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**ATENCIÓN! INFORMACIONES IMPORTANTES - ATENÇÃO! INFORMAÇÕES IMPORTANTES**

**I**

#### **INTERRUTTORE DI SICUREZZA CRUSCOTTO COMANDI**

All'apertura del "cruscotto comandi" l'interruttore di sicurezza interrompe l'alimentazione elettrica.

Quando si devono eseguire controlli funzionali a cruscotto aperto, tirare il perno come indicato in figura per ripristinare l'alimentazione elettrica.

Dovendo reintervenire su dei componenti all'interno della macchina dopo aver eseguito il punto precedente, premere il perno indicato in figura per interrompere nuovamente l'alimentazione elettrica. La chiusura del cruscotto ripristinerà attraverso l'interruttore l'alimentazione elettrica.

**GB**

#### **COMMAND PANEL SAFETY SWITCH**

When the "command panel" is opened the safety switch cuts off the electricity.

When the machine's functions need to be checked with the panel open, pull the pin as indicated in the figure to restore the electricity.

If after the having restored the electricity interventions need to be made to the components inside the machine, press the pin shown in the figure to cut off the electricity once again. The electricity will be restored via the switch when the panel is closed.

**F**

#### **INTERRUPTEUR DE SECURITE' TABLEAU DES COMMANDES**

Dès l'allumage du "tableau des commandes", l'interrupteur de sécurité interrompt l'alimentation électrique.

Lorsque les vérifications du "tableau des commandes" doivent être faites à appareil ouvert, tirer le pivot comme indiqué sur le dessin ci-contre pour remettre l'alimentation électrique.

Lorsque l'on doit intervenir à nouveau sur des composants se trouvant à l'intérieur de la machine après avoir effectué le point précédent, appuyer sur le pivot indiqué sur le dessin reporté ci-après pour interrompre à nouveau l'énergie électrique.

La fermeture du clavier engendrera l'alimentation électrique par l'intermédiaire de l'interrupteur.

**D**

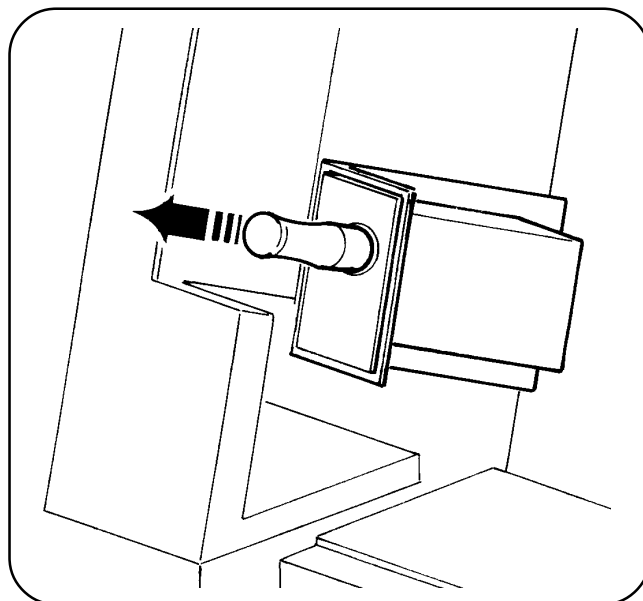
#### **SICHERHEITSSCHALTER DER STEUERTAFEL**

Bei Öffnung der Steuertafel wird die Stromversorgung durch den Sicherheitsschalter unterbrochen.

Wenn Funktionskontrollen bei geöffneter Steuertafel vorgenommen werden, müssen Sie zur Rückstellung der Stromversorgung den in der Abbildung gezeigten Stift ziehen.

Sollten danach Eingriffe an den in der Maschine befindlichen Komponenten vorgenommen werden, so müssen Sie den in der Abbildung gezeigten Stift zur erneuten Unterbrechung der Stromversorgung drücken.

Bei Schließen der Steuertafel wird die Stromversorgung durch den Sicherheitsschalter erneut wiederhergestellt.

**E**

#### **INTERRUPTOR DE SEGURIDAD DEL PANEL DE MANDOS**

Cuando se abre el "panel de mandos" el interruptor de seguridad interrumpe la alimentación eléctrica.

Cuando hay que efectuar controles funcionales con el panel abierto, tirar del perno como se indica en la figura para restablecer la alimentación eléctrica.

Si se tiene que volver a intervenir en algunos componentes en el interior de la máquina, después de haber efectuado el punto anterior, presionar el perno indicado en la figura para interrumpir otra vez la alimentación eléctrica.

El cierre del panel de mandos restablecerá a través del interruptor la alimentación eléctrica.

**P**

#### **INTERRUPTOR DE SEGURANÇA DO PAINEL DE COMANDOS**

Quando o "painel de comandos" for aberto o interruptor de segurança interrompe a alimentação eléctrica.

Quando se têm que efectuar controles funcionais com o painel de comando aberto, puxar o pino, consoante indicado na figura e restabelecer a alimentação eléctrica.

Tendo que intervir em alguns componentes no interior da máquina, após ter seguido as instruções indicadas no parágrafo anterior, para interromper novamente a alimentação eléctrica carregar no pino indicado na figura.

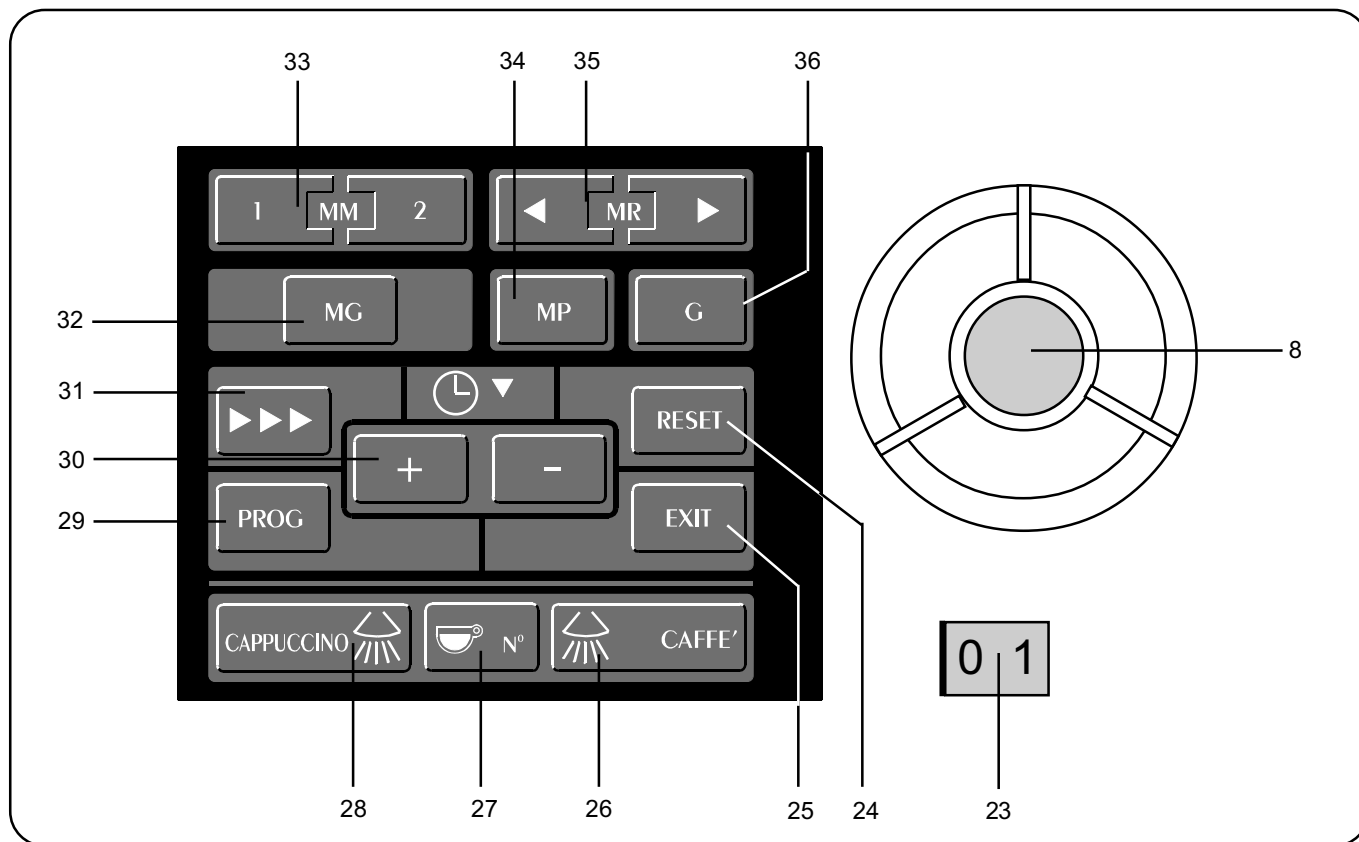
O fecho do quadro restabelecerá a alimentação eléctrica através do próprio interruptor.

# PROGRAMMING

## INDEX

1. Display panel - description (4)
2. Clock settings
3. Language selection
4. Counter display and reset
5. How to enter programming mode
6. CPU-Display programming
7. Display menu
8. CPU menu
9. Selections programming
10. Manual window
11. Special functions

## 1. Display Panel - Description (4)



Raise the display panel (4) to access the programming keyboard and the power switch.

### DESCRIPTION OF THE COMPONENTS

8	Dallas key sensor
23	Power switch
24	RESET key
25	EXIT key (quit programming)
26	Coffee circuit wash key
27	Counters display key
28	Milk circuit wash key
29	PROG key (enter programming mode)
30	"+" and "-" keys (change parameters / clock)
31	"▶▶▶" key (change language and move cursor)

### Keys used for manual programming

32	Doser-grinder magnets activation key
33	Doser grinder motor activation keys (1 and 2)
34	Pump motor activation key
35	Group motor activation keys (back "◀" forward "▶")
36	Coffee solenoid valve activation key

## 2. Clock Settings

To set the clock use the "+" and "-" keys (30).

The time increases (or decreases) by one minute at each pressure of the key.

When one of the keys (30) is kept pressed down, the speed of the time indicator increases. The day of the week is changed each time the value "0:00" is passed.

N.B. The time cannot be changed if the clock function has not been not activated (by the installing technician).

If the "ACCOUNT" function has been activated (dip-switch display 4 = ON), the clock can be set with the engineer's key or the account key.

ESPRESSOTIME

Monday 12:30

Clock function activated

ESPRESSOTIME

Machine ON

Clock function deactivated

### 3. Language Selection

To display the messages in a language other than the one set, press the “▶ ▶ ▶” key (31).

The following options appear on the display (5):

Italian, English, French, German, Dutch, Spanish, Portuguese and Japanese.

ESPRESSOTIME  
Italiano  
Lunedì 12:30

Example of selection  
in Italian

ESPRESSOTIME  
English  
Monday 12:30 P.M.

Example of selection  
in English

### 4. Counters Display and Reset

The counters are displayed by pressing the “n°” key (27).

To reset the counters, keep the RESET key (24) pressed until they are reset.

Once the counters reading and reset operations have been completed, press the “n°” key (27) again or the EXIT key (25) to return to the main window (EXPRESSOTIME).

N° coffee 35  
N° water 54  
N° milk 28  
Reset NO ←

Counter reading

N° coffee 00  
N° water 00  
N° milk 00  
Reset YES ←

Counter reset

### 5. How to Enter Programming Mode

To enter programming mode touch sensor (8) with the “engineer’s” key. A buzzer will sound and the following message will be displayed:

ESPRESSOTIME  
Monday 12:30  
Engineer

To quit the programming phase, touch sensor (8) with the “engineer’s” key again.

The machine automatically exits programming when **NO** operations have been made and the key activation time (see **Paragraph 7.2a**) is other than zero.

To go directly from any programming window to the above-mentioned window, press the EXIT key (25).



“If the engineer’s key is lost, all the programming operations may be performed by activating the dip-switch 1 (Display) as follows:

- 1 - Switch off the machine by pressing switch (23).
- 2 - Using the key provided, unlock the panel.
- 3 - Lift the panel.
- 4 - Position dip-switch 1 (Display) to ON.
- 5 - Close the panel and switch on the machine.

The message shown here will be displayed.

When the programming operations have been completed, turn dip-switch 1 (Display) to OFF, as previously described.

**N.B. All changes to the position of the dip-switch must be made with the machine switched off.”**

### 6. CPU-Display Programming

Press the PROG key (29). The following message will be displayed:

Programming  
CPU  
Display ←

Press the PROG key (29) again to program the CPU menu, as indicated in Chapter “**8. CPU Menu**”.

Press the “▶ ▶ ▶” (31) key. The arrow moves to the next line down. The following message will be displayed:

Programming  
CPU  
Display ←

Press the PROG key (29) again to program the **Display** menu, as indicated in Chapter “**7. Display Menu**”.

## 7. Display Menu (ON/OFF Programming)

Press the PROG key (29). The following message will be displayed:

```
Time ON    3:00 ◀
Time OFF   3:00
Closing day
None
```

N.B. If the clock function has not been activated, the above window will not be displayed.

To change the ON time use the "+" and "-" keys (30).

To change the OFF time first press the "▶ ▶ ▶" key (31) to move the cursor (arrow) to the next line down, then press the "+" and "-" keys (30). Press the "▶ ▶ ▶" key (31) again. The flashing cursor will position itself against the closing day (None). Press the "+" and "-" keys (30) to change this parameter (Monday, Tuesday, etc.).

N.B. If the automatic switch-on/off function is not required and manual control is preferred, set the "Time ON" and "Time OFF" to the same time.

### 7.1 Menù Display – Setting the Temperature Scale

Press the PROG key (29). The following message will be displayed:

```
Measurement unit
Temperatures  °C ◀
Pressure      bar
```

Press the "+" or "-" keys (30) to change the temperature scale (°C or °F).

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed:

```
Measurement unit
Temperatures  °C
Pressure      bar ◀
```

Press the "+" or "-" keys (30) to change the pressure unit (bar or psi).

### 7.2 Menù Display - Parameters programming

#### 7.2.1)

Press the PROG key (29). The following message will be displayed:

```
Parameters
Key programm. 20,0 ◀
Clock          YES
Customers prog. YES
```

Press the "+" or "-" keys (30) to change the key activation time (from **0.0** to **120.0** in steps of **5** seconds each). When the value "**0.0**" is set, once the key has touched sensor (8) it is always activated. To deactivate the key, rest it on sensor (8) again. If any other value is set, for example "**10.0**", the key will remain activated for **10** seconds after the last operation.

#### 7.2.2)

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed

```
Parameters
Key programm. 20,0
Clock          YES ◀
Customers prog. YES
```

Press the "+" or "-" keys (30) to activate (YES) or deactivate (NO) the clock function. When the clock function is deactivated (NO), the clock menus will not be displayed.

#### 7.2.3)

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed:

```
Parameters
Key programm. 20,0
Clock          YES
Customers prog. YES ◀
```

Press the "+" or "-" keys (30) to activate (YES) or deactivate (NO) the customer programming function. When the customer programming function is deactivated (NO), the customer programming menus will not be displayed.

#### 7.2.4)

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed:

```
Parameters
Clock          YES
Customers prog. YES
Selection modify NO ◀
```

Press the "+" or "-" keys (30) to activate (YES) or deactivate (NO) the personalize selections function. For further details on the "Personalize Selections" menus, see Chapter "9. Selections Programming".

#### 7.2.5)

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed:

```
Parameters
Customers prog. YES
Selection modify NO
Time credit     0 ◀
```

Press the "+" or "-" keys (30) to change the credit time (from **0** to **30** in **one-minute** steps).

The credit time for machines with coin/card units is the time within which credit may be used.

With the setting on "**0**" this time is infinite.

If any other value is set, for example "**10**", the credit must be used within 10 minutes of the last drink dispensed.

#### 7.2.6)

Press the "▶ ▶ ▶" (31) key. The arrow moves to the next line down. The following message will be displayed:

```
Parameters
Selection modify NO
Time credit       0
Standard data     NO ◀
```

Press the "+" or "-" keys (30) to load (YES) or not load (NO) the standard data.

The factory values will be loaded when the Standard data value is set to "YES" and the PROG key (29) is pressed.

### 7.3 Display Menu – Malfunctions Display

Press the PROG key (29). The following message will be displayed:

```

Error 1
E=xx/1  h00012:40 ◀
E=xx/1  h00007:15
E=xx/0  h00000:23
  
```

This is a read-only display.

“xx” represents the code of the malfunction that has occurred. For further details on this type of malfunction see Chapter “**Defects – Malfunctions**”.

Press the “▶ ▶ ▶” (31) key. The arrow moves to the next line down. The following message will be displayed:

```

Error 2
E=xx/1  h00012:40
E=xx/1  h00007:15 ◀
E=xx/0  h00000:23
  
```

Every time the “▶ ▶ ▶” key (31) is pressed, the arrow moves to the next line down and displays the successive malfunctions. The machine memorizes the last 32 malfunctions that have occurred.

### 7.4 Display Menu – DISPLAY Data Display

Press the PROG key (29). The following message will be displayed:

```

Display
Version  x.x.x-x
Date      gg/mm/aa
N° Machine AC443509
  
```

This is a read-only display that shows:

- The version of the Display memory present and characteristics of the machine.

### 7.5 Display Menu – Return to the First Window

Press the PROG key (29). The following message will be displayed:

```

ESPRESSOTIME

Monday 12:30
Engineer
  
```

At this point the programming operations of the Display menu are terminated.

## 8. CPU Menu – Selections Programming

These operations are performed by positioning the arrow on CPU in the "Programming" Window.

```

Programming
CPU      ◀
Display
  
```

Press the PROG key (29). The following message will be displayed:

```

Select. setting
Choose a selection
  
```

The menu "Selections Programming" is accessed when one of the selection keys is pressed. Follow the instructions in Chapter "9. Selections Programming".

### 8.1 CPU Menu – Manual Window (components testing)

Press the PROG key (29). The following message will be displayed:

```

Manual
P=+91°C FC1=0 FC2=0
B=+99°C Rd=0 Vc=0
P=1,15bar Dv= 0
  
```

Press the "▶▶▶" key (31). The following message will be displayed:

```

Manual
V=12,2V
I= 0,0A
Dv= 0 MR>
  
```

Drinks can be dispensed during this phase and the change of parameters can be seen on the display.

When the keys (32, 33, 34, 35, 36) are pressed once, the associated components are tested (Chapter "1. Display Panel – Description"). For further details, refer to Chapter "10. Manual Window".

Press the "▶▶▶" key (31). The component indicated on the display (MR>) is activated.

Press the "+" or "-" keys (30) to change the component to be tested (MR>, MR<, MP, etc.).

Press the EXIT key (25) to return to the 1<sup>st</sup> manual window.

For further details, see Chapter "10. Manual Window".

### 8.2 CPU Menu – Cycles Display and Reset

Press the PROG key (29). The following message will be displayed:

```

Cycles
N° cycles 254
Reset NO ◀
  
```

To reset the number of cycles, keep the RESET key (24) pressed until the counter is reset.

The cycles counter is associated to every movement of the group.

### 8.3 CPU Menu – Temperature Programming

#### 8.3a)

Press the PROG key (29). The following message will be displayed:

```

Temperatures setting
Piston 90°C ◀
Coffee boiler 95°C
Serv. steam 1,20bar
  
```

Press the "+" or "-" keys (30) to change the piston temperature (from 70 to 120 in steps of 1°C).

#### 8.3c)

Press the "▶▶▶" key (31). The arrow moves to the next line down and this message will be displayed:

```

Temperatures setting
Piston 90°C
Coffee boiler 95°C ◀
Serv. steam 1,20bar
  
```

Press the "+" or "-" keys (30) to change the boiler pressure (from 0.6 to 1.30 bar in steps of 0.1 bar).

#### 8.3b)

Press the "▶▶▶" key (31). The arrow moves to the next line down and this message will be displayed:

```

Temperatures setting
Piston 90°C
Coffee boiler 95°C ◀
Serv. steam 1,20bar
  
```

Press the "+" or "-" keys (30) to change the coffee boiler temperature (from 70 to 120 in steps of 1°).

## 8.4 CPU Menu – Maintenance Program

Press the PROG key (29). The following message will be displayed:

General main. needed	
Service	30000 ◀
N° cycles	254
Reset	NO

Press the "▶ ▶ ▶" key (31) to go to the next line down. The following message will be displayed:

General main. needed	
Service	30000
N° cycles	254
Reset	NO ◀

Press the "+" or "-" keys (30) to change the number of cycles within which to perform the maintenance program (from **10000** to **50000** in steps of **200** each).

When the number of cycles is equal to the "maintenance" number the message "**Perform Maintenance**" will be displayed. This message will be displayed even after 6 months from the last reset if the number of cycles performed is less than the set value.

Keep the RESET key (24) pressed for a few seconds to reset the number of the cycles and the counter.

## 8.5 CPU Menu – Programming the Coffee Circuit Wash Time

Press the PROG key (29). The following message will be displayed:

Descaling time	
Time	NO ◀
Time	11:00

Press the "▶ ▶ ▶" key (31) to go to the next line down. The following message will be displayed:

Descaling time	
Time	YES
Time	11:00 ◀

Press the "+" or "-" keys (30) to activate (YES) or not activate (NO) the "perform wash" message at the set time.  
To go to the time setting function the (YES) function must be activated.

Press the "+" and "-" keys (30) to change the time.  
The message "**perform wash**" will be displayed at the set time (e.g. at 11:00) and the user must perform the wash cycle within half an hour of the displayed message.  
After half an hour the message will remain fixed on the display and the machine's function will be suspended until the wash cycle has been completed.  
Wash cycles performed before the programmed time will not be considered useful for preventing the machine's functions from being blocked.

## 8.6 CPU Menu – Programming the Resin Regeneration Parameters

Press the PROG key (29). The following message will be displayed:

Regeneration	
Water hardness	50 ◀
Liters softner	1

Press the "▶ ▶ ▶" key (31) to go to the next line down. The following message will be displayed:

Regeneration	
Water hardness	50
Liters softner	1 ◀

After having effected the tests for the determining the hardness of the water, press the "+" or "-" keys (30) to set the value (from **0** to **50** in steps of **5**) on the display.

N.B. By setting the value of the hardness of the water at **0**, the display of the message "Regenerate Resin" will be deactivated.

Take the reading of the resin liters from the water softener and set it using the "+" or "-" keys (30).  
The possible value to be set is between **1** and **20** in steps of **1** liter.



## 8.7 CPU Menu – Parameters Programming

### 8.7.1)

Press the PROG key (29). The following message will be displayed:

```
Parameters
Dregs disch.    30 ◀
Infusion  Automatic
Cleaning start  MAN
```

Press the "+" or "-" keys (30) to change the number of the "coffee grounds drawer" (from 0 to 100 in steps of 1).

The number must be set according to the type of drawer (version 100 – small draw; version 200 – large drawer) and the diameter of the piston (Ø 42mm; Ø 50mm).

We recommend the following settings:

- Version 100, Ø 42mm = 30
- Version 100, Ø 50mm = 25
- Version 200, Ø 42mm = 55
- Version 200, Ø 50mm = 50

If the value "0" is set, the message "Coffee grounds drawer full" will not be displayed. This value must be set for machines with an external coffee grounds container (optional kit).

If another value is set (e.g. 30), the message "Coffee grounds drawer full" will be displayed 10 cycles (of coffee based drinks) before the set number of "coffee grounds", i.e. after 20 cycles. When the 30<sup>th</sup> cycle is reached, the dispensing of the coffee based drinks will be suspended. Empty the drawer to reactivate the dispensing of the coffee.

### 8.7.2)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

```
Parameters
Dregs disch.    30
Infusion  Automatic ◀
Cleaning start  MAN
```

Press the "+" or "-" keys (30) to select infusion via "Infusion Device" or "Pump".

The setting depends upon the configuration of the machine:

- For machines with automatic infusion set "Automatic".
- For machines with manual infusion set "Pump".

### 8.7.3)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

```
Parameters
Dregs disch.    30
Infusion  Automatic
Cleaning start  MAN ◀
```

Press the "+" or "-" keys (30) to select whether to run the coffee wash manually (MAN) or automatically (AUT).

If the wash cycle is run manually (MAN), press the coffee circuit wash button (26) after having opened the decaffeinated panel door (18) and inserted the detergent tablet.

If the wash cycle is run automatically (AUT), open the decaffeinated panel door (18) and insert the detergent tablet, the wash cycle will commence automatically after approximately 10 seconds.

### 8.7.4)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

```
Parameters
Infusion  Automatic
Cleaning start  MAN
Low power    NO ◀
```

Press the "+" or "-" keys (30) to activate (YES) or deactivate (NO) the "reduced power" function.

When the "reduced power" function is activated (YES), the resistances of the boilers in the machine are powered alternately (one at a time) so as not to cause a power overload. This function must be activated (YES) in the event of low power in the electrical system

### 8.7.5)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

```
Parameters
Cleaning start  MAN
Low power    NO
Low pressure   NO ◀
```

Press the "+" or "-" keys (30) to activate (YES) or deactivate (NO) the "pressure block" function.

If the function is activated (YES) when the general boiler pressure value is 0.3 bar less than the programmed pressure, the dispensing of hot water, milk and cappuccino will be suspended until the correct pressure value has been set.

### 8.7.6)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

```
Parameters
Low power    NO
Low pressure  NO
Standard data NO ◀
```

Press the "+" or "-" keys (30) to load (1 or 2) or not load (NO) the standard data.

Position the indicator on "1" and press the PROG key (29) to load the standard data for the "Cappuccino" version machines (C).

Position the indicator on "2" and press the PROG key (29) to load the standard data for machines "without Cappuccino" (S).

## 8.8 CPU Menu – Keys Reading

### 8.8.1)

Press the PROG key (29). The following message will be displayed:

```

Keys info.
Code ..   Series .. ◀
Data mach. IN   NO
Data mach. OUT NO
  
```

By touching sensor (8) with a key, the code and the series of that key is provided so that spares can be ordered.

### 8.8.2)

Press the “▶▶▶” key (31). The arrow moves to the next line down and the following message will be displayed:

```

Keys info.
Code ..   Series ..
Data mach. IN   NO ◀
Data mach. OUT NO
  
```

To load the data, position the indicator to “YES” (using the “+” or “-” keys (30)), touch the sensor (8) with the “DATA IN/OUT” key and keep it resting there until the data transfer has been completed (the indicator returns to NO)

### 8.8.3)

Press the “▶▶▶” key (31). The arrow moves to the next line down and the following message will be displayed:

```

Keys info.
Code ..   Series ..
Data mach. IN   NO
Data mach. OUT NO ◀
  
```

To save the data, position the indicator to “YES” (using the “+” or “-” keys (30)), touch the sensor (8) with the “DATA IN/OUT” key and keep it resting there until the data transfer has been completed (the indicator returns to NO).

## 8.9 CPU Menu – CPU Data Display

Press the PROG key (29). The following message will be displayed:

```

CPU
Version   x.x.x-x
Date      gg/mm/aa
N° Machine AC443509
  
```

This is a read-only display that shows:

- The version of the CPU present and characteristics of the machine.

## 8.10 CPU Menu – Return to Initial Window

Press the PROG key (29). The following message will be displayed:

```

ESPRESSOTIME

Monday 12:30
Engineer
  
```

At this point the programming operations of the CPU menu are terminated.

## 9. Selections Programming

Operations to be performed to program a selection key.

Select. setting  
Choose a selection

Press one of the selection keys (e.g. a coffee dispensing key). The following message will be displayed:

Selection 07  
1 Coffee MM1  
Water dose 100 ◀  
Coffee dose 3,2

The arrow ◀ will be displayed on the "1 Coffee MM1" line if the "Personalize Selection" function (Paragraph 7.2.4) is activated (**YES**). It will be displayed on the "Water Dose 100" line if the "Personalize Selection" function (Paragraph 7.2.4) is not activated (**NO**).

### 9.1 Selections Programming - Personalization

The operation "Personalize Selection" can be performed only if it is activated (**YES**).

Selection 07  
1 Coffee MM1 ◀  
Water dose 100  
Coffee dose 3,2

Press the "▶ ▶ ▶" key (31) a third time. The following message will be displayed:

Selection  
Coffee 1  
Coffee grinder MM1  
Cycle repet. NO ◀

Press the "+" key (30) to carry out the personalization operations. The following message will be displayed:

Selection  
Type Coffee ◀  
Coffee 1  
Coffee grinder MM1

Press the "+" or "-" keys (30) to:

Not activate (**NO**) the repetition function;  
Associate the repetition function to a key (N°);  
Set the number of repetitions (x2, x3, x4, x5, x10, x20 and x99) associated to that key.

Press the "+" or "-" keys (30) to select the type of selection to be made on the key.

The following information will be displayed:

- Coffee, Capp. (Cappuccino)
- Water, Milk
- Input
- Record
- Key
- Deactivated

Para. 9.1.1  
Para. 9.1.2  
Para. 9.1.3  
Para. 9.1.4  
Para. 9.1.5  
Para. 9.1.6

Press the "▶ ▶ ▶" key (31) a fourth time. The following message will be displayed:

Selection  
Coffee grinder MM1  
Cycle repet. NO  
II Outlet NO ◀

Press the "+" or "-" keys (30) to activate (**YES**) a second EXIT. For example, a double thermal circuit energizes a second EXIT for the distribution of coffee at a lower temperature.

#### 9.1.1)

Select "Coffee" or "Capp." with by pressing the "▶ ▶ ▶" key (31) once. The following message will be displayed:

Selection  
Type Coffee  
Coffee 1 ◀  
Coffee grinder MM1

Press the "+" or "-" keys (30) to set the number of cups to dispense: "1" (one cup) or "2" (two cups).

Press the "▶ ▶ ▶" key (31) a second time. The following message will be displayed:

Selection  
Type Coffee  
Coffee 1  
Coffee grinder MM1 ◀

Press the "+" or "-" keys (30) to set the doser-grinder associated to the key:

"MM1" Doser-grinder 1  
"MM2" Doser-grinder 2  
"DEC" Automatic decaffeinated doser (optional)

#### 9.1.2)

Select "Water" or "Milk" on the first pressure of the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection  
Type Water  
II Outlet NO ◀

Press the "+" or "-" keys (30) to activate (**YES**) a second OUTLET (function not activated).

## 9.1 Selections Programming

### 9.1.3)

Select "Prod. feed" on the first pressure of the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection	
Type	Prod. feed
IN	Flap. cycle ◀

This option associates the decaffeinated flap (18) to a selection key.

### 9.1.4)

Select "Req. repet." on the first pressure of the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection	
Type	Req. repet.
Req. repet.	N° ◀

Press the "+" or "-" keys (30) to set the following:

**N°** The repeat key

**Ms** Skip blend key (from MM1 to MM2)

When a key that has been personalized with one of the above functions is pressed on its own, it will not dispense any drinks per se. The dispensing key associated with the action of the record key must be pressed immediately after.

### 9.1.5)

Select "Button" on the first pressure of the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection	
Type	Button
Button	Cleaning ◀

Press the "+" or "-" keys (30) to set:

**Wash** (wash the coffee circuit)

**Steam** (dispensing of steam)

**W.rapid** (wash the milk circuit and the coffee circuit)

**STOP water**

**STOP coffee**

### 9.1.6)

Select "Disable" on the display. The following message will be displayed:

Selection	
Type	Disable ◀

The key will be deactivated. **NO** operations may be carried out.

## 9.2 Selections Programming - Coffee

### 9.2.1)

Press one of the coffee selection keys. The following message will be displayed (in the case of "Personalize Selections" = **NO**):

Selection 07	
1 Coffee MM1	
Water dose	100 ◀
Coffee dose	3,2

The arrow ◀ appears on the line "1 Coffee MM1" if the function "Personalize Selections" (Paragraph 7.2.4) is activated (**YES**). Press the "▶ ▶ ▶" key (31) to go to the "Water dose 100" line.

Press the "+" or "-" keys (30) to change the water dose (volumetric counter pulses from "10" to "1000" in steps of 1 pulse).

### 9.2.2)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

Selection 07	
1 Coffee MM1	
Water dose	100
Coffee dose	3,2 ◀

Press the "+" or "-" keys (30) to change the coffee dose (grind time from "0.0" to "12.0" in steps of 0.1 seconds).

### 9.2.3)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

Selection 07	
1 Coffee MM1	
Coffee dose	3,2
Infusion	5,0 ◀

Press the "+" or "-" keys (30) to change the infusion time ("0.0" to "15.0" in steps of 0.1 second).

### 9.2.4)

Press the "▶ ▶ ▶" key (31). The arrow moves to the next line down and the following message will be displayed:

Selection 07	
1 Coffee MM1	
Infusion	5,0
Water after	400 ◀

Press the "+" or "-" keys (30) to change the "Water after" ("5" to "1000" in steps of 1 pulse).

"Water after" represents the number of pulses of the volumetric doser before the activation of the additional water solenoid valve (not all models). If the value set is higher than the water dose, the additional water solenoid valve will not be activated.

## 9.3 Selections Programming – Hot Water

Press one of the hot water selection keys. The following message will be displayed (in the case of "Personalize Selections" = **NO**):

Selection 05	
Water	
Time water	10,0 ◀

Press the "+" or "-" keys (30) to change the "Water time" (hot water dispensing time from "0.1" to "30.0" in steps of 0.1 seconds).

## 9.4 Selections Programming – Milk

### 9.4.1)

Press one of the milk selection keys. The following message will be displayed (in the case of "Personalize Selections" = NO):

Selection 08	
Milk	
Time milk	10,0 ◀
No froth for	3,0

Press the "+" or "-" keys (30) to change the "Milk time" (milk dispensing time from "0.5" to "60.0" in steps of 0.1 seconds).

### 9.4.2)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection 08	
Milk	
Time milk	10,0
No froth for	3,0 ◀

Press the "+" or "-" keys (30) to change the "NO emulsion time" (unwhipped milk dispensing time from "1.0" to "60.0" in steps of 0.1 seconds).

N.B. If the "NO emulsion time" is higher than the "Milk time", unwhipped milk will be dispensed.

## 9.5 Selections Programming – Cappuccino

### 9.5.1)

Press one of the Cappuccino selection keys. The following message will be displayed (in the case of "Personalize Selections" = NO):

Selection 09	
1 Capp. MM1	
Water dose	100 ◀
Coffee dose	3,2

Press the "+" or "-" keys (30) to change the water dose (volumetric counter pulse from "10" to "1000" in steps of 1 pulse).

### 9.5.2)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection 09	
1 Capp. MM1	
Water dose	100
Coffee dose	3,2 ◀

Press the "+" or "-" keys (30) to change the coffee dose (grind time from "0.0" to "12.0" in steps of 0.1 seconds).

### 9.5.3)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection 09	
1 Capp. MM1	
Coffee dose	3,2
Infusion	5,0 ◀

Press the "+" or "-" keys (30) to change the infusion time (from "0.0" to "15.0" in steps of 0.1 seconds).

### 9.5.4)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

Selezione 09	
1 Capp. MM1	
Infusion	5,0
Milk dose	10,0 ◀

Press the "+" or "-" keys (30) to change the milk time (milk dispensing time from "0.5" to "60.0" in steps of 0.1 seconds).

### 9.5.5)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

Selection 09	
1 Capp. MM1	
Milk dose	10,0
Milk start	60,0 ◀

Press the "+" or "-" keys (30) to change the "Start milk" (milk dispensing start time with respect to the coffee start time, from "0.0" to "60.0" in steps of 0.1 seconds).

When:

"0.0" is set: Milk will be dispensed when the selection is key pressed and after a few seconds the coffee will be dispensed.

"60.0" or other high time value is set: Milk will be dispensed after the coffee has been dispensed.

"05.0" is set: Milk will be dispensed after 5 seconds from the start of the coffee dispensing.

### 9.5.6)

Press the "▶ ▶ ▶" key (31). The following message will be displayed:

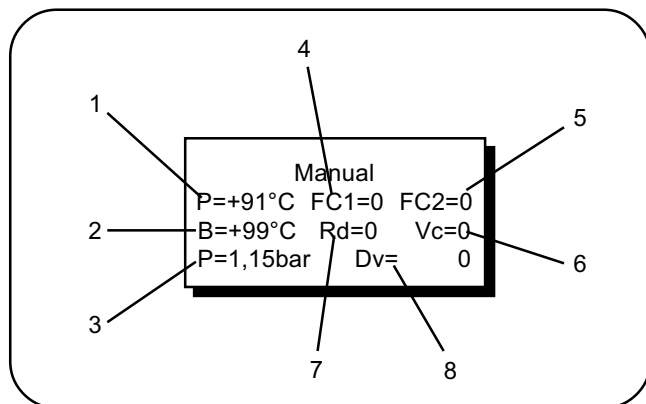
Selection 09	
1 Capp. MM1	
Milk start	60,0
No froth for	5,0 ◀

Press the "+" or "-" keys (30) to change the "NO emulsion" (unwhipped milk dispensing time, from "1.0" to "60.0" in steps of 0.1 seconds).

N.B. If the "NO emulsion time" is higher than the "Milk time", the milk dispensed for the cappuccino will be unwhipped.

## 10. Manual Window

### 10.1) 1<sup>st</sup> Manual Window



#### Legend

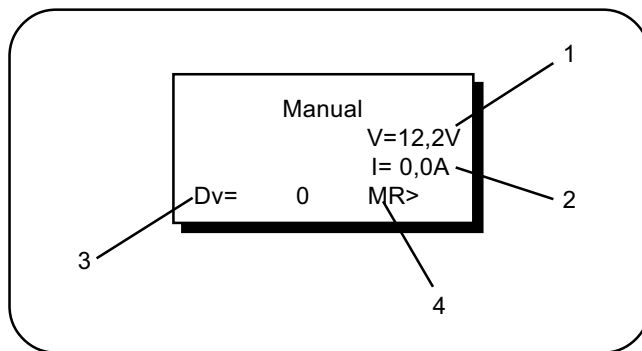
- 1 Piston temperature
- 2 Coffee boiler temperature (where present)
- 3 Service boiler pressure (where present)
- 4 Group limit stop state (normal position FC1 = 0)
- 5 Group limit stop state (normal position FC2 = 0)
- 6 NO coffee sensor state (not available)
- 7 Boiler level probe state (0 = water present; 1 = NO water)
- 8 Volumetric doser pulses

In this phase drinks can be dispensed and the correct change of the state of the parameters indicated on the display can be checked. When the keys **32**, **33**, **34**, **35** and **36** of the programming keyboard are pressed the actions of the following components can be checked:

- Key **32 (MG)** Activation of the doser-grinder magnets
- Key **33 (1 MM 2)** Activation of the doser-grinder 1 motor and doser-grinder 2 motor
- Key **34 (MP)** Activation of the pump motor
- Key **35 (◀ MR ▶)** Activation of the group motor back (◀) and forward (▶)
- Key **36 (G)** Activation of the coffee dispensing solenoid valve

### 10.2) 2<sup>nd</sup> Manual Window

Press the "▶▶▶" key (**31**) to change from the 1<sup>st</sup> to the 2<sup>nd</sup> manual window. The following is displayed:



#### Legend

- 1 Voltage (continuous) of the power supplied to the electronic card (11 ÷ 13V)
- 2 Current reading (not available)
- 3 Volumetric doser pulses
- 4 Reference initials of the component to be tested

Press the "+" or "-" keys (**30**) to change the reference initials (reference **4**) of the component to be tested.

Press the "▶▶▶" key (**31**) to activate the component indicated in the display (reference **4**).

The reference initials shown on the display are associated to the following components (where present)

- MR>** Forward group motor
- MR<** Back group motor
- MP** Pump motor
- G** Coffee dispensing solenoid valve
- MM1** Doser-grinder 1 motor
- MM2** Doser-grinder 2 motor
- MG** Doser-grinder electromagnets
- Eva** Additional water dispensing solenoid valve
- Evc** Boiler charge solenoid valve
- Eac** Hot water dispensing solenoid valve
- Vau** Automatic infusion device
- Em** Milk dispensing solenoid valve
- Ear** Air solenoid valve
- Ed** Coffee deviator solenoid valve
- Ev** Steam dispensing solenoid valve
- Dd** Automatic decaffeinated coffee doser
- II** Second OUTLET
- EBM** Milk block solenoid valve
- AUX** Auxiliary functions

To change from the 2<sup>nd</sup> to the 1<sup>st</sup> manual window press the EXIT key (**25**).

## 11. Special Functions

### Coffee STOP function

Stops the dispensing of the coffee before the programmed dose has been reached.

The STOP key is active when the coffee is pouring into the cup and not during the grinding of the coffee.

If the STOP key is pressed immediately after the coffee has been dispensed, the dose in the cup is diluted.

To stop the issue of coffee press the STOP key again.

N.B. Pressing the STOP key does not change the parameters set during programming.

### SECOND BLEND (Ms) function (only for machines with double doser-grinder)

Enables the coffee for all drinks associated with doser-grinder "1" (MM1) to be ground with doser-grinder "2" (MM2).

Press the second blend key, the leds of all the keys associated with doser-grinder "1" will flash.

Press one of these dispensing keys that correspond to the desired dose, the grind will be performed by doser-grinder "2" while maintaining the set parameters unchanged (water dose, coffee dose).

N.B. To cancel the second blend operations, press the Ms key again before dispensing.

### REPEAT FUNCTION (N°)

Allows the same type of drink to be repeated.

Keep the repeat key pressed until the desired number of drinks is displayed.

The leds of the keys associated to the "N°" function will flash.

Press the desired key. The number of coffees previously selected will be dispensed consecutively.

To stop the repetition of the dispensing of the drinks, press again the coffee key corresponding to the selected dose (highlighted by a flashing led). The dispensing in course will be terminated.

N.B. To cancel the repeat function, press the repeat key again before dispensing.

## **SMONTAGGIO - DISASSEMBLY - DEMONTAGE**

## **ABMONTIERUNG - DESMONTAJE - DESMONTAGEM**

1.    **Apertura pannello comandi - Opening the command panel.**  
**Ouverture du tableau des commandes - Öffnung der Schalttafel**  
**Abertura panel mandos - Abertura painel de comandos**
2.    **Rimozione tramoggia - Removal of the coffee beans receptacle**  
**Soulèvement de la trémie - Abnahme des Trichters**  
**Extracción tolva- Remoção da tremonha**
3.    **Smontaggio fiancate - Removal of the side panels**  
**Démontage des côtés - Abnahme der Seitenpaneele**  
**Desmontaje paneles laterales - Desmontagem lados**
4.    **Pannello posteriore - Back panel**  
**Panneau postérieur - Abnahme des hinteren Paneels**  
**Panel posterior - Painel traseiro**
5.    **Pannello frontale inox - Stainless steel front panel**  
**Panneau frontal inox - Abnahme des vorderen Paneels aus Edelstahl**  
**Panel frontal inoxidable - Painel dianteiro inoxidável**
6.    **Scatola elettrica - Junction Box**  
**Boite électrique - Elektrokasten**  
**Caja eléctrica - Caixa eléctrica**





- I** Prima di effettuare operazioni di apertura o smontaggio di parti della carrozzeria della macchina, togliere l'alimentazione elettrica agendo sull'interruttore principale dell'impianto elettrico del cliente.
- GB** Switch off the electricity via the mains switch before opening or dismantling the chassis of the machine.
- F** Avant d'effectuer les opérations d'ouverture ou de démontage des parties représentant la carrosserie de la machine, s'assurer de bien avoir déconnecté l'énergie électrique en appuyant sur l'interrupteur principal de l'installation électrique.
- D** Vor der Ausführung von Schritten der Öffnung oder der Abnahme von Gehäuseteilen muß über Betätigung des Hauptschalters die Netzstromzuführung unterbrochen werden.
- E** Antes de efectuar las operaciones de abertura o desmontaje de algunas partes de la carrocería de la máquina, desconectar la alimentación eléctrica por medio del interruptor principal de la instalación eléctrica del cliente.
- P** Antes de se proceder às operações de abertura ou desmontagem de partes da armação da máquina, desligar a alimentação eléctrica, através do interruptor principal da instalação eléctrica do cliente.

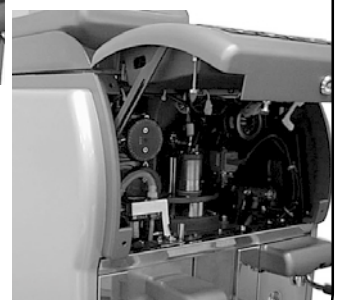
## 1. Apertura pannello comandi - Opening the command panel. Ouverture du tableau des commandes - Öffnung der Schalttafel Abertura panel mandos - Abertura painel de comandos

- I** Inserire la chiave (50) in dotazione alla macchina nella serratura posta nella parte inferiore del pannello comandi.  
Ruotare la chiave in senso antiorario per aprire il pannello.
- GB** Insert the key (50) provided with the machine into the keyhole located on the lower part of the command panel.  
Turn the key anti-clockwise to open the panel.
- F** Introduire la clef (50) en dotation avec la machine dans la serrure placée sur la partie antérieure du panneau des commandes.  
Tourner la clef dans le sens contraire des aiguilles d'une montre pour pouvoir ouvrir le panneau..
- D** Stecken Sie den mit der Maschine mitgelieferten Schlüssel (50) in die auf dem unteren Bereich der Schalttafel befindliche Verriegelung.  
Drehen Sie den Schlüssel zur Öffnung der Schalttafel gegen den Uhrzeigersinn.
- E** Introducir la llave (50), suministrada con la máquina, en la cerradura situada en la parte inferior del panel de mandos.  
Girar la llave en sentido contrario a las agujas del reloj para abrir el panel.
- P** Introduzir a chave (50) em dotação com a máquina na fechadura colocada na parte inferior do painel de comandos.



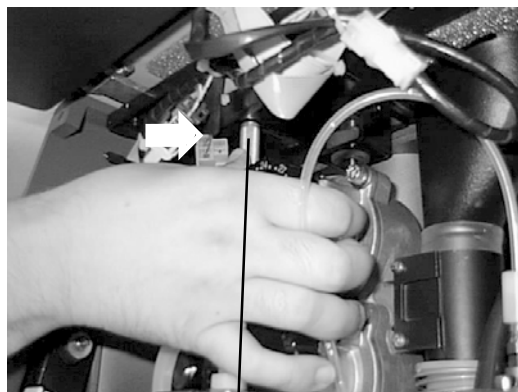
50

- I** Sollevare il pannello.  
Bloccarlo, a seconda della comodità d'uso, in una delle due posizioni indicate in figura.
- GB** Lift the panel.  
Block the panel in place in one of the two positions indicated in the picture, as convenient.
- F** Solever le panneau.  
Le bloquer, selon le désir, dans une des deux positions indiquées sur le dessin.
- D** Heben Sie die Schalttafel nach oben an.  
Stellen Sie das Panel in einer dem Einsatz entsprechenden bequemen Stellung in einer der beiden in der Abbildung gezeigten Positionen fest.
- E** Levantar el panel.  
Bloquearlo, según la comodidad de uso, en una de las dos posiciones indicadas en la figura.
- P** Levantar o painel.  
Bloqueá-lo, segundo a comodidade de utilização, numa das duas posições indicadas na figura.



## 2. Rimozione tramoggia - Removal of the Coffee Beans Receptacle Soulèvement de la trémie - Abnahme des Trichters Extracción tolva - Remoção da tremonha

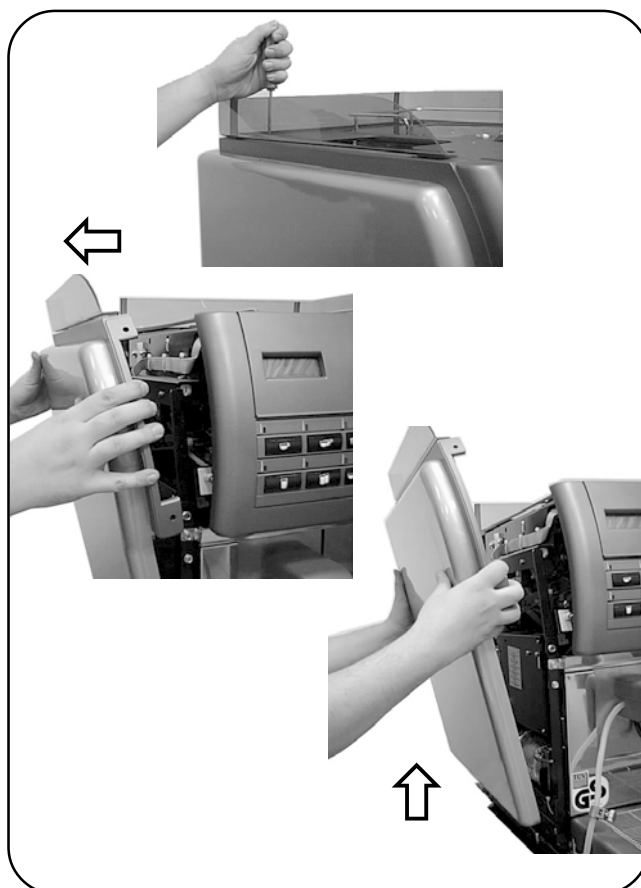
- I** Spingere verso l'interno l'impugnatura (51) della serranda della tramoggia (6).  
Sollevare e rimuovere la tramoggia (6).
- GB** Push the knob (51) of the coffee beans receptacle door (6) towards the inside.  
Lift and remove the coffee bean receptacle (6).
- F** Pousser la poignée (51) du bouchoir de la trémie (6) vers l'intérieur.  
Soulever et enlever la trémie (6).
- D** Drücken Sie den Griff (51) der Verriegelung des Trichters (6).  
Heben Sie den Trichter (6) an, und nehmen Sie ihn von der Maschine ab.
- E** Empujar hacia el interior la palanca (51) del registro de la tolva (6).  
Levantar y extraer la tolva (6).
- P** Empurrar para o interior o punho (51) da grade da tremonha (6).  
Levantar e remover a tremonha (6).



51

## 3. Smontaggio fiancate - Removal of the Side Panels Démontage des côtés - Abnahme der Seitenpaneele Desmontaje paneles laterales - Desmontagem dos lados

- I** Allentare le due viti di fissaggio del pannello laterale.  
Inclinare il pannello e rimuoverlo.
- GB** Loosen the two screws on the side panel.  
Tilt the panel and remove it.
- F** Dévisser les deux vis de fixation du panneau latéral.  
Incliner le panneau et l'enlever.
- D** Lösen Sie die beiden Schrauben zur Befestigung der Seitenpaneele.  
Neigen Sie das Paneel, und nehmen Sie es ab.
- E** Aflojar los dos tornillos de fijación del panel lateral.  
Inclinar el panel y extraerlo.
- P** Afrouxar os dois parafusos de aperto do painel lateral.  
Inclinar o painel e retirá-lo.



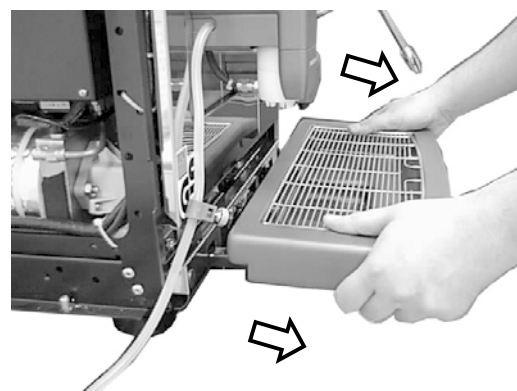
## 4. Pannello posteriore - Back Panel Panneau postérieur - Abnahme des hinteren Paneels Panel posterior - Painel traseiro

- I** Lo smontaggio del pannello posteriore deve essere eseguito solo dopo aver rimosso entrambi i pannelli laterali. Svitare le viti di fissaggio e rimuovere il pannello.
- GB** The back panel may be removed only after the two side panels have been removed. Loosen the screws and remove the panel.
- F** Le démontage du panneau postérieur ne doit être fait qu'après avoir enlevé les deux panneaux latéraux. Dévisser les vis de fixation et enlever le panneau.
- D** Vor der Abnahme des hinteren Paneels müssen beide Seitenpaneele abgenommen werden. Lösen Sie die Schrauben zur Befestigung, und nehmen Sie das hintere Panel ab.
- E** El desmontaje del panel posterior se tiene que efectuar sólo después de haber quitado los dos paneles laterales. Destornillar los tornillos de fijación y quitar el panel.
- P** Proceder à desmontagem do painel traseiro só depois de ter tirado ambos os painéis laterais. Afrouxar os parafusos de aperto e tirar o painel.



## 5. Pannello frontale inox - Stainless steel front panel Panneau frontal inox - Abnahme des vorderen Paneels aus Edelstahl Panel frontal inoxidable - Painel dianteiro inoxidável

- I** Togliere la bacinella appoggiatezze (16).
- GB** Remove the cup tray (16).
- F** Enlever le petit bassin appuie-tasses (16).
- D** Nehmen Sie die Wanne zur Tassenaufsetzung (16) ab
- E** Quitar la bandeja apoya-tazas (16).
- P** Retirar o tabuleiro para apoiar as chávenas (16).



## 5. Pannello frontale - Front Panel Panneau frontal - Abnahme des vorderen Paneels Panel frontal - Painel dianteiro

**I** Allentare le quattro viti di fissaggio e rimuovere il pannello frontale inox.

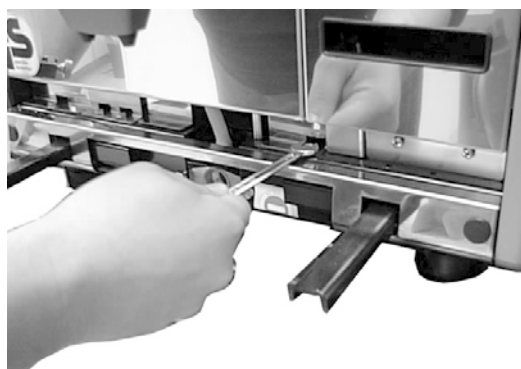
**GB** Loosen the four fixing screws and remove the stainless steel front panel.

**F** Dévisser les quatre vis de fixation du panneau frontal et démonter le panneau frontal en inox.

**D** Lösen Sie die vier Befestigungsschrauben, und nehmen Sie das vordere Edelstahlpaneel ab.

**E** Aflojar los cuatro tornillos de fijación y quitar el panel frontal inoxidable.

**P** Afrouxare os quatro parafusos de aperto e tirar o painel dianteiro inoxidável.



# 6.

## Scatola elettrica - Junction Box Boîte électrique - Elektrokasten Caja eléctrica - Caixa eléctrica

**I** Svitare la vite (A) e ruotare la scatola elettrica (B) verso l'esterno della macchina.

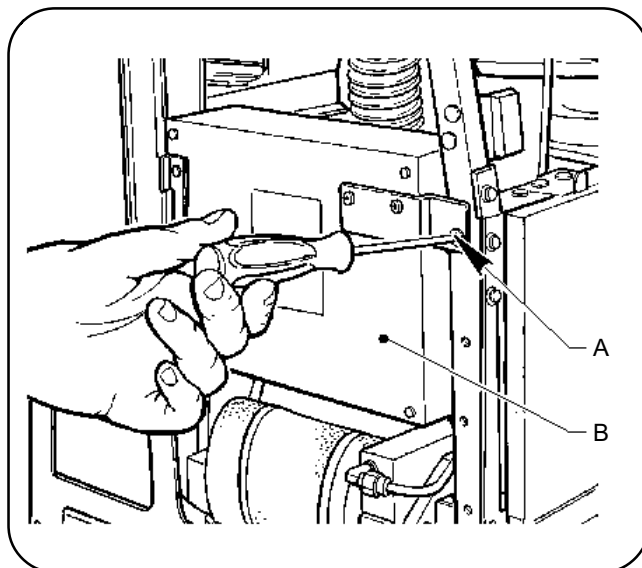
**GB** Loosen the screw (A) and turn the junction box (B) towards the outside of the machine.

**F** Dévisser les vis (A) et tourner la boîte électrique (B) vers l'extérieur de la machine.

**D** Lösen Sie die Schraube (A), und nehmen Sie den Elektrokasten (B) aus der Maschine, indem Sie ihn nach außen hin drehen.

**E** Desapertar o parafuso (A) e extrair a caixa eléctrica (B) para o exterior da máquina.

**P** Aflojar el tornillo (A) y girar la caja eléctrica (B) hacia el exterior de la máquina.



**I** Svitare la vite (C) e togliere il coperchio (D) della scatola elettrica.

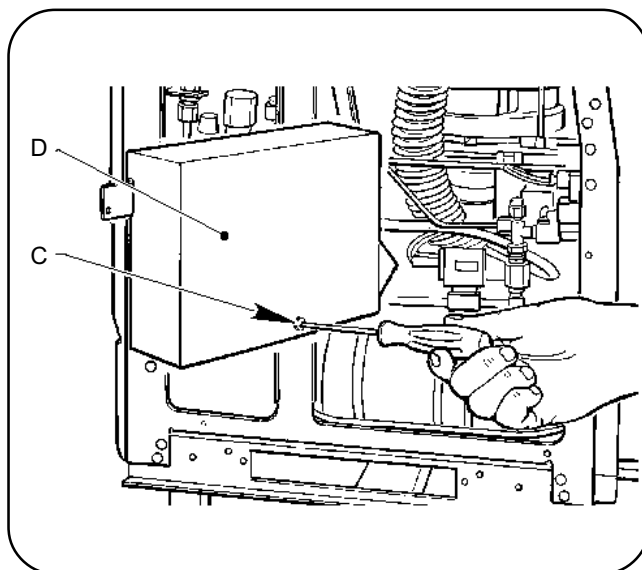
**GB** Loosen screw (C) and remove cover (D) from the junction box.

**F** Dévisser la vis (C) et enlever le couvercle (D) de la boîte électrique.

**D** Lösen Sie die Schraube (C), und nehmen Sie den Deckel (D) des Elektrokastens ab.

**E** Aflojar el tornillo (C) y quitar la tapa (D) de la caja eléctrica.

**P** Desapertar o parafuso (C) e retirar a tampa (D) da caixa eléctrica.

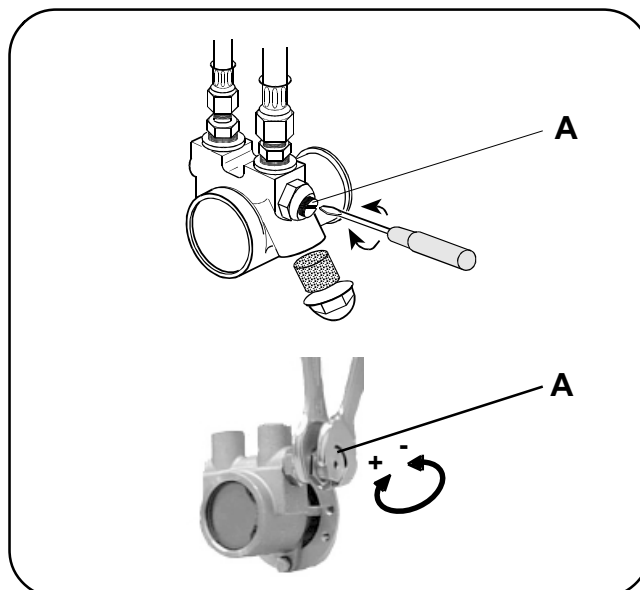


## **REGOLAZIONI - SETTING - REGLAGES EINSTELLUNGEN - REGULACIONES - REGULAÇÕES**

1. **Pompa volumetrica - Volumetric pump  
Pompe volumetrique - Volumetrische Pumpe  
Bomba volumetrica - Bomba volumetrica**
2. **Pressostato elettrico - Electrical pressurestat  
Pressostat électrique - Elektrischer Druckschalter  
Pressostato electrico - Pressostato electrico**
3. **Economizzatore - Hot water saving device  
Economiseur - Heisswassersparanlage  
Economizador - Economizador**
4. **Regolazione aria cappuccino - Cappuccino air setting  
Réglage de l'air du cappuccino - Regelung der Luft zur  
Cappuccino-Zubereitung - Regulación aire capuchino  
Regulação ar garoto (cappuccino)**
5. **Regolazione II<sup>a</sup> temperatura caffè - 2<sup>nd</sup> coffee temperature setting  
Réglage II température café - Regler 2. Kaffeetemperatur  
Regulación II<sup>a</sup> temperatura café - Regulação II<sup>a</sup>. temperatura café**
6. **Variatore macinatura caffè 1-2 - 1-2 coffee grind variator  
Variateur du moulage café 1-2 - Regler Kaffeemahlwerk 1-2  
Variador molienda café 1-2 - Variador moedura do café 1-2**
7. **Regolazione granulometria - Granulometry setting  
Réglage granulométrie - Regler Mahlfeinheit  
Regulación granulometría - Regulação granulometria**
8. **Pesatura caffè macinato - Ground coffee weighing  
Pesage du café moulu - Abwiegung des gemahlenen Kaffees  
Peso café molido - Pesagem do café moído**
9. **Dip-Switch Display - Display dip-switch  
Dip-Switch Display - Dip-Switch-Schalter Display  
Dip-Switch Display - Dip-Switch Display**
10. **Dip-Switch CPU - CPU dip-switch  
Dip-Switch CPU - Dip-Switch-Schalter CPU  
Dip-Switch CPU - Dip-Switch CPU**
11. **Termostato di sicurezza - Safety thermostat -  
Thermostat de sureté - Sicherheitsthermostat  
Termostato de seguridad - Termostato de segurança**

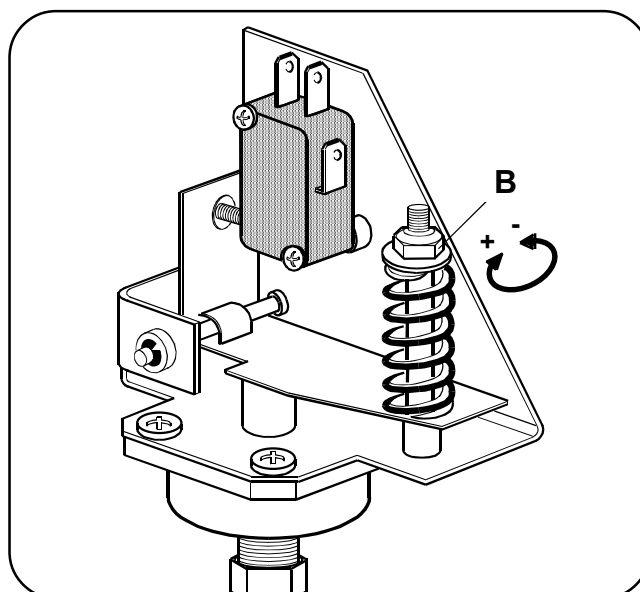
# 1. Pompa volumetrica - Volumetric pump Pompe volumetrique - Volumetrische Pumpe Bomba volumetrica - Bomba volumetrica

- I** All'insorgere della rumorosità pulire il filtro (dove presente).  
**BY-PASS (A)** - Vite di regolazione pressione pompa.  
Tarare a 9÷10 bar a mandata chiusa.
- GB** When the pump becomes noisy, clean the filter..  
**BY-PASS (A)** - Screw for adjusting the pump pressure.  
Calibrate to 9 ÷ 10 bar with screw tightened
- F** Dès que la machine commence à faire du bruit, nettoyer le filtre (si présent).  
**BY-PASS (A)** - Vis de réglage de la pression de la pompe.  
Tarer à 9-10 bar à envoi fermé.
- D** Bei Geräuschen den Filter (falls vorhanden) reinigen.  
**BY-PASS (A)** - Pumpendruck-Einstellschraube.  
Stellen Sie den Betriebsdruck der Pumpe bei gesperrter Druckzuführung in einem Bereich zwischen 9 und 10 bar ein.
- E** Cuando empieza a hacer ruidos, limpiar el filtro (cuando esté presente).  
**BY-PASS (A)** - Tornillo de regulación presión bomba.  
Regular a 9÷10 bar con válvula cerrada.
- P** Quando começa a fazer barulho,limpiar o filtro (quando presente).  
**BY-PASS (A)** - Porta de regulação pressão bomba.  
Afinar em 9÷10 bar com emissão fechada.



# 2. Pressostato - Pressurestat Pressostat - Druckschalter Pressostato - Pressostato

- I** Pressostato utilizzato come limitatore.  
Vite (**B**) di regolazione completamente avvitata.
- GB** Pressurestat used as limit device.  
Setting screw (**B**) is completely tightened.
- F** Pressostat utilisé comme limiteur  
Vis (**B**) de réglage complètement vissée
- D** Der Druckschalter dient zur Begrenzung des Drucks.  
Die Schraube (**B**) muß vollkommen angezogen sein.
- E** Presostato utilizado como limitador.  
Tornillo (**B**) de regulación completamente atornillado.
- P** Pressóstato utilizado como limitador.  
Parafuso (**B**) de regulação completamente apertado.

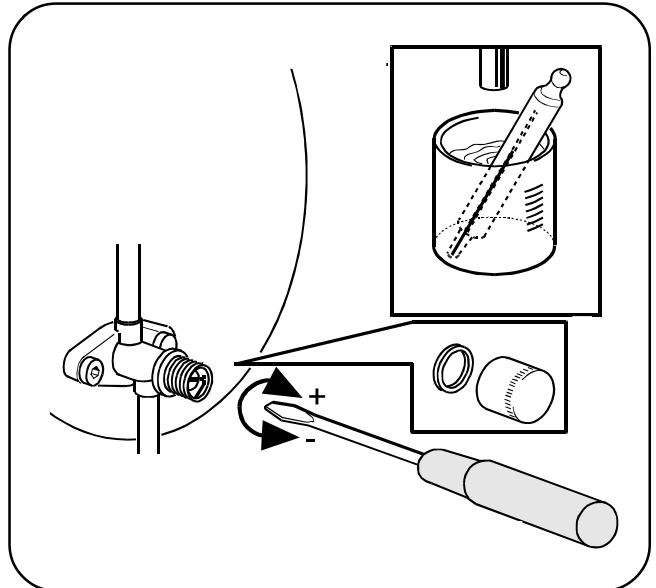




### 3.

#### Economizzatore - Hot water saving device Economiseur - Heiwassersparanlage Economizador - Economizador

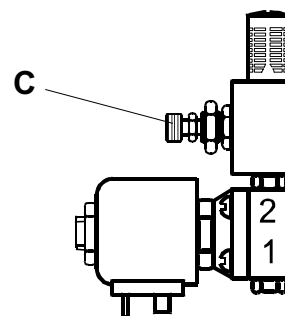
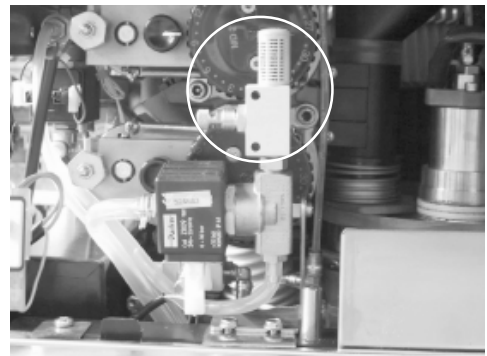
- I** Regolazione della temperatura dell'acqua.
- GB** Water temperature adjustment.
- F** Réglage de la température de l'eau.
- D** Wassertemperatureinstellung.
- E** Regulación de la temperatura del agua.
- P** Regulação da temperatura da água.



### 4.

#### Regolazione aria cappuccino - Cappuccino Air Setting Réglage de l'air du cappuccino - Regelung der Luft zur Cappuccino-Zubereitung Regulación aire capuchino - Regulação do ar do garoto (cappuccino)

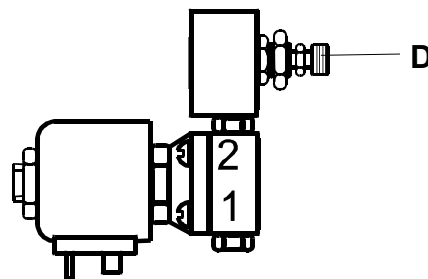
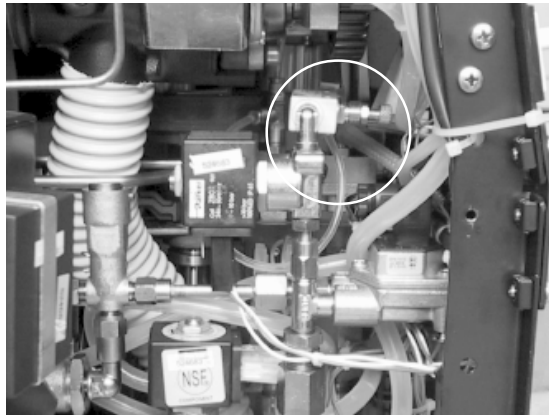
- I** Avvitare completamente la vite (C), poi tornare indietro di 2 giri. Per diminuire la quantità di crema, ma aumentare la compattezza, avvitare la vite (C). Per aumentare la quantità di crema, ma diminuire la compattezza, svitare la vite (C).
- GB** Tighten screw (C) completely then turn back two turns. To decrease the quantity of cream and increase its consistency tighten the screw (C). To increase the quantity of cream and decrease its consistency loosen the screw (C).
- F** Visser complètement la vis (C), et puis revenir en arrière de deux tours. Pour diminuer la quantité de crème, en augmenter la consistance, visser la vis (C). Pour augmenter la quantité de crème, en diminuant la consistance, dévisser la vis (C).
- D** Ziehen Sie die Schraube (C) bis zum Anschlag an, und drehen Sie sie um 2 Umdrehungen zurück. Zur Reduzierung der Haubenstärke und zur Erhöhung der Haubenkonsistenz muß die Schraube (C) angezogen werden. Zur Erhöhung der Haubenstärke und zur Verminderung der Haubenkonsistenz muß die Schraube (C) gelockert werden.
- E** Apretar completamente el tornillo (C), luego volver hacia atrás 2 vueltas. Para disminuir la cantidad de crema, pero aumentar la consistencia, apretar el tornillo (C). Para aumentar la cantidad de crema, pero disminuir la consistencia, aflojar el tornillo (C).
- P** Apertar completamente o parafuso (C), seguidamente voltar para trás de 2 rotações. Para diminuir a quantidade de crème, mas aumentar a densidade, apertar o parafuso (C). Para aumentar a quantidade de crème, mas diminuir a densidade, desapertar o parafuso (C).





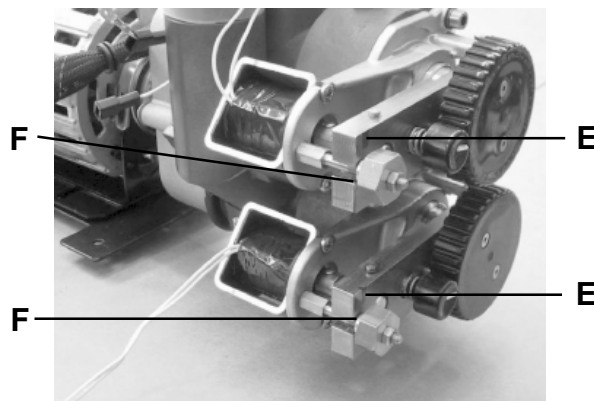
## 5. Regolazione II<sup>a</sup> temperatura caffè - 2<sup>nd</sup> coffee temperature setting Réglage II température café - Regler 2. Kaffeetemperatur Regulación II<sup>a</sup> temperatura café - Regulação II<sup>a</sup> temperatura café

- I** Avvitare completamente la vite (D), poi tornare indietro di circa 7/8 giri.  
Per diminuire la temperatura dell'acqua in arrivo sul pannello di caffè, rispetto all'erogazione senza la doppia termica, svitare la vite (D).
- GB** Tighten the screw (D) completely, then turn back 7/8 turns.  
To decrease the temperature of the water with respect to the dispensing without double water circuit, loosen the screw (D).
- F** Visser complètement la vis (D), et puis revenir en arrière de 7,8 tours.  
Pour diminuer la température de l'eau en entrée sur le panneau du café, par rapport au débit sans la double thermique, dévisser la vis (D).
- D** Ziehen Sie die Schraube (D) bis zum Anschlag an, und drehen Sie sie um etwa 7 - 8 Umdrehungen zurück.  
Wenn Sie die Wassertemperatur unter der Temperatur des Kaffees (Abgabereinheit mit doppeltem Thermoelement) einstellen wollen, müssen Sie die Schraube (D) entsprechend lockern.
- E** Apretar completamente el tornillo (D) y volver hacia atrás unas 7/8 vueltas.  
Para disminuir la temperatura del agua que llega al panel de café, respecto a la erogación sin el par térmico, aflojar el tornillo (D).
- P** Apertar completamente o parafuso (D), seguidamente voltar para trás de cerca de 7/8 rotações.  
Para diminuir a temperatura da água à chegada no painel do café respeito à erogação sem a dupla térmica, desaparafusar o parafuso (D).



## 6. Variatore macinatura caffè 1-2 - 1-2 Coffee Grinding Variator Variateur moulage café 1.2 - Regler Kaffeemahlwerk 1-2 Variador molienda café 1-2 - Variador da moedura do café

- I** Premere e mantenere premuta la zona indicata con "E".  
Inserire uno spessore da 0,4 mm tra il dado e l'involucro dell'elettromagnete (zona indicata con "F").  
Serrare dado e controdado, rimuovere lo spessore.
- GB** Press the area marked "E" and keep it pressed.  
Insert a 0.4 mm. thickness gauge between the nut and the electromagnet housing (area marked "F").  
Tighten the nut and lock nut, remove the thickness gauge.
- F** Appuyer la zone indiquée par la lettre "E" et la garder enfoncée.  
Introduire un palpeur de 0,4 mm entre l'écrou et l'enveloppe de l'électro-aimant (zone indiquée par un "F").  
Serrer l'écrou ainsi que le contre-écrou, et enlever le palpeur.
- D** Drücken Sie gegen das Teil (E). Führen Sie zwischen der Mutter und dem Gehäuse des Magnetventils (F) einen Dickenmesser mit Stärke 0,4 mm ein.  
Ziehen Sie Mutter und Gegenmutter fest, und ziehen Sie den Dickenmesser wieder heraus.
- E** Pulsar y mantener pulsada la zona indicada con "E".  
Introducir un calibre de espesor de 0,4 mm entre la tuerca y la cubierta del electromagneto (zona indicada con "F").  
Apretar la tuerca y la contratuerca, quitar el calibre de espesor.
- P** Carregar e manter carregada a zona indicada por "E".  
Introduzir um medidor de espessura de 0,4 mm entre a porca e o invólucro do electromagnete (zona indicada por "F").  
Apertar a porca e o contraporca e remover o medidor de espessura.



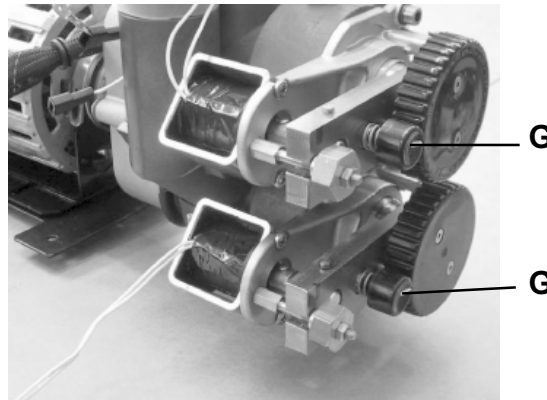
## 7. Regolazione granulometria - Granulometry Setting Réglage granulométrie - Regler Mahlfeinheit Regulación granulometría - Regulação da granulometria

**I** Premere e mantenere premuto il pulsante di sblocco (**G**).  
Ruotare in senso orario la ghiera graduata per stringere la macinatura (9 - 8 - ...);  
aumentare, in programmazione, il tempo di macinatura in modo che la quantità di caffè macinato utilizzata rimanga inalterata.  
Ruotare in senso antiorario per allargare la macinatura (9 - 10 - ...);  
diminuire il tempo di macinatura.  
Effettuare variazioni di 2/3 tacche al massimo alla volta.

**GB** Press the release key (**G**) and keep it pressed.  
Turn the graded ring nut clockwise for a finer grind (9 - 8 - ...).  
In programming, increase the grinding time so that the quantity of ground coffee used remains unaltered.  
Turn anti-clockwise for a coarser grind (9 - 10 - ...).  
Decrease the grinding time.  
When increasing/decreasing the texture of the grind, do not exceed 2-3 notches at a time.

**F** Appuyer sur la touche de déblocage (**G**) et la garder enfoncée.  
Tourner l'embout graduée dans le sens des aiguilles d'une montre, de manière à serrer le moulage (9-8,...);  
Lors de la programmation, augmenter le délai de moulage de manière à ce que la quantité de café moulu utilisée reste inaltérée.  
Tourner dans le sens contraire des aiguilles d'une montre pour élargir le grain (9-10,...);  
diminuer la durée de moulage.  
Effectuer des changements de 2/3 crans à la fois, au maximum.

**D** Drücken Sie gegen den Druckschalter zur Entsperrung (**G**).  
Drehen Sie den Gewinding zur Einstellung einer feineren Körnung im Uhrzeigersinn (9 - 8 - ...).  
Erhöhen Sie während der Programmierung die Mahlzeit so, daß die eingestellte Menge des gemahlten Kaffees unverändert bleibt.  
Drehen Sie den Gewinding zur Einstellung einer gröberen Körnung gegen den Uhrzeigersinn (9 - 10 - ...).  
Nehmen Sie pro Einstellung keine Veränderungen vor, die um mehr als 2-3 Bezugsmarken hinausgehen.



**E** Pulsar y mantener pulsada la tecla de desbloqueo (**G**).  
Girar en sentido horario el casquillo graduado para apretar la molienda (9-8-...);  
aumentar, en programación, el tiempo de molienda de forma que la cantidad de café molido utilizada permanezca inalterada.  
Girar en sentido contrario a las agujas del reloj para ensanchar la molienda (9-10-...);  
disminuir el tiempo de molienda.  
Efectuar variaciones de 2/3 muescas como mucho cada vez.

**P** Carregar e manter carregado o botão de desbloqueio (**G**).  
Rodear em sentido dos ponteiros do relógio através da virola graduada para apertar a moedura (9 - 8 - ...);  
aumentar, durante a programação, o tempo de moedura, por forma a que a quantidade de café moído utilizada se mantenha inalterada.  
Rodear em sentido contrário aos ponteiros do relógio para alargar a moedura (9-10 ...); diminuir o tempo de moedura.  
Proceder a variações de 2/3 entalhes no máximo de cada vez.

# 8.

## Pesatura caffè macinato - Ground Coffee Weighing Pesage café moulu - Abwiegung des gemahlten Kaffees Peso café molido - Pesagem do café moído

I

Spingere verso il basso il condotto superiore sfilandolo dalla sede del convogliatore di uscita del caffè macinato. Rimuovere il condotto superiore (H), la molla (I) e la piastra (L) ad alabarda facendoli passare dietro al gruppo caffè.

Rilevare il tempo di macinatura (dose caffè) impostato sul tasto che si vuole verificare.

Posizionarsi con la paletta (M) di raccolta caffè in corrispondenza del convogliatore di uscita del caffè macinato ed azionare il tasto di selezione da verificare.

Durante la fase di macinatura, prestare attenzione a non far fuoriuscire caffè macinato dalla paletta.

Terminata la fase di macinatura, togliere la paletta dalla macchina e pesare, con una bilancia di precisione, la quantità di caffè macinato.

N.B.: per ottenere un peso reale, consigliamo di effettuare almeno 3+5 prelievi di caffè macinato e rilevarne la media.

GB

Push down the upper tube removing it from the housing of the ground coffee delivery conveyor. Remove upper tube (H), the spring (I) and the plate (L) passing them through to the back of the coffee group.

Read the grinding time (coffee dose) set on the key to be checked. Place coffee collector palette (M) near the ground coffee outlet conveyor and activate the selection key to be checked.

During the grinding phase, ensure that no ground coffee falls from the palette.

Once the grinding is completed, remove the palette from the machine and weigh the ground coffee using precision scales.

N.B. To obtain the true weight, we recommend that 3-5 samples of ground coffee are taken and the average weight recorded.

F

Pousser la conduite supérieure vers le bas en la faisant glisser hors du siège de convoyeur de sortie du café moulu. enlever la conduite supérieure (H), le ressort (I) ainsi que la plaque (L) en les faisant passer derrière le groupe café.

Prendre le temps de moulage (dose café) programmé sur la touche que l'on veut vérifier.

Se placer avec la palette (M) pour recueillir le café, près du convoyeur de sortie du café moulu et utiliser la touche de sélection à vérifier.

Pendant le moulage, faire attention à ne pas faire sortir du café moulu hors de la palette.

Terminée la phase de moulage, enlever la palette de la machine et peser, à l'aide d'une balance de précision, la quantité de café moulu.

N.B. pour obtenir le poids réel, il est conseillé d'effectuer au moins de 3 à 5 prélèvements de café moulu et en relever la moyenne.

D

Drücken Sie die obere Leitung nach unten, indem Sie die Leitung von der Zuführvorrichtung am Auslauf des gemahlten Kaffees abziehen. Bauen Sie die obere Leitung (H), die Feder (I) und die Platte (L) aus, indem Sie diese Teile hinter der Einheit zur Kaffeeabgabe durchführen.

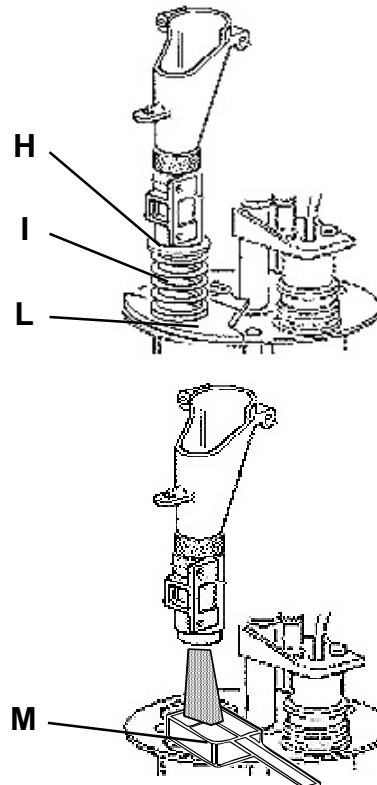
Lesen Sie die auf der Taste eingestellte Mahlzeit (Kaffeedosierung) ab, die verändert werden soll.

Setzen Sie die Schaufel (M) zur Kaffeeaufnahme in die Nähe der Zuführvorrichtung am Auslauf des gemahlten Kaffees, und drücken Sie die zu kontrollierende Wahl Taste.

Achten Sie während des Mahl Vorgangs darauf, daß kein gemahlener Kaffee aus der Schaufel tritt.

Nehmen Sie nach Beendigung des Mahl Vorgangs die Schaufel weg, und wiegen Sie mit einer Präzisionswaage den gemahlten Kaffee.

Zu beachten: Um das genaue Gewicht des gemahlten Kaffees zu erhalten, empfehlen wir, wenigstens drei bis fünf mal abzuwiegen und den Durchschnittswert zu ermitteln.



E

Empujar hacia abajo el conducto superior sacándolo de la sede del transportador de salida del café molido. Extraer el conducto superior (H), el resorte (I) y la placa de alabarda (L) haciéndolos pasar detrás del grupo café.

Medir el tiempo de molienda (dosis café) programado en la tecla que se desea comprobar.

Colocarse con la paleta (M) de recogida café en correspondencia con el transportador de salida del café molido y accionar la tecla de selección que hay que comprobar.

Durante la fase de molienda, tener cuidado en no hacer salir café molido de la paleta.

Una vez terminada la fase de molienda, quitar la paleta de la máquina y pesar, con una balanza de precisión, la cantidad de café molido.

NOTA: para obtener un peso real, aconsejamos efectuar por lo menos 3+5 extracciones de café molido y realizar la media.

P

Empurrar o cano superior para baixo, desfiando-o do alojamento do transportador de saída do café moído. Remover o cano superior (H), a mola (I) e a chapa (L) em alabarda, fazendo-os passar por trás do grupo de café.

Detectar o tempo de moedura (dose café) seleccionado na tecla que se quiser verificar.

Posicionar-se com a pá (M) de recolha do café por baixo do transportador de saída do café moído e accionar a tecla de selecção a verificar.

Durante a fase de moedura, prestar atenção para que o café moído não saia da pá.

Terminada a fase de moedura, retirar a pá da máquina e pesar a quantidade de café moído, com uma balança de precisão.

N.B.: para obter um peso real, aconselhamos efectuar pelo menos 3+5 levantamentos de café moído e detectar a média dos mesmos.

# 9.

## Dip-Switch Display - Display Dip-Switch Dip-Switch Display -Dip-Switch-Schalter Display Dip-Switch Display - Dip-Switch Display

I

### Attenzione!

Il cambiamento di posizione dei Dip-Switch (N) deve essere effettuato **RIGOROSAMENTE** a macchina SPENTA.

Nelle condizioni standard i Dip-Switch sono posizionati su OFF. Agendo sui Dip-Switch (N) si attivano le seguenti funzioni:

- DIP 1 = ON simulazione chiave tecnico
- DIP 2 = OFF
- DIP 3 = ON inserimento dati standard (\*)
- DIP 4 = ON macchina con contabilità/computer/gettoniera
- DIP 5 = OFF
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF

(\*) Al termine delle operazioni di inserimento dati standard, riportare il DIP 3 sulla posizione OFF.

GB

### CAUTION!

When changing the position of the Dip-Switch (N), the machine **MUST BE SWITCHED OFF**.

Under standard conditions, the dip-switches are positioned on OFF.

The dip-switches (N) have the following functions:

- DIP 1 = ON Simulation of engineer's key
- DIP 2 = OFF
- DIP 3 = ON Input of standard (\*) data
- DIP 4 = ON Machine with account/computer/coin-card unit functions
- DIP 5 = OFF
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF

(\*) Upon completion of the standard data input operations, position DIP 3 to OFF again.

F

### Attention !

Le changement de position des Dip-Switch doit être **OBLIGATOIREMENT** effectué lorsque la machine est **ETEINTE**.

En phase de position standard, les Dip-Switch sont placés sur OFF.

Utiliser les Dip-Switch (N) pour activer les fonctions suivantes :

- DIP 1 = ON simulation clef technique
- DIP 2 = OFF
- DIP 3 = ON introduction informations standard (\*)
- DIP 4 = ON machine à jetons / computer
- DIP 5 = OFF
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF

(\*) à la fin des opérations d'introduction des informations standard, remettre le DIP 3 sur la position OFF.

D

### Achtung:

Die Verstellung der Dip-Switch-Schalter (N) darf nur bei **ABGESCHALTETER** Maschine vorgenommen werden!

Bei normalen Betriebsbedingungen müssen die Dip-Switch-Schalter auf OFF gestellt sein. Nachstehend werden die Funktionen bei entsprechender Einstellung der Dip-Switch-Schalter (N) aufgeführt:

- Dip-Switch-Schalter 1 = ON Simulation Monteurschlüssel
- Dip-Switch-Schalter 2 = OFF
- Dip-Switch-Schalter 3 = ON Eingabe Standarddaten (\*)
- Dip-Switch-Schalter 4 = ON Maschine mit Funktion Buchführung/ Computer / Münzwerk
- Dip-Switch-Schalter 5 = OFF
- Dip-Switch-Schalter 6 = OFF
- Dip-Switch-Schalter 7 = OFF
- Dip-Switch-Schalter 8 = OFF

(\*) Nach Abschluß der Eingabe der Standarddaten muß der Dip-Switch-Schalter 3 auf OFF zurückgestellt werden.

E

### ¡Atención!

El cambio de posición de los Dip-switch (N) se tiene que efectuar **RIGUROSAMENTE** con la máquina **APAGADA**.

En condiciones estándares los Dip-switch están colocados en OFF.

Por medio de los Dip-Switch (N) se activan las siguientes funciones:

- DIP 1 = ON simulación llave técnico
- DIP 2 = OFF
- DIP 3 = ON introducción datos estándares (\*)
- DIP 4 = ON máquina con contabilidad/ordenador/ dispositivo fichas
- DIP 5 = OFF
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF

(\*) Al final de las operaciones de introducción datos estándares, restablecer el DIP 3 a la posición OFF.

P

### Atenção!

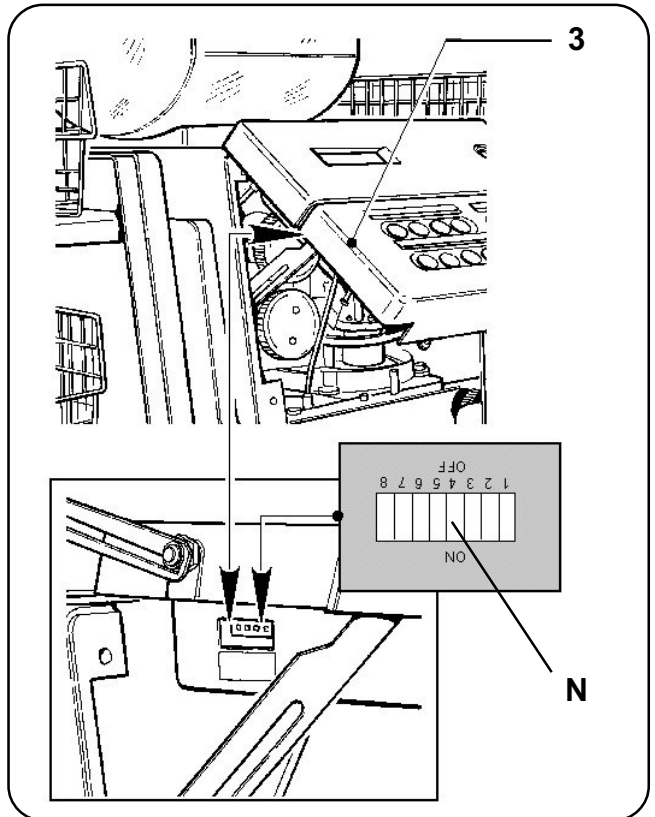
A mudança de posição dos Dip-Switch deverá ser efectuada **RIGOROSAMENTE** com a máquina **DESLIGADA**.

Nas condições standard os Dip-Switch estão posicionados em OFF.

Actuando nos Dip-Switch (N) activam-se as funções a seguir indicadas:

- DIP 1 = ON simulação chave técnico
- DIP 2 = OFF
- DIP 3 = ON introdução dados standard (\*)
- DIP 4 = ON máquina com contabilidade/ computador/caixa das moedas
- DIP 5 = OFF
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF

(\*) No fim das operações de introdução dos dados standard, recolocar o DIP 3 na posição OFF.



# 10. Dip-Switch CPU - CPU Dip-Switch Dip-Switch CPU - Dip-Switch CPU Dip-Switch-Schalter CPU - Dip-Switch CPU

I

## Attenzione!

**Il cambiamento di posizione dei Dip-Switch deve essere effettuato RIGOROSAMENTE a macchina SPENTA.**

Nelle condizioni standard i Dip-Switch sono posizionati su OFF. Agendo sui Dip-Switch (O) si attivano le seguenti funzioni:

- DIP 1 = ON simulazione chiave tecnico
- DIP 2 = ON inibizione lavaggio rapido
- DIP 3 = ON inserimento dati standard (\*)
- DIP 4 = OFF interfaccia computer - ON cassa centrale
- DIP 5 = ON blocco selezioni per mancato lavaggio latte (da 4.0.0-7)
- DIP 6 = ON elettrovalvola deviatrice normalmente aperta
- DIP 7 = OFF vedi libretto schemi elettrici
- DIP 8 = OFF vedi libretto schemi elettrici

(\*) Al termine delle operazioni di inserimento dati standard, riportare il DIP 3 sulla posizione OFF.

GB

## CAUTION!

**When changing the position of the Dip-Switch, the machine MUST BE SWITCHED OFF.**

Under standard conditions, the dip-switches are positioned on OFF.

The dip-switches (O) have the following functions:

- DIP 1 = ON Simulation of engineer's key
- DIP 2 = ON fast washing block
- DIP 3 = ON Input of standard (\*) data
- DIP 4 = OFF computer interface - main body ON
- DIP 5 = ON selection block due to milk wash failure (from 4.0.0-7)
- DIP 6 = ON normally open solenoid valve diverter
- DIP 7 = OFF See electric wiring diagrams booklet
- DIP 8 = OFF See electric wiring diagrams booklet

(\*) Upon completion of the standard data input operations, position DIP 3 to OFF again.

F

## Attention !

**Le changement de position des Dip-Switch doit être RIGOREUSEMENT effectué lorsque la machine est ETEINTE.**

En phase de standard, les Dip-Switch sont placés sur OFF.

Utiliser les Dip-Switch (O) pour activer les fonctions suivantes:

- DIP 1 = ON simulation clef technique
- DIP 2 = ON inhibition lavage rapide
- DIP 3 = ON introduction informations standard (\*)
- DIP 4 = OFF interface ordinateur-ON caisse centrale
- DIP 5 = ON blocage sélections à cause d'un non lavage du lait (de 4.0.0-7)
- DIP 6 = ON électrovanne déviatrice normalement ouverte.
- DIP 7 = OFF voir livret des schémas électriques
- DIP 8 = OFF voir livret des schémas électriques

(\*) à la fin des opérations d'introduction des informations standard, remettre le DIP 3 sur la position OFF.

D

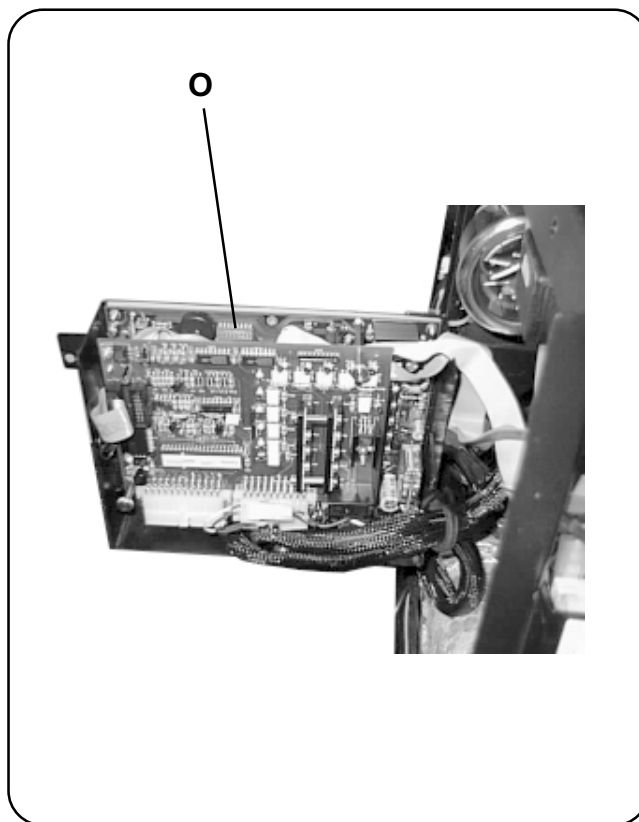
## Achtung:

**Die Verstellung der Dip-Switch-Schalter darf nur bei ABGESCHALTETER Maschine vorgenommen werden!**

Bei normalen Betriebsbedingungen müssen die Dip-Switch-Schalter auf OFF gestellt sein. Nachstehend werden die Funktionen bei entsprechender Einstellung der Dip-Switch-Schalter (O) aufgeführt:

- DIP 1 = ON Simulation Monteurschlüssel
- DIP 2 = ON Ausschuß Schnellsplüfung
- DIP 3 = ON Eingabe Standarddaten (\*)
- DIP 4 = OFF Schnittstelle Computer - ON zentrales Gehäuse
- DIP 5 = ON Sperrung Selektionen wegen nicht erfolgter Spülung des Milchkreises (von 4.0.0-7)
- DIP 6 = ON Magnetventil Umleitventil, normalerweise geöffnet
- DIP 7 = OFF siehe Schaltpläne
- DIP 8 = OFF siehe Schaltpläne

(\*) Nach Abschluß der Eingabe der Standarddaten muß der Dip-Switch-Schalter 3 auf OFF zurückgestellt werden.



E

## ¡Atención!

**El cambio de posición de los Dip-switch (O) se tiene que efectuar RIGUROSAMENTE con la máquina APAGADA.**

En condiciones estándares los Dip-switch están colocados en OFF.

Por medio de los Dip-Switch (O) se activan las siguientes funciones:

- DIP 1 = ON simulación llave técnico
- DIP 2 = ON inhibición lavado rápido
- DIP 3 = ON introducción datos estándares (\*)
- DIP 4 = OFF interfaz ordenador - ON caja central
- DIP 5 = ON bloqueo selecciones por falta de lavado leche (de 4.0.0-7)
- DIP 6 = ON electroválvula de derivación normalmente abierta
- DIP 7 = OFF véase manual esquemas eléctricos
- DIP 8 = OFF véase manual esquemas eléctricos

(\*) Al final de las operaciones de introducción datos estándares, restablecer el DIP 3 a la posición OFF.

P

## Atenção!

**A mudança de posição dos Dip-Switch deverá ser efectuada RIGOROSAMENTE com a máquina DESLIGADA.**

Nas condições standard os Dip-Switch estão posicionados em OFF. Actuando nos Dip-Switch (O) activam-se as funções a seguir indicadas:

- DIP 1 = ON simulação chave técnico
- DIP2 = ON inibição da lavagem rápida
- DIP 3 = ON introdução dados standard (\*)
- DIP4 = OFF interface computador - ON caixa central
- DIP5 = ON bloqueio selecções por falta de lavagem leite (de 4.0.0-7)
- DIP6 = ON electroválvula desviadora geralmente aberta
- DIP 7 = OFF ver manual esquemas eléctricos
- DIP 8 = OFF ver manual esquemas eléctricos

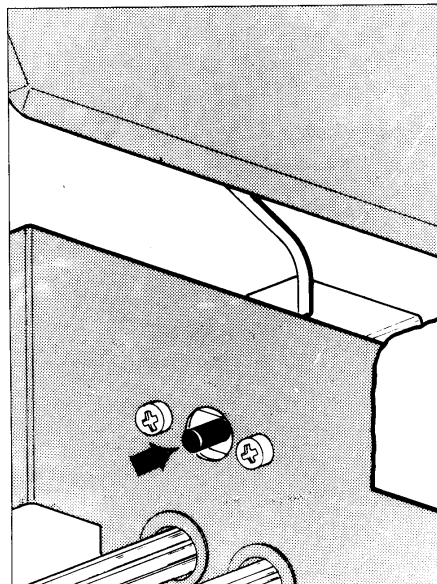
(\*) No fim das operações de introdução dos dados standard, recolocar o DIP 3 na posição OFF.



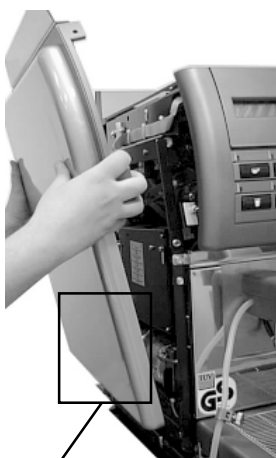
# 11.

## Termostato di sicurezza - Safety thermostat Thermostat de sureté - Sicherheitsthermostat Termostato de seguridad - Termostato de segurança

- I** In caso di intervento del termostato, riarmare
- GB** In case of thermostat intervention, switch on again
- F** En cas d'intervention du thermostat, brancher de nouveau
- D** Falls der Thermostat ausgelöst wird, ihn wiederenschalten
- E** En caso de intervención del termostato, reencender de nuevo
- P** En caso de intervenção do termostato, reacender de novo



**UBICAZIONE TERMOSTATO DI SICUREZZA - LOCATION OF THE SAFETY THERMOSTAT - EMPLACEMENT DU THERMOSAT DE SECURITE  
POSITION DES SICHERHEITSTHERMOSTATS - UBICACIÓN TERMOSTATO DE SEGURIDAD - LOCALIZAÇÃO DO TERMÓSTATO DE SEGURANÇA**



10



20

**ANOMALIE/GUASTI - DEFECTS/MALFUNCTIONS**  
**ANOMALIES/AVARIES - ANOMALIEN/STÖRUNGEN**  
**ANOMALÍAS/AVERÍAS - ANOMALIAS/AVARIAS**

- I** Anomalie - Guasti
- GB** Defects - Malfunctions
- F** Anomalies - Avaries
- D** Anomalien - Störungen
- E** Anomalías - Averías
- P** Anomalias - Avarias

## Defects - Malfunctions

### 1. Table of the Malfunctions Displayed Under Normal Operating Conditions

MALFUNCTION CODE	CAUSE	REMEDY
"01" MACHINE COLD	Coffee boiler KTY short circuited. Connections (pins 2-11 of Y3 CPU and KTY) short circuited. Defective CPU card.	Change the coffee boiler KTY. Check the connections. Change the CPU card.
"02" MACHINE COLD	Coffee boiler KTY cut off. Connections (pins 2-11 of Y3 CPU and KTY) cut off. Defective CPU card.	Change the coffee boiler KTY. Check the connections. Change the CPU card.
"03" MACHINE COLD	The coffee boiler does not reach the set temperature within 45 minutes: - Resistance power supply phase is missing. - Boiler resistance cut off. - Defective automatic reset thermostat (TB1). - Connections (pins 11-12 of Y4 CPU and static relay) cut off. - Defective resistance command static relay. - Defective CPU card output.	Check the power supply phase. Change the resistance. Change the thermostat (TB1). Check the connections. Change the static relay. Change the CPU card.
"04" MACHINE COLD	Piston group KTY short circuited. Connections (pins 2-12 of Y3 CPU and KTY) short circuited. Defective CPU card.	Change the group piston KTY. Check the connections. Change the CPU card.
"05" MACHINE COLD	Group piston KTY cut off. Connections (pins 2-12 of Y3 CPU and KTY) cut off. Defective CPU card.	Replace the group piston KTY. Check the connections. Change the CPU card.
"06" COLD MACHINE	The group piston does not reach the set temperature within 45 minutes: - Piston resistance cut off. - Connections (pins 22-13 of Y4 CPU resistance) cut off. - Defective CPU card output.	Change the resistance. Check the connections. Change the CPU card.
"07" MACHINE COLD	The general boiler does not reach the set temperature within 45 minutes: - Resistance power supply phase is missing. - Intervention of the thermostat safety device. - General boiler resistance cut off. - Defective or uncalibrated pressurestat. - Connections (pins 7-13 of Y4 CPU and static relay) cut off. - Defective resistance command static relay. - Defective CPU card output.	Check the power supply phase. Reset the thermostat safety device. Change the resistance. Calibrate or change the pressurestat. Check the connections. Change the static relay. Change the CPU card.
"08" MACHINE COLD	General boiler KTY short circuited. Connections (pins 1-2 of Y3 CPU and KTY) short circuited. Defective CPU card.	Replace the general boiler KTY. Check the connections. Change the CPU card.
"09" MACHINE COLD	General boiler KTY cut off. Connections (pins 1-2 of Y3 CPU and KTY) cut off. Defective CPU card.	Replace the general boiler KTY. Check the connections. Change the CPU card.
"10" - "11" GROUP STOPPED	The group does not move / the group moves but does not complete the phase within 8 seconds: - Group's rotation is mechanically obstructed. - Defective group motor. - Connections (pins 14-15 of the CPU and motor) cut off. - Defective FC1 or FC2 limit stops. - Defective CPU card output.	Check. Change the group motor. Check the connections. Change the FC1 or FC2 limit stops. Change the CPU card.
"12" IRREGULAR DOSE	During the dispensing of the coffee based drinks the counter pulses of the volumetric doser do not reach the CPU's memory within 10 seconds: - Excessive dose of ground coffee. - The spout, filter and/or tubes are obstructed. - Defective volumetric doser. - Connections (7-8-10 of Y3 CPU and the volumetric doser) are obstructed or short circuited. - Defective CPU card.	Decrease the ground coffee dose. Clean and/or change the spout, filter and tubes. Change the volumetric doser. Check the connections. Change the CPU card.



## Defects - Malfunctions

### 1. Table of the Malfunctions Displayed Under Normal Operating Conditions

MALFUNCTION CODE	CAUSE	REMEDY
"13" IRREGULAR DOSE	During the dispensing of the coffee based drinks the group has moved and the FC1 limit stop has changed status: - Incorrect calibration of the group's cams - Malfunction of the stop command of the group (CPU card)	Calibrate the cams correctly. Change the CPU card.
"15" NO WATER	The water level in the general boiler does not refill within 10 minutes: - No water from mains. - Defective boiler fill solenoid valve (EVC). - Blocked water tubes. - Connections (pins 19-13 of Y4 CPU and EVC) obstructed.	Open water mains tap. Clean or change the solenoid valve (EVC). Clean or change the tubes. Check the connections.
"20" DISPLAY MALFUNCTION	Incorporated clock battery is dead.	Change incorporated clock.
"23" CPU MALFUNCTION	Defective EEPROM data memory.	Change CPU card.
"24" HIGH VOLTAGE	When the machine is switched on the CPU card checks the value of the continuous voltage on the card (value displayed on the 2 <sup>nd</sup> MANUAL WINDOW). If the voltage exceeds <b>13.9V</b> the malfunction is displayed. - Power supply voltage is not correct.  - TR1 transformer malfunction.	Check and if necessary change the position of the voltage change connector. Change the TR1 transformer.
"25" LOW VOLTAGE	When the machine is switched on the CPU card checks the value of the continuous voltage on the card (value displayed on the 2 <sup>nd</sup> MANUAL WINDOW). If the voltage is lower than <b>11.3V</b> the malfunction is displayed. - Power supply voltage is not correct.  - TR1 transformer malfunction.	Check and if necessary change the position of the voltage change connector. Change the TR1 transformer..
"29" MACHINE COLD	Steam probe short circuited. Connections short circuited. Defective Adapter card.	Change the steam probe. Check the connections. Change the Adapter card.
"30" MACHINE COLD	Steam probe cut off. Connections cut off. Defective Adapter card.	Change the steam probe. Check the connections. Change the Adapter card.

## Defects - Malfunctions

### 2. Table of the Malfunctions Displayed During the Programming of “Display Menu”

MALFUNCTION CODE	CAUSE
"00"	Card initialization at the factory.
"14"	Programming of coffee selections with water dose at zero
"16"	NO connection with the computerized systems in serial line.
"18"	Milk circuit wash not performed (12 hours from the first milk dispensing).
"19"	Coffee circuit wash not performed (72 hours from the last wash).
"21"	Data record from modem-PC.
"26"	NO automatic call from CTS.
"95 - 96 - 97 - 98 - 99"	Input of standard data.

N.B. The codes (xx) of the previously described malfunctions are also displayed in the “Display Menu”.

Error 1	
E=xx/1	h00012:40 ◀
E=xx/1	h00007:15
E=xx/0	h00000:23

"E=xx/0" Represents malfunctions in the display card  
 "E=xx/1" Represents malfunctions in the CPU card

In the case of “Malfunction 1”, the time indicated represents the difference between the current time and the time when the malfunction occurred. In the case of other malfunctions, the time represents the difference in time between the indicated malfunction (e.g. “Malfunction 2”) and the previous one. If the time given is “h00000:00”, this indicates that the malfunction occurred simultaneously with the previous one.

### 3. Other Malfunctions

MALFUNCTION DESCRIPTION	CAUSE	REMEDY
“The machine does not switch on”	Intervention of the coffee boiler safety thermostat . Electric connections between the machine and the power supply panel are incorrect. Intervention of the automatic fuses. Defective TR or TR1 transformer. Intervention of the SCM card fuse. Defective IG or IS switch.	Reset the coffee boiler safety thermostat. Check the connections and the position of the general switch. Reset the fuses. Check/change the TR or TR1 transformer. Change the SCM card fuses. Check/change the IG or IS switch.
“Programming keyboard malfunction”	If the defect persists after having input the STANDARD DATA via dip-switch 3 of the display card, check the following: - Whether the programming keyboard is defective. - Whether the display card is defective.	Change the programming keyboard. Change the display card.
“Selection keys malfunction	Display the “ <b>Prog. Selections – Press a Selection Key</b> ” window . Check the quality of the display. If the picture is unstable, check the following: - Whether the CPU, DISPLAY and GRINDER (SCM) connecting 14-way flat cable are blocked or defective. - Whether the water selection keyboard connections are blocked or defective.	Check the connections. If necessary, change the 14-way flat cable. Check the connections.
“Grinder malfunction”	Intervention of the motor’s thermal protection device (motor very hot). - Foreign body in the grinding chamber. - Grinder motor - grinder card (SCM) connections are blocked or defective. - Grinder card (SCM) is defective. - MD1 or MD2 relay is defective. - Grinder motor capacitors are defective. - Grinder motor is defective.	Wait until the motor has cooled down and then check if it functions correctly. Open the grinding chamber, check and clean. Check the connections.  Change the defective grinder card (SCM). Change the MD1 or MD2 relay. Change the capacitors. Change the grinder motor.