D 500

ROTARY SEALER
WITH DOT MATRIX PRINTER

Cod. 35910

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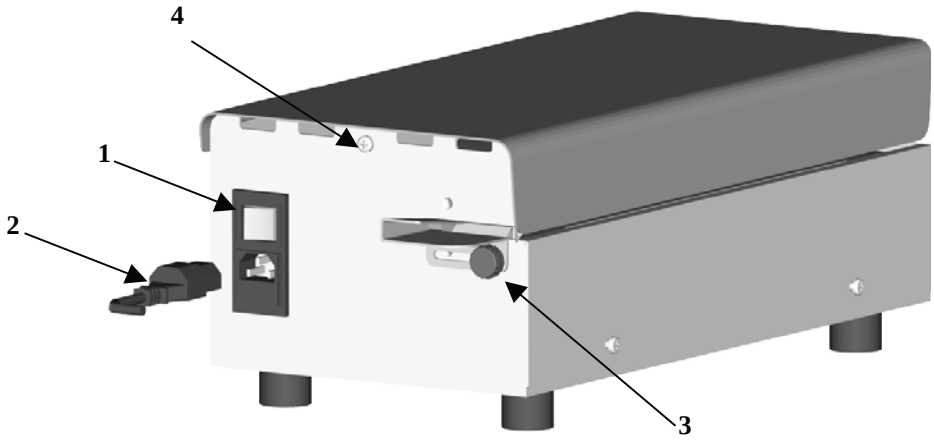
PAR 1.1

SYMBOLS

WARNING it means there is a danger

NOTICE it means you have to take note

NOTICE maintenance



Pict. a

PAR 1.2

GENERAL INFORMATION

WARNING

All people involved in the operation of this heat-sealer whether their task is production, maintenance or revision must read this instruction manual.

The instructions of use and maintenance containing in this manual, show the correct employ of the machine according with the project planning and its technical specifications.

This manual is supplied together with the sealing machine.

In case of lost or damage, the user can ask to the manufacturer for a new manual, having care of taking note: lot number, model, construction date and serial number mentioned on the plate placed on the side of the machine (see pict. a).

1.2.1 Expected use

The D 500 is a continuous heat-sealer for closing hermetically sterilization pouches with chirurgical instruments and disposable articles made of paper and multilayered materials as paper/polypropylene/ polyester aluminum/polyethylene, tyvek etc. with built-in dot matrix printer.

The heat-sealer is designed to be used by only one operator.

WARNING

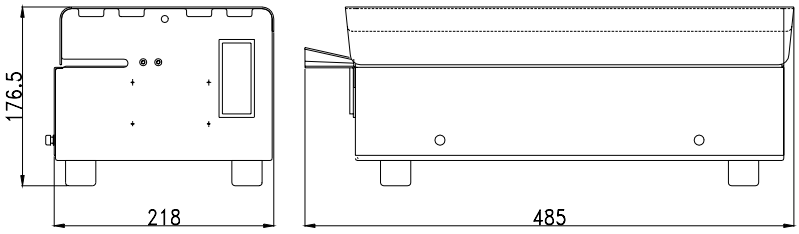
THE MACHINE MUST NOT BE USED FOR OTHER USE THAN THE ONE ABOVE MENTIONED, FOR WHICH THE MACHINE HAS BEEN DESIGNED AND BUILT.

THE HEAT SEALER MUST NOT BE USED FOR SEALING SINGLE PLASTICS FILMS LIKE POLYETHILENE, POLYPROPYLENE.

1.2.2 technical specifications

- Sealing speed 6 m/1'
- Electronic thermo regulator 50°- 180° C (± 1%) equipped with auto test and automatic setup of the temperature parameters
- Automatic stop of the heat-sealer if the temperature is +/- 5° from the setting value according to the material.
- Sealing width 12 mm
- Free edge 0 - 20 mm
- Pre-adjusted sealing pressure
- 9 dots matrix printer
- Power supply 230 V 50-60 Hz
- Power absorption 500 W
- Acoustic emission level under 70 dB(A)
- Dimensions without accessories (width x h depth)
  485x176x218 mm
- Net Weight: 13,5 Kg
- Built to: CEI EN 60204 - 1
- Seals to: DIN 58953 P-7
- Built to: CE rules

N.B. *GIMA S.p.A. reserves the right to modify the machines to update it, without any notice and any other obligation.*



PAR 1.3

SAFETY RULES

UNPLUG THE MACHINE FROM THE MAIN POWER SUPPLY (n°02 pict. A) BEFORE ANY MAINTENANCE OPERATION.

DO NOT OPERATE WITH THE HEAT-SEALER IF THE SAFETY PANELS ARE OPEN OR REMOVED.

Here below there is a list of the main safety rules to follow for the safety and maintenance of the machine:

- To ensure its good function, maintain the heat-sealer clean.
- Before cleaning procedures on the heat-sealer machine unplug it (n°02 pict. a) from the main supply.
- Do not clean the heat-sealer with fluid or spray cleaners.
- Wipe the outside with a slightly moist cloth and clean the inside with compressed air.
- Never introduce in the sealing area anything other than the bags to seal.
- Make sure that any metal objects be never introduced into the machine through the aeration leaks.
- The heat-sealer must be used only indoor and in a dampness free environment
  Temperature: 5°÷ 40° C (41° - 104° F).
  Humidity relative: 30% ÷ 95% (without condensation)
- Do not operate with the heat sealer in environments with risk of fire or explosion.
- Do not use the heat-sealer in packaging inflammable, corrosive or explosive substances or in any case with dangerous products for the operator.
- Use only original spare parts.
- It is advisable to have the heat-sealer machine checked by a qualified technician every year.
- Do not change the set parameters while the heat-sealer is working.
- Replace the fuses with other of the same type.

BEFORE ELECTRICAL WIRING, CHECK IF THE DATA ON THE IDENTIFICATION PLATE CORRESPOND TO THE LOCAL POWER SUPPLY

PAR 1.4

TO DISCARD THE MACHINE

The frame of the rotary sealing machine D 500 does not contain any particular polluting element, then it can be eliminated by normal discarding according with the current law.

Take out the data keeping battery of the main board, which has to be discarded according with the current law.

PAR 2.

INSTRUCTIONS FOR USE

2.1 Installation

The equipment can be used in any working environment that is dry and without excessive dust.
Position the sealer on a work surface, leaving a large enough space in front of it for the bags to run over.

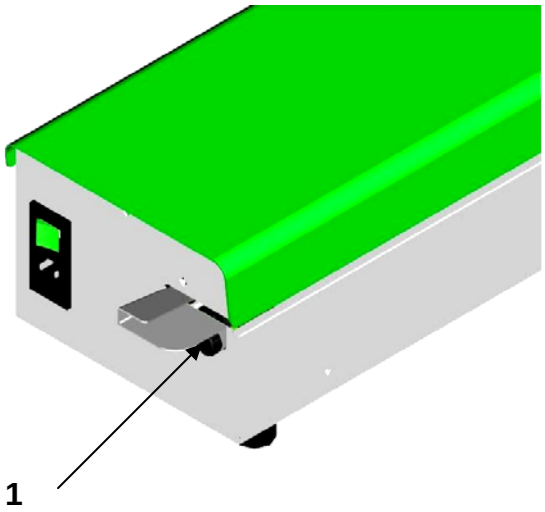
Ensure that the heat sealer is at least 30 mm from the back wall in order to allow a perfect release of the heat produced inside and that laterally it has the needed room for comfortable loading and unloading of the bag that are being sealed.

2.2 Infeed pouches adjustment

To allow an easier opening of the sealed sterilization pouches, it is necessary to leave a not sealed free edge over the seal.

According to the specific needs, it is possible to obtain an edge of 0 - 20 mm, as follows:

- unscrew the fixing knob (n° 1 pict. a)
- move it on the right to reduce the edge width the not sealed edge (min 0 mm)
- move it on the left to increase the edge width the not sealed edge (max 20 mm)
- at the end of this operation , screw the knob (n° 1 pict. a)



Pict. a

2.3 Electrical wiring

Check that the luminous main switch (n°1 pict. b) is switch off, in position "0" (off).

Insert the cable plug (n°2 pict. b) into the socket of the main switch group before introducing the plug into the single phase socket
(230V (*)).

Insert the plug into the single phase socket with protected earth from a magnetothermic switch, after checking that the data of the plate are the same of the power supply net.

(*) according to the version

2.4 switch on the machine

Press the GREEN main switch (n°1 pict. b) in position “I” (on).

The display lights showing the message “AUTOTEST” done by the software on the probe measuring the temperature of the sealing jaws.

in case of test failure, do not employ the machine and contact the technical service GIMA

The display passes automatically on the **operative visualization** showing the temperature value of the sealing jaws, which start their heating to reach the set temperature.

Once the machine reaches the set temperature ant the two values (current and set ones) are the same, the machine is ready to be used.

 Wait for some minutes till the temperature stabilizes.

2.5 First employ

 **to avoid unperfect seals, bad functioning or stops of the machine, the pouch has to be introduced into the machine well stretched, without wrinkles and any kind of labels and/or adhesive.**

According with DIN 58953 P7 rules, the pouch has not to be filled in more then ¾ of its length

After switching on (see par. 2.4), after reaching the set sealing temperature, the machine is ready to do the first seal.

 during the jaws heating, the electronics disenables the machine till the jaws have not reached the set temperature value.

Introducing the first pouch into the sealer through the infeed guide, adjusted according with par.2.2, the motors will automatically start and the pouch is infeeded into the machine.

If you do not introduce any pouches for approx. 15 sec., the motor reducer stops automatically, in order to avoid useless consumption and will start only when the operator introduces a new pouch.

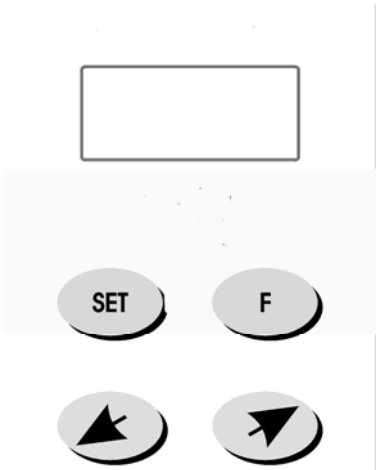
PAR 3.

COMMAND PANEL

In this section will be described the panel commands, which can be done by the operator to manage the working adjustments and the desired machine configuration.

- Working adjustment
- Machine configuration

The control panel (pict. c) allows the operator to visualize, set and/or modify the sealing temperature parameters and the printing parameters.



Pict. c

3.1 Key symbols

3.1.1 Function keys

SET setting function key; F service key

3.1.2 Setting keys

increase/decrease value keys

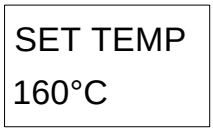
3.2 Operative settings

This section describes the operative settings of the machine.

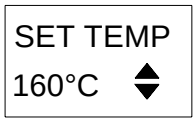
3.2.1 Sealing temperature

To set or modify the SET value of sealing temperature proceed as follows:

1. press SET ;
2. through the keys ↙ ↗ choose the function



3. press SET ; the display shows:



4. through the keys ↙ ↗ choose the new SET value
5a press F to confirm and go out from the menu

or

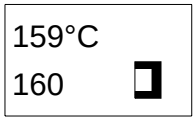
5b press SET to confirm and remain into the function

WE ADVICE, AFTER EVERY VARIATION OF SEALING TEMPERATURE VALUE, TO WAIT FOR SOME MINUTES BEFORE BEGINNING TO SEAL, TO LET THE TEMPERATURE STABILIZE AT THE NEW VALUE

3.2.2 Printer activation

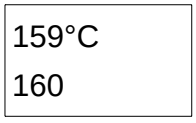
The key allows the operator to activate or deactivate the printer

- press F ; the display shows:



→ printer activated

- press F ; the display shows:



→ printer inactive

3.2.3 Pouch expulsion

When some pouches stop into the sealing tunnel, because of the temperature alarm function, the control system allows to take out the pouches from the machine. To make this do as follows:

- press for about 2 sec. the key 
- keep the key pressed until all the pouches are out of the machine

 releasing the key, the gear will keep running for about 5 seconds.

3.3 Machine configuration setting

This paragraph is concerned with the “machine configuration” and it consists of the following list of functions:

- SET OUTPUT PRINTING DATE FORMAT: mmddyy, yymmdd, mmyy

- SET OUTPUT PRINTING SYMBOLS: Clear, EN

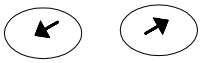
- SET OUTPUT PRINTING EXPIRY PERIOD:
  month (from 1 up to 60) i.e. 5
  days (from 1 up to 365) i.e. 48
  complete date (direct : dd/mm/yyyy) i.e. 14-05-2006 (or 05-14-2006)

- SET ACTUAL DATE/HOUR:

  year (2000-2099)
  month (1 – 12)
  day (1 – 31)
  hour (0 – 24)
  minute (0 - 60)
  second (0 – 60)

To access to the functions do as follows:

- press 

; through the keys  choose the desired function.

3.3.1 output printing date format:

The function allows the operator to set the printing date format on the sealed pouches.

- the display shows

F DATA
GGMMAA

- press SET : the two arrows appear
- through the keys ↙ ↗ choose the new format
- press F to confirm and go out from the menu

or

- press SET to confirm and remain into the function

3.3.2 output printing symbols

The function allows the operator to set the output of the symbols printed on the sealed pouches

- the display shows

SIMBOLI
CHIARO

- press SET : the two arrows appear
- through the keys ↙ ↗ choose the new format
- press F to confirm and go out from the menu

or

- press SET to confirm and remain into the function

3.3.3 expiry periods

The function allows the operator to set the expiry date period choosing among three options :

a) option choosing

- the display shows | T. SCAD mesi | (last option set)

- press SET : the two arrows appear

- through the keys ↙ ↗ select | T. SCAD giorni | T. SCAD diretta

b) expiry date duration

- press ↗ ; the display shows according to the expiry date format :

SCADENZA mesi 3	SCADENZA gior 3	AA scad 2005

- press SET : the two arrows appear

- through the keys ↙ ↗ set the new value

- press F to confirm and go out of the menu

or

- press SET to confirm and remain into the function

NOTE : in case of *direct expiry* date choosing, you have to set the month and the day of the expiry date too. Do as follows.

- after the year value setting, press ↗ and the display shows | MM scad 10 | (month)

- press SET : the two arrows appear and through the keys ↙ ↗ set the new value

- press SET to confirm

- press ↗ and the display shows | GG scad 15 | (days)

- press SET : the two arrows appear and through the keys ↙ ↗ set the new value

- press SET to confirm or F to confirm and go out of the menu

NOTE : the system does not accept expiry date preceding the actual production date. If it occurs the expiry date will be set automatically equal to the actual production date

3.3.4 Actual date/hour adjustment

The function allows the operator to set the clock parameters of the machine to synchronise the printed dates on the pouches with the actual date and hour.

press SET ; through the keys ↙ ↗ choose the desired function:

ANNO 2001	MESE 10	GIORNO 2
ORA 13	MINUTI 36	SECONDI 45

NOTE:
anno means year
mese means month
giorno means day
ora means hour
minuti means minutes
secondi means seconds

For each function do as follows:

- press SET : the two arrows appear
- through the keys ↙ ↗ choose the new value for the months
- press F to confirm and go out of the menu

or

- press SET to confirm and remain into the function

3.4 Alarm messages

In case of some functioning problem, the alarm system shows lighting messages on the display, stopping the thermo regulator functioning.

Stop immediately the pouches infeed.
(the pouches transport is still activated)

In presence of alarms, the system stops immediately the pouches transport.
So, if some pouches are blocked into the machine, to avoid possible rests of melt material, do the expulsion command (par.3.2.3)

3.4.1 Sealing bars temperature control message

display visualization:

161°C
155 !

The message origins every time the actual bars temperature is higher or lower than the allowed range of functioning.

Action: the machine stops the pouches transport until the temperature re-enter the allowed range of functioning (≶ 5° than the SET)

RESET Procedure: wait

the appearance of the message is normal every new change of the SET temperature

3.4.2 Message control battery data maintenance

display visualization: ----

Action : the machine doesn't do corrective actions

RESET Procedure: change battery data maintenance ((see electric diagram)

 When the battery is discharged you loose the following data:

- current hour
- current data

which must be inserted every new switch on of the machine.

3.4.3 Message temperature probe out of order

display visualization:

The message appears when the starting AUTOTEST of the integrity of the probe and/or its connections is not passed.

Action : the machine remain blocked

RESET procedure: change the temperature probe.

PAR 4

CORRECT FUNCTIONING

4.1 Sealing temperature

The sealing temperature has to be set according to the thickness, the kind and the condition of the material to be sealed.

Check that the set temperature corresponds to the suggested one by the pouches manufacturer.

Should this value be unknown, follow the table below, containing indicative adjustment values of the heat sealer, according with the used material.

STANDARD STERILIZATION POUCHES (*)

MATERIALS	PAPER/POLYPROPYLENE-POLYESTER	HEAT- SEALABLE PAPER	TYVEK
FLAT POUCH	140°-145° C	130°-140° C	100°-110° C
GUSSETED POUCH	145°-150° C	140°-150° C	- - - - - - - -

(*)GIMA S.p.A. takes no responsibility for the given data reliability.

For other materials or in case of troubles in finding the correct temperature, please send GIMA S.p.A. a sampling of bags to allow comparative tests and calculate the relevant adjustment values.

To set a new sealing temperature value see par. 3.2.1

Make some tests to check the correctness of the new temperature value.

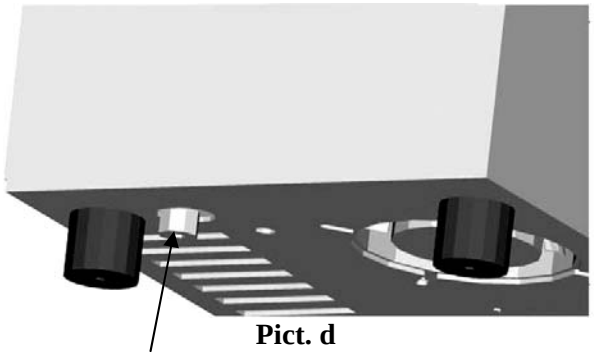
4.2 Sealing pressure

The sealing pressure is already set by the manufacturer according with all materials normally in use

In case you should need a pressure increase/decrease for special purposes, turn the regulation nut (n°1 pict. d) reachable from the bottom of the machine.

- Screwing the adjustment nut (n°1 pict. d) the pressure is increased
- Unscrewing the adjustment nut (n°1 pict. d) the pressure is decreased

Any pressure increase must be limited not to damage the counter wheel (n° 3 pict. i) and the motor (n°2 pict. h).



Pict. d

4.3 Sealing quality

In order to obtain steady high quality seals, please follow these guidelines.

- During the sealing cycle the bag should not be submitted to any traction or moves
- Make sure that the part of the bag to be sealed is clean and dry
- Place carefully the mouth of the bag to be sealed inside the infeed guide; during this operation remove the air in excess
- Keep the mouth of the bag spread out until it is fully introduced in the sealing area of the machine; this will prevent from any damage to the sealing
- never feed the pouches into the in-feed guide using a feeding speed higher than the machine transport speed
- pouches feeding too much fast, can interfere with the in-feed photocell characteristic that might cause a transport stop
- Do not stop the sealer during the sealing, with the exception of emergency situations

Never introduce into the machine bags on which labels or adhesive tapes are applied; this origins rests of material into the sealing tunnel, which causes the bags jam into the machine.

To obtain perfect seals and to make the work easier, the DIN 58953 rules state that the pouches must not to be filled more than the 3/4 of their length, letting always not less than 30 mm between the content and the internal edge of the seal.

4.4 Normal stop of the heat sealer

To switch off the machine press the main GREEN luminous switch to the position “O” (off).

With the exception of emergency situations, do not stop the machine during the running of one or more bags in the sealing area. This will avoid the overheating of the bags and the burning of material.

To avoid useless consumption of power and wear, the heat sealer motor will stop automatically if no bag is introduced in the sealer during the last 15 sec.

4.5 Emergency stop

Turning the luminous green general switch (n°1 pict. a) you stop the power supply and all the moving parts of the sealer.

To restart the machine after removing the trouble, turn again the luminous green general switch.

The heat sealer will start after some minutes, as during the stop the temperature is decreased.

4.6 Printer

The D 500 has a built-in matrix printer with ink ribbon.

If you choose the printing function from the control panel (see par. 3.2.2), the printer will engrave the data set by operator on the seal of the bag before it goes out of the machine

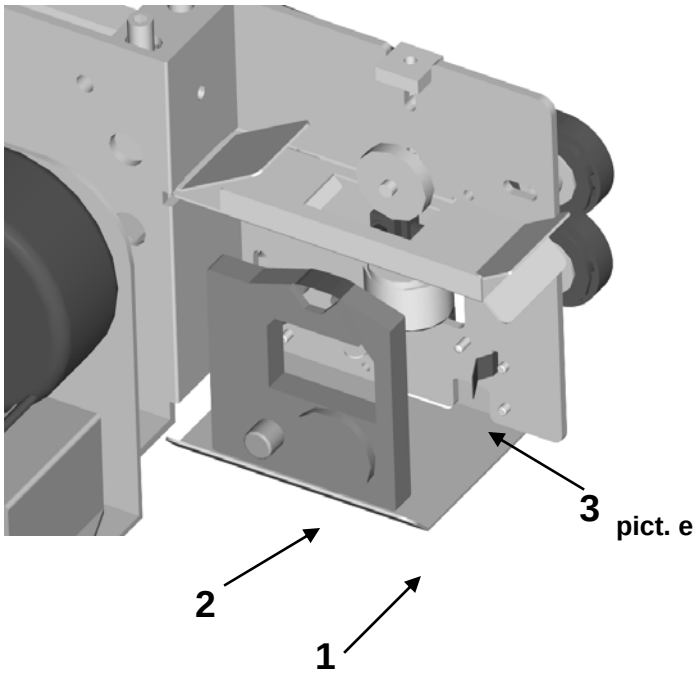
The printer works correctly if the print quality is neither too soft nor too strong.

The printing function is electronically controlled by the infeed photocell, which activates the print as soon as the pouch runs into its area.

The photocell works correctly if the printing phase stops automatically before the bag is out of the machine.

4.6.1 Insert/extraction of the ribbon case.

To insert the case, follow these guidelines (see pict. e):

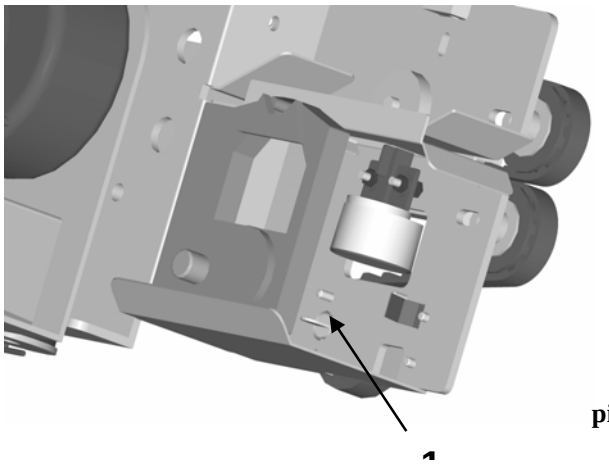


pict. e

unplug the power cord from the machine

- Open the upper carter unscrewing completely the two screws on the sides (n°4 pict. a)
- introduce the case (n°2 pict. e) in its place, leaning it on the guide plane (n°1 pict .e) slightly inclined on the rear of the machine and turned
- look for the two hook pins (n°3 pict. e) of the ribbon case
- once the case is completely in its place, lean it on the more internal pin and, without forcing it, bring the case to the external pin until you hear the hook “click”.

check that the projecting edge of the motor drive shaft (n°1 pict. f) is in the place of the ink ribbon case.



pict. f

check that the ribbon is correctly extended.

to avoid damages to the dots of the printing head, do not use the printing head without the ink case inserted.

4.7 Bag jamming

In case of a bag jamming into the machine, do as follows:

SWITCH OFF THE MACHINE IMMEDIATELY, THROUGH THE GENERAL LUMINOUS SWITCH

- **Do not pull out the bag towards the external of the machine to avoid:**

  1. **Irreparably damages to the printing head dots**
  2. **rest of material, which should obstruct the sealing tunnel and/or the printing area, with a consequent jam of the following bag.**

to avoid pouches jam, follow the instructions of par. 4.3 e 4.6.1

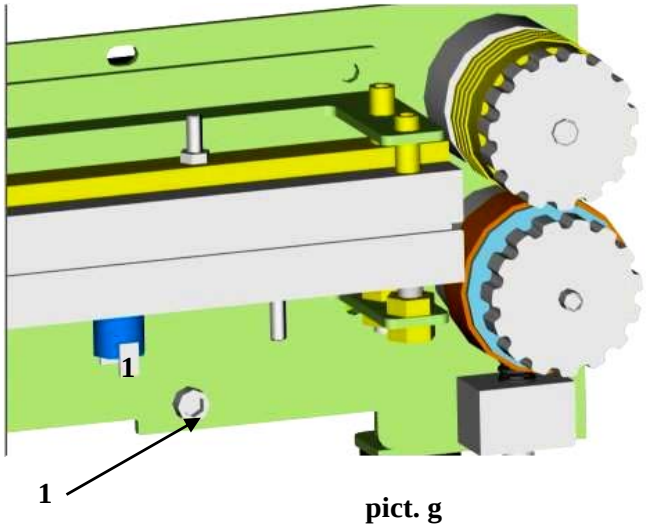
4.7.1 Extraction of the jammed bag

In case of a bag jamming in the pressure and/or printing zone, do as follows:

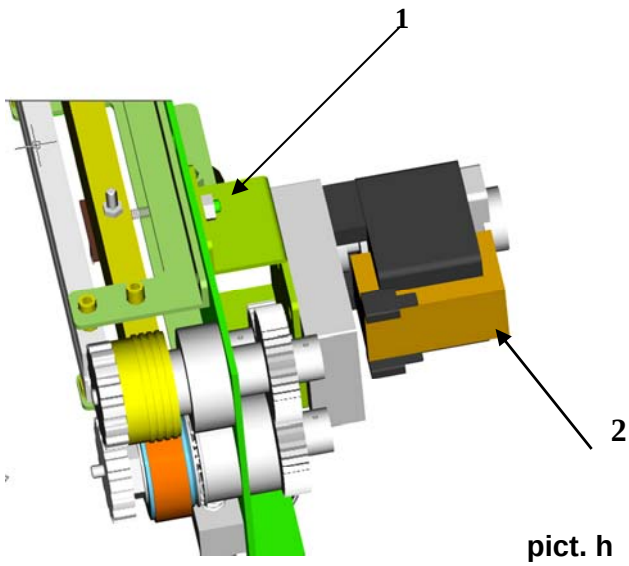
- Switch off the machine, through the green general luminous switch
- Unplug the power cord
- Open the upper carter, unscrewing the two screws
- Take out the ink ribbon case, as described in par. 4.6.1
- Hang with the right hand the transport upper belt and pull it towards right SLOWLY and WITHOUT BREAKSI.
  In the meanwhile pull the jammed bag with the other hand making it go backwards until is it possible to extract it from the infeed guide

In case of special heavy jamming, do as follows:

- Decrease the sealing pressure, like described in the par. 4.2.
- Take out the ink ribbon case, like described in par. 4.6.1
- Free the gear motor (n°2 pict. h) turning it anticlockwise after having unlocked the upper locknut (n° 1 pict. h) and the rotation screw (n°1 pict. g)
- Hang with the right hand the transport upper belt and pull it towards right SLOWLY and WITHOUT BREAKSI.
  In the meanwhile pull the jammed bag with the other hand making it go backwards until is it possible to extract it from the infeed guide



pict. g



pict. h

4.7.1.2 Restore of the machine for the correct functioning

After letting free the bag, before restarting the machine, do as follows:

- Be sure that there are no bag pieces into the sealing tunnel
- Restore the sealing pressure, if modified (see par. 4.2)
- Place the motor gear in its original position, if changed
- Remount the ink ribbon case
- Close the carter screwing the two screws
- Plug the power cord

Now the machine is ready for the restarting.

PAR 5.

MAINTENANCE

Before doing any interventions on the machine, disconnect the power supply.

5.1 Opening the machine

5.1.1 carter

- unscrew the two screws, placed on the sides (n° 4 pict. a)
- remove the carter

5.1.2 front cover

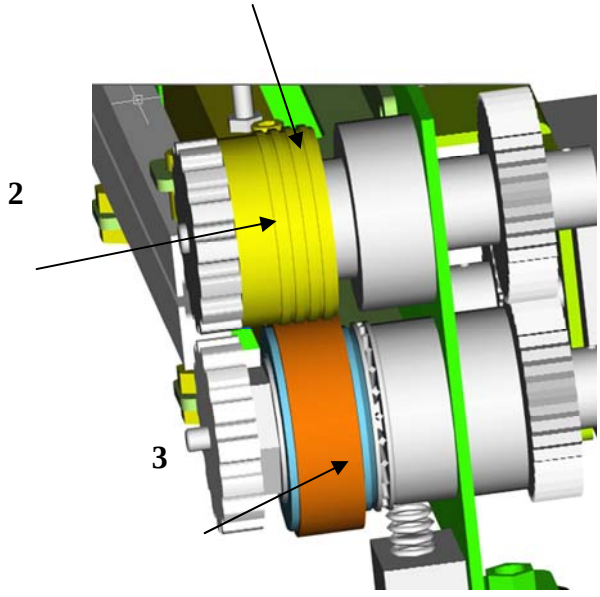
- unscrew the two screws, placed on the front (n°3 pict. a)
- remove the front cover

5.2 Main previous maintenance rules

5.2.1 pressure wheel

Check periodically the pressure wheel (n°2 pict. l) grooves (n°1 pict. l) in order to make sure that they are clean without any rest of pouches.

On the contrary, clean them with a soft band or with a small plastic or wooden stick.



Pict. l

Do not use any metal objects, which could damage irreparably it.

5.2.2 sealing jaws

Check periodically that the surfaces (in teflon) of the sealing jaws in contact with the pouches are clean without any rest of pouches.

On the contrary, clean them with a soft band or with a small plastic or wooden stick.

Do not use any metal objects, which could damage irreparably them

To access to the sealing jaws see par. 5.5

5.3 Thermo electrical protections

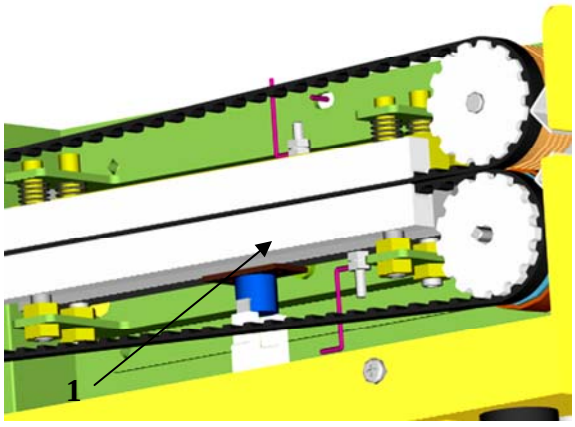
D 500 sealer is equipped with a thermo electrical protection to avoid dangerous overheating.

5.3.1 thermo-protection through a thermostat (n°1 pict. m), which intervenes in case of fails in the electronic temperature control.

In this way any danger of overheating is avoid and the machine stops immediately.

If, after the stop of the machine through the thermostat (n°1 pict. m), you do not switch off the main green switch, the machine will start functioning, as the temperature has decreased under its intervention value.

In this case stop the sealer and contact the Manufacturer.



Pict. m

5.4 Replacement of the sealing jaws temperature probe

The probe measuring the sealing jaws temperature, does not need any maintenance.

PROBE TYPE: thermocouple J

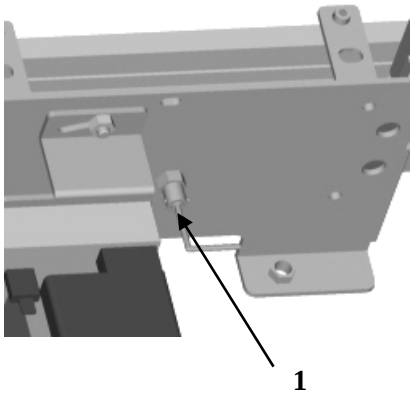
5.4.1 access to the probe

- open the machine, following the instructions 5.1.1 and 5.1.2 and identify the probe (n°1 pict. p) placed on the lower jaw (n°2 pict. p)

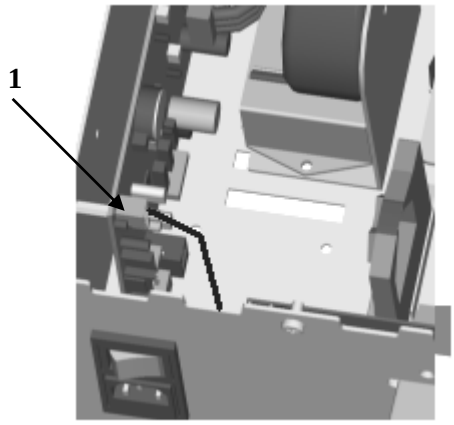
5.4.2 replacement

- disengage the probe mount, turning the locknut (n° 1 pict. n)
- disconnect the cable of the probe (n°1 pict. o) from the main board
- take out the sensible terminal (n° 1 pict. p) of the probe from the lower sealing jaw (n° 2 pict. p)
- take out the cable from the locknut and remove the probe from the machine
- replace it with a new one

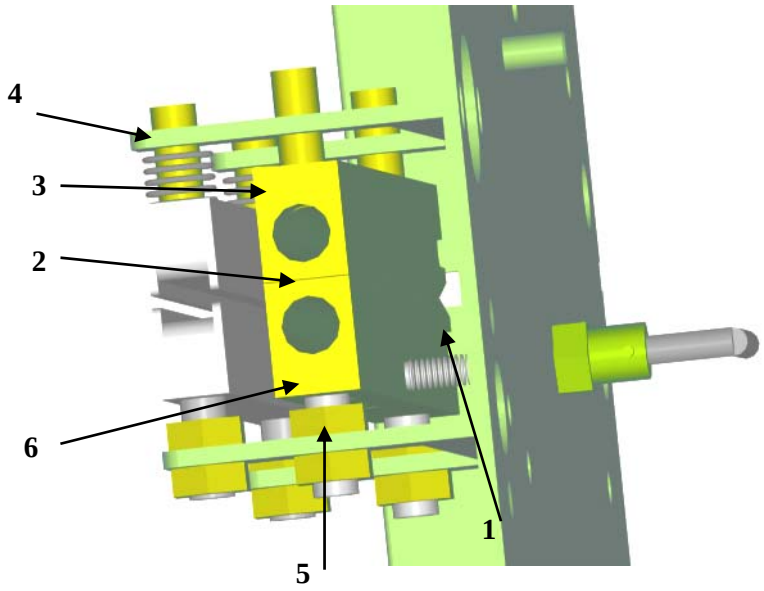
during the mounting operation of the new probe strew the sensible terminal with conductor paste (like the one used for the personal computer)



Pict. n



Pict. o



Pict. p

5.5 Replacement of the heating element

the connection of the two heating element is of SERIE type (see the electrical diagram)

HEATING ELEMENT TYPE: round;
Power:0.2 Kw , l=200mm

5.5.1 access to the heating element

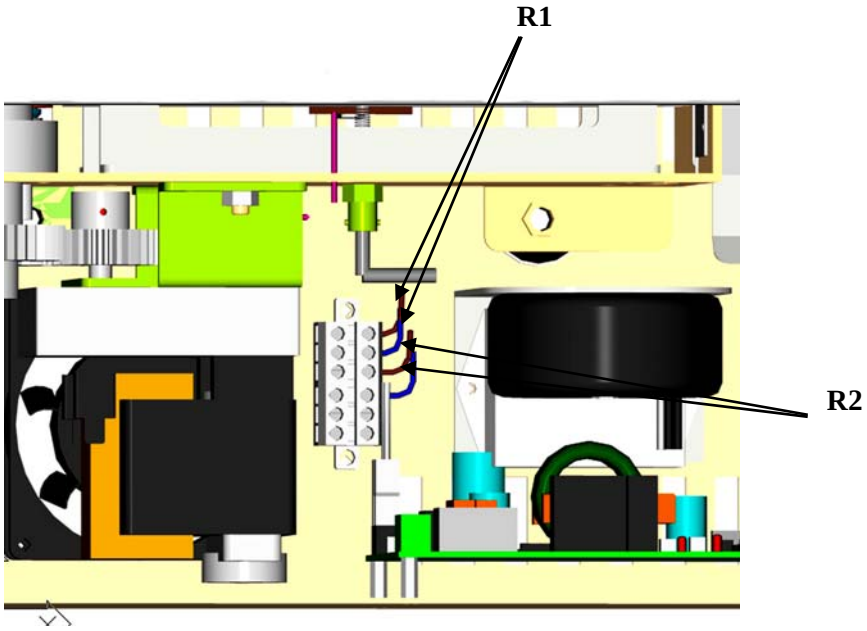
- open the machine following the instructions 5.1.1 e 5.1.2 and identify the heating elements placed inside the sealing jaws (n° 2 e 3 pict. p)

5.5.2 replacement of the heating element in the upper sealing jaw

- disengage the probe mount, turning the locknut (n° 1 pict. n)
- remove the upper transport jaw (n°1 pict. r) unscrewing the two guide pins (n°2 pict.r)

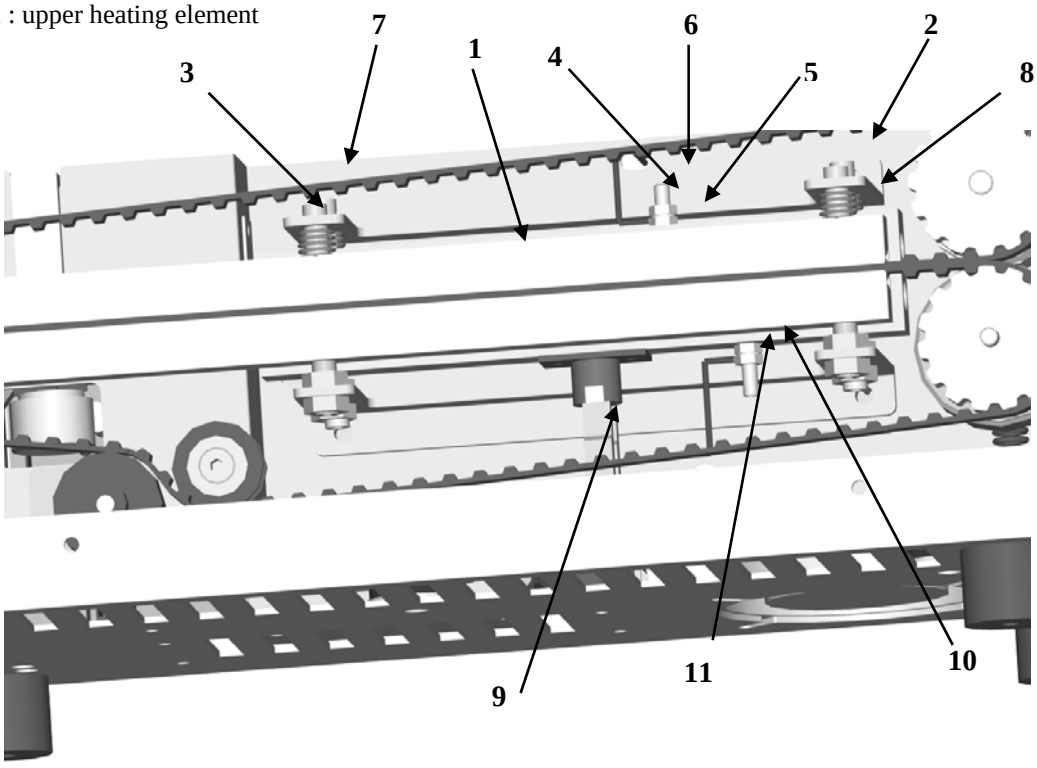
be careful not to loose the two pressure springs (n°3 pict. r o n° 4 pict. p)

- disconnect the two cable edges of the heating element from the terminal bloc (pict. q)
- unscrew the locknut of the ground cable (n°4 pict. r)
- unscrew the nut (n°5 pict.r) and remove the ground cable
- unscrew the lock grain of the heating element (n°6 pict. r)
- unscrew the two guide pins (n°7 pict. r) with the pressure springs (n°8 pict. r)
- remove from the machine the assemby jaws+heating element



pig. q

R1 : lower heating element
R2 : upper heating element



Pig. r

- insert the new heating element in the sealing jaw in such a way that it is completely contained into the jaw seat.

during the remounting operations do not exceed with the loosing, especially in the lock grains of the heating element

5.5.3 replacement of the heating element in the lower sealing jaw

- follow instruction 5.5.2
- disconnect the FASTON (n° 9 pict. r) from the thermostat
- unscrew the locknut of the ground cable (n°10 pict. r)
- unscrew the locknut (n°10 pict. r) and the lock grain of the heating element (n°11 pict. r)
- unscrew the lower locknuts (n°5 pict. p) and remove the assembly heating element + jaw

do not unscrew the register nuts (n°6 pict. p)

5.6 replacement of the sealing jaws

the replacement of the sealing jaws is necessary only in case of worn out of the teflon cover.

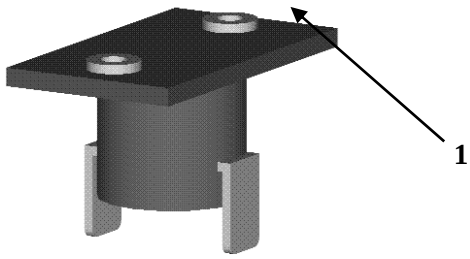
For the replacement procedure do as follows:

- operations as described in the par. 5.5.2 e 5.5.3

it is not necessary to disconnect the edges of the cables of the heating elements from the terminal bloc

- remove the thermostat (n°1 pict m)

when you remount the thermostat, be sure to remount the spacer washers (n° 1 pict. s) placed between the plate and the lower sealing jaw.



pict. s

5.7 replacement of the transport belts

type : timing ones L pitch sv. = 322 mm width= 8mm

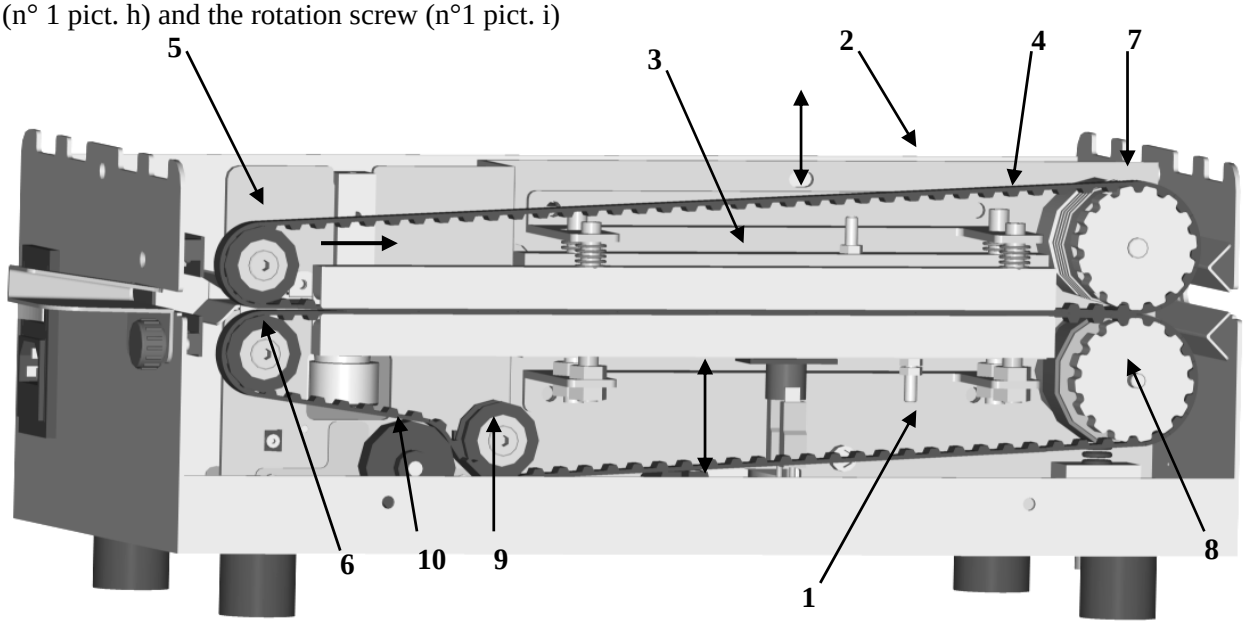
The timing transport belts do not need any previous maintenance.
Their replacement is suggested only in case the teeth or the cover, which are in contact with the pouches, are worn out

5.7.1 Access to the belts

- open the machine following the instructions 5.1.1 e 5.1.2 and identify the upper transport belt (n°2 pict. t) and the lower one (n°1 pict. t).

5.7.2 Transmission disengage

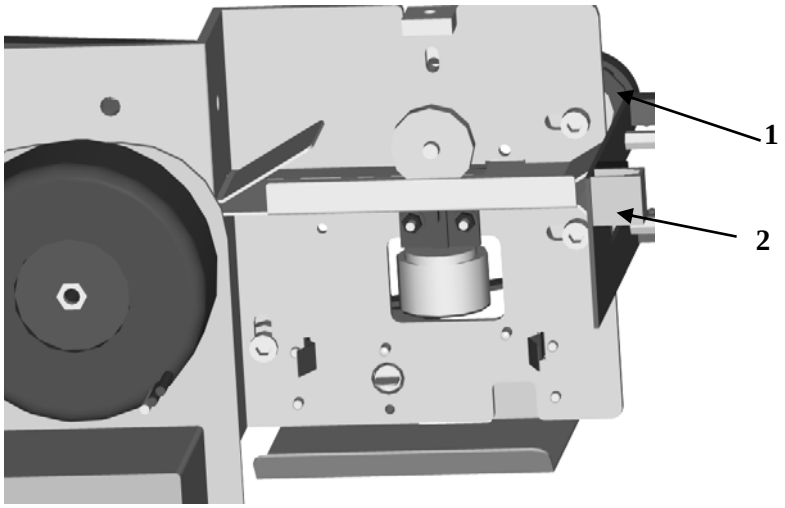
- discharge the sealing pressure (see par. 4.2)
- disengage the motor reducer (n° 2 pict. i) turning it anticlockwise and after unscrewing the upper locknut (n° 1 pict. h) and the rotation screw (n°1 pict. i)



Pict. **t**

5.7.3 take out the belts

- remove the ink cartridge
- remove the upper transport jaw (n°3 pict. t) unscrewing the two guide pins (n°4 pict.t);
- unscrewing the lock screw (n°1 pict. u), unscrew the upper conduct pulley (n°1 pict. t) according to the arrow direction
- take out the upper transport belt from the upper motor pulley (n°7 pict.t) with a low pressure towards the outside
- unscrewing the lock screw (n°2 pict. u), unscrew the lower motor pulley (n° 6 pict. t) according to the arrow direction
- take out the lower transport belt from the lower motor pulley (n°8 pict. t) and the returning one (n°9 pict. t) with a low pressure towards outside



Pict. u

5.7.4 How to mount the belts

- Insert the lower transport belt first of all on the lower motor pulley than on the returning one (n° 9 pict. t) and finally on the lower conduct pulley (n°6 pict. t).
- Stretch the lower belt fixing it with the screw (n°2 pict. u)

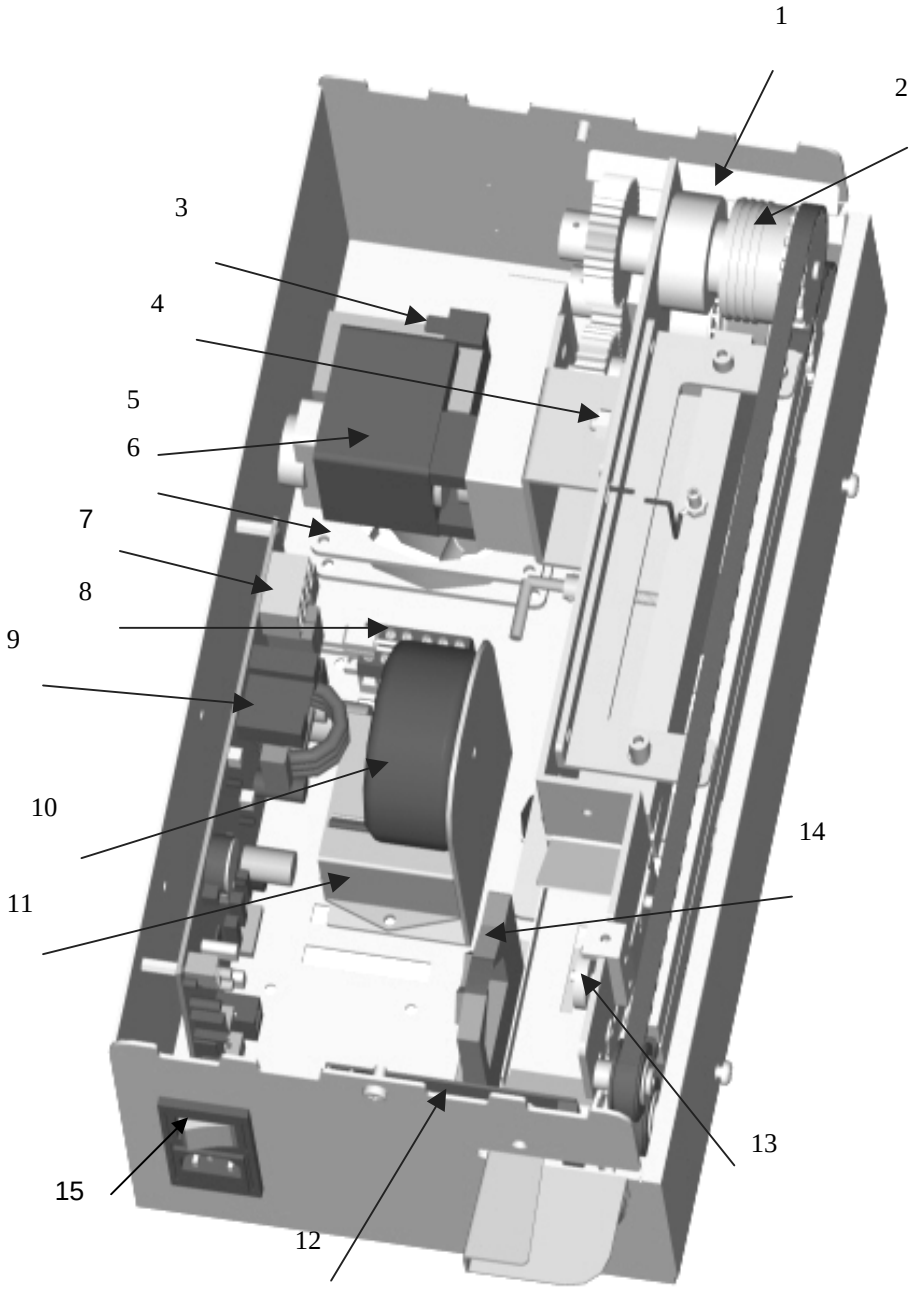
correct tensioning (see pict. t) :
small vertical oscillations during the transport
when the ink cartridge is inserted, the belt does not shift on the infeed pulley (n°10 pict. t)

- Stretch the upper belt, screwing the couple of nuts of the upper conduct pulley (n°1 pict. u)

correct tensioning (see pict.t) :
small vertical oscillations during the transport

- remount the upper transport jaw (n°3 pict. t) screwing the two guide pins (n°4 pict.t) with the relative springs
- Recharge the right sealing pressure (see par 4.2)
- Reposition in its correct way the motor reducer
- Remount the front cover, screwing the two screws on the front
- Close the carter screwing the two screws on the sides

5.8 table of the main components



Pict. v

1 : exit guide
2 : pressure pulley
3 : motor reducer faston
4 : motor reducer locknut
5 : motor reducer
6 : fan
7 : main board 230 Vac connector
8 : terminal bloc
9 : main board
10 : transformer 230/24 Vac , 50 VA
11 : anti jamming filter
12 : starting photocell
13 : counter wheel ring
14 : ink cartridge
15 : fuses 3.15 AF section

5.9 printer

The printer needs only some maintenance operations. See list below.

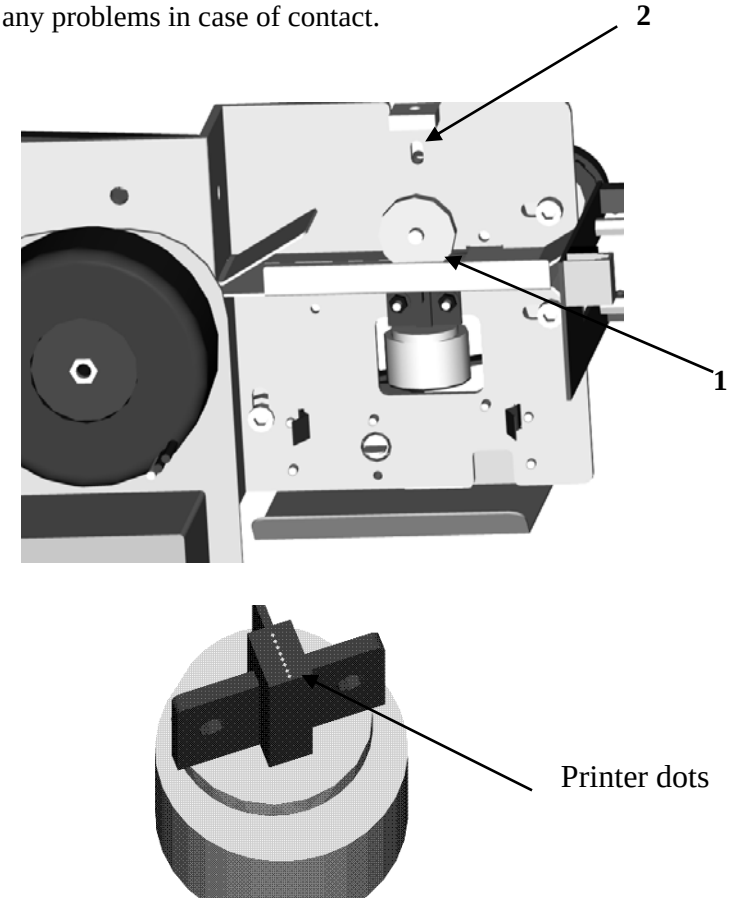
- keep clean the printing head dots (n°1 pict. z) and the surface of the counter roll (n° 2 pict. z), to avoid the rest of ink. Use a cotton flock with alcohol.

Do this cleaning operation periodically, according to the use of the machine.

The cleaning operation has to be done always after disconneting the power supply plug and taking our the ink cartridge from its seat.

TO AVOID ANY DAMAGE ON THE PRINTING DOTS, DO NOT USE THE MACHINE WITHOUT INSERTING THE INK CARTRIDGE.

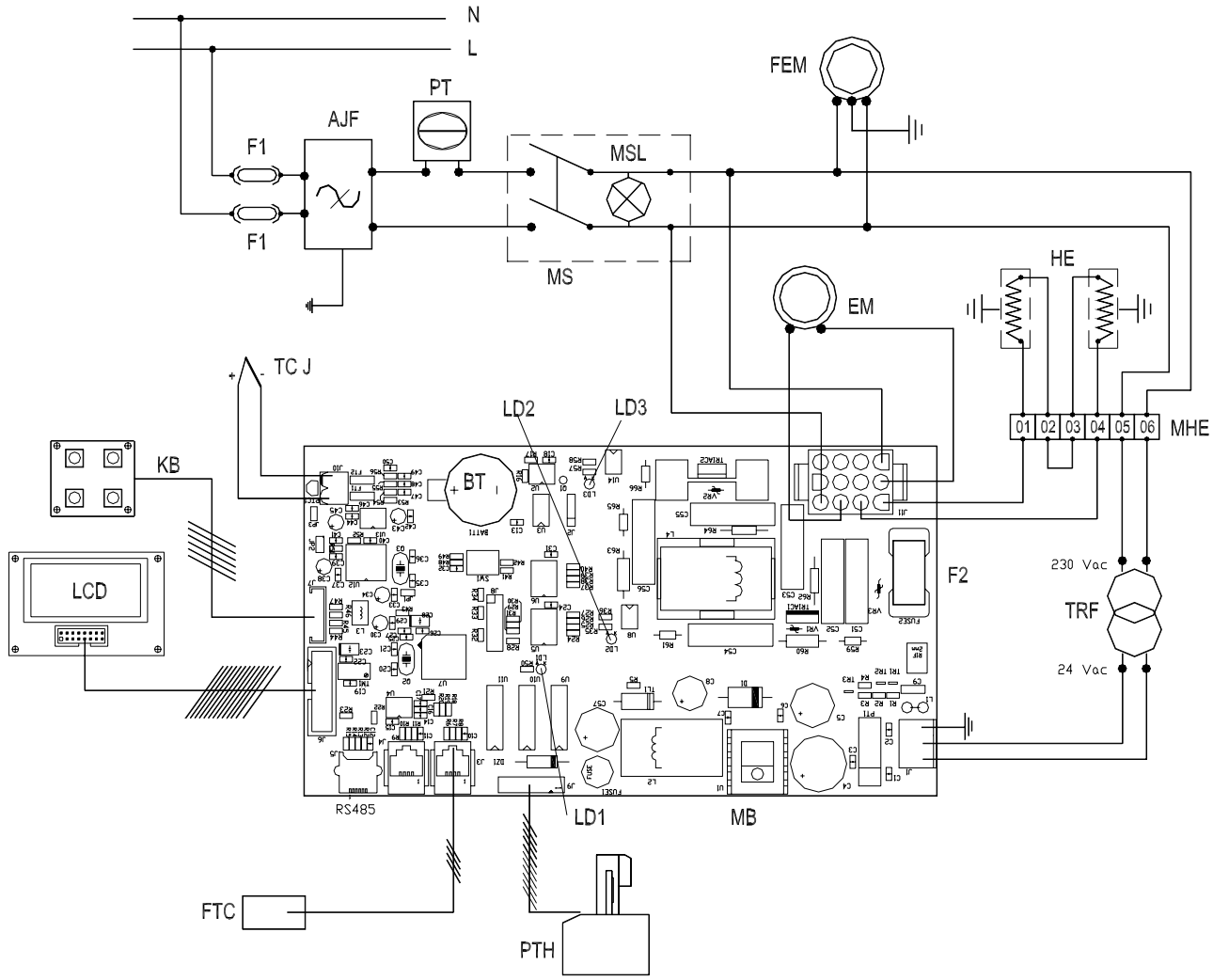
If the cleaning operation is done after an intensive use of the machine, be sure that the printing head is not too hot, to avoid any problems in case of contact.



Pict. z

PAR 6.

GENERAL ELECTRICAL DIAGRAM

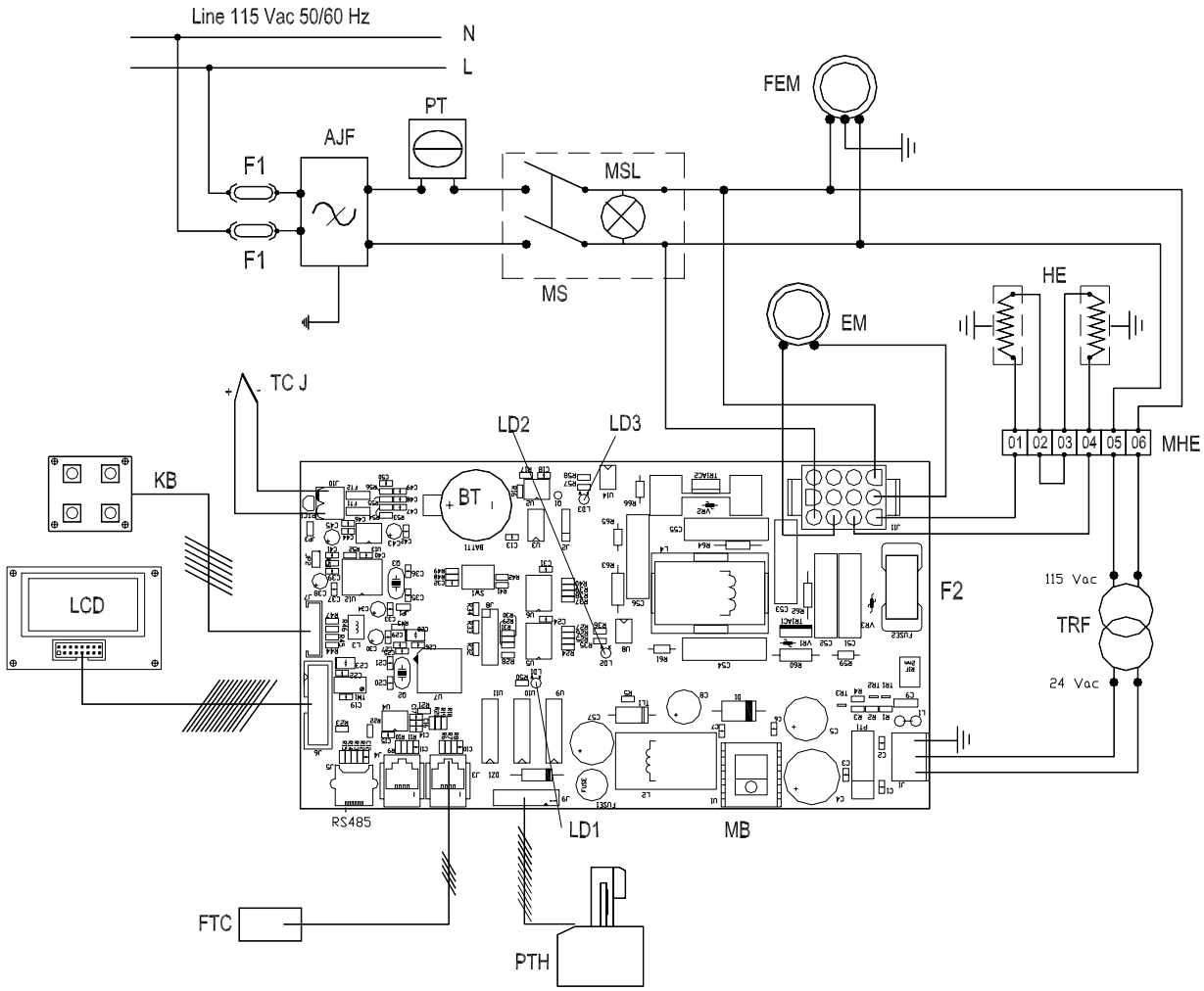


LEGEND :

AJF	antijamming filter
BT	batteria tampone
EM	transport motor reducer
F1	fuse 3.15 AF
F2	main board fuse 3.15 AT
FEM	fan
FTC	infeed photocell
HE	heating element 200 w
KB	coomand panel
LD1	photocell led
LD2	motor reducer led
LD3	heating modulation led
LCD	LCD display
MB	main board
MHE	terminal bloc
MS	main switch
MSL	main switch lamp
PT	thermoprotection
PTH	printing head
TCJ	probe
TRF	transformer 230/24 Vac

PAR 6.

GENERAL ELECTRICAL DIAGRAM



LEGEND :

AJF	antijamming filter
BT	batteria tampone
EM	transport motor reducer
F1	fuse 6.3 AF
F2	main board fuse 6.3 AT
FEM	fan
FTC	infeed photocell
HE	heating element 55 VAc 200 w
KB	coomand panel
LD1	photocell led
LD2	motor reducer led
LD3	heating modulation led
LCD	LCD display
MB	main board
MHE	terminal bloc
MS	main switch
MSL	main switch lamp
PT	thermoprotection
PTH	printing head
TCJ	probe
TRF	transformer 115/24 Vac

PAR 7

PROBLEMS & SOLUTIONS

In this section are mentioned the problems, which can occur during the use of the sealing machine and for each one is showed the possible solution.

If, even following the given instructions, you can not solve the problem, put in contact with yr dealer or directly with us.

7.1 Power supply

- **The sealer does not function and the main green switch (n°2 pict. a) does not light up**

  The fuses (n°15 pict. v) are blown up: replace them with new ones of the same kind and class

  ! If still after their replacement, the fuses intervene again, put in contact with the manufacturer, as the possible cause should be a short circuit in the machine.

  a) The power cord (n° 2 pict. a) is disconnected or broken down: reconnect or replace it, after testing its functioning, connecting it to an other device
  b) The thermostat (pict. s) has intervened. In this case (cfr. par 5.3) stop the machine

7.2 Seal

- **The seal shows some lacks along the edges:**

a) verify that the set temperature value is suitable according to the kind of pouches to be sealed (see table par 4.1)
b) wait that the temperature stabilizes, especially every time you make an adjustment change
c) follow the instructions par. 4.1, 4.3

- **The seal, even if done with the correct temperature, does not resist:**

a) follow instructions par. 4.2

- **The sealing jaws do not heat**

a) Verify that on the main board the red led (LD3 general electrical diagram) lights up:
   - LD3 switch on :→ electrical break down of one or both the heating elements: see par. 5.5
   - LD3 switch off :→ lack on the main board: put in contact with the technical assistance

- **the seal, in the edge zone, shows a shrinkage of plastic material:**

a) check that the sealing zone is free and clean. Verify that the pouch, if it is too heavy or thick, has found any obstacle during its infeed.
b) verify that the pouch mouth, inside and outside, is clean and dry, before sealing it
c) check that the sealing jaws and the pressure wheel are clean

7.3 Transport

- **The motor does not stop automatically after 15 sec. no pouches are infeeded into the machine:**

a) Check that the two infeed photocell transmitters (see pict. u) are aligned and clean . In this case the led LD2 (see electrical diagram) remains always switch on
b) Check that the connection phone cable, connecting the infeed photocell and the main board, is correctly inserted in the relative plugs

- **The motor does not infeed**:

a) the motor gears are worn out: replace the motor reducer
b) check that the "faston" of the power supply connection (n° 3 pict. v) to the motor reducer are correctly inserted
c) the infeed zone is submitted to excessive ambiance light: in this case the led LD1 (see electrical diagram) remains switch on

7.4 Alarm messages

In case the display visualizes an alarm message, follow the par **3.3** and the described instructions for the different kinds of alarms.

7.5 Printer

- **The printing string is not too marked on the sealed pouch:**

a) verify the status of the ink cartridge, if it is worn out replace it with a new one
b) do some printing tests
c) verify that the printing head is clean (see par. 5.9)

- **The printing string is too marked on the sealed pouch:**

a) the cartridge has too much ink: replace it with a new one.
b) do some printing tests

- **the built-in dot matrix printer does not print on the pouch:**

a) see par. 3.2.2
b) the infeed zone is submitted to an excessive ambiance light. Protect this area from the light.
c) the printing dots can be blocked in their seats because of the excess of ink and/or paper powder. Clean them.
d) the printing head is electrically broken down. Verify that the flat cable connector is right inserted into its seat of the main board (see electrical diagram)