact to ensure functions are always effective. The groups are:



1 Motor group

It includes the motor, its protection casing which also acts as a feeding support, the internally cooled tool and the fixed guard.

2 Cooling group

It allows for the constant supply of cooling water for the mill, equipped with submersible pump, water collection tank, hollow spindle and regulating valve.

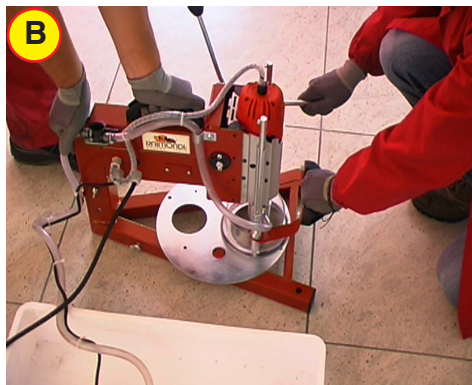
3 Frame

It is the bearing part of the machine, complete of removable feet. A carrying handle allows for quick and easy handling in the operating area. It is equipped with a handle for the feeding, adjustable sliding guides and protection for the startsystem.

4 Tank

It can be used depending on the type of processing.

2.6 Position of the operator



The FORASPEED 2008 series shall be used by one single operator (A), who will have to stand in front of the machine. The material shall have to lean, whenever possible, on the rotary plane.

In case of drilling on materials whose size exceeds 70 cm or already laid on the floor the machine can be extracted from the tank, the three supporting feet remove and the machine leant in the desired position: to carry out this operation two persons are required (B), one of them shall operate as described above while the other one, positioned on the rear side of the machine shall hold firmly the machine over the material to be drilled. The pump during this operation will have to remain into the tank.

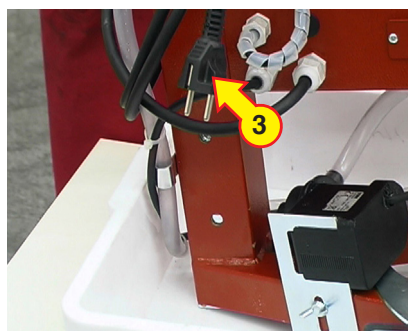
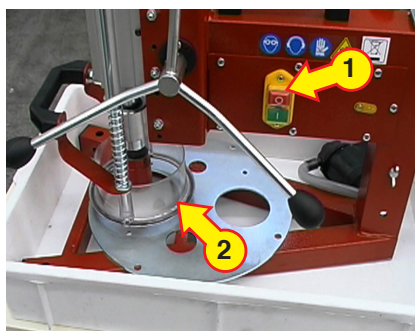


CUTTING DANGER

THE MACHINE SHALL BE TURNED ON EXCLUSIVELY WHEN THE OPERATOR IS IN THE WORKING POSITION. THE MACHINE SHALL BE TURNED OFF AT THE END OF EACH CUTTING OPERATION. IT IS ABSOLUTELY FORBIDDEN TO PUT HANDS TO THE TOOL. FINISH AND HOLE 'SHOULD BRING IN POSITION OF MAXIMUM LIFT.

2.7 Safety devices

The FORASPEED 2008 series is equipped with the following safety devices:



1 ON/OFF switch

It allows to start and stop the machine it is provided with thermal protection. In case of potential danger, the machine shall be turned off by means of the red switch.

2 Splash guard TOOL GUARD

It prevents water and debris from being projected from the drilling area; it prevents the accidental contact with the diamond part of the tool; it holds the material which has to be drilled thus avoiding its rotation. It also includes a safety handle to hold the material.

3 Power supply plug

In case of danger it will have to be immediately unplugged.



RAIMONDI S.P.A. WILL NOT BE HELD RESPONSIBLE FOR DAMAGE CAUSED BY EJECTIONS RESULTING FROM SCARCE MAINTENANCE OF OR TAMPERING WITH THE GUARDS, OR FROM AN ERRONEOUS POSITION OF THE OPERATOR (SEE PICTURE SHOWING THE POSITION OF THE OPERATOR).

2.8 Accessories of the machine

The FORASPEED 2008 series is supplied with the following accessories:

1. Two eccentric pins for cutters locking;
2. 3 mm. hexagonal wrench;
3. 6 mm. hexagonal wrench;
4. Two fore feet and associated screws;
5. Drassingstone;
6. Reference square;
7. Use and maintenance manual in the destination country language.

2.9 Noise

The machine was designed and manufactured in such a way as to reduce at source the machine noise level. Obviously, sound pressure varies in relation to the type of blade, its wear status and the material to be cut; hence, we have made a series of measurements using different types of blades and different materials, both indoors and outdoors. Measurements made in the operator position on a similar machine have provided the following values, where:

The weighted continuous equivalent sound pressure level A1 [LAeq = dB(A)] Outdoor measurements

<i>Type of grinding wheel</i>	<i>Type of material</i>				
	Hollow	Double-firing	Porcelain	Brick	Stone
Special segmented	71,9	89,8	96,0	92,4	94,8

Weighted continuous equivalent sound pressure level A1 [LAeq = dB(A)] Indoor measurements

Weighted maximum instant sound pressure level C1 [Lpc = dB(C)] Outdoor measurements

<i>Type of disc</i>	<i>Type of material</i>				
	Hollow	Double-firing	Porcelain	Brick	Stone
Special segmented	74,8	93,4	99,8	96,1	98,6

The conditions for indoor measurements are the following:

Building size:

length	8 m (26')
width	5 m (16')
height	3 m (10')

Type of premises:

floor	polished concrete
covering	tile
walls	masonry with side glass

Instrument used Bruel & Kjaer mod. 2221 class 1

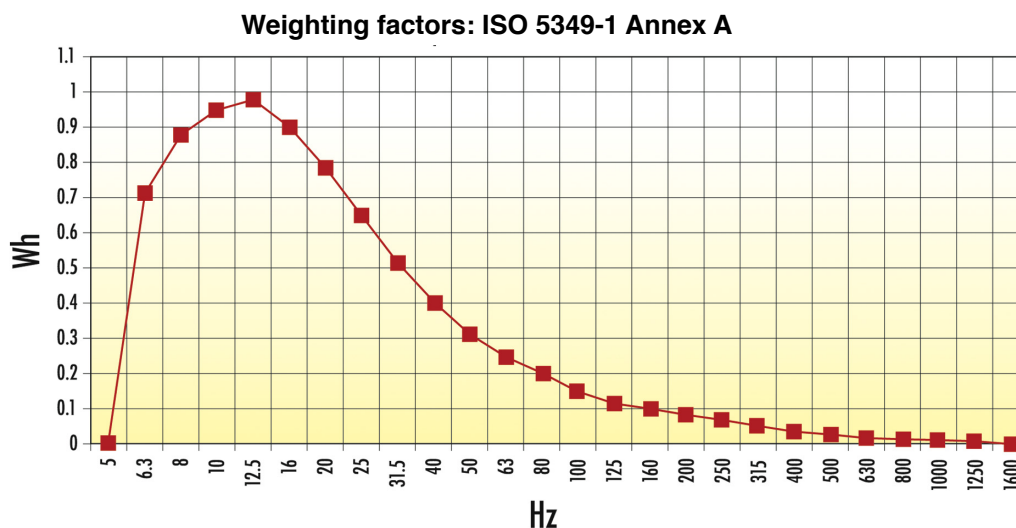
Reference standard DIN 45635

The use of the machine is only allowed provided that suitable hearing protection is ensured. The employer shall hence compulsorily provide the operators with personal protection equipment (earphones, plugs).

2.10 Vibrations

Determination of the vibration level generated by the equipment- $A_{(w)sum}$

The magnitude of the vibrating stresses generated by the equipment shall have to be characterized, for every exposure condition, in terms of "Equivalent Frequency-Weighted Acceleration" $A_{(w)} m/s^2$. The equivalent acceleration, which is preferably expressed (*) in S.I. units of measurement (meters per second squared - m/s^2), shall have to be quantified for every handle along three standardized directions **X**, **Y** and **Z**, by applying the weighted frequency provided for by the standard (W_H), which states the maximum hand-arm system sensitivity to vibratory stimuli with a frequency ranging between 5.6 and 1400 Hz. Such an interval turns out to be delimited by the octave-band nominal frequencies 8 and 1000 Hz (included), or by the one-third octave bands with nominal frequency ranging between 6.3 Hz and 1250 Hz (included).



(*) The logarithmic decibel scale (dB ref. $10^{-6} m/s^2$) is also frequently used

The three axial results shall have to be summed sectorally in order to obtain the total weighted acceleration:

$$A_{(w)sum} = \sqrt{a_{wx}^2 + a_{wy}^2 + a_{wz}^2}$$

The three standardized directions refer to a biodynamic system of coordinates, having their origin connected with the summit of the third metacarpal bone and the **Z** axis, determined by the longitudinal axis of this bone, the **X** axis crosses the palm of the hand while the **Y** axis is orthogonal to the two previous ones.

On the basis of the measurements, carried out through an operative simulation at the test room of the company RAIMONDI S.p.A. by conforming to the UNI EN ISO 5349-1:2004 standard the retrieved values are the following:

Determination of the level of vibrations generated by the equipment

- Disc D.20	$A_{(w)sum}$ 0,1524 m/s^2 .
- Disc D.45	$A_{(w)sum}$ 0,0886 m/s^2 .
- Drilling	$A_{(w)sum}$ 0,5219 m/s^2 .

THE TEST DOCUMENTS AND THE CERTIFICATES OF THE TOOLS ARE HELD BY THE COMPANY RAIMONDI S.P.A. AND THEY ARE KEPT AT THE DISPOSAL OF THE RELEVANT CONTROL AUTHORITIES.

2.11 Demolition and disposal

The manufacturer estimates a life of 15.000 hours of operation under normal conditions of use.

At the end of the life cycle, the company using the machine shall see to the demolition of the machine in compliance with the laws in force, first of all seeing to the emptying of lubricant fluids and overall cleaning of the different elements and, subsequently, separation of the parts making up the machine.

After disassembling the machine in line with the previous disassembling procedure, the different materials shall be separated in compliance with the laws of the country where the machine shall be eliminated. The machine does not contain harmful components or substances requiring particular removal procedures.



DURING THE DISPOSAL PROCESS, COMPLIANCE WITH THE LAWS IN FORCE IN THE COUNTRY IS REQUIRED. POLLUTANTS, SUCH AS OILS AND SOLVENTS, SHALL BE STORED EXCLUSIVELY IN METAL DRUMS.



2.12 CE Manufacturer's declaration - ROHS/RAEE

DIRECTIVE (UE) 2015/863 (Directive RoHS III) of the European Parliament and of the council of 15 March 2015 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

DIRECTIVE 2002/96/EC (WEEE Directive) of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment.

With reference to the above Directives and in particular to ENCLOSURES "I A" and "I B" of Directive 2002/96/CE, RAIMONDI S.p.A., declares that its products.

DO NOT FALL WITHIN THE FIELD OF APPLICATION OF THE (UE) 2015/863 DIRECTIVE

Restricted substances referred to in Article 4(1) and maximum concentration values tolerated by weight in homogeneous materials:

Lead (0,1 %)
Mercury (0,1 %)
Cadmium (0,01 %)
Hexavalent chromium (0,1 %)
Polybrominated biphenyls (PBB) (0,1 %)
Polybrominated diphenyl ethers (PBDE) (0,1 %)
Bis (2-ethylhexyl) phthalate (DEHP) (0.1%)
Benzyl butylphthalate (BBP) (0.1%)
Dibutylphthalate (DBP) (0.1%)
Diisobutylphthalate (DIBP) (0.1%)

Raw materials used by RAIMONDI S.p.A, in its components, fall within the EXEMPTIONS limits.

All surface treatments and plastic materials in RAIMONDI S.p.A. products do not contain the prohibited substances listed in the (UE) 2015/863 directive.

DECLARATION OF THE MANUFACTURER CE - REACH

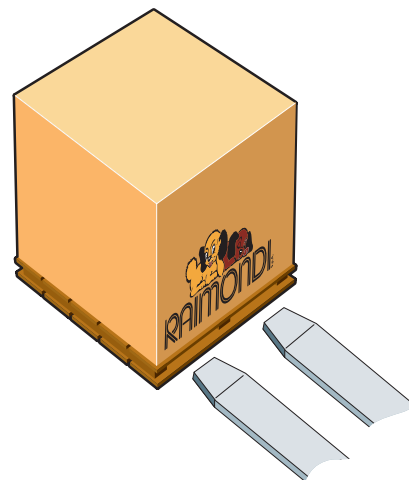
REGULATION (EC) N. 1907/2006 of the EUROPEAN PARLIAMENT AND THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

With reference to the above-mentioned Directive, RAIMONDI S.p.A., declares that the products they market were pre-registered by our suppliers on 1 December 2008.

We hereby inform you also that the products by RAIMONDI S.p.A., do not originally contain any SVHCs (Substances of Very High Concern) exceeding 0.1%.

3.1 Packing transport

Prior to using the machine, check for broken, worn or damaged parts.
Replace immediately if necessary.
Follow the instructions given in this manual for replacing parts and accessories.



3.2 Manual handling

Manual handling



BEFORE ANY TRANSPORT AND HANDLING OPERATION REMOVE THE TANK AND MAKE SURE THE PUMP IS WELL FIXED.

For the manual handling make use of the carrying handle (A) on the top of the machine.

In case the machine needs to be stored during idle periods, it shall be kept in covered premises, so that the machine can be protected from bad weather, and free from aggressive chemicals.

Before storing the machine, disconnection from the mains and unloading of the cooling water tank is recommended.

The machine must be kept in a place with a suitable temperature (from +10° C to +70° C) / (from 50° F to 158° F).



3.3 Power supply

The drilling machine “Foraspeed 2008” must be supplied at the voltage corresponding to the value shown in the “TECHNICAL DATA” plate; connect the machine only to a line with an efficient grounding cable. In case of doubt, do not plug the machine. Plug the machine to a 10A socket.



THE USE OF EXCESSIVELY LONG PATCH CORDS OR POWER SUPPLY WITH CURRENT GENERATORS, MIGHT LEAD TO THE FOLLOWING TROUBLES:

- 1. SLOW STARTING OF THE MOTOR AND SAFETY DEVICES INTERVENTION;**
- 2. MOTOR OVERHEATING WITH POWER DROP;**
- 3. THE SWITCHING ON-OFF DEVICE DOES NOT WORK.**



IF THE MACHINE IS CONNECTED TO THE MAINS BY MEANS OF A PATCH CORD, THIS SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- 1. MAXIMUM LENGTH 10 METERS (33');**
- 2. HAVING A SECTION SUITABLE FOR THE LOAD;**
- 3. BEING COMPLETELY UNCOILED.**

The “FORASPEED 2008” machines must be connected to a power mains equipped with differential switch or insulation transformer of class II and matching the technical regulations of the destination country.



FOR THE CORRECT USE OF THE RESIDUAL CURRENT CIRCUIT BREAKERS, DO NOT FORGET TO CHECK THEIR EFFICIENCY BY MEANS OF THE TEST BUTTON PLACED ON THE FRONT PART OF THE DEVICE ITSELF.

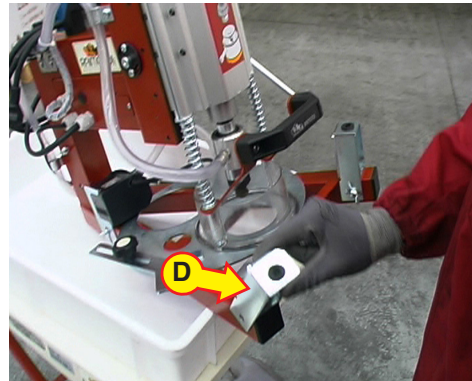
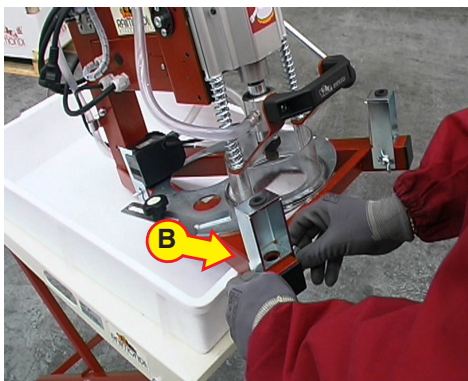
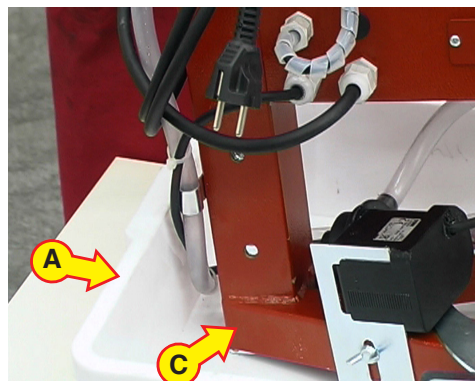
3.4 Assembly of the machine



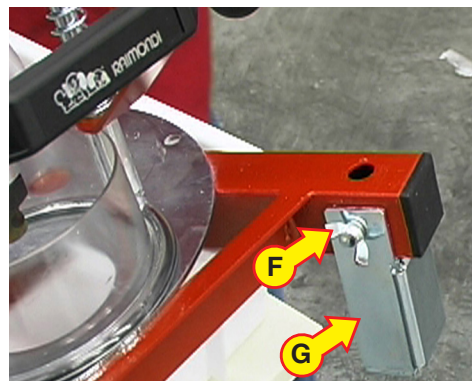
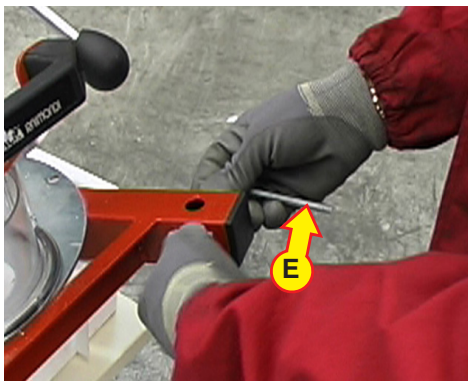
TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES.

Place the machine on a stable, uncluttered surface.

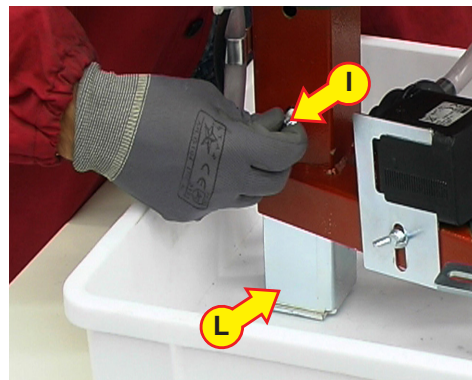
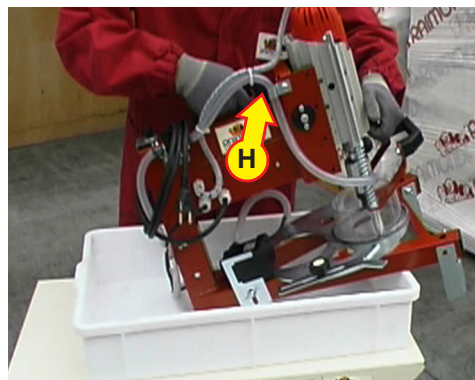
Feet assembling



Position the tank (A) on the prepared plane and then lean the machine inside the tank with the front side (B) against one of the longest sides of the tank and the rear side (C) on the bottom of the tank leaning to the opposite side.

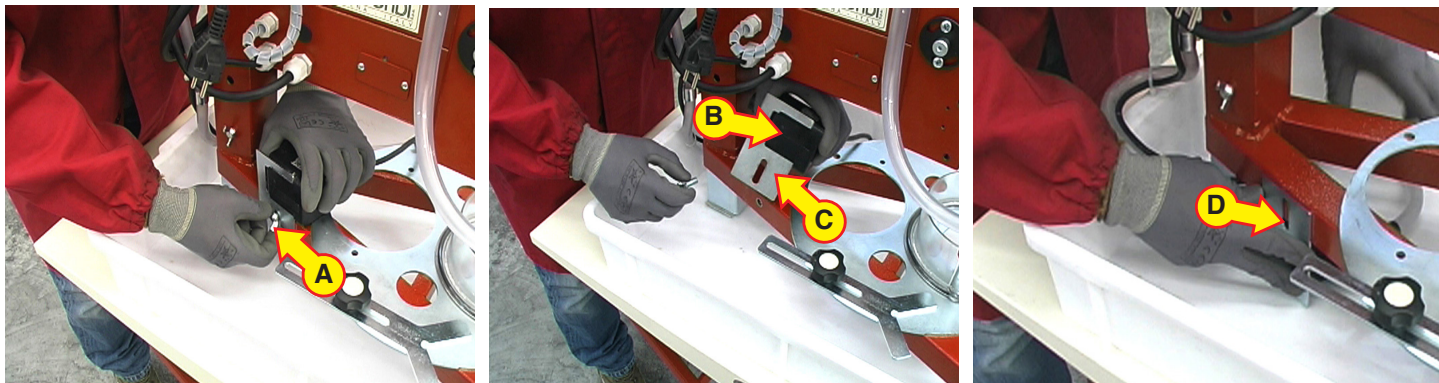


Then position the left foot (D) by matching holes, fit the allen screw (E) from the inside and then tighten the butterfly nut (F). Repeat the operation for the right foot (G).



Then position the machine correctly inside the tank, unscrew the butterfly nuts (I), lift by the handle (H) the rear side of the machine until the holes of the rear telescopic foot (L) match those on the frame, then screw the butterfly nuts (I) by tightening them firmly.

Pump assembling



Unscrew the butterfly nut (A), position the pump (B) so that the slot of the pump holding plate (C) matches the hole (D) and the base of the pump is in contact with the bottom of the tank, tighten the butterfly nut (A).

3.4.1 Assembling and disassembling of the tool

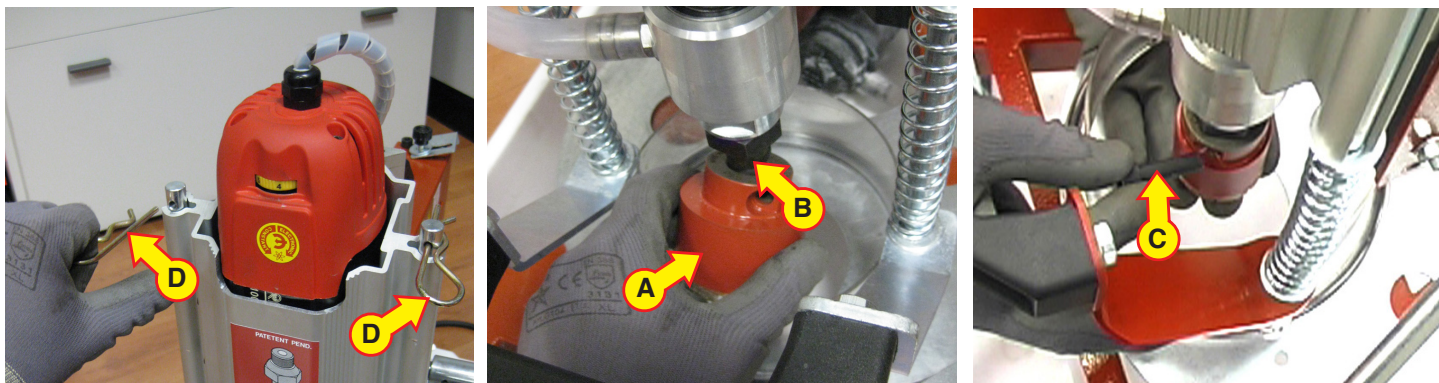


BEFORE PERFORMING ANY OPERATION, MAKE SURE THAT THE MACHINE IS UNPLUGGED.



TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES

Mounting the diamond cutters

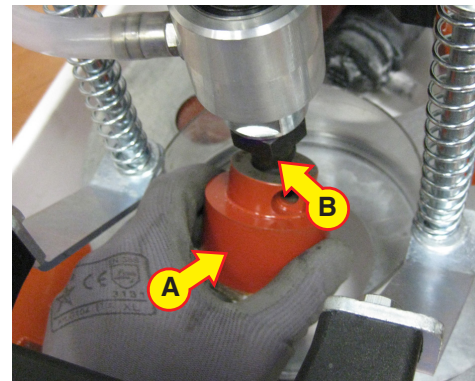
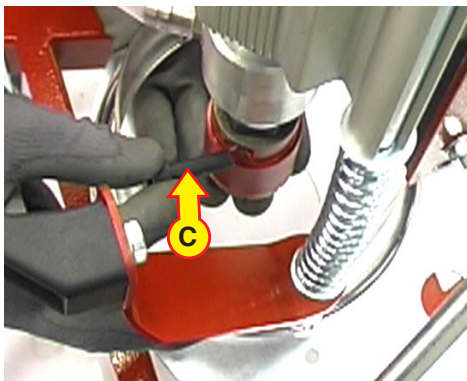
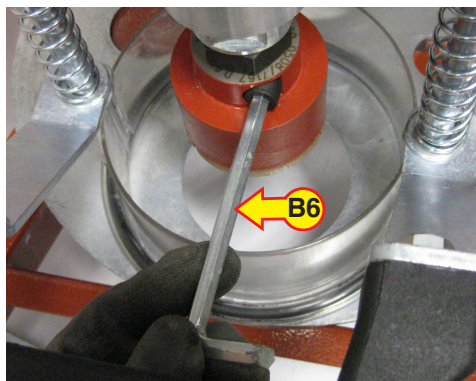


Remove the two split pins (D) and take the motor group at its maximum height. Insert the cutter (A) on the adapter (B), making sure that the pin hole (C) is aligned to the groove on the adapter.



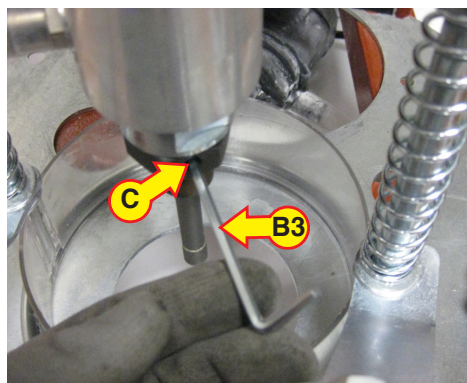
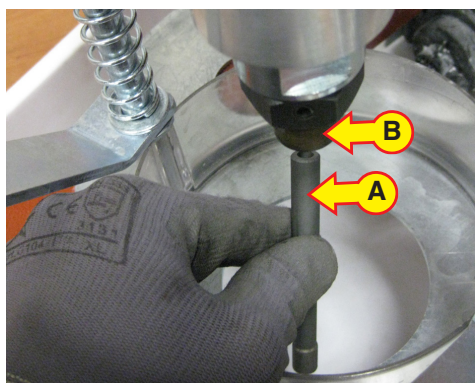
Using the (B6) Allen key, completely insert pin (C) and rotate it to ensure the cutter is locked in place. Lower the motor and insert again the two split pins (D).

Dismounting the diamond cutters



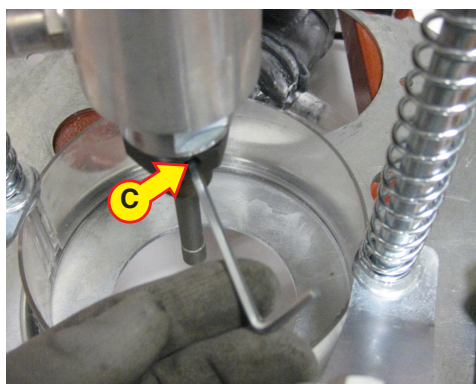
Remove the two split pins (D) and take the motor group at its maximum height.
Using the B6 Allen key, turn pin (C) and remove it.
Remove the cutter (A) from adapter (B).
Lower the motor and insert again the two split pins (D).

Mounting the diamond bits



Using the (B3) Allen key, loosen screw (D) so you can fully insert the shank of the diamond (A) bit in the middle of adapter (B).
Tighten screw (C) completely to ensure that the bit is locked in place (A).

Dismounting the diamond bits



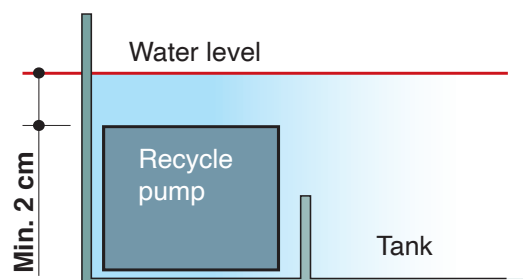
Loosen screw (C) and remove the diamond bit (A).

3.4.2 Tank filling



TO CARRY OUT THIS OPERATION, MAKE SURE THE MACHINE IS NOT CONNECTED TO THE MAINS.

Pour cold and clean water into the tank until a level 2cm above the recycle pump has been reached.



4.1 Selection of the rotation speed

Select the desired cutting rotation speed according to the following table:



THE TABLE GIVES A GENERAL INDICATION, THE CHOICE OF THE ROTATION SPEED MUST BE DONE ON THE BASIS OF THE USED TOOL DIAMETER, OF THE TYPE OF MATERIAL TO BE DRILLED, OF THE THICKNESS OF THE MATERIAL TO BE DRILLED.

<i>Speed</i>	<i>Ø Tools (mm)</i>
1	85 - 120
2	75 - 85
3	55 - 75
4	35 - 55
5	20 - 35
6	6 - 12

The penetration speed will have to be inversely proportional to the hardness of the material which has to be drilled.

FOR A BETTER COOLING OF THE DIAMOND CUTTER IT IS ADVISABLE TO STOP THE PENETRATION PRESSURE DURING THE DRILLING BY LIFTING THE LEVER GRIP.



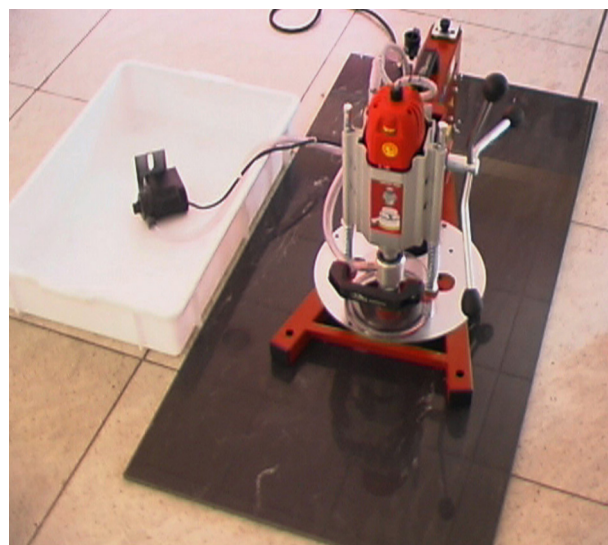
IT IS NECESSARY TO PAY UTMOST ATTENTION TO THE NOISE OF THE CUTTER DURING THE DRILLING. IF THE CUTTER EMITS A SHRILL WHISTLING IT MEANS IT HAS LOST ITS CUTTING ABILITY. IT IS NECESSARY TO DRESS THE CUTTER BY DRILLING SOME HOLES ON THE DRESSING STONE.

4.2 Use of the machine

Foraspeed 2008 can be used in the following ways:



Drill materials before laying



Drill materials already laid or of great dimensions

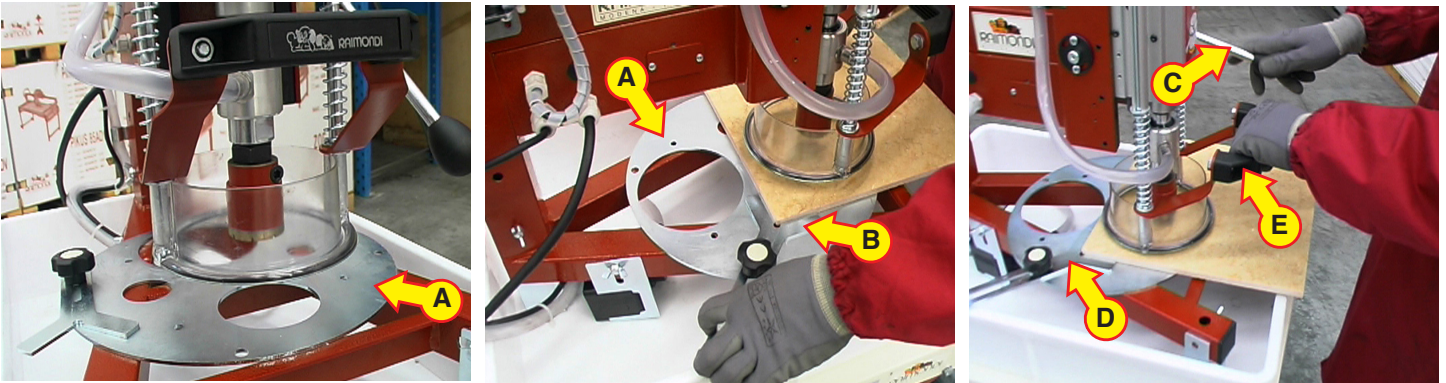
4.2.1 Drilling of materials before laying

! TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES.

! MAKE SURE BEFORE THE OPERATION THAT THE THREE FEET ARE WELL FIXED.

! BEFORE ROTATING THE ROTARY PLANE ALWAYS REMOVE THE REFERENCE SQUARE.

! MAKE SURE BEFORE THIS OPERATION THAT THE TANK CONTAINS THE RIGHT QUANTITY OF CLEAN WATER.



Choose which hole of the rotary plan of the counterdrill (A) to use, the hole diameter shall have to be a bit larger than that of the tool and the selected hole has to be concentric to the tool.

! CHECK FOR THE CORRECT ALIGNMENT OF THE TOOL AND THE COUNTERDRILL HOLE.

Fill the tank as shown in paragraph 3.4.2.

- 1) Mark with a pen on the surface of the material to be drilled the Ø of the hole to be drilled.
- 2) When the machine is off and the motor placed at its maximum height fit the material between the counterdrill (A) and the material stop protection (B).
- 3) Use the control lever (C) to lower the cutter making sure it fits the previously marked diameter. Lift the cutter by 1 cm from the material to be drilled.

If the size and the position of the hole permit it, position the reference (D) in contact with the angle of the material and tighten the knob as shown in the chapter Use of the reference square.

- 4) Select the desired speed, switch on the machine and wait for the cooling water to reach to the diamond cutter.
- 5) Slowly lower the control lever the protection gets in contact with the material to be drilled and press the safety handle (E).
- 6) Slowly lower the control lever until the diamond cutter gets in contact with the material to be drilled and press the safety handle.
- 7) Start with the drilling operation.
- 8) Once you have completed the drilling operation, always make sure that no material is left inside the cutter, in case the core is still in, remove the tool and extract the core.

4.2.2 Drilling of already laid materials



FOR THE POSITIONING BE SURE THE MACHINE IS CUT OFF FROM POWER MAINS.



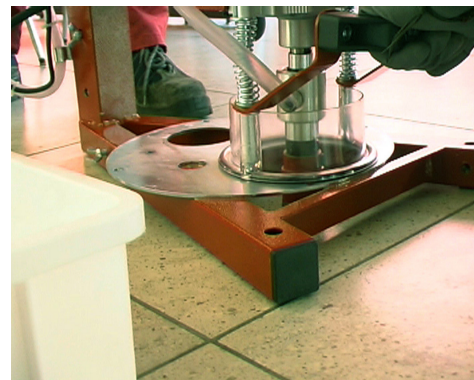
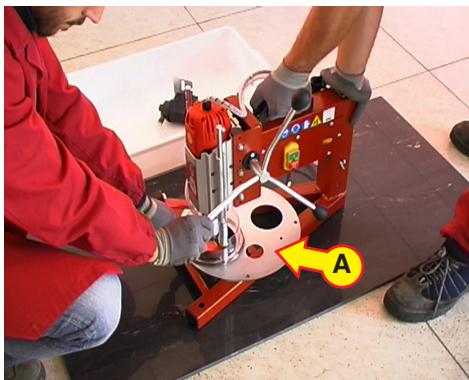
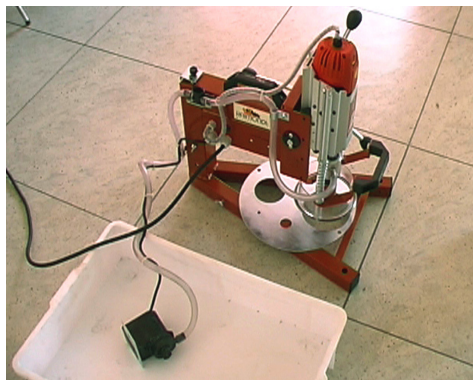
TO CARRY OUT THIS OPERATION, WEAR PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES.



TWO PERSONS ARE REQUIRED FOR THIS OPERATION, CHECK FOR THE CORRECT ALIGNMENT OF HOLE AND COUNTERCUTTER.



MAKE SURE BEFORE THIS OPERATION THAT THE TANK CONTAINS THE RIGHT QUANTITY OF CLEAN WATER.



- 1) Disassemble and remove completely the two frontfeet and the pump.
- 2) Retract the rear telescopic foot.
- 3) Rotate the counter-cutter plane (A) until the hole with the biggest diameter is aligned with the tool.
- 4) mark with a pen on the surface of the material to be drilled the $\varnothing$ of the hole to be drilled and mount the required diamond drill or cutter.
- 5) Position the machine on the material to be drilled.
- 6) By using the control lever lower the cutter and make sure it matches the previously marked diameter.
- 7) Position the tank next to the machine and the pump inside of it. Make sure the tank contains the correct quantity of clean water.

NOW CONNECT THE MACHINE TO THE POWER MAINS

- 8) An operator will have to position himself on the rear side of the machine and hold the machine firmly leant on the ground, the other operator will have to position himself on the front side of the machine.
- 9) Select the desired speed, switch on the machine and wait for the outflowing of cooling water from the tool.
- 10) The operator which is positioned on the front side of the machine will have to hold the control lever and lower it until the diamond tool gets in contact with the material to be drilled.
- 11) Start with the drilling operation making sure the machine does not lift from the material.

5.1 Sharpening of cutters and diamond drills



BEFORE PERFORMING ANY OPERATION, MAKE SURE THAT THE MACHINE IS UNPLUGGED.



TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES

When you notice that during drilling the cutter or the diamond drill 'sparks', that at the end of drilling it 'breaks' the material and that feeding requires too much of an effort the cutter or drill must be dressed by making repeated drills on the dressing stone coming with the machine.

5.2 Tank emptying and cleaning



BEFORE PERFORMING ANY OPERATION, MAKE SURE THAT THE MACHINE IS UNPLUGGED.

Remove the machine and the pump of the machine and wash accurately the tank with water and a sponge.



FOR A CORRECT OPERATION OF THE PUMP, WATER SHALL BE KEPT CLEAN.

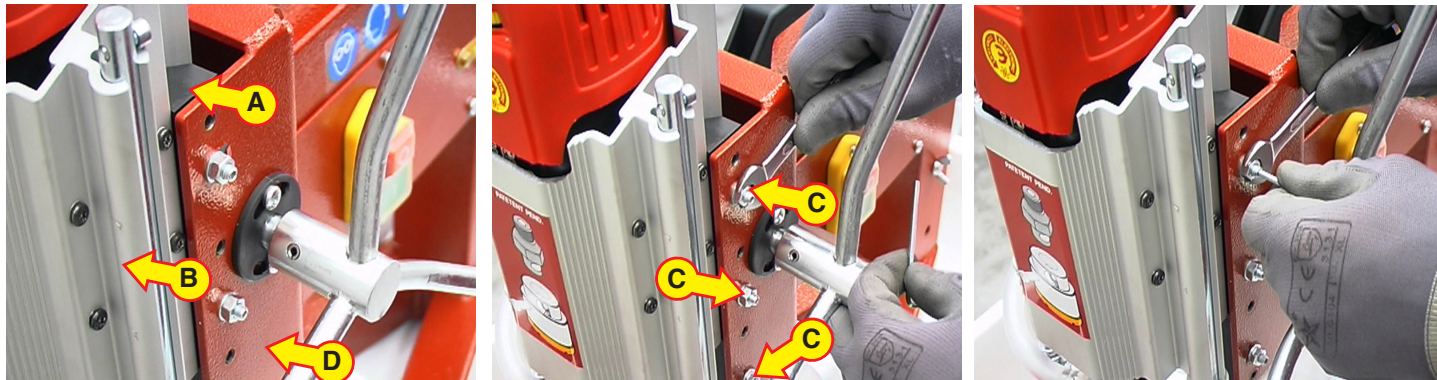
UPON EACH TANK WATER CHANGE, CLEAN THE FILTER AND THE PUMP ROTOR.



DISPOSAL OF WATER CONTAINED WITHIN THE TANK SHALL BE MADE IN COMPLIANCE WITH THE LAWS IN FORCE IN THE COUNTRY OF USE.

5.3 Sliding guides adjustment

In case excessive backlash between the motor holder and the sliding guides is detected (**A**) follow instructions below:



Lower the motor until the motor holder (**B**) covers the whole length of the guides (**A**); slacken the three nuts (**C**), screw the dowels (**D**) until the backlash is eliminated. Tighten now the three nuts (**C**).

5.4 Starting device replacement



BEFORE PERFORMING ANY OPERATION, MAKE SURE THAT THE MACHINE IS UNPLUGGED.



TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES.



Remove the starting device unscrewing the fixing screws (A). Disconnect the electric cables and replace the on/off switch or the damaged thermal relay (B). Reconnect the cables and tighten with the previously removed screws. Make sure the seal gasket (C) is not damaged. Replace it if needed.



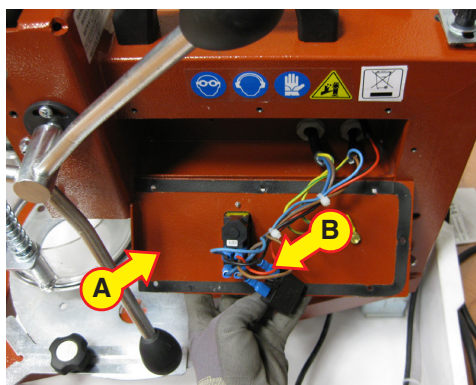
AFTER REPLACEMENT MAKE SURE CONNECTIONS HAVE BEEN CORRECTLY EXECUTED.

5.5 Recycle pump replacement



TO CARRY OUT THIS OPERATION, WEAR THE PROTECTIVE GLOVES AND ACCIDENT-PREVENTION SHOES.

For recycle pump replacement follow indications below:



Empty the tank; open the frame casing (A). Disconnect the power cord of the pump (B); disconnect the water delivery pipe (C), replace the damaged pump with a new pump and restore connections. Close the frame (A) making sure not to smash wires. Reconnect the delivery pipes.



AFTER REPLACEMENT MAKE SURE CONNECTIONS HAVE BEEN CORRECTLY EXECUTED.

6.1 Trouble-shooting

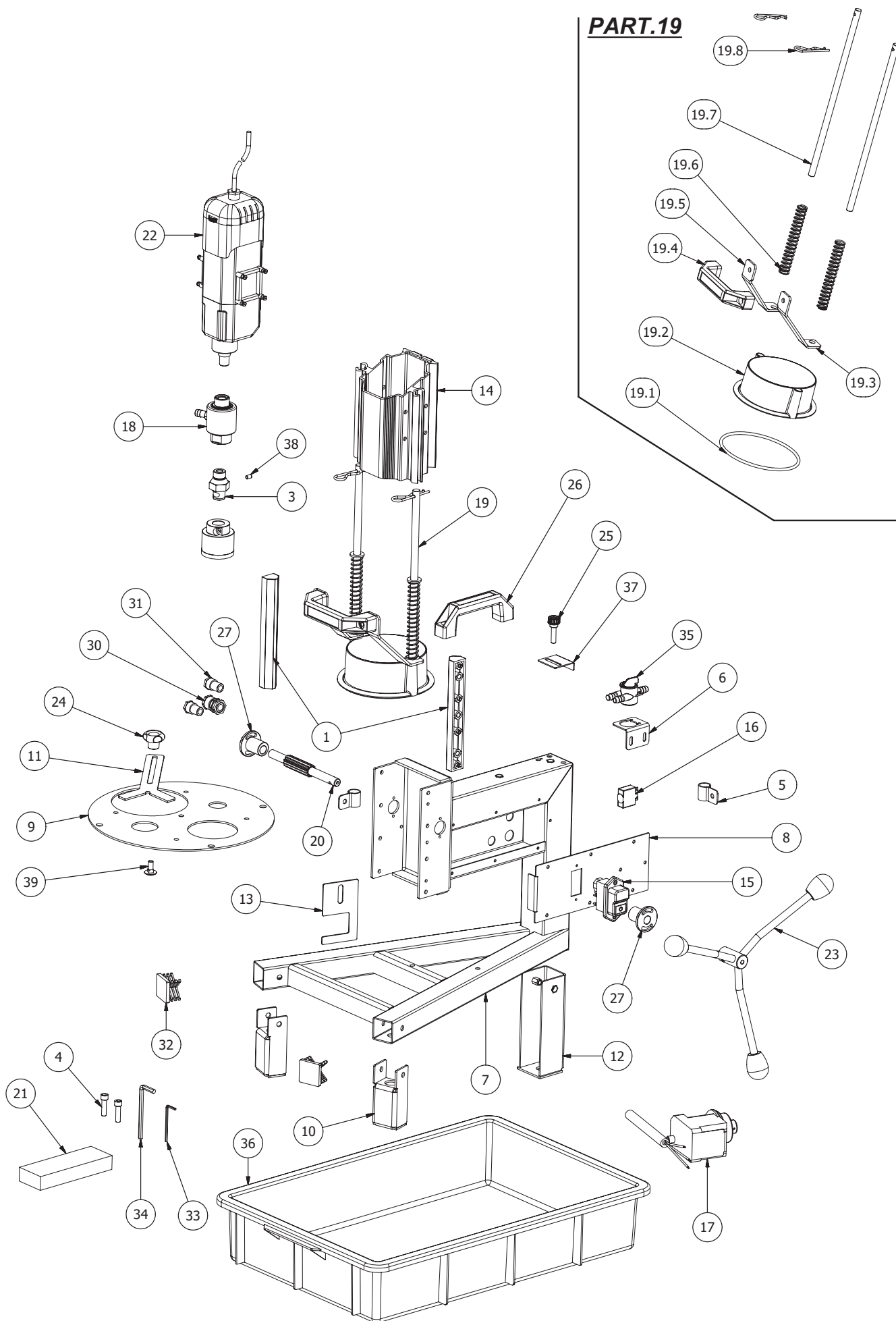
Problem	Cause	Solutions
The machine does not work	The plug is not correctly inserted in the power socket.	Push the plug completely into the power socket.
	Power socket undervoltage (Amp.).	Check the socket amperage.
	The power supply cable is interrupted.	Check the connection in the terminal board. Replace the power supply cable.
	Lack of voltage in the power socket.	Check or provide for the check of the power socket.
	The switch is damaged.	Replace the switch.
	The motor is interrupted.	Contact the retailer or the authorized technical service centre.
	Charcoals are worn out.	Contact the authorised technical service or your retailer.
The motor is difficult to start	No voltage to the motor.	Check the supply voltage. The power supply cable is longer than 10 mt (33'). The conductors section is undersized.
	Frictions on the mandrel.	Contact the authorised technical service or your retailer.
The machine turns off during work	Motor excessive temperature.	Wait for the motor to cool down.
No water to the blade	The pump is not working.	Make sure the pump is free from cutting residues. In case pump replacement is required, please refer to the paragraph “Water pump replacement”
	The water level in the tank is too low.	Add water in the tank.
	The cock is clogged.	Clean or replace the cock.
	The water recycle hose is bended.	Disconnect the water delivery hose from the pump or clogged and blow inside it. Clean it or replace it according to the wear status.
	Holes clogged in the pump filter.	Free all the holes in the filter of the rotor cover.
	The mandrel leaks water.	Replace the mandrel.
Excessive backlash in the	Guides have to be adjusted.	See paragraph “Adjustment of guides sliding guides” .
	Guides are worn out.	Contact the authorised technical service or your retailer.
The tool does not cut	The tool is worn out.	See paragraph “Tool dressing” .

Spare parts and electric diagram

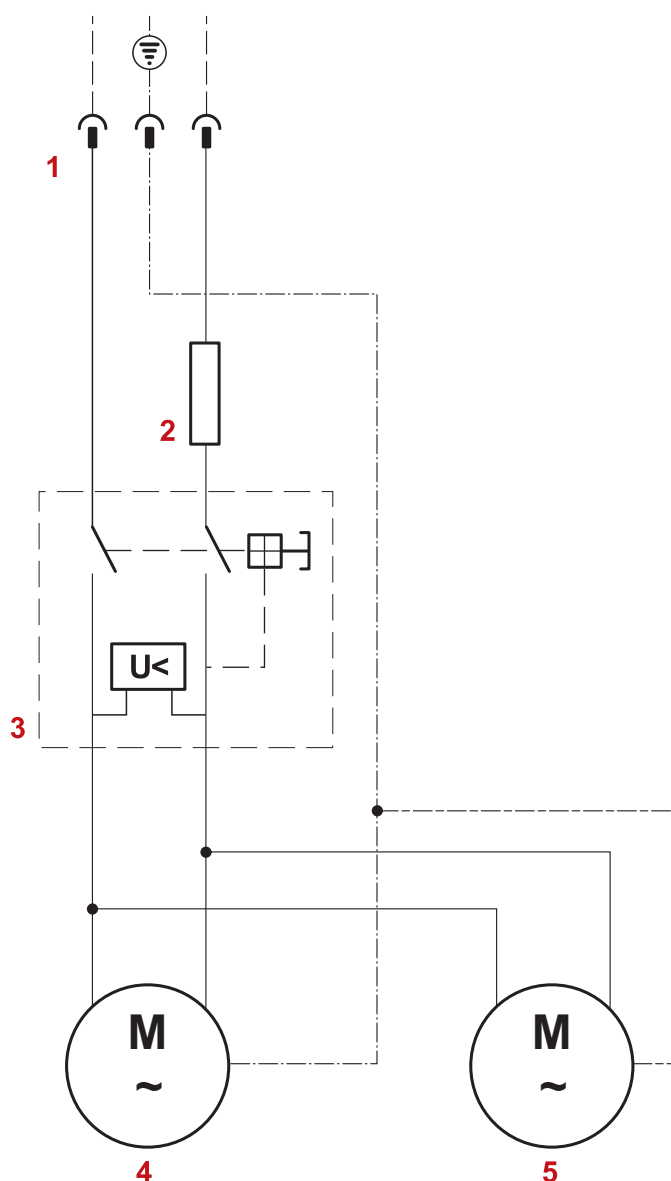
7.1 Spare parts

ITEM	ART. CODE	DESCRIPTION
1	114CA01A	GUIDE WITH PINS FORASPEED 2008
2	177OR02C	O RING
3	181ADATT	ADAPTER 1/2GAS
4	181SPINA	ECCENTRIC PIN Ø8
5	202PG01D	TUBE HOLDER
6	202PR02D	COCK HOLDER
7	205LA01D	FRAME
8	205LA02D	LID
9	205LA03D	COUNTECUTTER
10	205LA04D	FRONT FOOT
11	205LA06D	REFERENCE SQUARE
12	205LA07D	REAR FOOT
13	205LA08D	PUMP HOLDER
14	205PM01D	MOTOR HOLDER
15	234MD01C	MICRO CIRCUIT-BREAKER 16A 230V 50/60HZ
16	234TR05C	THERMAL RELAY 6A
17	240	PLUNGING PUMP
18	259PA02A	COMPLETE MANDREL
19	263LX04A	PROTECTION
19.1	177OR02C	O RING 5,34 x 149,2
19.5	205LA09D	TILE STOPPING LEVER FORASPEED 2008 SX
19.3	205LA09DX	TILE STOPPING LEVER FORASPEED 2008 DX
19.2	263LX04D	CUTTER PROTECTION (FORASPEED 2008)
19.4	306IP03C	GRIP INT.130 HOLE Ø8
19.6	314PR19D	SPRING PRES.Ø20 F.Ø2 L.140 Z.B.(FORASPEED 2008)
19.7	317ST09D	PIN Ø12 LL.358 Z.B. FORASPEED 2008
19.8	900COP3.5	SPLIT PIN A (R) UNI 8833-A 3.5
20	284PG06D	SPROCKET
21	288MAXI	DRESSING STONE
22	297CA01D	MOTOR 230V. 50/60HZ
23	305MA08A	TRIPLE LEVER
24	305PF06C	KNOB
25	305PM22C	KNURLED KNOB
26	306IP03C	GRIP
27	310BS17D	ACETALIC BUSHING
28	314PR19D	SPRING Ø20 LL.140
29	317ST09D	PIN Ø12 LL.358
30	320PR01C	CABLE GLAND PG11
31	320PR03C	CABLE GLAND PG9
32	322QU03C	PLUG PL.40X40
33	323BR01C	HEX SOCKET KIT 3
34	323BR04C	HEX SOCKET KIT 6
35	324RD02D	COCK WITH DEVIATOR
36	326SE07C	WHITE TANK PL.LT26
37	422LA08D	KIT HOLDER
38	900GR6X10	FLAT DOWELS UNI 5923 M6X10
39	900TTDE82	SCREW TTDE UNI 5732 DIN 603 8X20 ZB

PART.19



7.2 Electric diagram



- | | |
|---|---------------------|
| 1 | Power socket |
| 2 | Thermal protection |
| 3 | ON/OFF switch |
| 4 | Disk motor |
| 5 | Pump motor (if any) |



AS TO TECHNICAL DATA SEE THE PLATE VALUE ON EACH COMPONENT.

RAIMONDI WARRANTY

Raimondi electrical machines for professional use satisfy the highest qualitative requirements.

For this reason Raimondi guarantees that your product is free from manufacturing faults.



Warranty Clauses

1. The device is guaranteed for a period of 12 months from the date of purchase.
2. The date indicated on the official receipt or invoice released at the delivery of the device by the seller is valid as date of purchase.
3. The warranty refers to the replacement or free repair of components acknowledged to be faulty due to manufacturing defects.
4. The complete replacement of the product is not provided for.
5. The replacement of components if carried out by the seller will be recognised free after the replaced components will be returned to our place to be examined and found faulty. The costs of labour are not included in the warranty.
6. All transport costs are at the expense of the buyer.
7. The parts subjected to wear are excluded from the warranty. Damages caused by negligence, improper use and installation and any event not dependent from the normal operation of the device.
8. The warranty expires if the devices has been tampered with or repaired by not authorized personnel.
9. The possible repairing intervention under warranty does not imply the extension of the original duration terms of the product warranty.
10. Nobody is authorized to modify the warranty terms or release other warranties, spoken or written, without the written authorization of RAIMONDI S.p.A.
11. The compensation of direct or indirect damages of any nature to people or things for the use or the suspension of use of the device is excluded.
12. Outside the Italian territory and where official importers are present the implementation of the after-sales service falls within the competence of the importers mentioned above.

REGISTER YOUR DEVICE

Raimondi machines are guaranteed for a period of 12 months from the date of purchase.

By registering your Raimondi machinery you will receive a rapid and efficient assistance service. And the advantages do not end here!

How do you register?

Register your own Raimondi device is very easy.

Go to the specific page of the website by scanning the QR CODE on the side with your smartphone or go to the site:

www.raimondispa.com/en/warranty-registration

You will find a simple form to compile where you will be asked few essential data to identify your device.



Thanks for choosing Raimondi

