



MACCHINE DA CAFFE' AUTOMATICA AUTOMATIC COFFEE MACHINES

DE LONGHI ECAM23.420
(INT/CH/ATE/DE/IT)

DATI TECNICI / TECHNICAL DATA / TECHNISCHE DATEN DONNEES TECHNIQUES / DATOS TECNICOS

Voltaggio / Voltage / Spannung / Voltage / Voltaje V / Hz 220 - 240 / 50 - 60

Max. potenza assorbita / Max. input power W 1450

SEZIONE CAFFE' / COFFEE SECTION

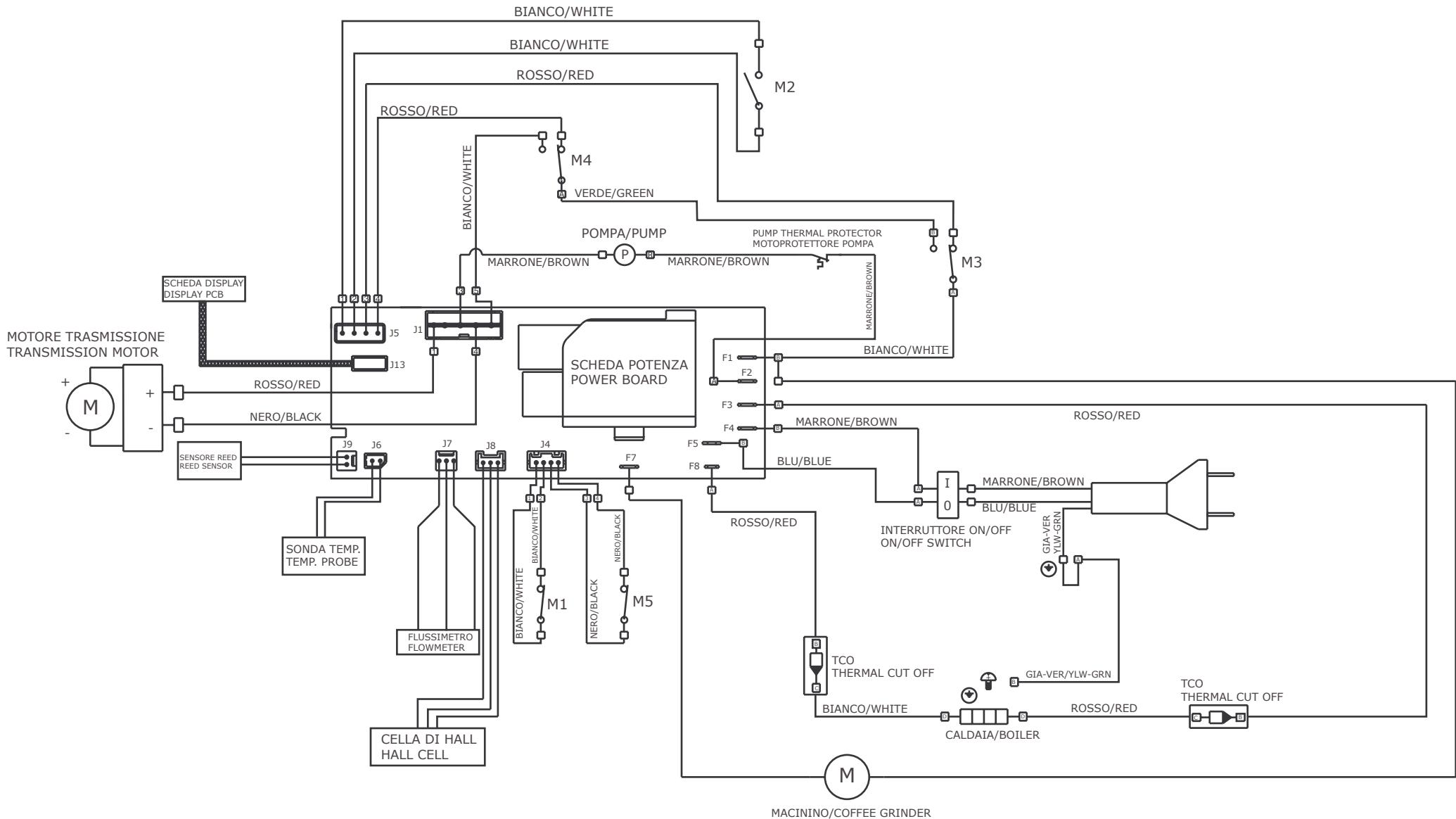
Sonda termica / Temperature probe °C 98 (Caffè / Acqua calda)
(Coffee / Hot water)

Fusibile termico TCO / Thermal fuseTCO °C 192

Resistenza riscaldamento W 1400

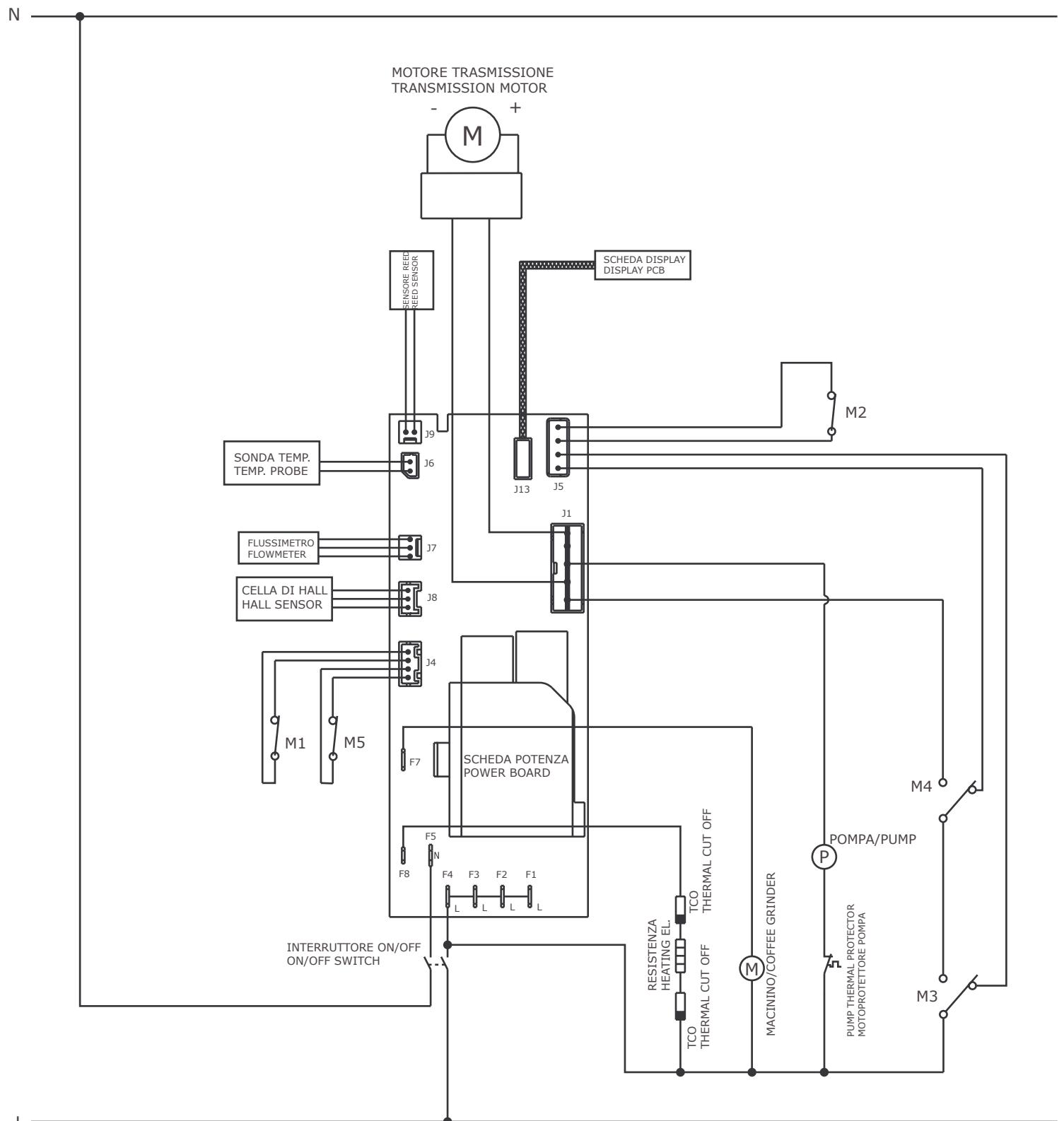
Pompa / Pump TYPE / W ULKA EP5W / 48

SCHEMA ELETTRICO / ELECTRICAL DIAGRAM

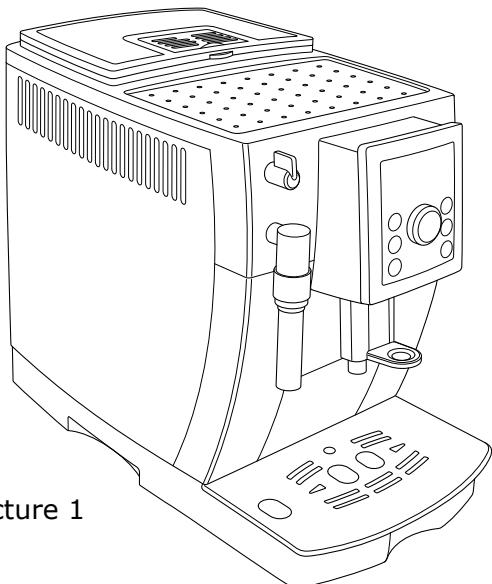


| LEGENDA MICRO / MICROSWITCHES | |
|-------------------------------|---|
| M1 | Infusore alto / Infuser top position |
| M2 | Infusore basso / Infuser bottom position |
| M3 | Cassetto fondi / Coffee grounds container |
| M4 | Tanica / Tank |
| M5 | Rubinetto / Tap |

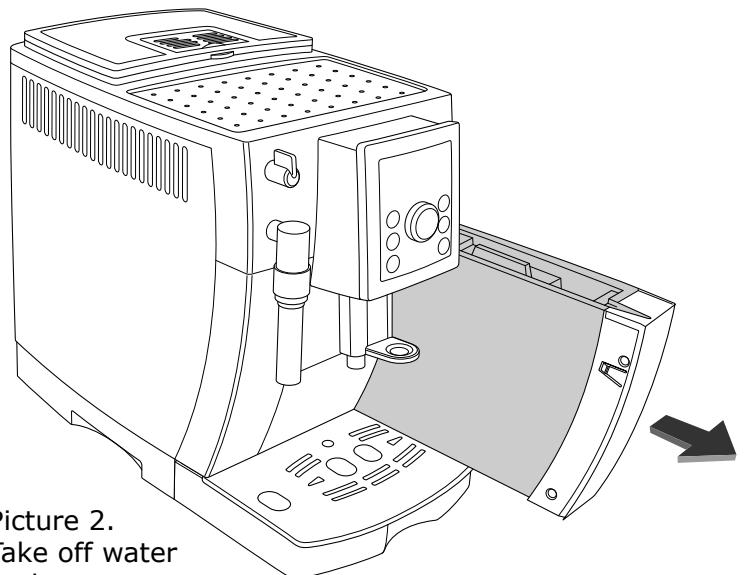
SCHEMA ELETTRICO / ELECTRICAL DIAGRAM



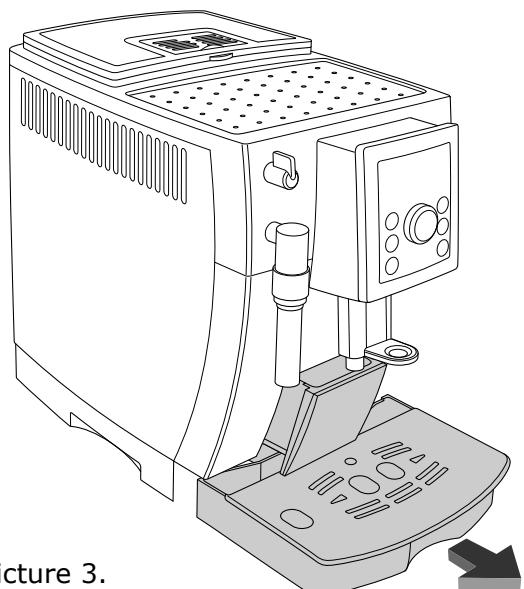
ACCESSIBILITY



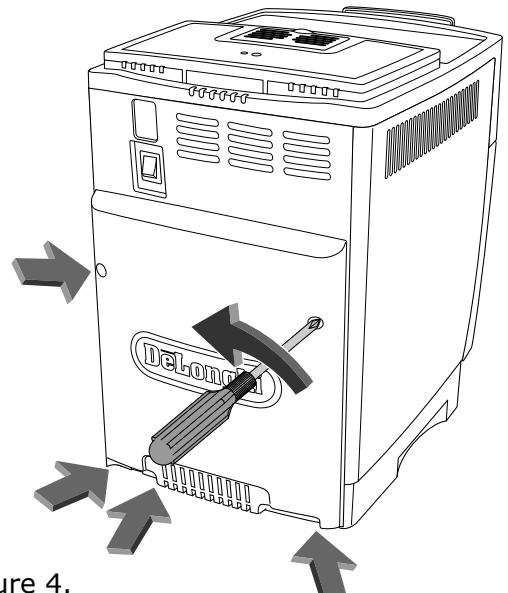
Picture 1



Picture 2.
Take off water
tank

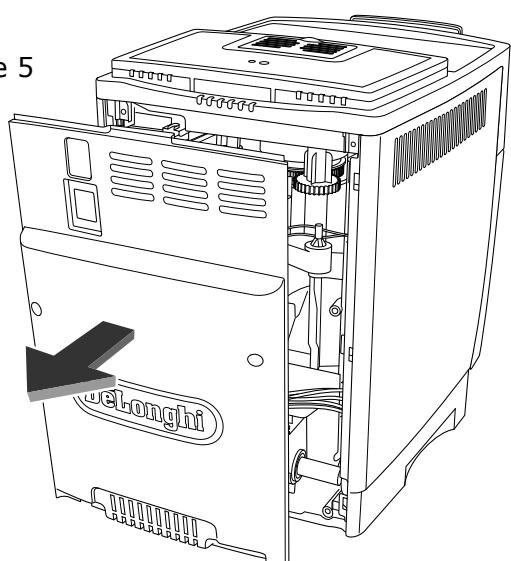


Picture 3.
Take off drip tray
and waste container

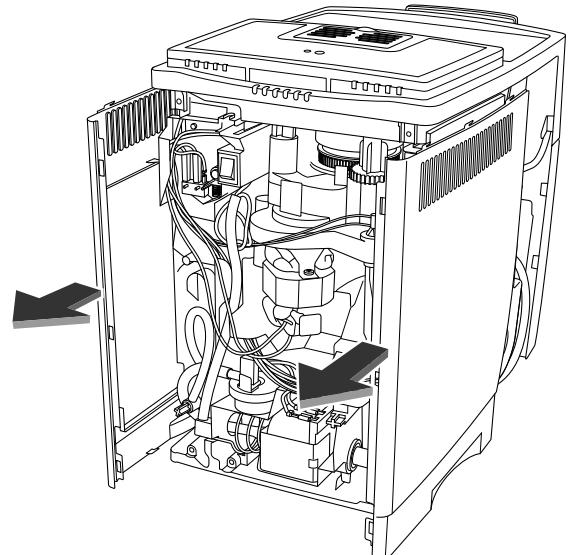


Picture 4.
Unscrew the 5 indicated screws
(Torx T20)

Picture 5

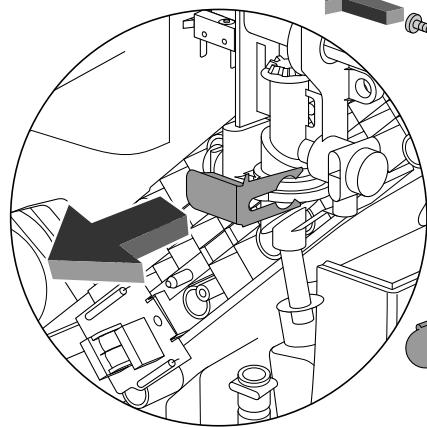


5.1 Remove back panel

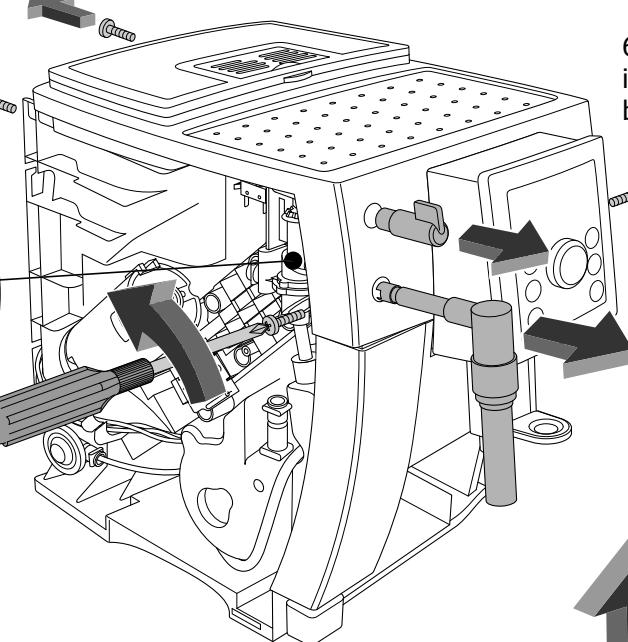


5.2 Unhook side panels

Picture 6 - TO REMOVE CONTROL PANEL

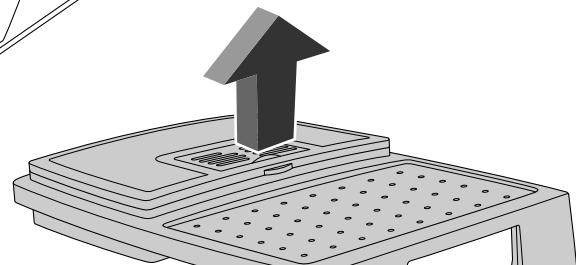


6.1 Take off plastic hook first

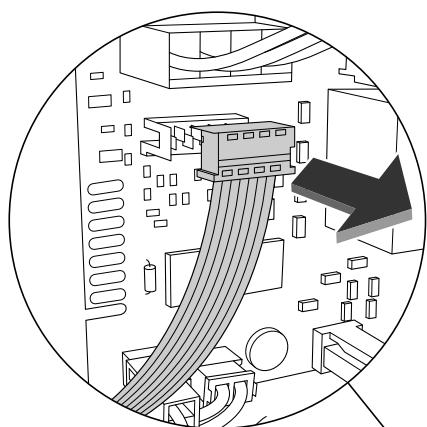


6.3 Unscrew the 4 indicated screws (2 on the back +2 on the sides)

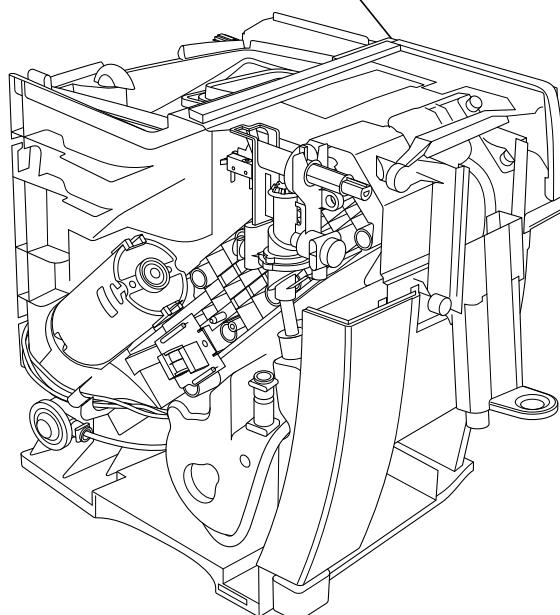
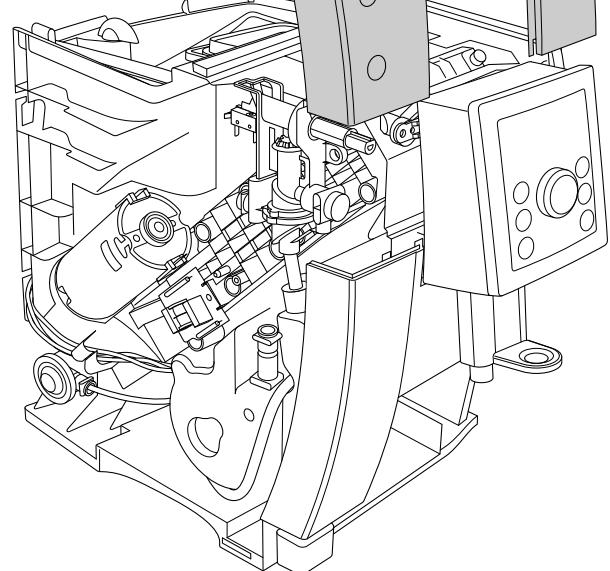
6.2 Take off knob and frother



6.4 Lift upper panel

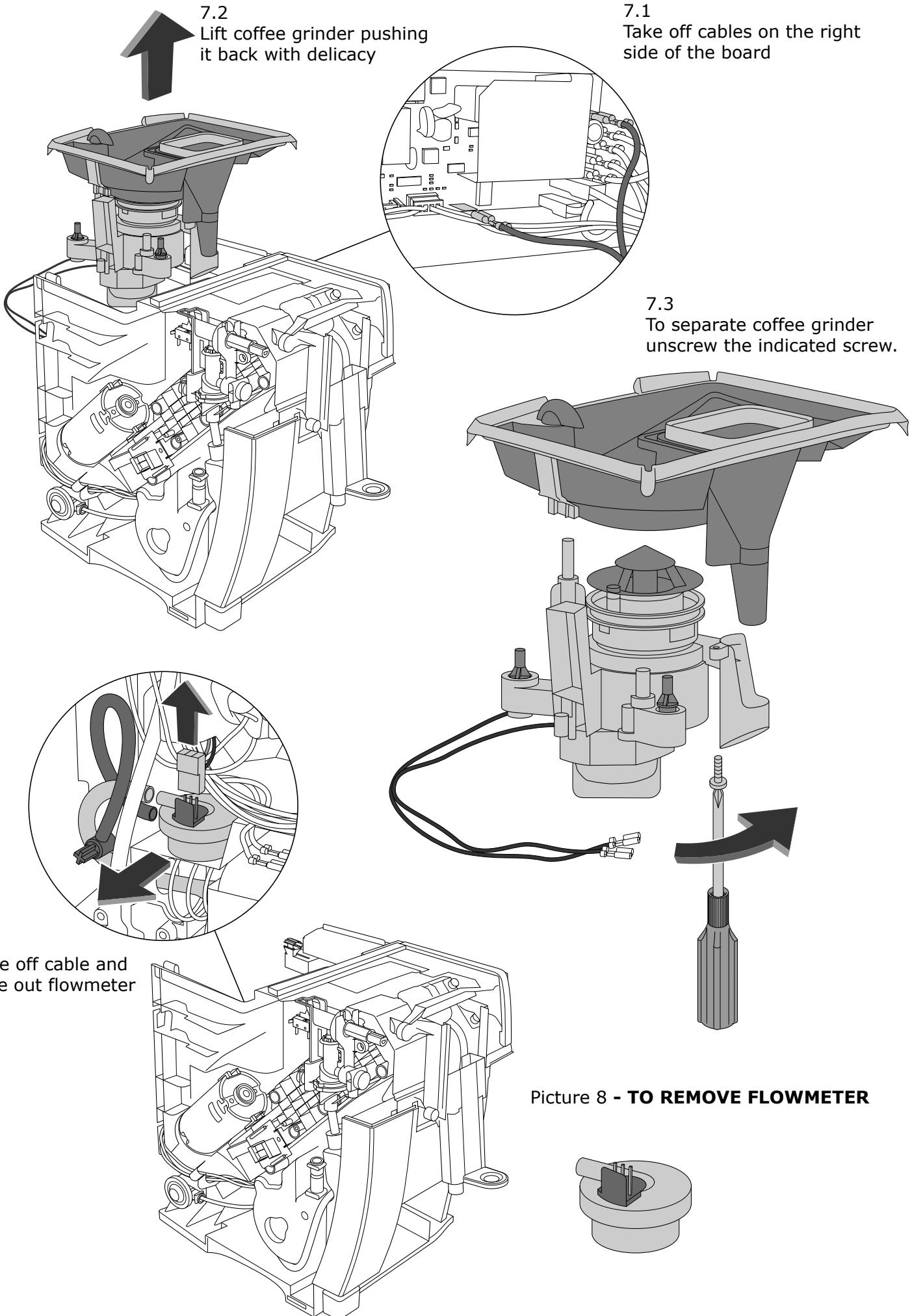


6.5 Take off cable

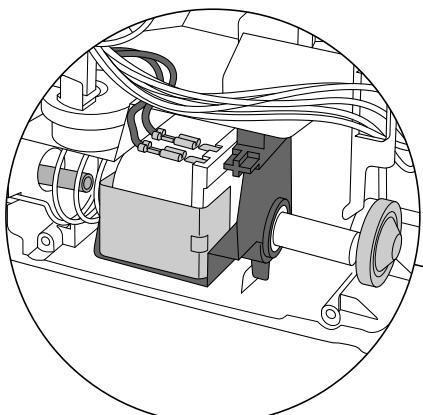


6.6
Unscrew the 2 indicated screws.
Then, lift with care the Control Panel

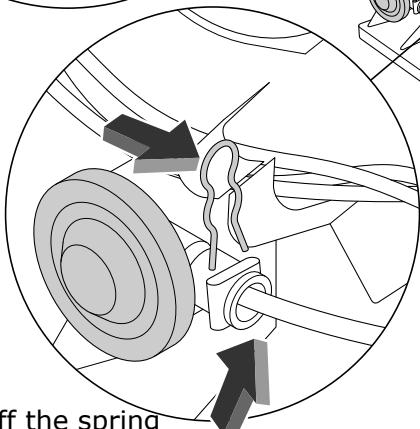
Picture 7 - TO REMOVE COFFEE GRINDER



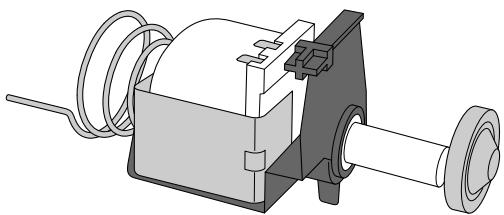
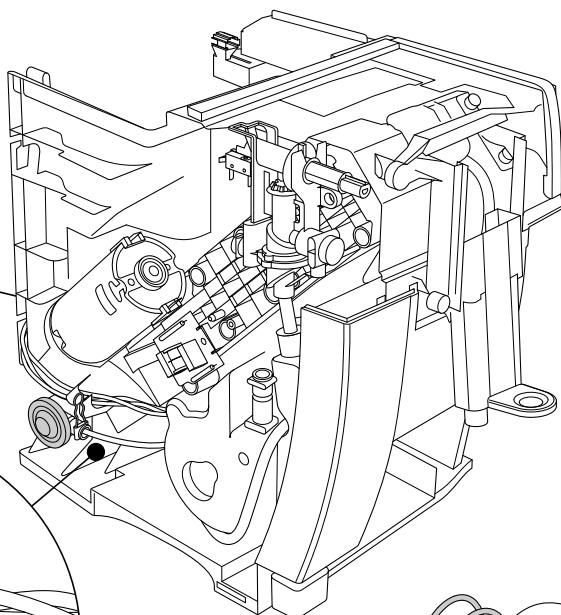
9.2
Take off pump



Picture 9 - **TO REMOVE PUMP**



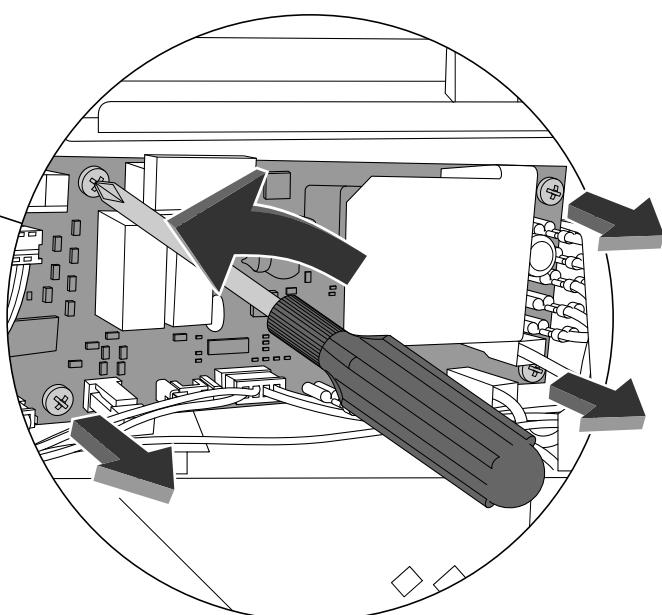
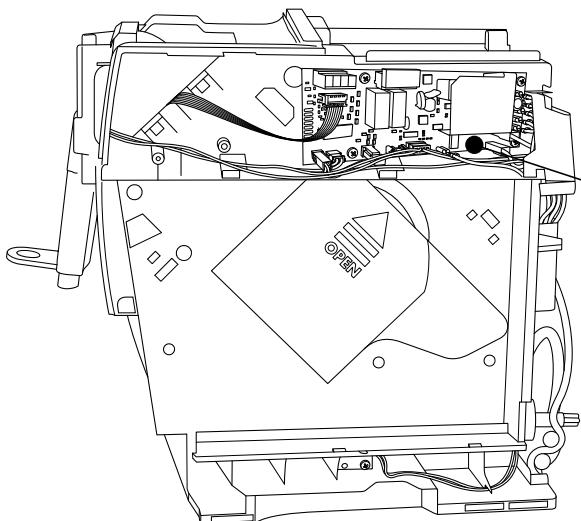
9.1
Take off the spring
and then the tube
Attention: Some water could come out
from the tube, since the water circuit is
emptying out



9.3

Attention: After you have taken off cables,
you will have to take off pump thermal protector.
Since it is glued, you will have to use a certain strength.
Remember to glue it again when you will reassemble it

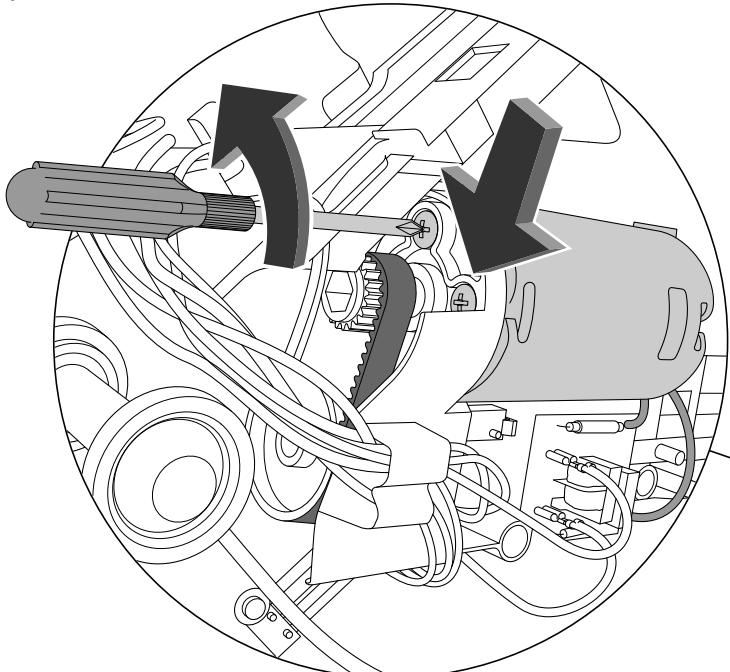
Picture 10 - **TO REMOVE BOARD**



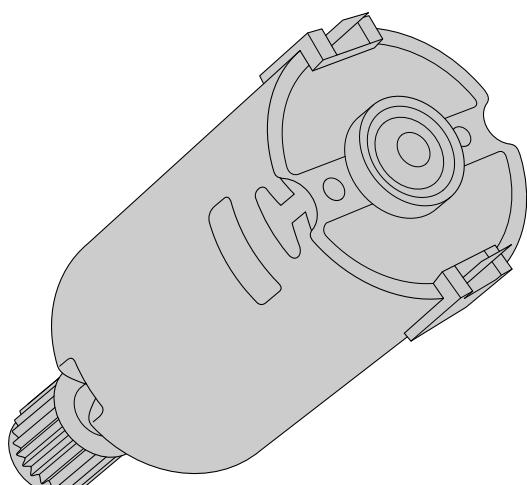
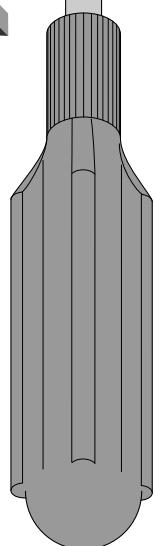
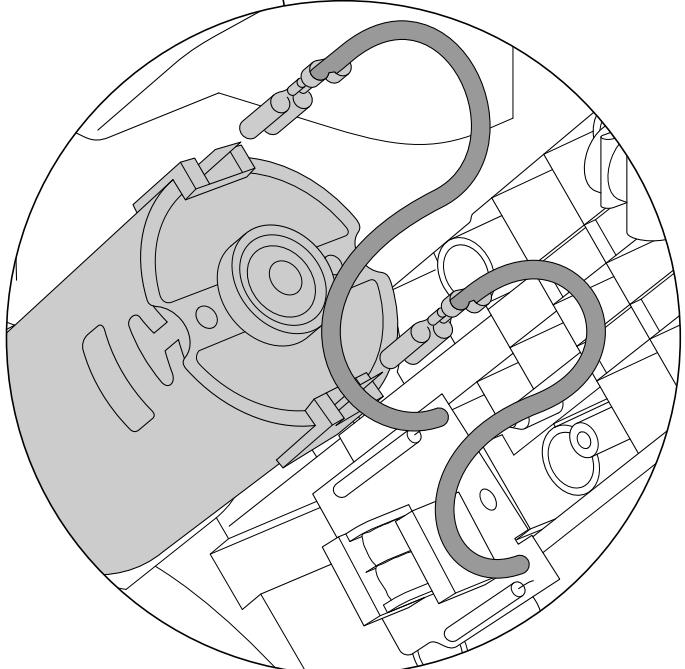
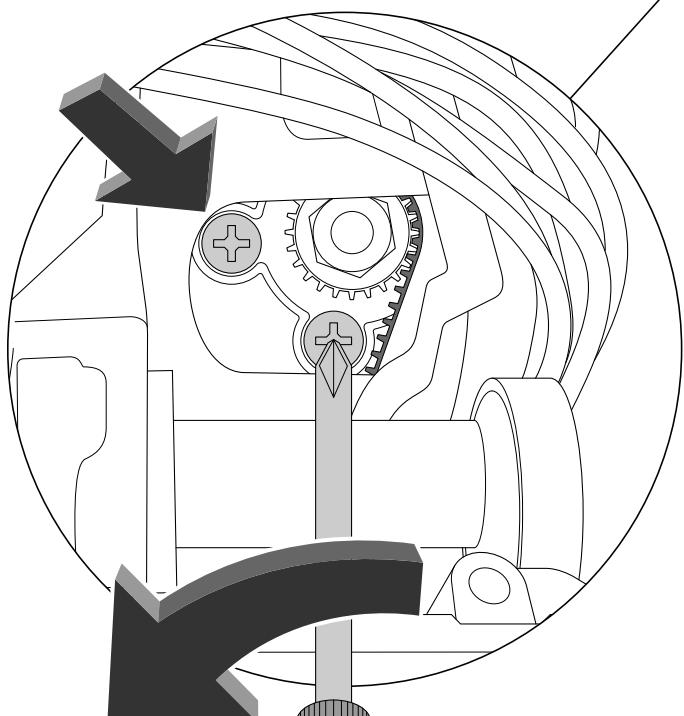
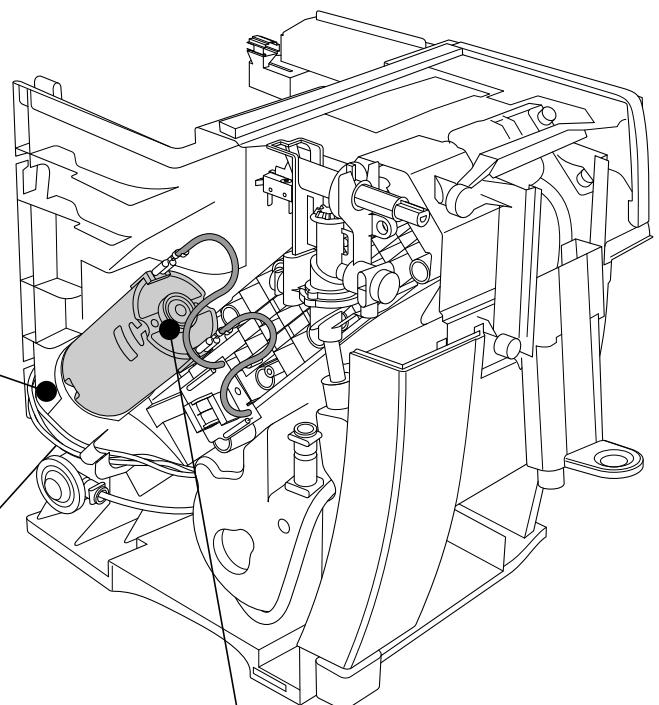
10.1
Take off the 4 indicated screws. After you have taken off cables, take out the board

11.1

Unscrew the 4 indicated screw
you find on the rear of the motor



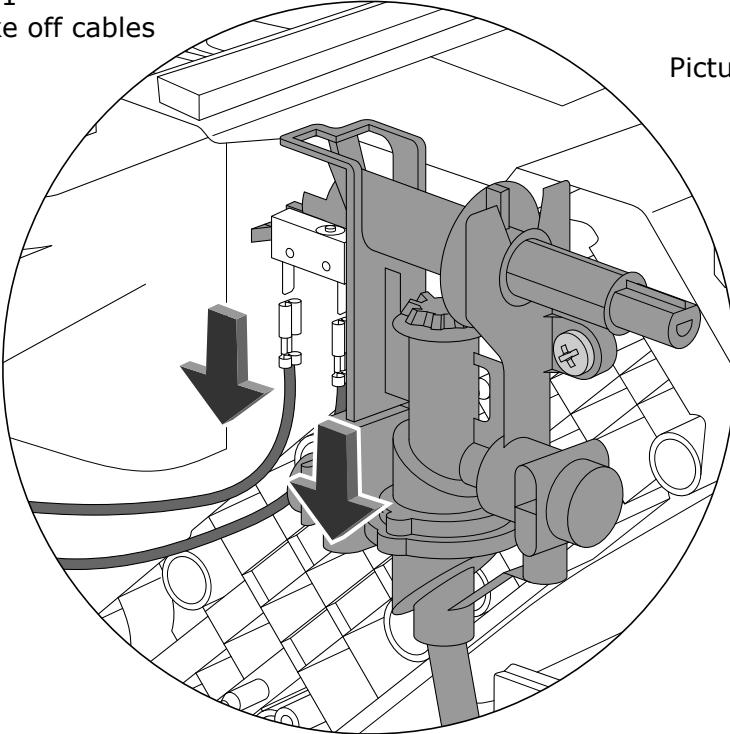
Picture 11 - **TO REMOVE MOTOR**



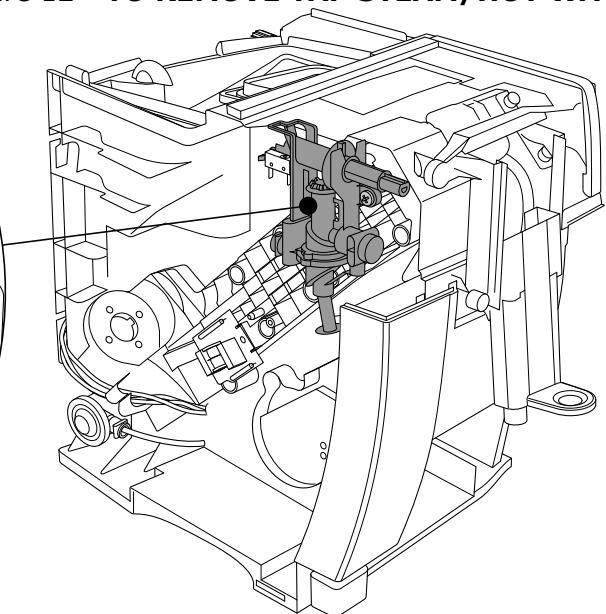
11.2

take off the 2 cables
and then take off
the DC motor.
Pay attention to
polarity when
replacing it

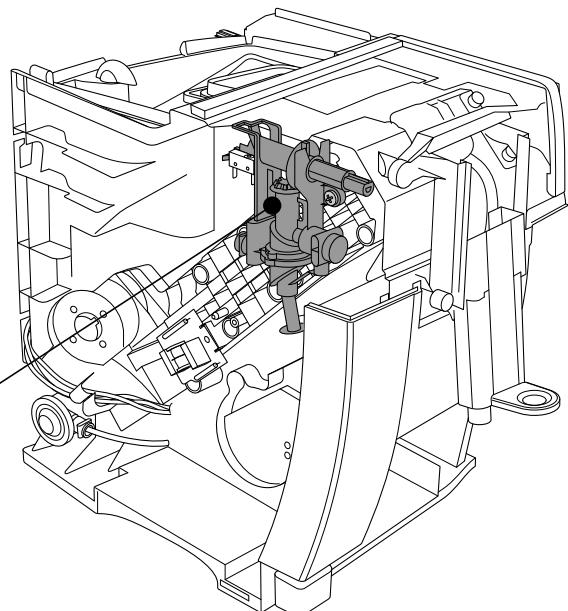
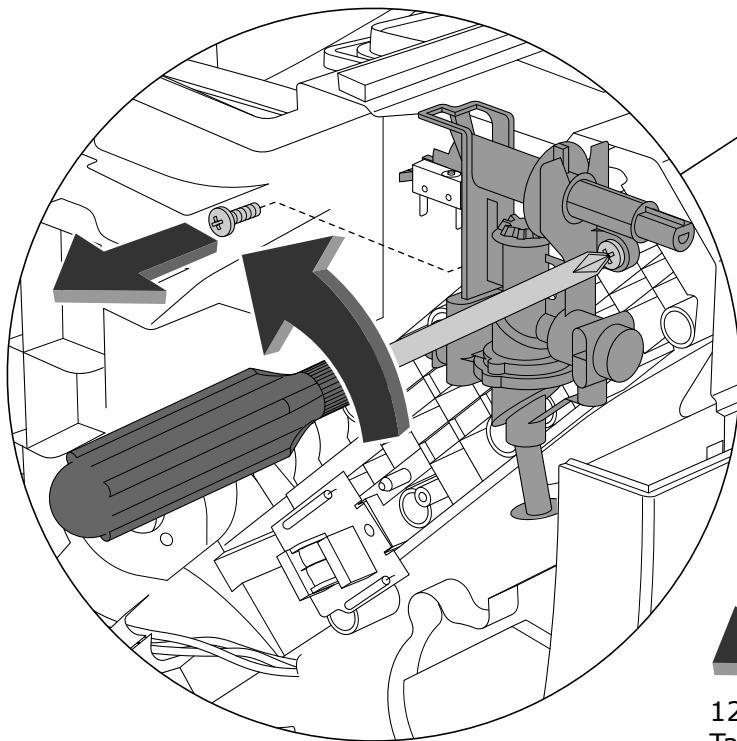
12.1
Take off cables



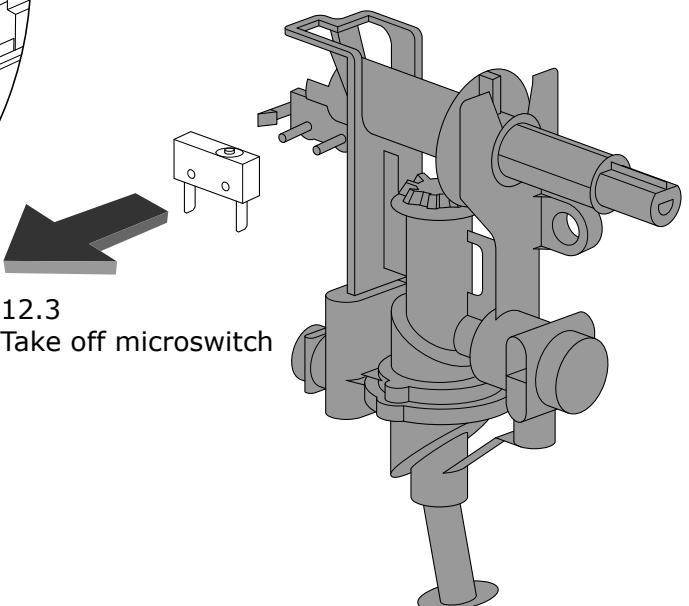
Picture 12 - TO REMOVE TAP STEAM/HOT WATER



12.2
Unscrew the 2 indicated screws

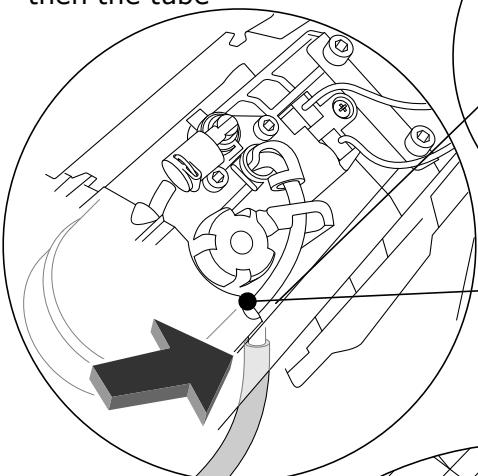


12.3
Take off microswitch



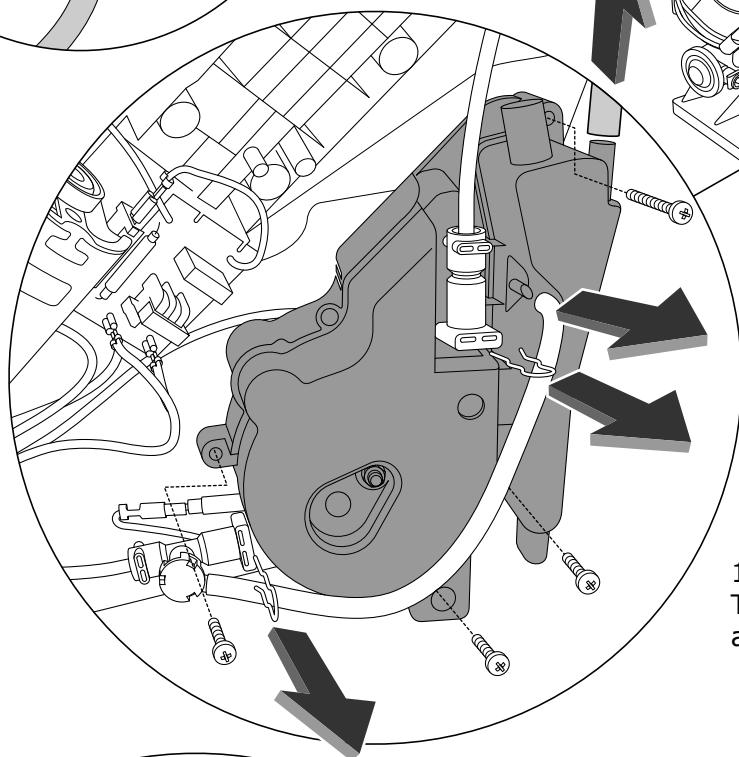
13.3

Take off the spring indicated by the arrow and then the tube

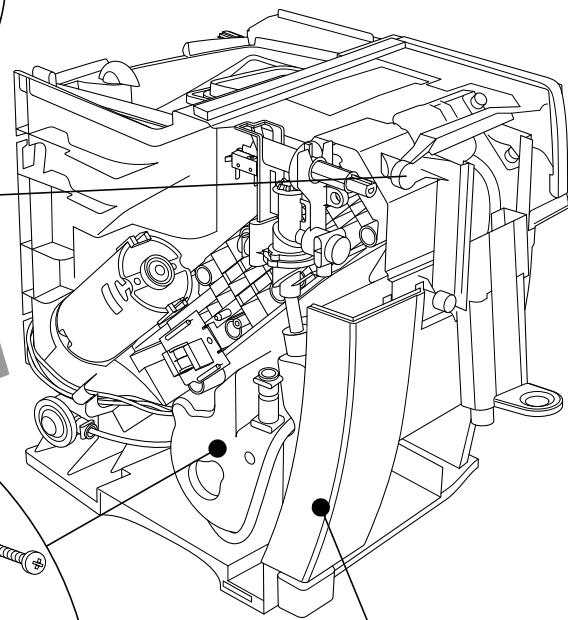


13.2

Take off the tube



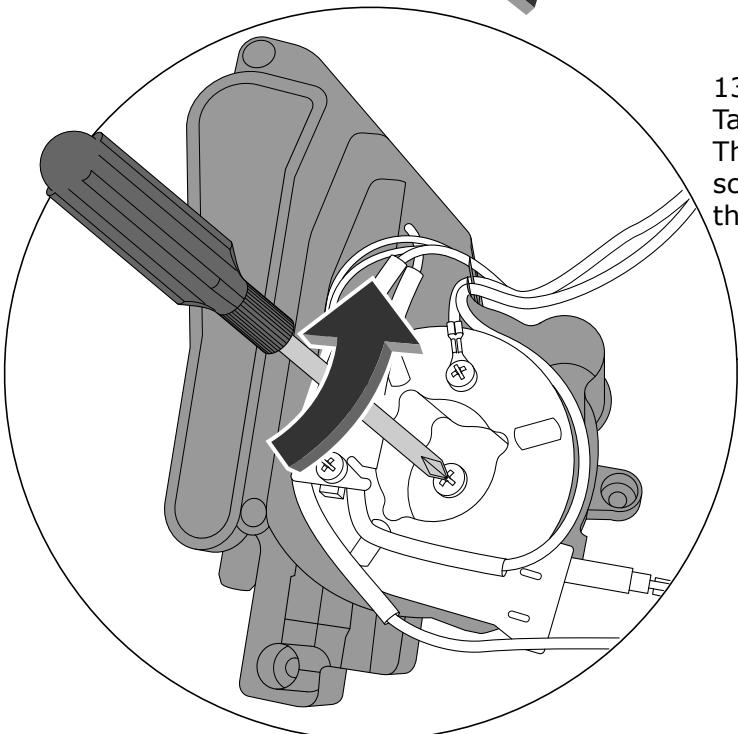
Picture 13 - TO REMOVE BOILER



Attention: to take off the boiler, push with delicacy the plastic panel

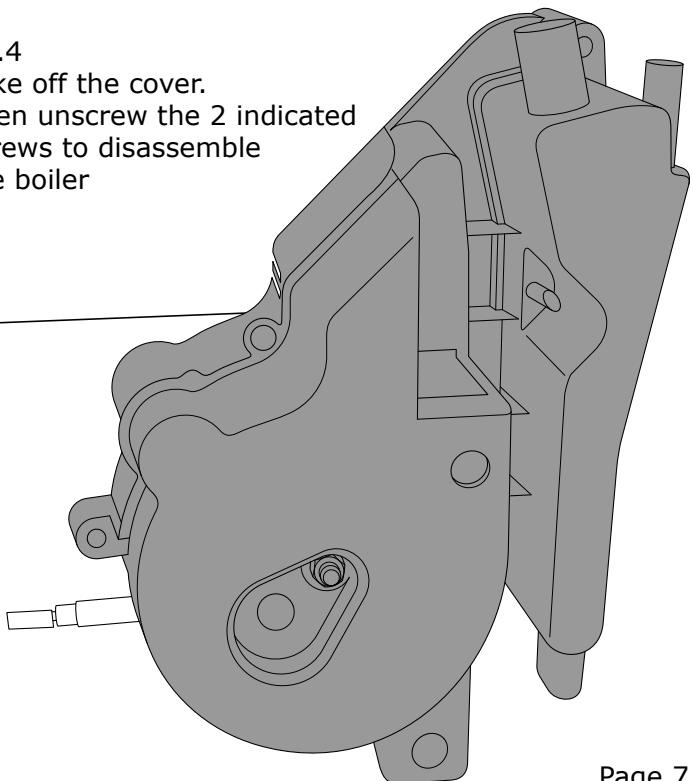
13.1

Take off the indicated 2 springs and the 4 screws.



13.4

Take off the cover.
Then unscrew the 2 indicated screws to disassemble the boiler



Picture14 - TO REMOVE INFUSER KIT

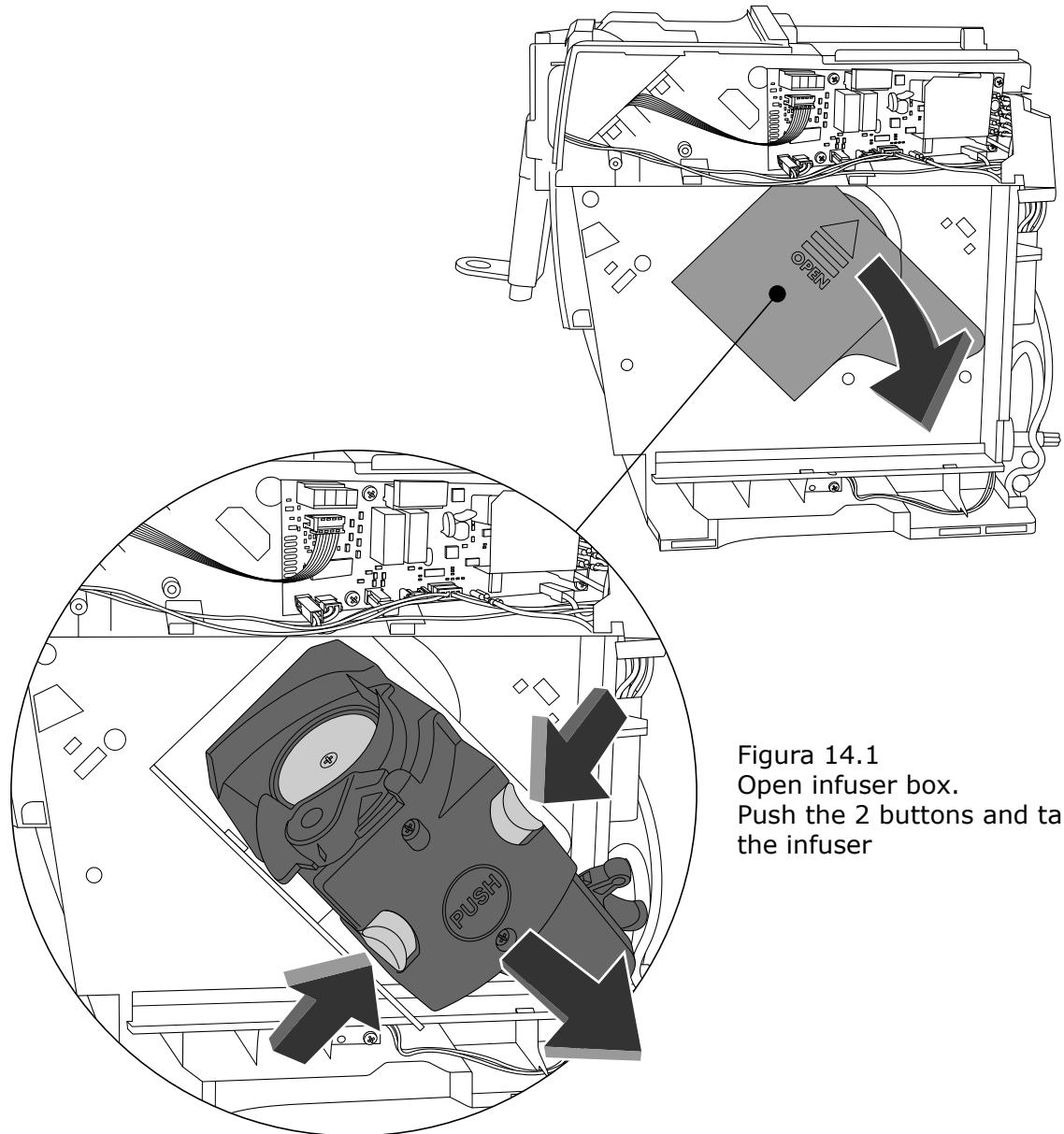
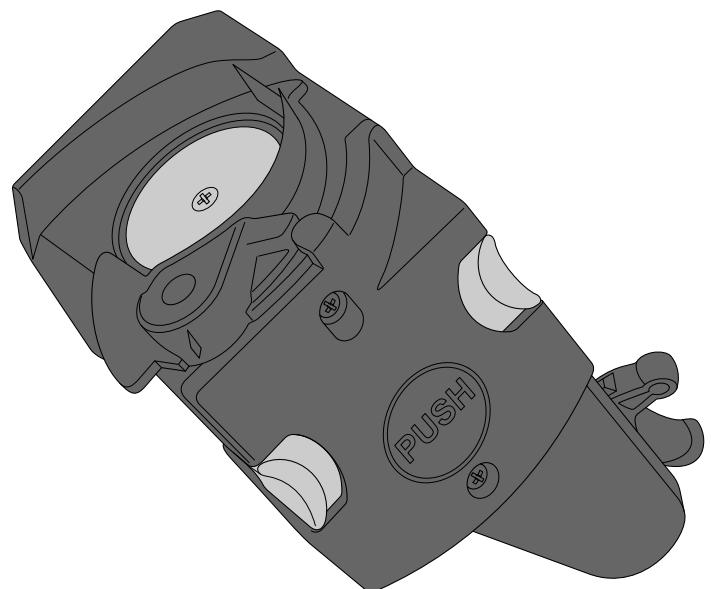
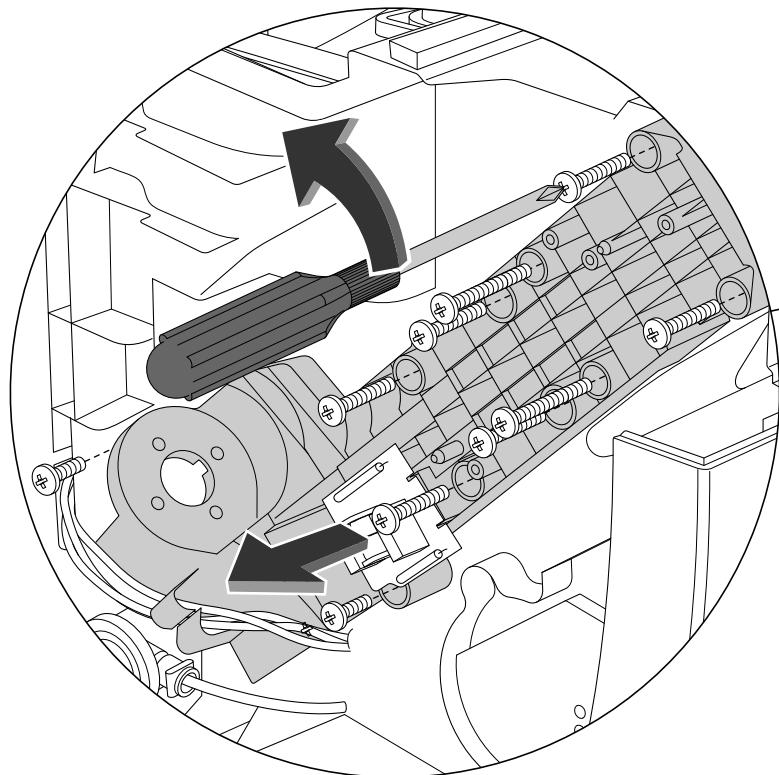


Figura 14.1
Open infuser box.
Push the 2 buttons and take out
the infuser

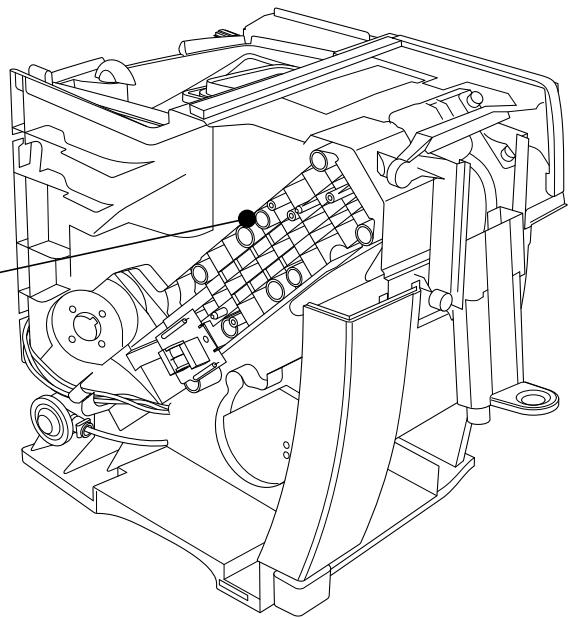


15.1

Unscrew the 10 indicated screws

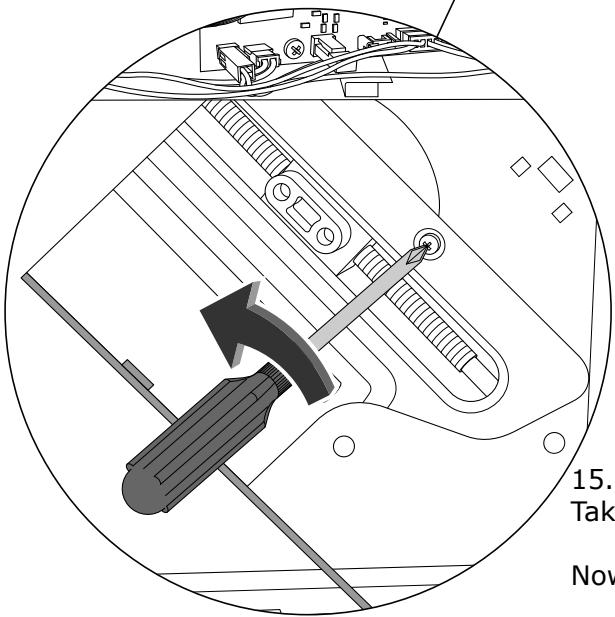
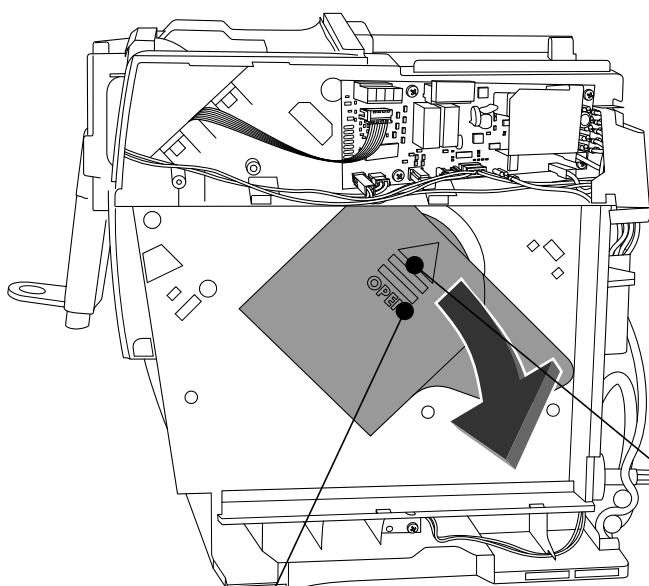


Picture 15 - TO REMOVE TRANSMISSION KIT



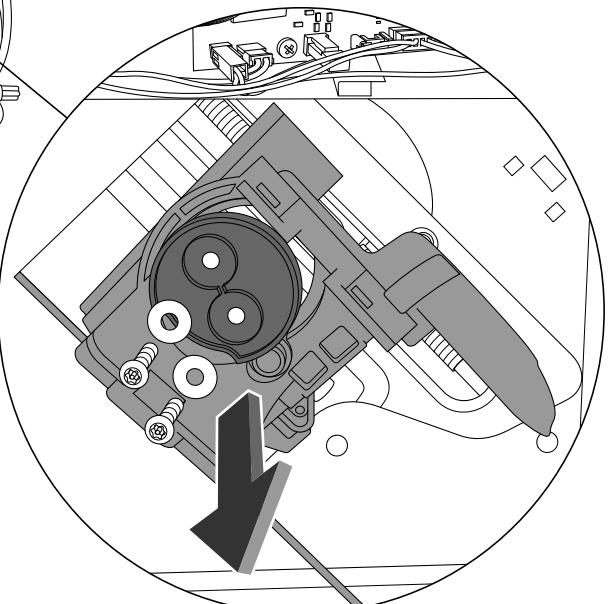
15.2

Open infuser box



15.3

Unscrew the 2 indicated screws
(Torx T20) and remove the slider



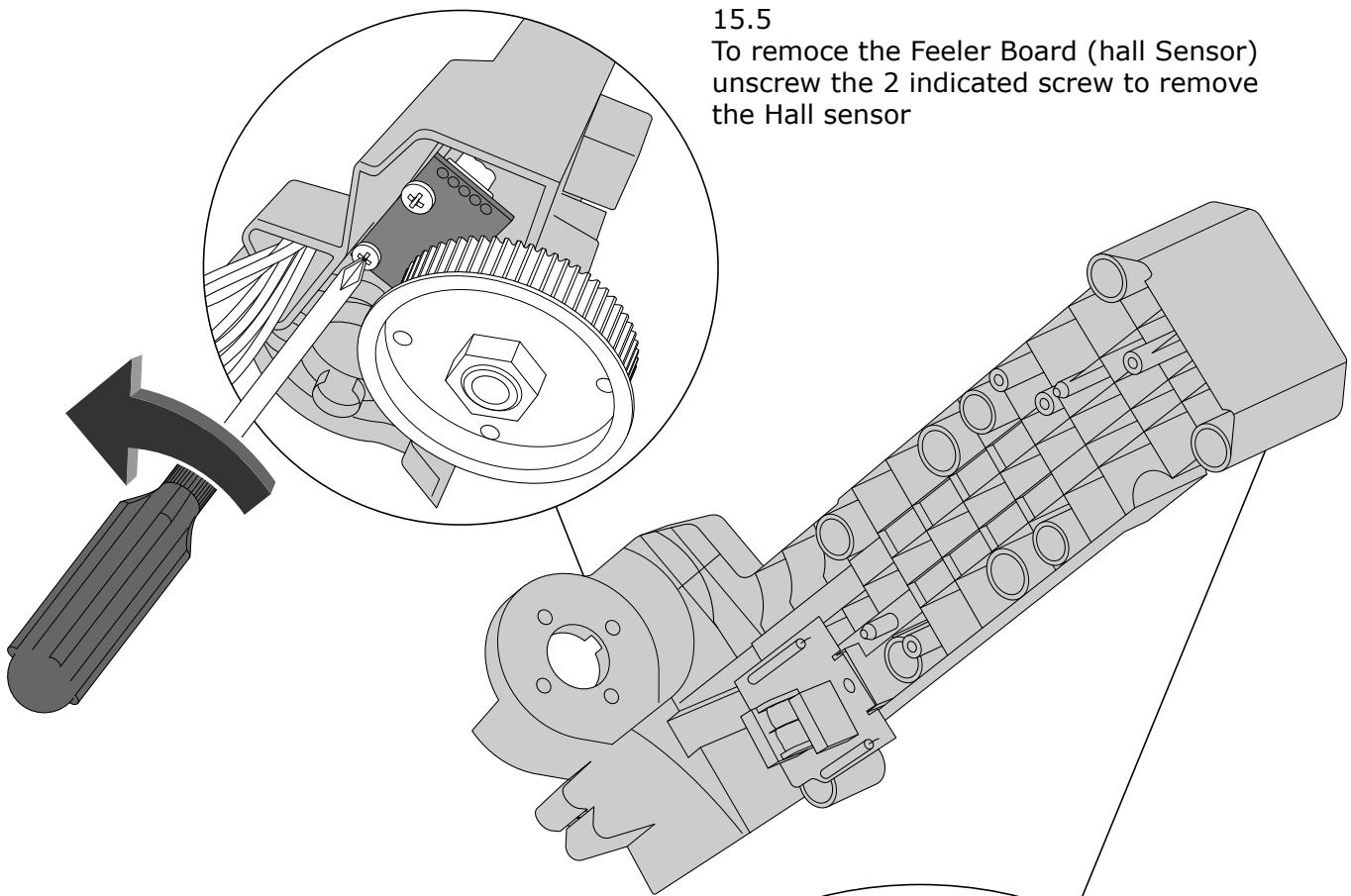
15.4

Take off the indicated screw

Now the TRASMISSION KIT is free and can be removed

15.5

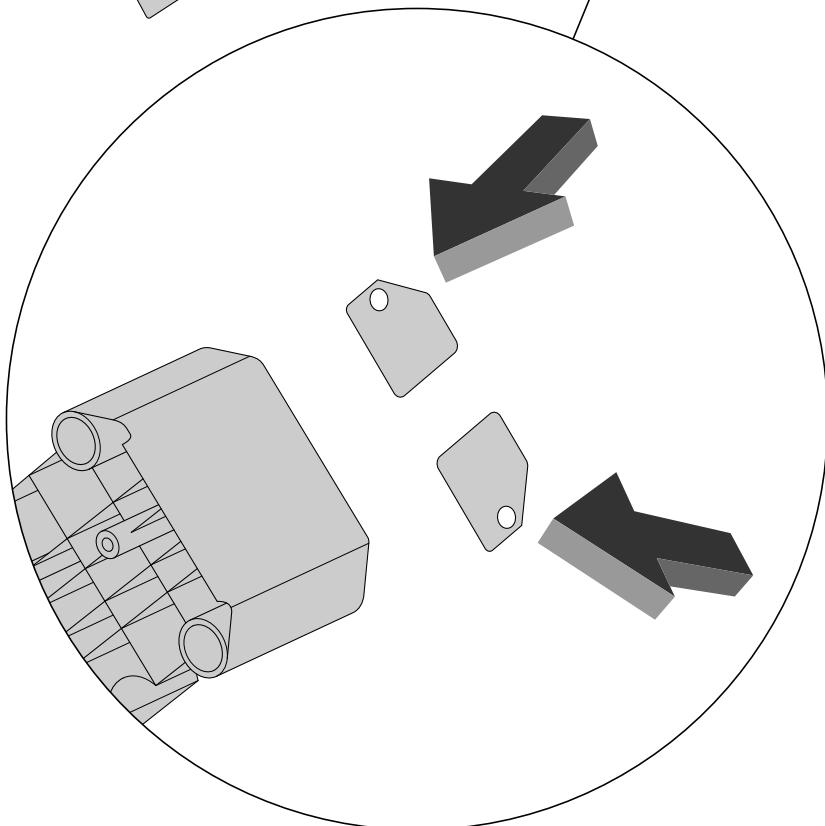
To remove the Feeler Board (hall Sensor) unscrew the 2 indicated screw to remove the Hall sensor



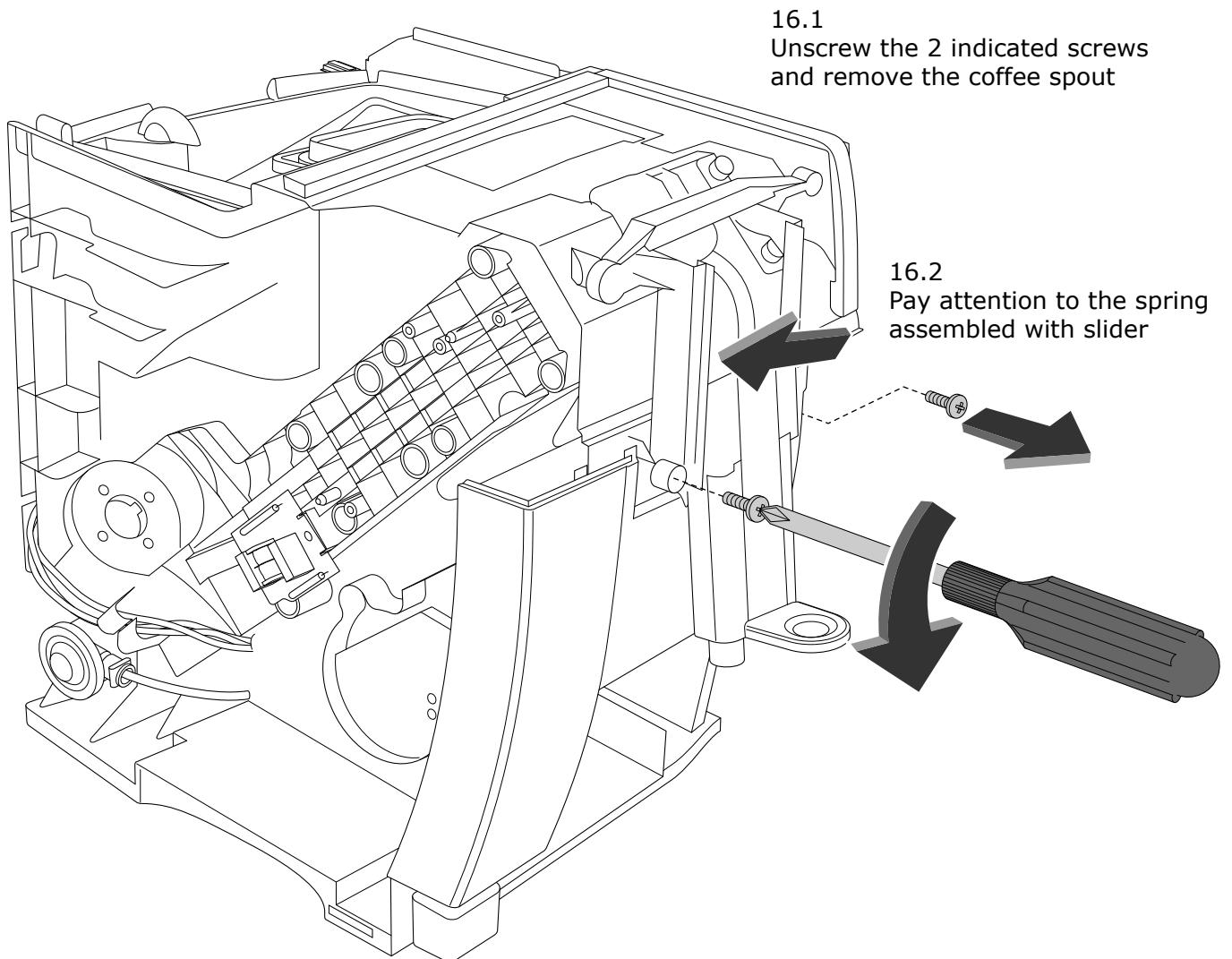
15.6

Pay attention, when you take off the plastic component, to the 2 indicated metal spacers

(**ATTENTION:** about metal spacers see Technical Info IT0181)



Picture 16 - TO REMOVE COFFEE SPOUT

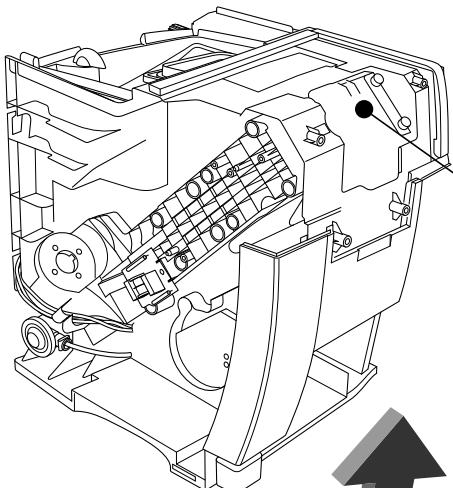


Picture 17 - TO REMOVE VALVE ASSEMBLY

(ATTENTION: see Technical Info IT0181)

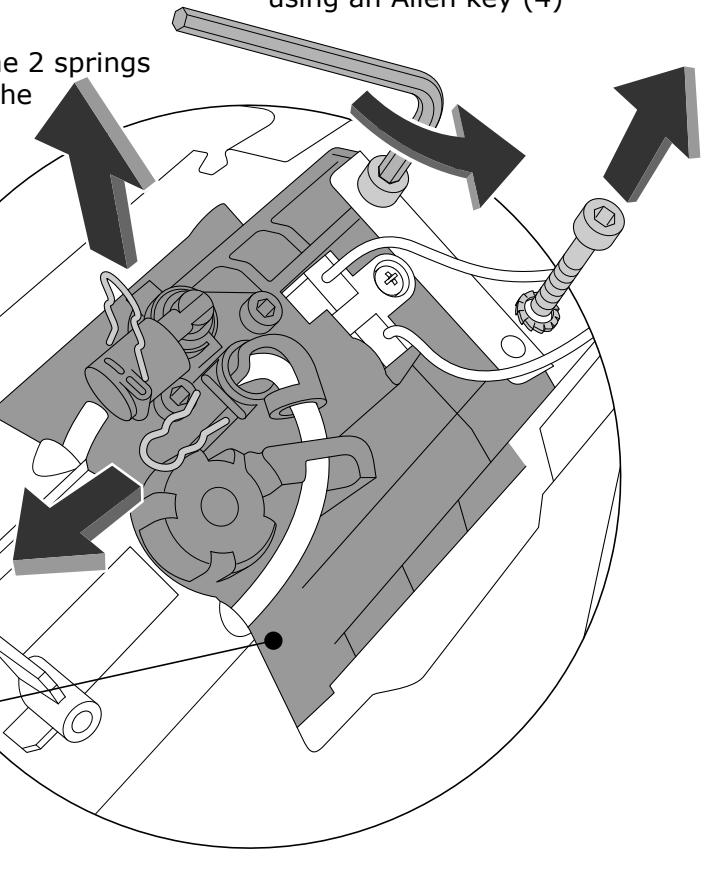
17.2

Unscrew the 2 indicated screws using an Allen key (4)



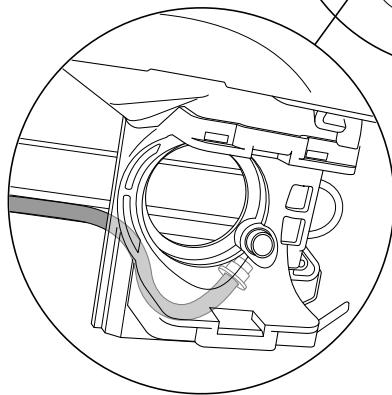
17.1

Take off the 2 springs
and then the tubes



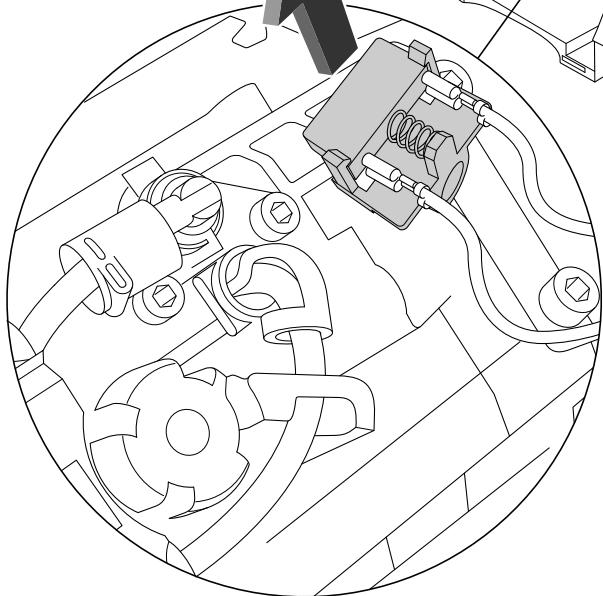
17.3

Take off the spring
and then the tube
which goes from
coffee spout to
infuser



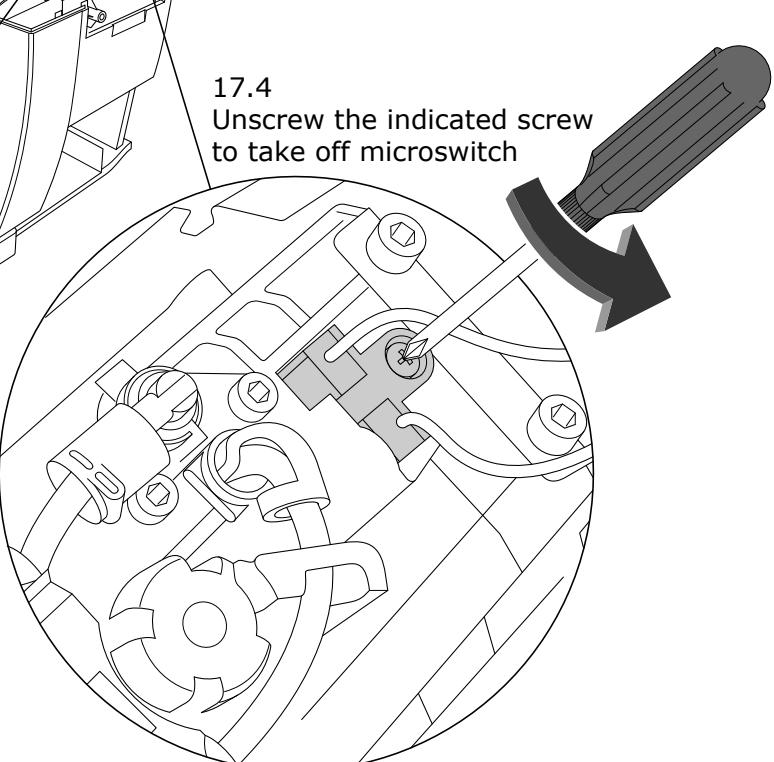
17.5

Take off microswitch



17.4

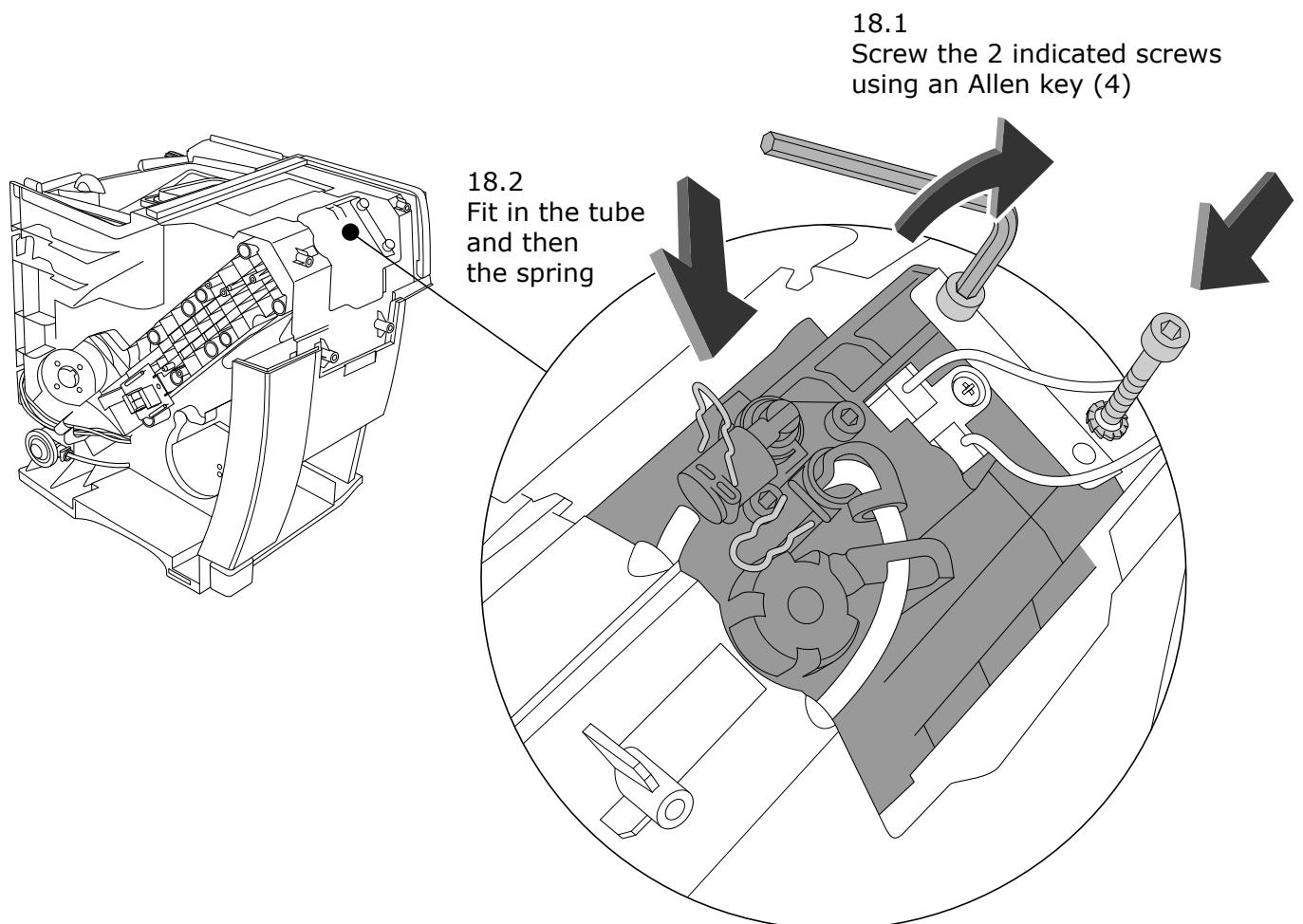
Unscrew the indicated screw
to take off microswitch



Picture 18 - HOW TO ALIGN VALVE

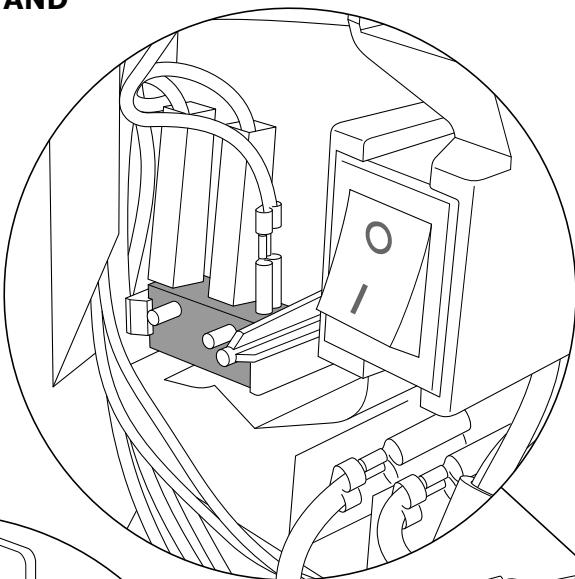
Lift the infuser up to touch the valve, without pushing with strength: it has only to be aligned to the valve.

Once you aligned it, fix the 2 screws (pic. 18.2) using an Allen key.



Picture 19 - MICROSCHWITZ AND WATER REED POSITION

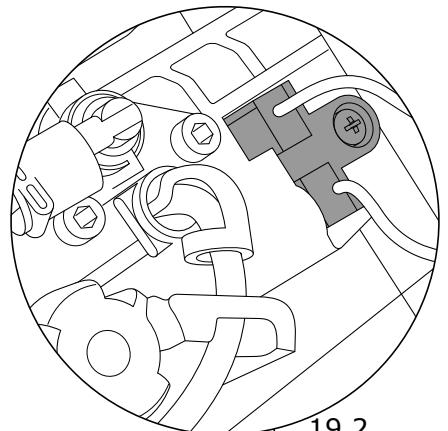
19.1
Water Tank
microswitch



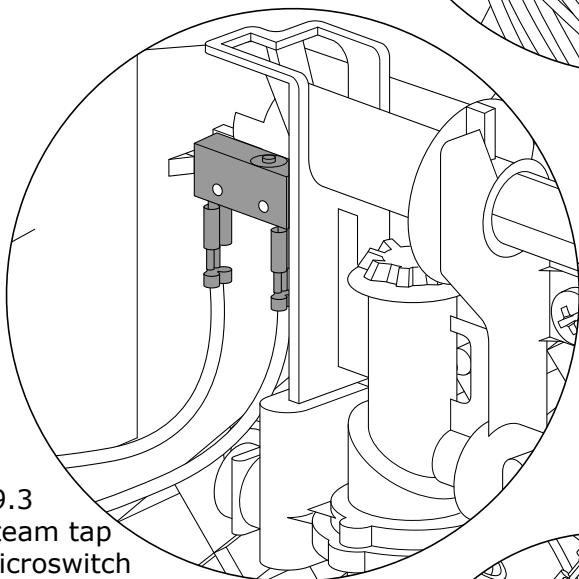
**ATTENTION: please, pay attention
to never bypass microswitch.
If you should do it
infuser motor would be on**

**ATTENTION: Water Tank micro,
Waste container micro
and Steam tap micro beep
when are open**

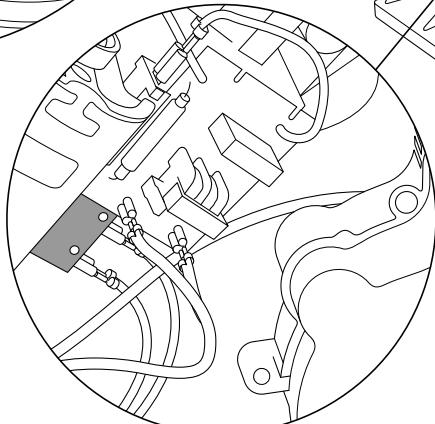
19.2
Infuser
Upper Limit
microswitch



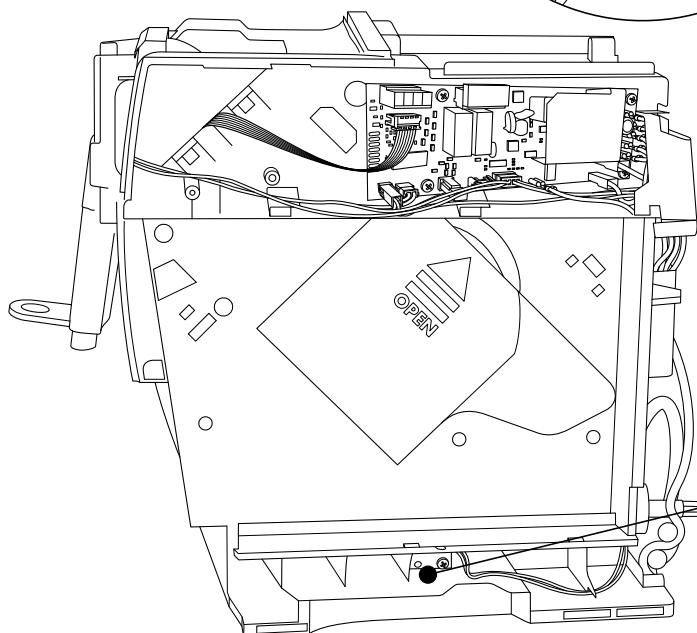
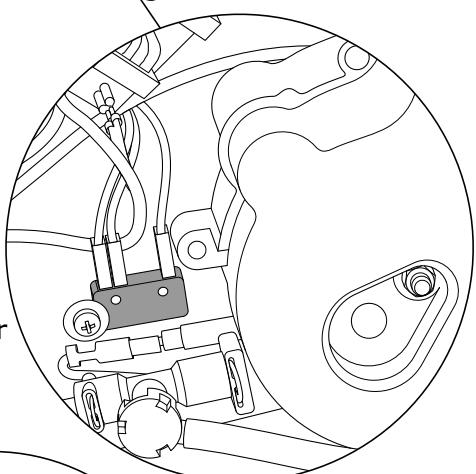
19.3
Steam tap
microswitch



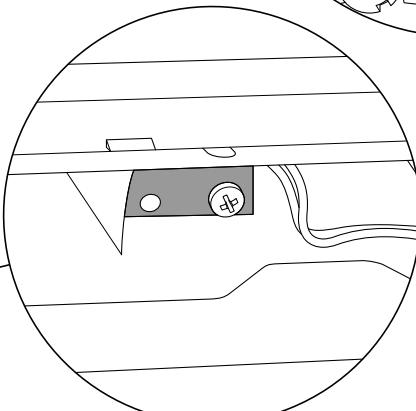
19.4
Infuser bottom limit
microswitch



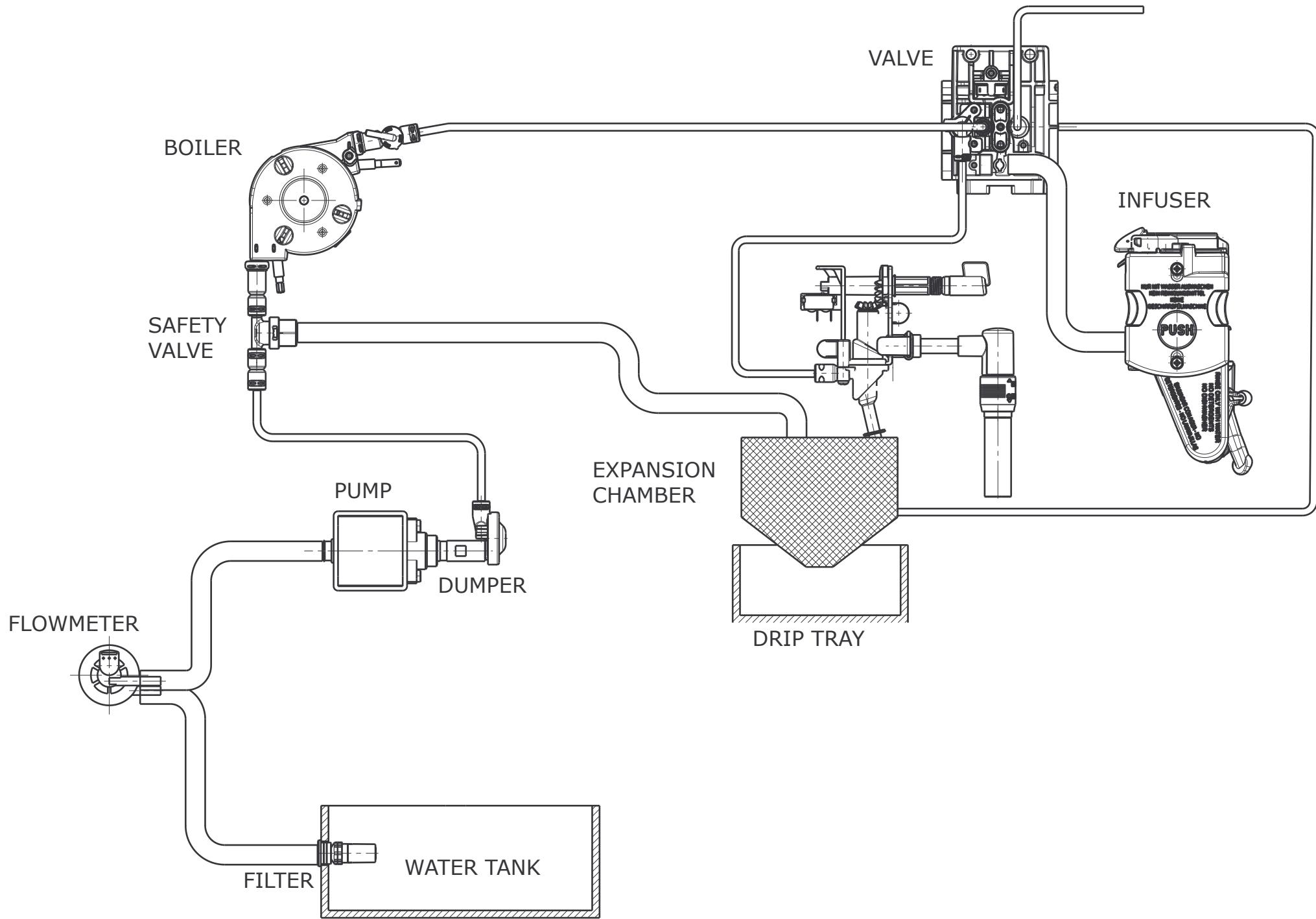
19.5
Waste container
microswitch



19.6
Reed switch
water tank



WATER CIRCUIT





TEST PROCEDURE FOR ECAM23.420 INTENSA



| TEST PROCEDURE | Pressing each icon below, we can manually check the devices: | |
|---|--|---|
| | icon | device |
| Put Steam Tap on 0. Plug the machine ON. Press and hold: 1 Coffee + Steam buttons | | Coffe Boiler ON |
| | | Grinder ON |
| | | Motor UP, till "UPPER LIMIT" Motor DOWN, till "BOTTOM LIMIT" |
| | | Water Pump ON |
| Press On/Off Switch (position I) | | |
| NOTE: Release bttoms when motor starts moving. | | |
| | | |
| | | |

NOTE: Water Tank micro, Waste container micro and Steam tap micro beep when are open

To EXIT the procedure, press On/Off Swicth (position 0) or unplug the machine.



DISPLAY TEST PROCEDURE FOR ECAM23.420 INTENSA

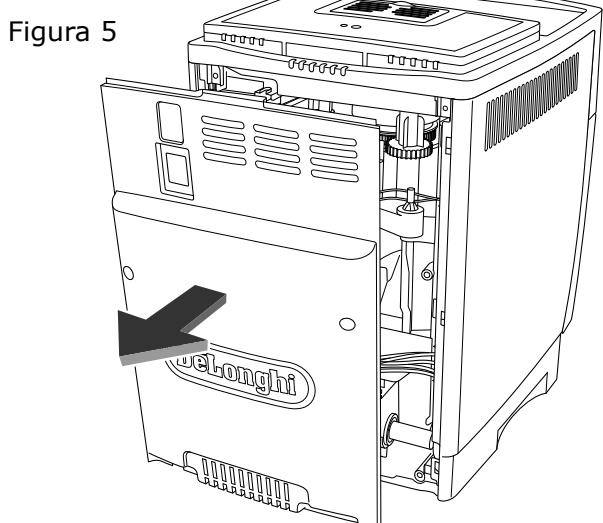
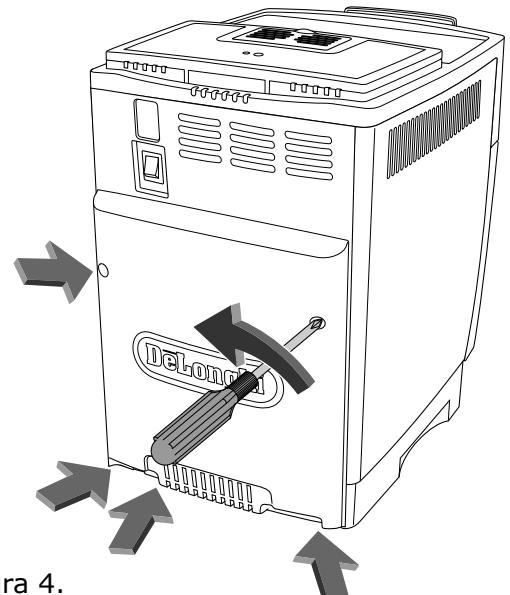
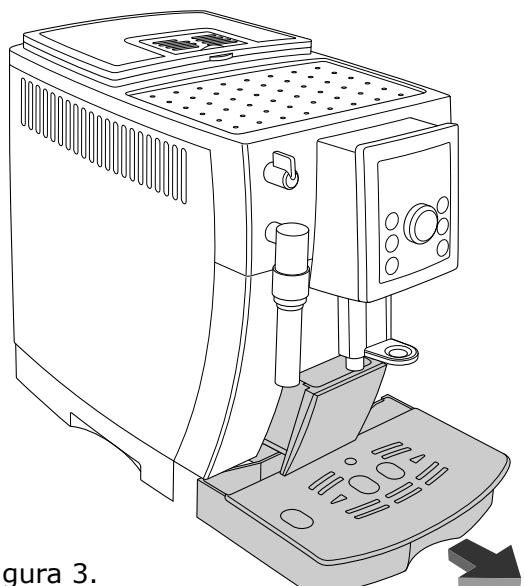
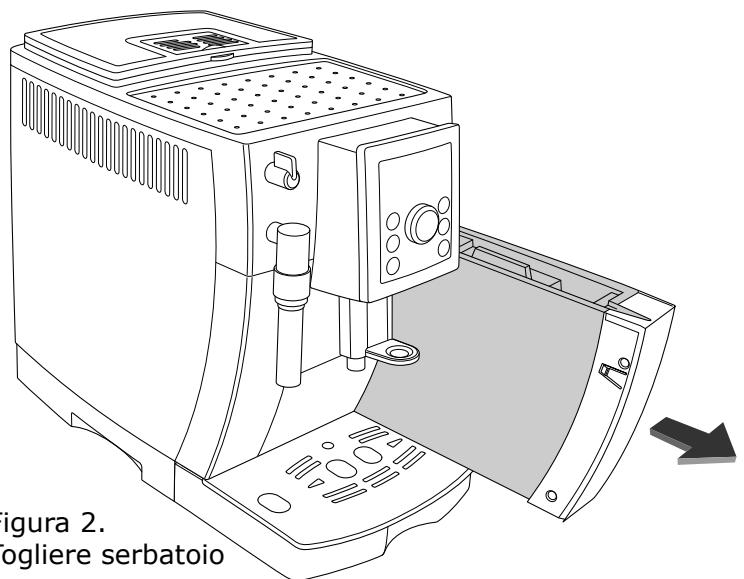
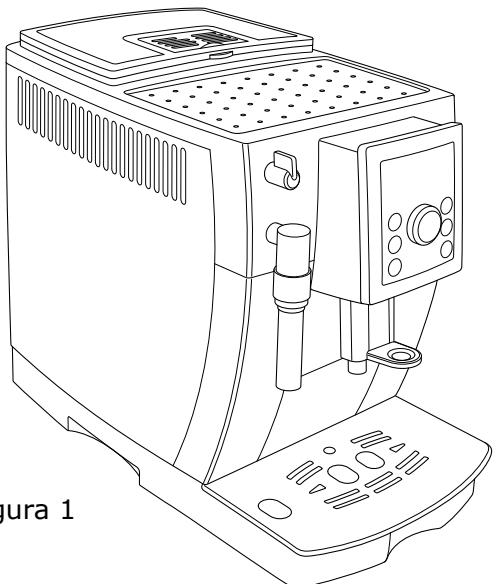


| DISPLAY TEST PROCEDURE | Pressing each icon the display will show following message | |
|--|--|----------|
| | icon | message |
| To enter the DISPLAY test: Plug the machine ON. Press and hold: 1 Coffee + Steam buttons | | BUTTON 1 |
| | | BUTTON 2 |
| | | BUTTON 3 |
| | | BUTTON 4 |
| | | BUTTON 5 |
| | | BUTTON 6 |
| | | BUTTON 7 |
| Note: Release buttons after you read the message "DISPLAY TEST MODE". | Turning the knob, the display will show the bar increasing or decreasing. | |

NOTE: After display Test performing, you need to initialize the machine.

To EXIT the procedure, press On/Off Switch (position 0) or unplug the machine.
Test procedure ends automatically 1 minute after you completed it.

ACCESSIBILITÀ'



5.1 Sfilare lo schienale

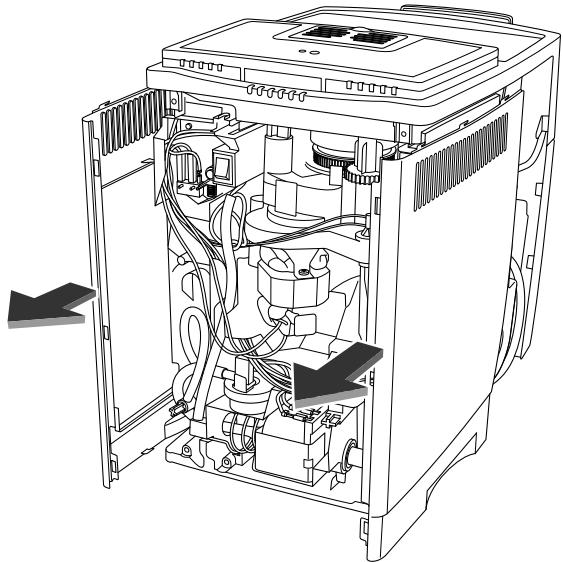


Figura 6 - **SMONTAGGIO CRUSCOTTO**

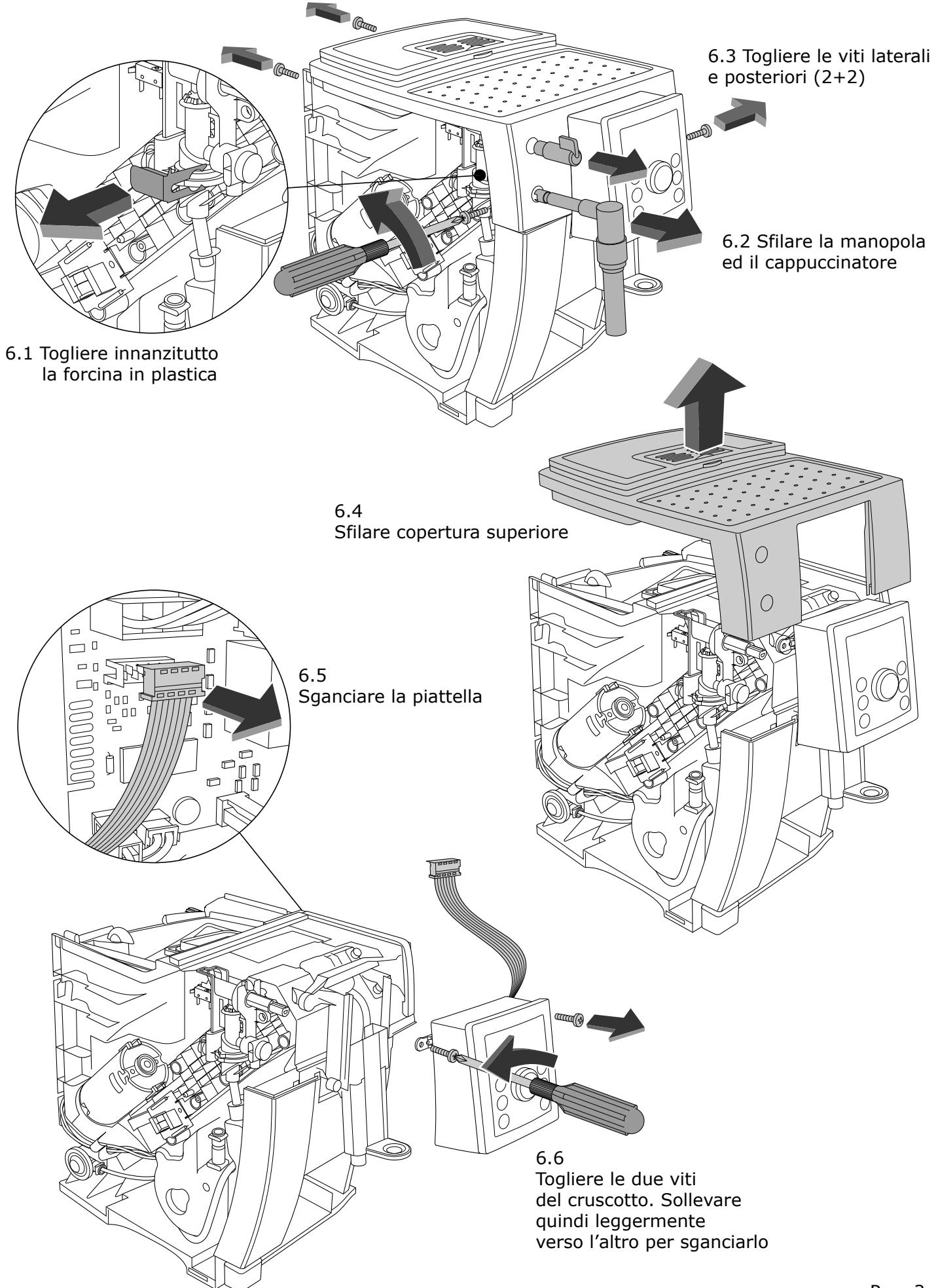
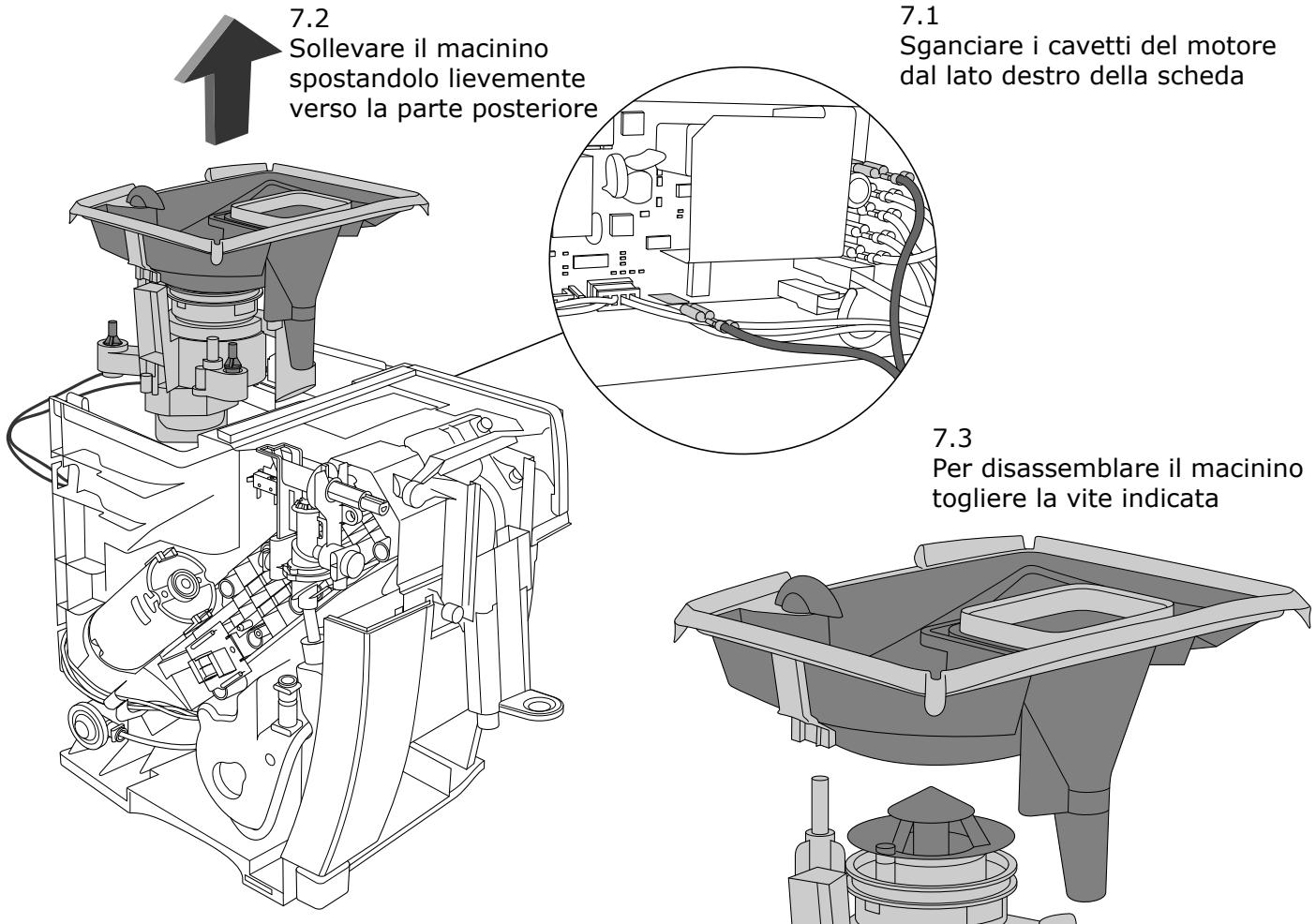


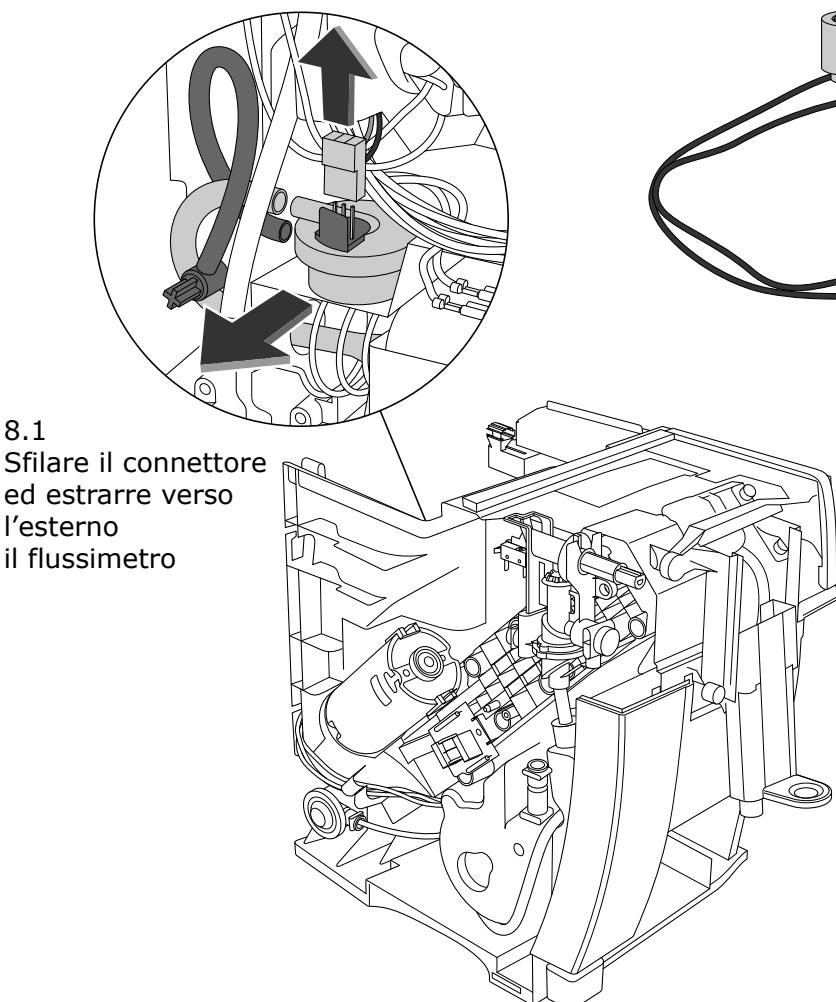
Figura 7 - SMONTAGGIO MACININO



7.2
Sollevare il macinino
spostandolo lievemente
verso la parte posteriore

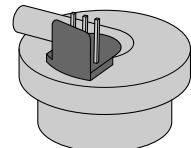
7.1
Sganciare i cavetti del motore
dal lato destro della scheda

7.3
Per disassemblare il macinino
togliere la vite indicata

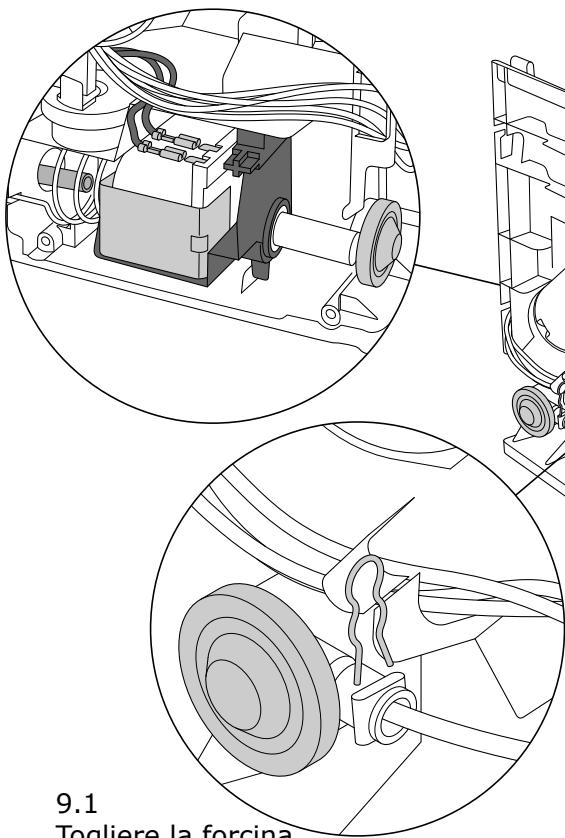


8.1
Sfilare il connettore
ed estrarre verso
l'esterno
il flussimetro

Figura 8 - SMONTAGGIO FLUSSIMETRO

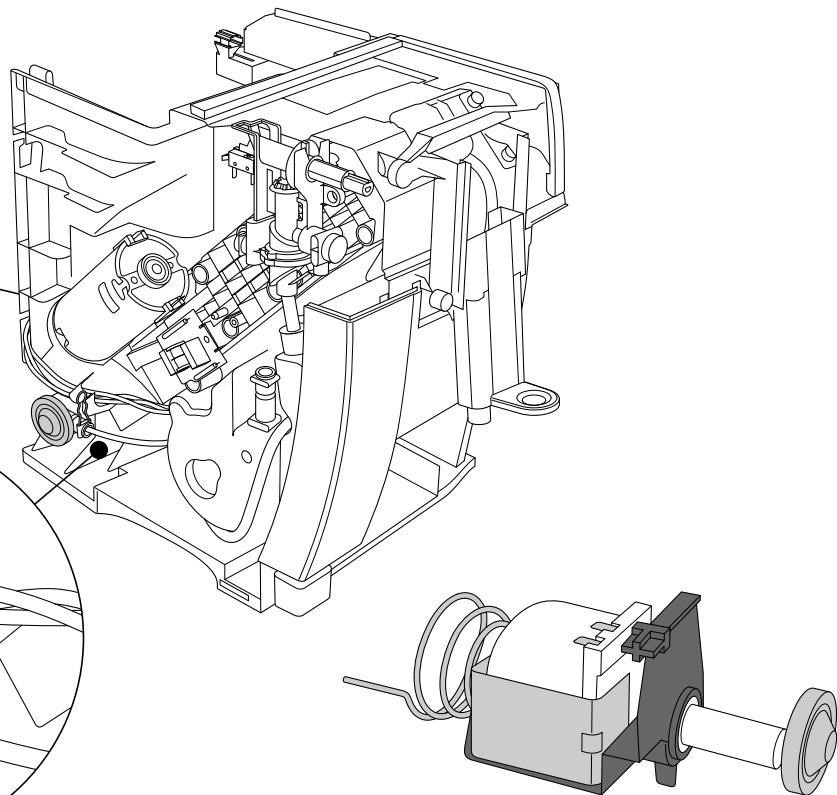


9.2
Sfilare la pompa



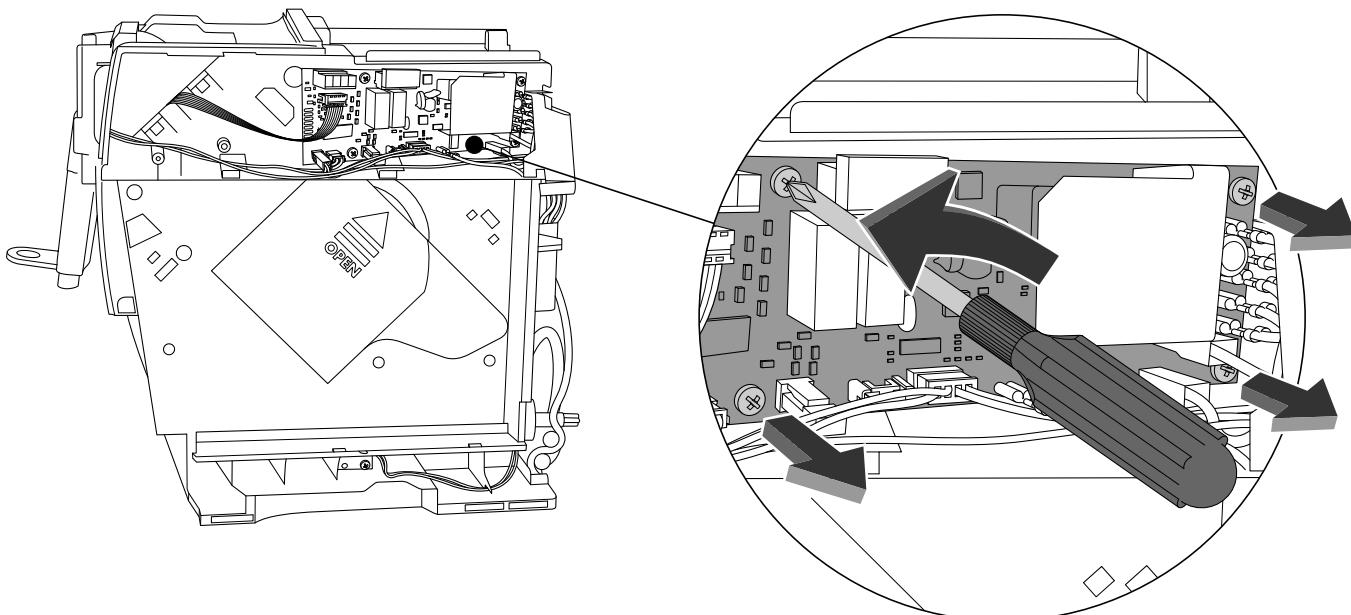
Attenzione: dal tubo potrebbe uscire una piccola quantità d'acqua, in quanto il circuito idraulico si svuota

Figura 9 - SMONTAGGIO POMPA



9.3
Attenzione: Dopo aver sganciato il cablaggio, sfilare il klixon. Essendo incollato, esercitare una certa forza. Ricordarsi di incollarlo nuovamente

Figura 10 - SMONTAGGIO SCHEDA



10.1
Togliere le quattro viti indicate. Dopo aver staccato i cablaggi, sfilare la scheda

11.1

Togliere le 4 viti di fissaggio del motore,
raggiungibili dalla parte posteriore

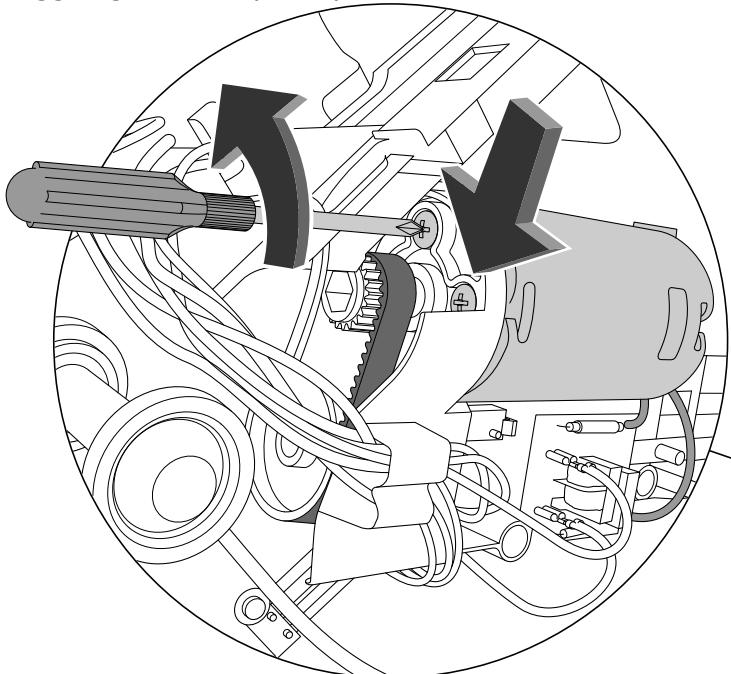
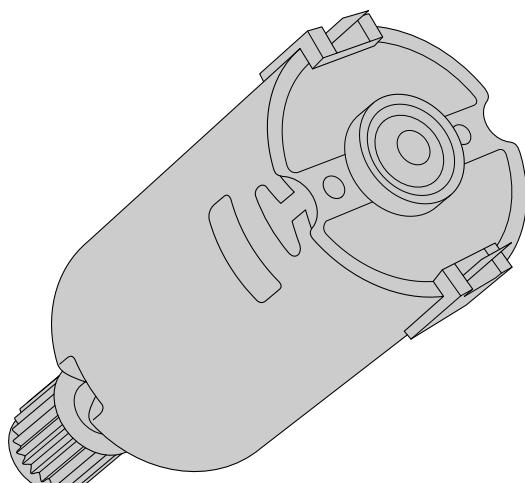
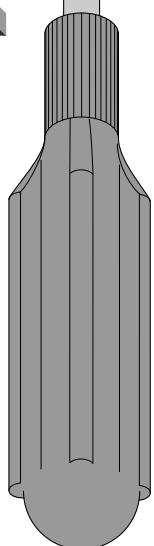
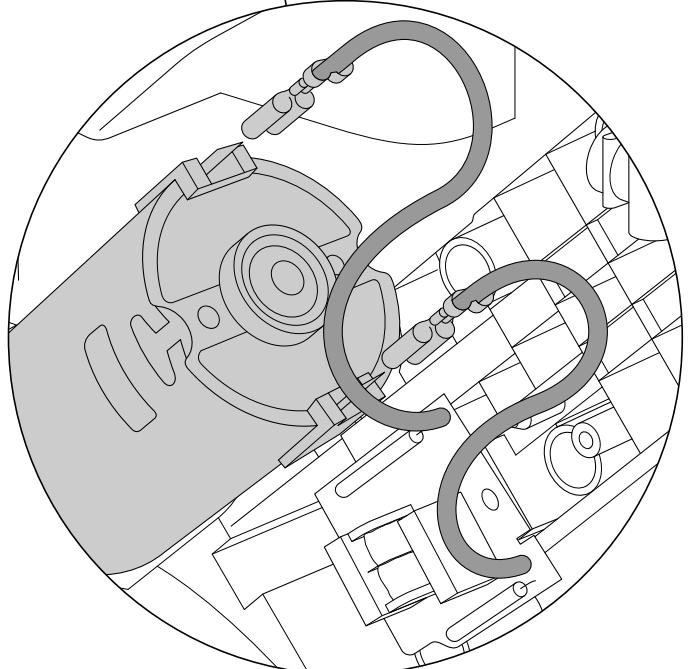
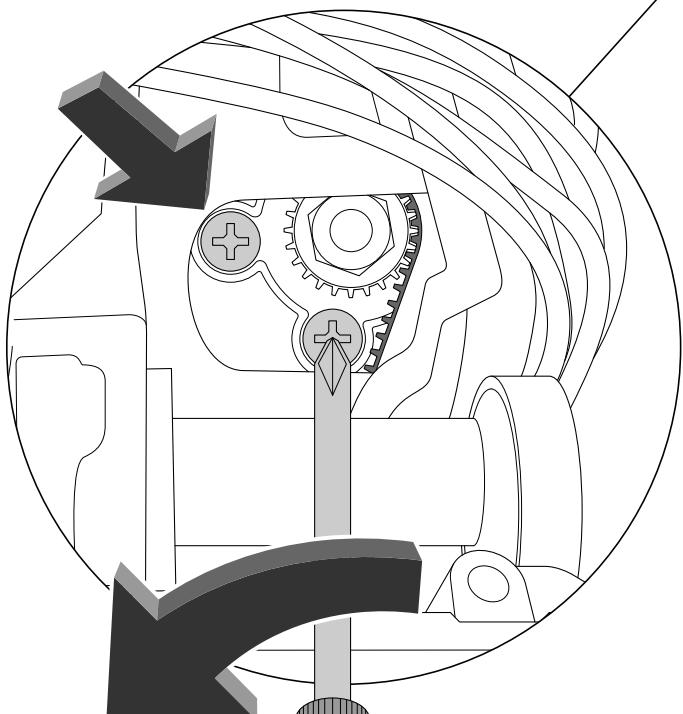
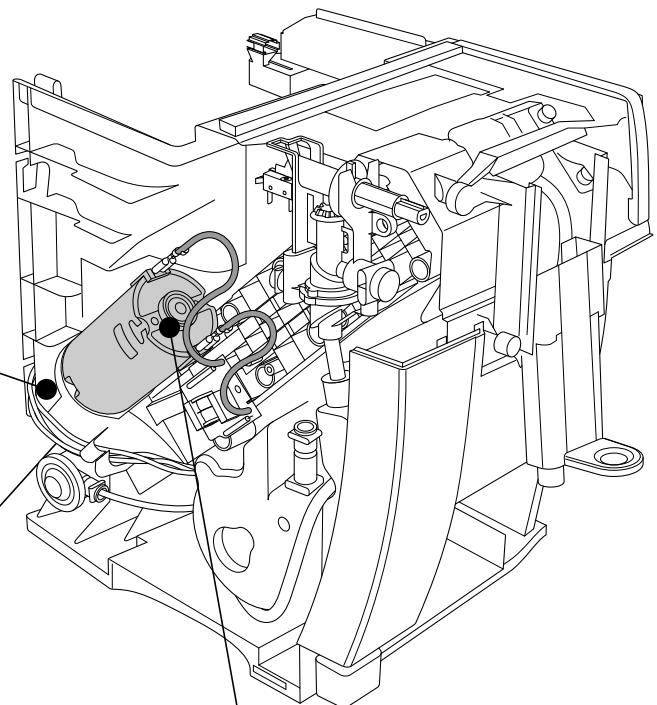


Figura 11 - SMONTAGGIO MOTORE



11.2

staccare i due cavetti
e sfilare il motore
a corrente continua.
Fare attenzione alla
polarità al momento
della sostituzione

12.1
Scollegare i cavi

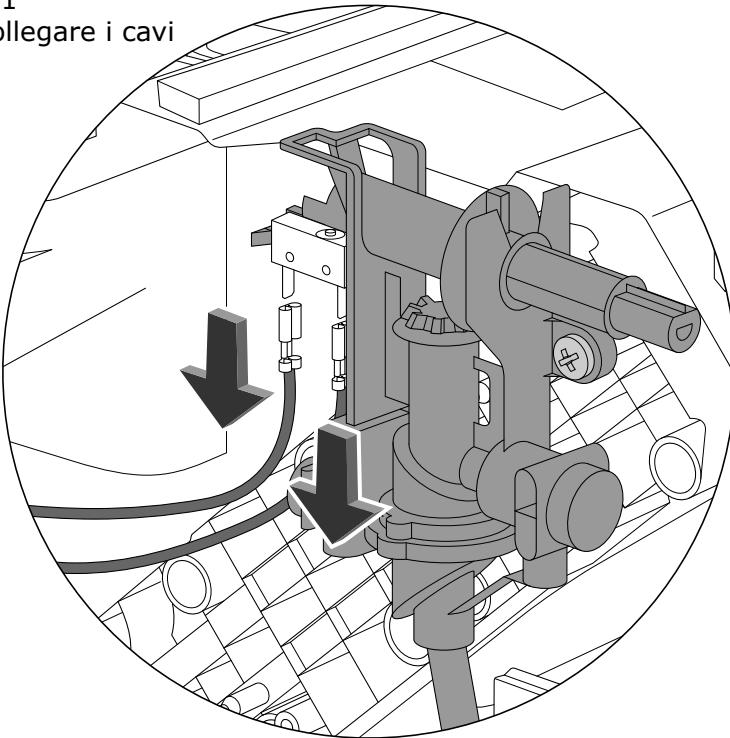
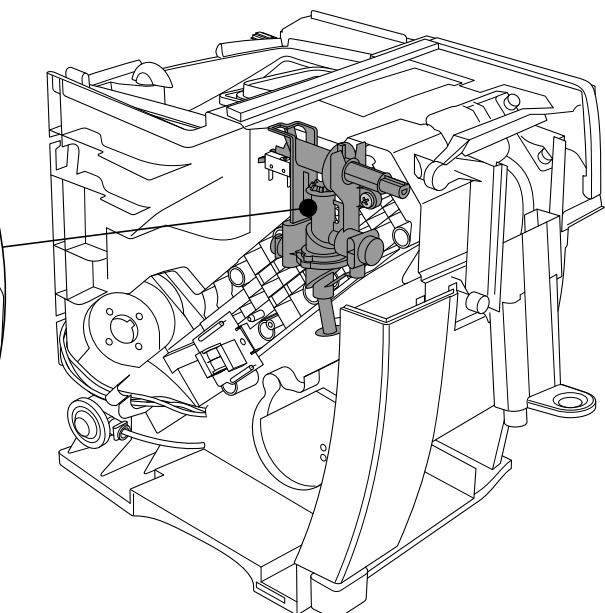
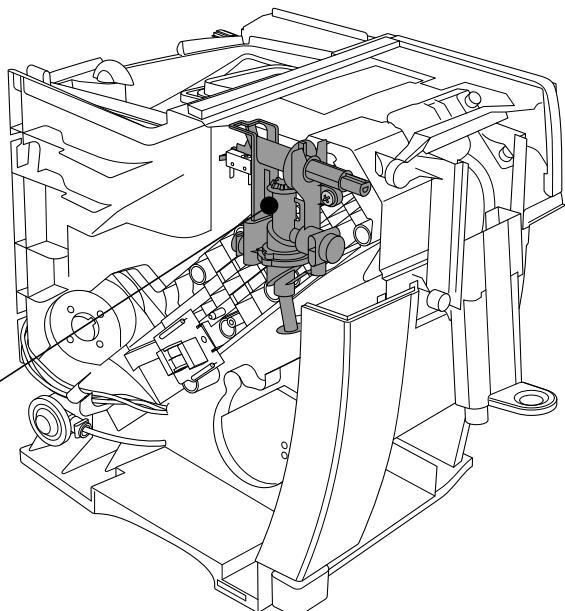
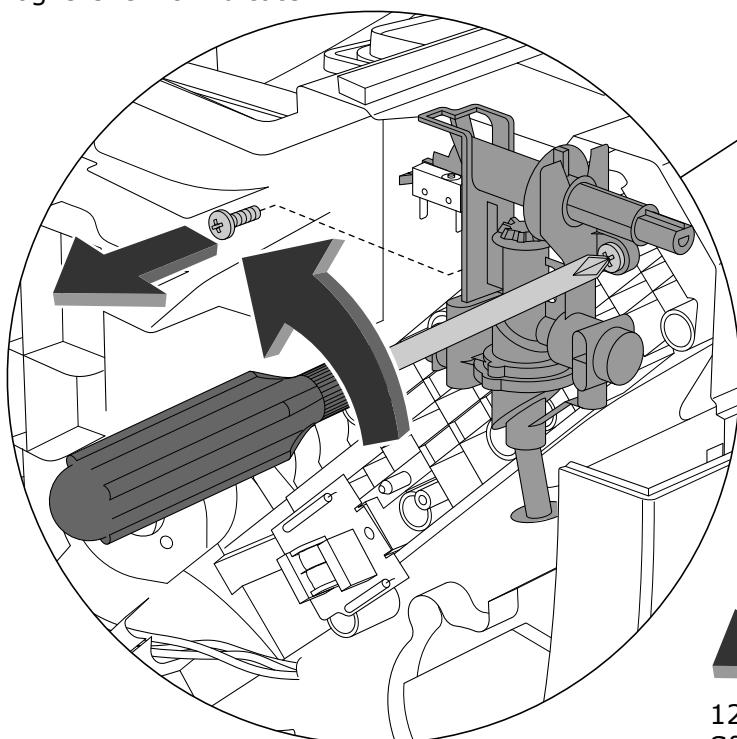


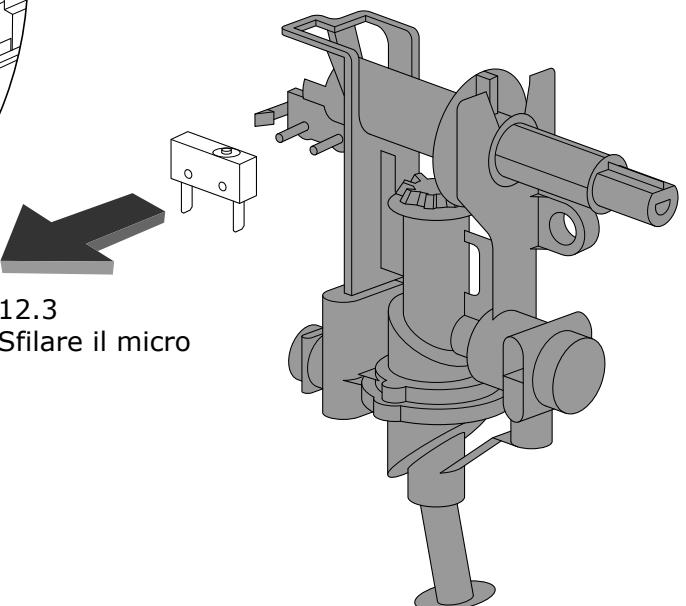
Figura 12 - **SMONTAGGIO RUBINETTO**



12.2
Togliere le viti indicate



12.3
Sfilare il micro



13.3

Togliere la forcina indivata
dalla freccia e sfilare il tubo

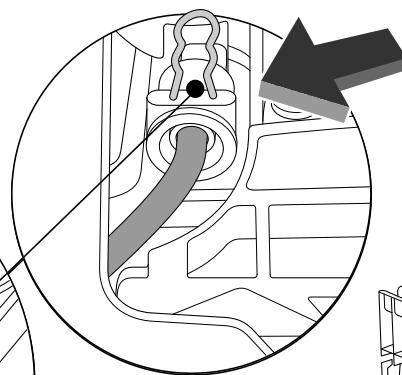
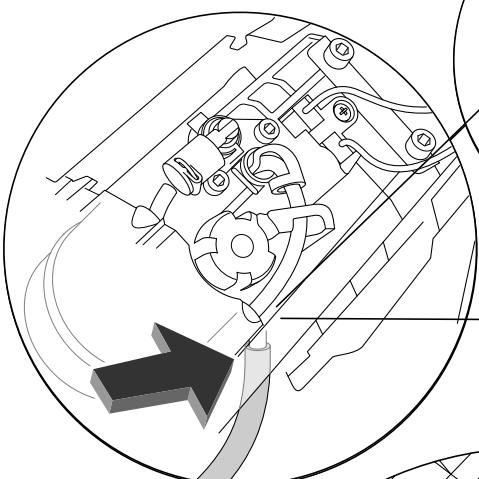
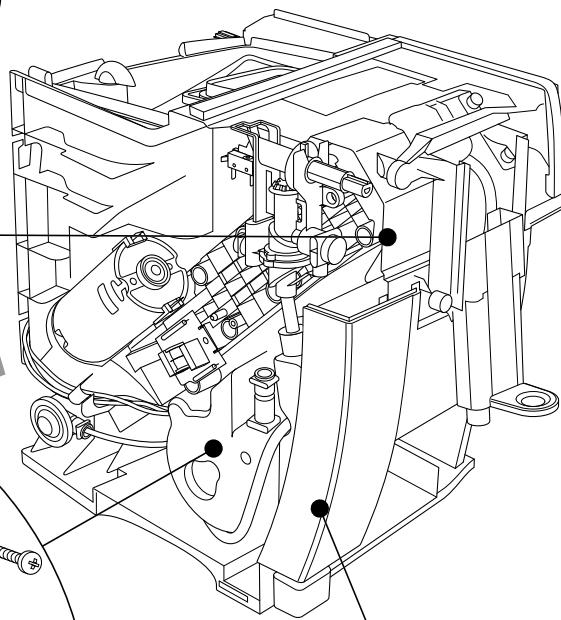
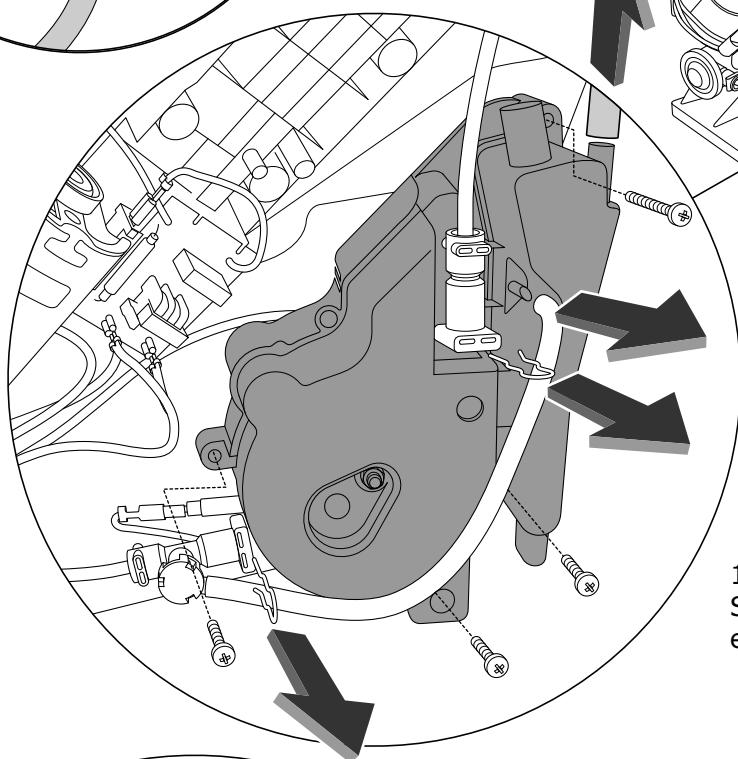


Figura 13 - SMONTAGGIO CALDAIA

13.2

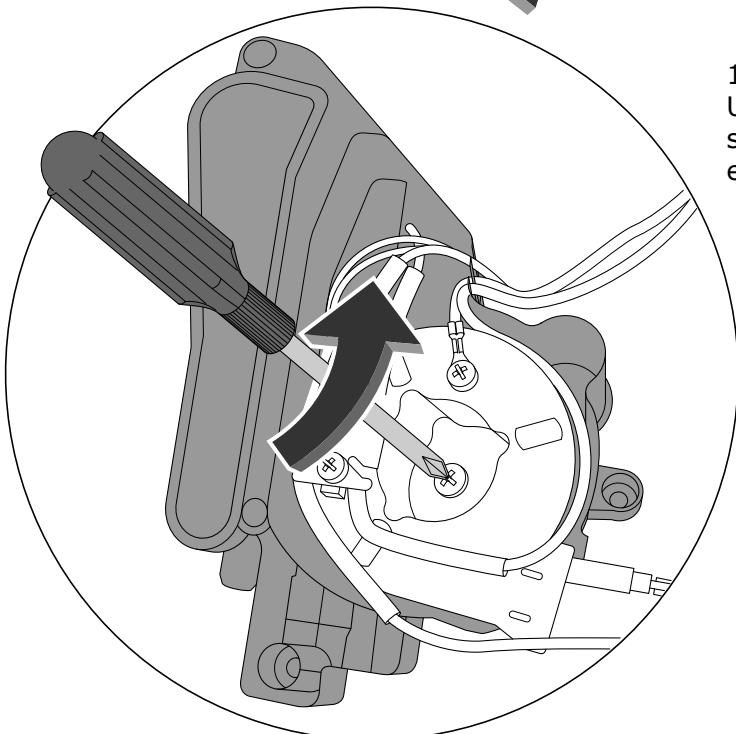
Staccare il tubo
indicato



Attenzione: per togliere la
caldaia, spingere con delicatezza
il pannello in plastica

13.1

Sfilare le 2 forcine
e togliere le 4 viti



13.4

Una volta tolta la chiusura,
svitare le viti indicate per
estrarre la caldaia

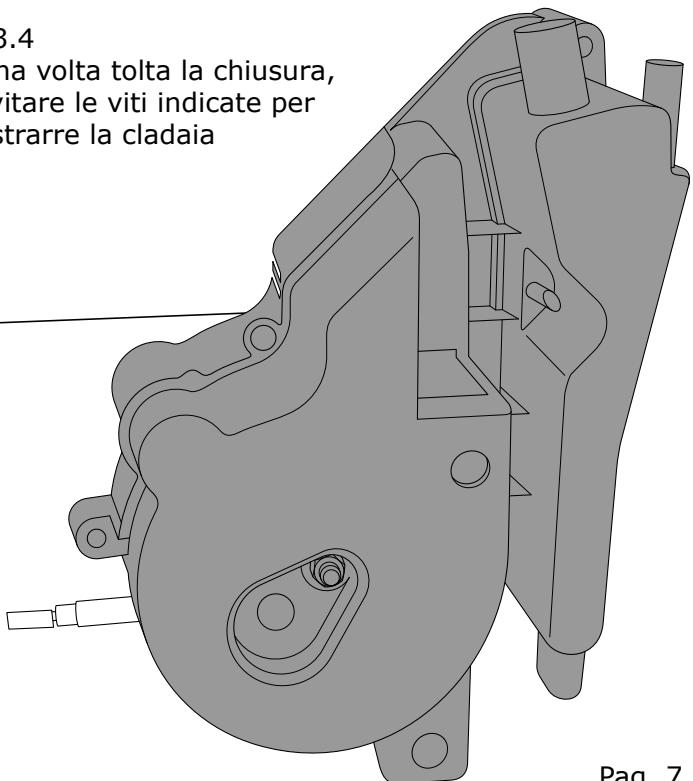


Figura 14 - ESTRAZIONE INFUSORE

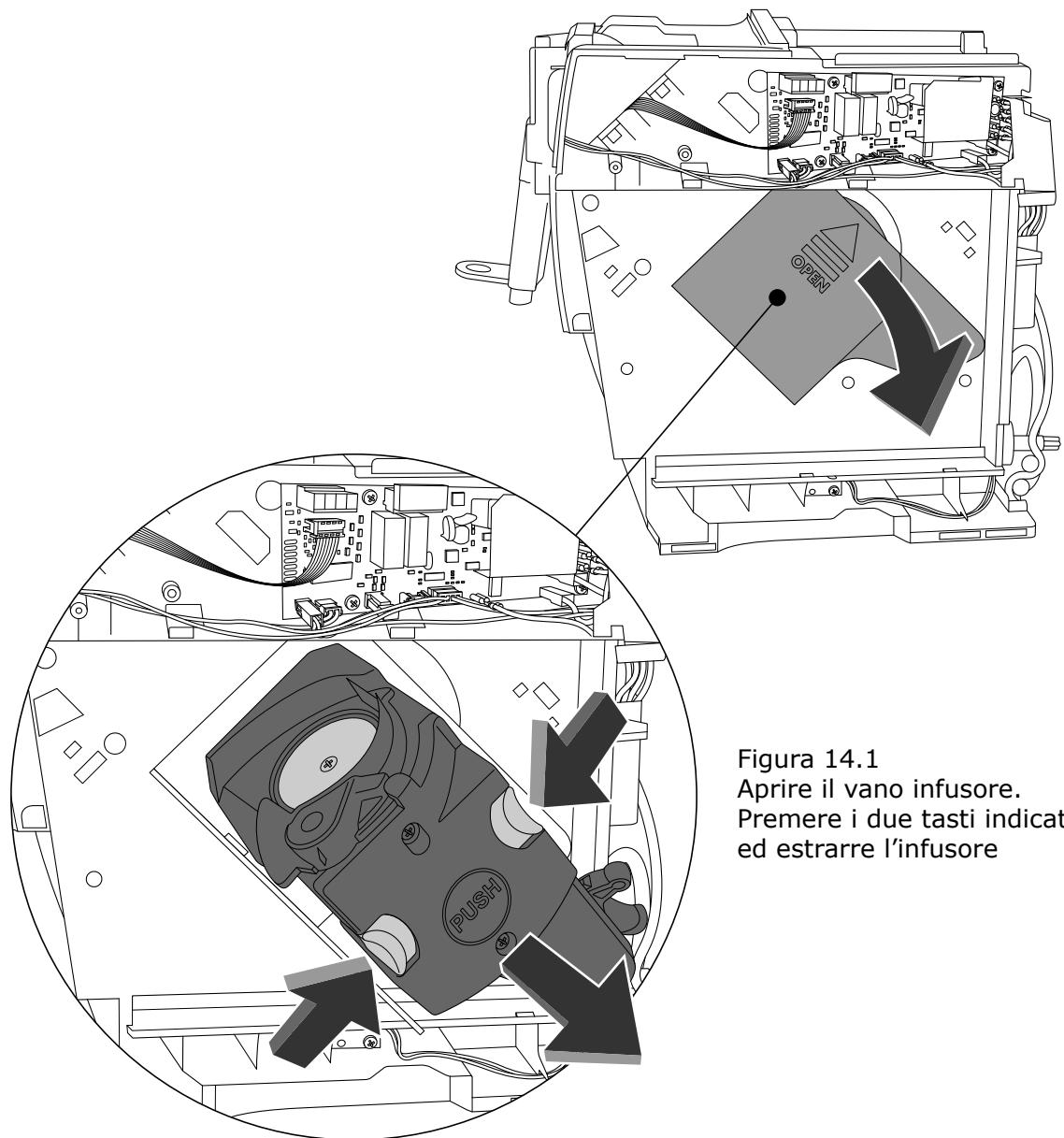
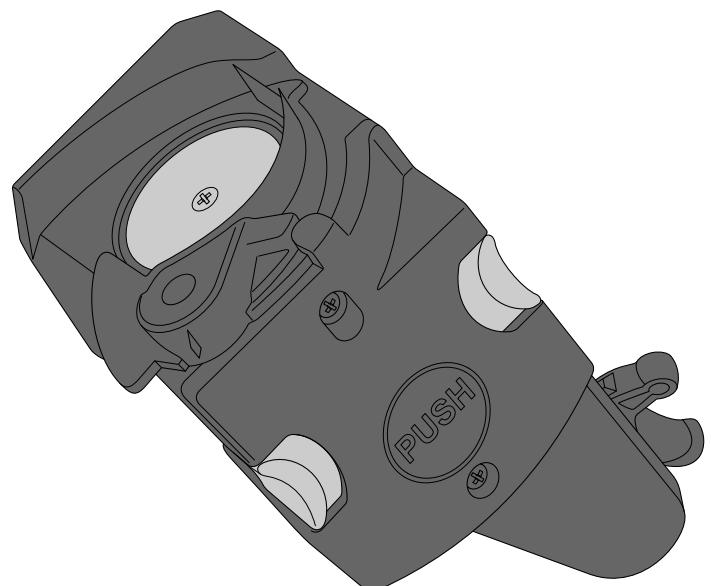


Figura 14.1
Aprire il vano infusore.
Premere i due tasti indicati
ed estrarre l'infusore



15.1

Togliere le 10 viti indicate

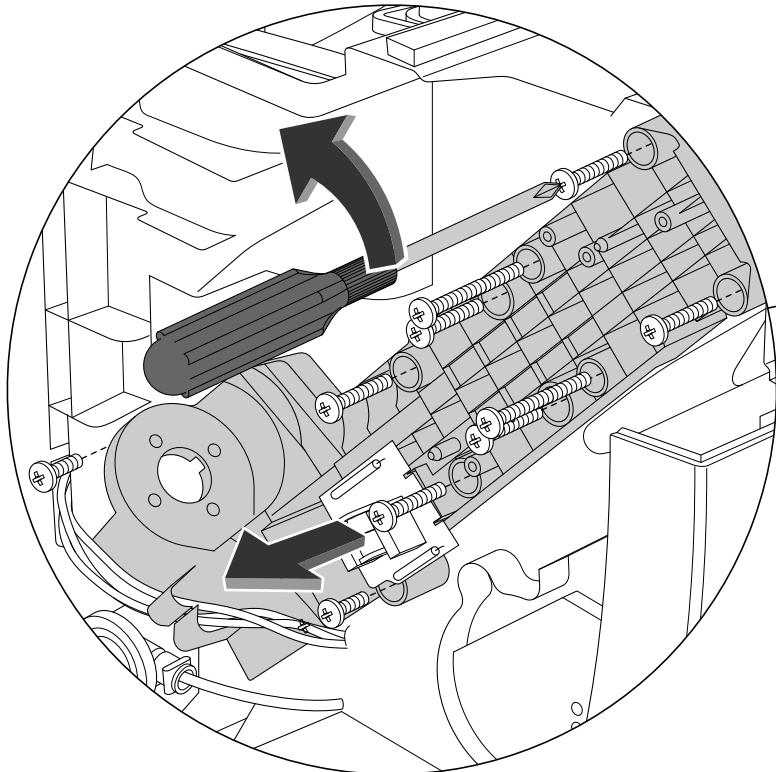
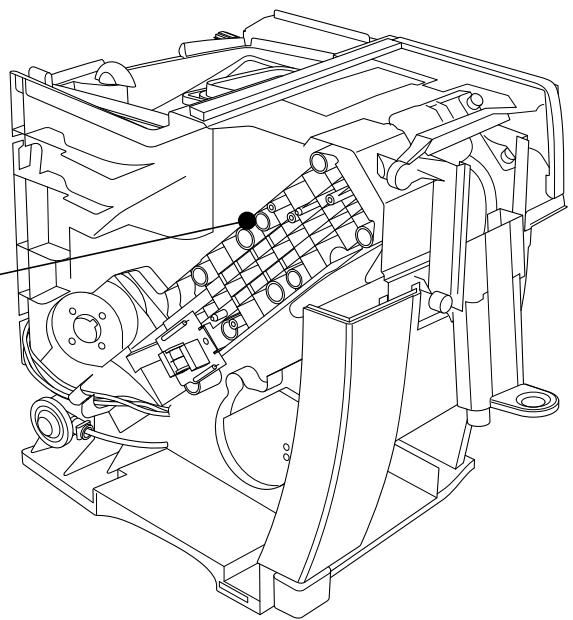
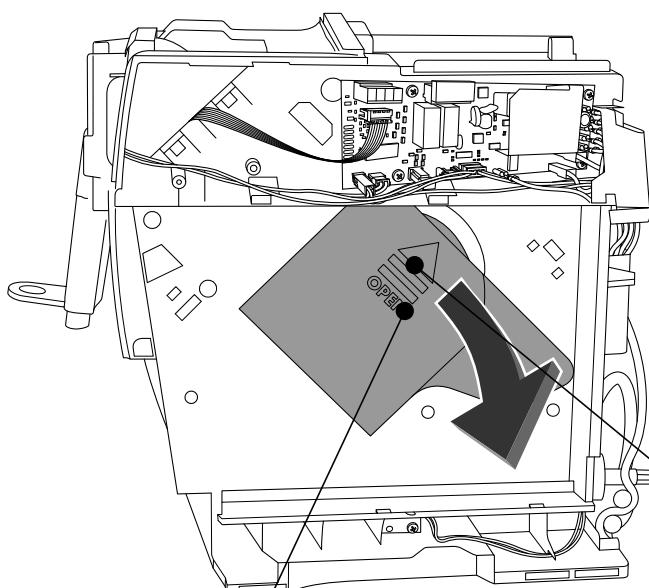


Figura 15 - **SMONTAGGIO GRUPPO MOVIMENTAZIONE**



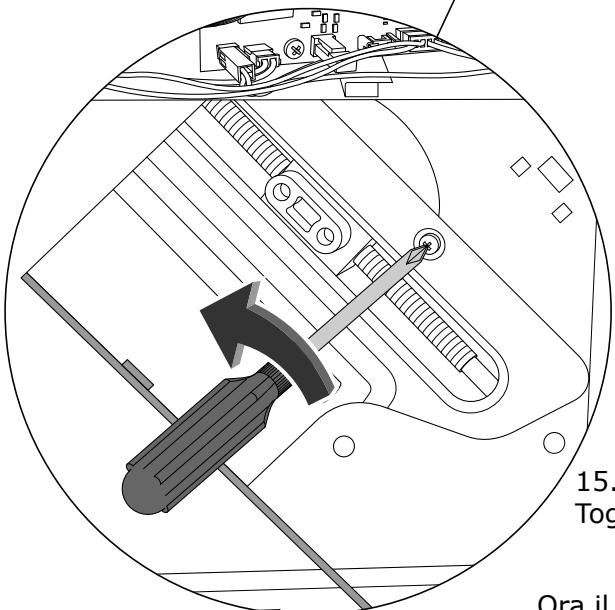
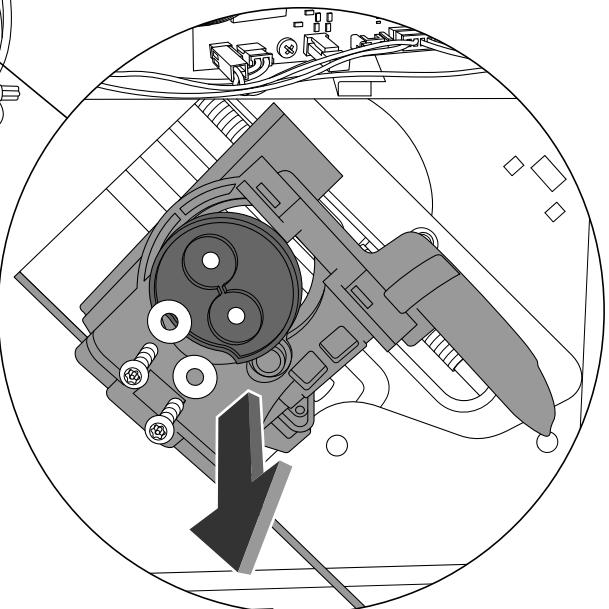
15.2

Aprire vano infusore



15.3

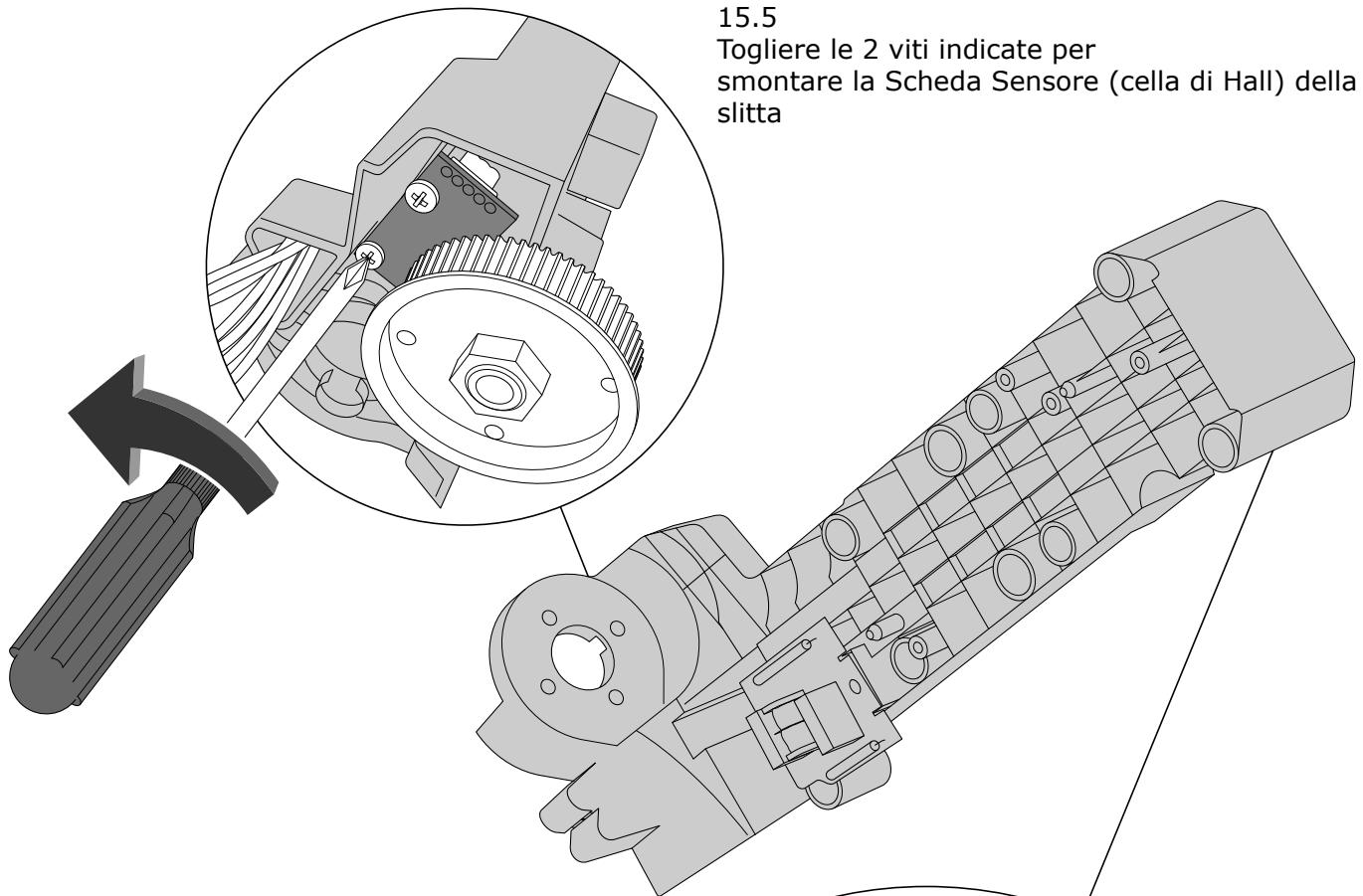
Togliere le 2 viti indicate
(Torx T20)



15.4

Togliere la vite di fissaggio della slitta

Ora il GRUPPO MOVIMENTAZIONE può essere estratto



15.5
Togliere le 2 viti indicate per
smontare la Scheda Sensore (cella di Hall) della
slitta

15.6
Fare attenzione, nel momento in cui
si toglie la slitta, ai 2 distanziali indicati nel
disegno
(**ATTENZIONE:** per i
distanziali vedere info
IT0181)

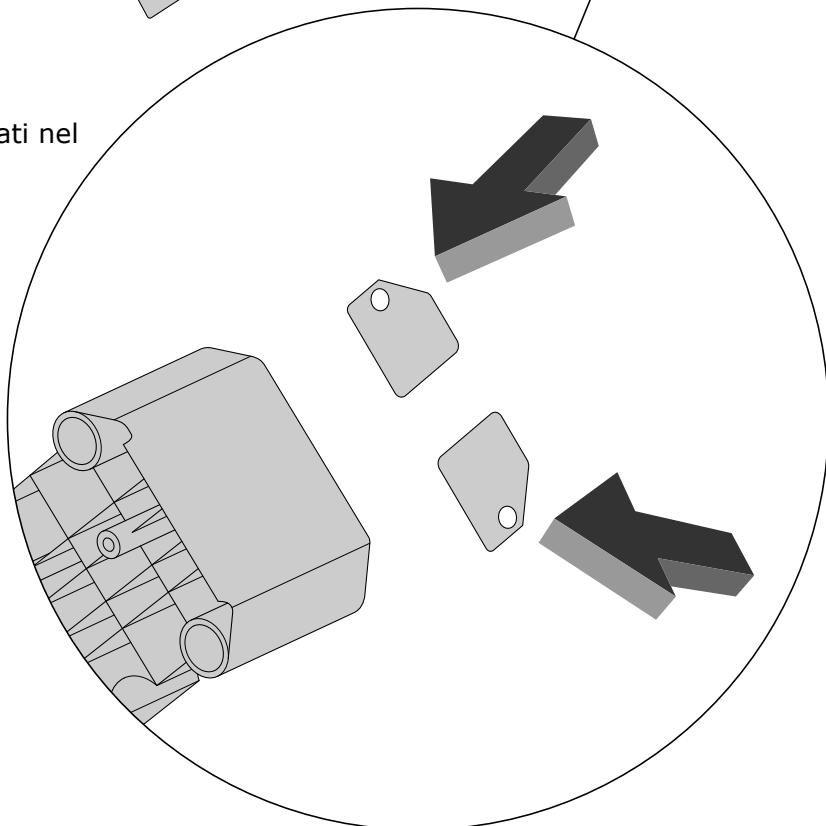


Figura 16 - **SMONTAGGIO EROGATORE CAFFE'**

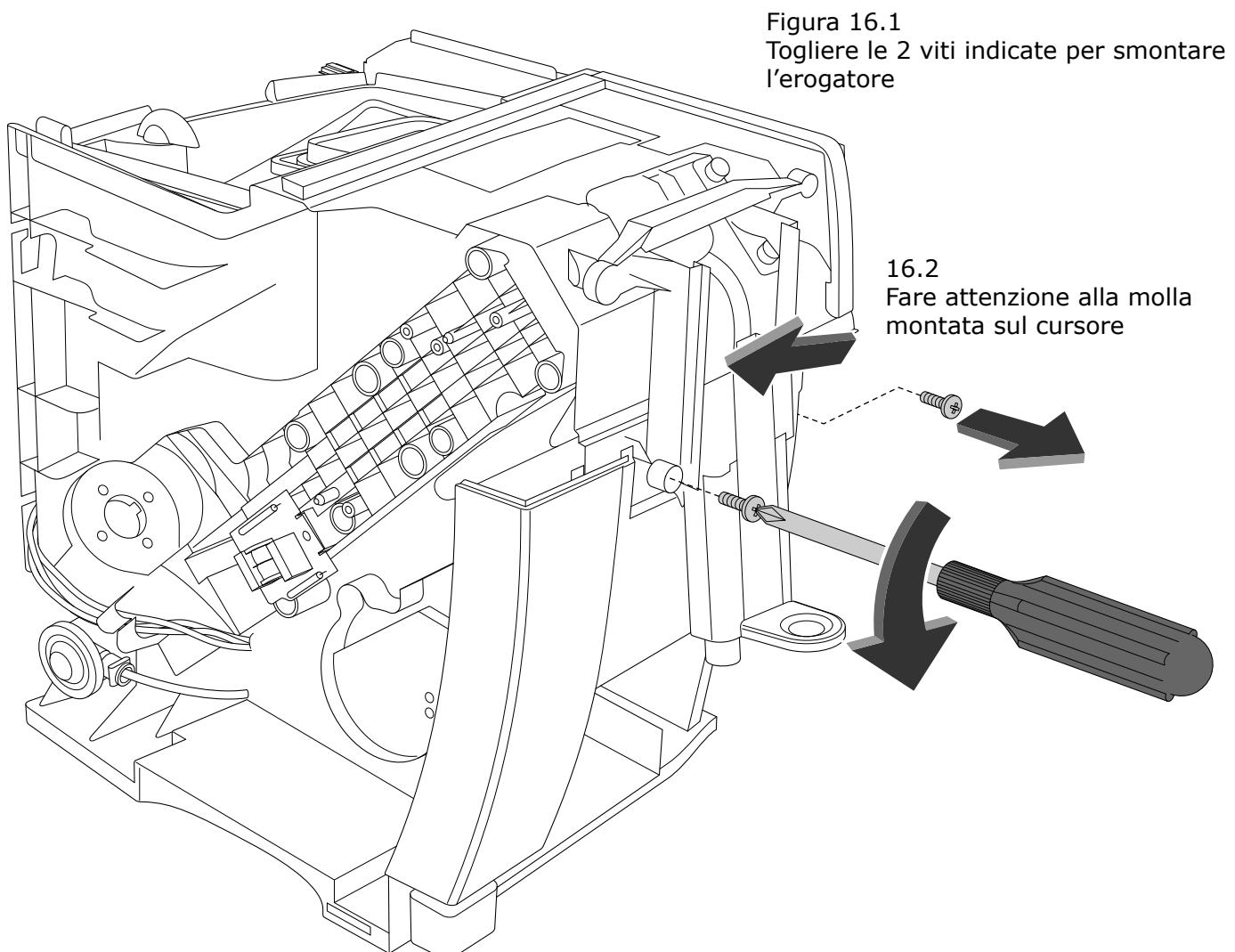
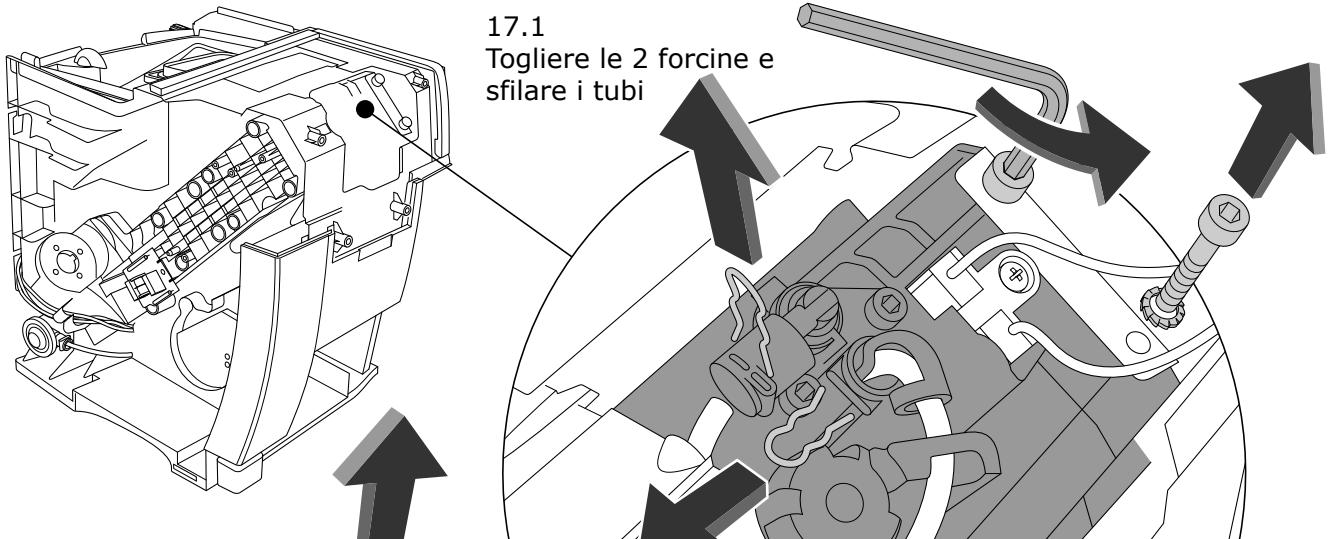
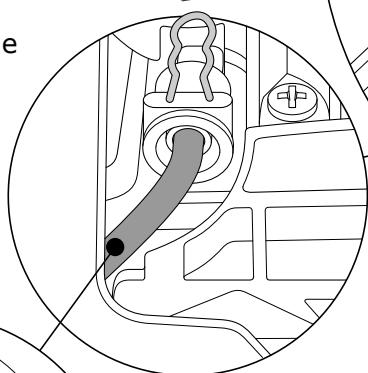


Figura 17 - SMONTAGGIO MECCANOVALVOLA
(ATTENZIONE: vedere info IT0181)

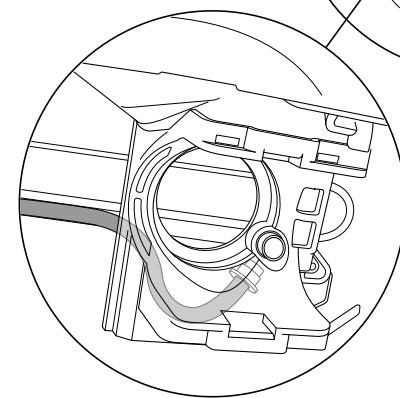
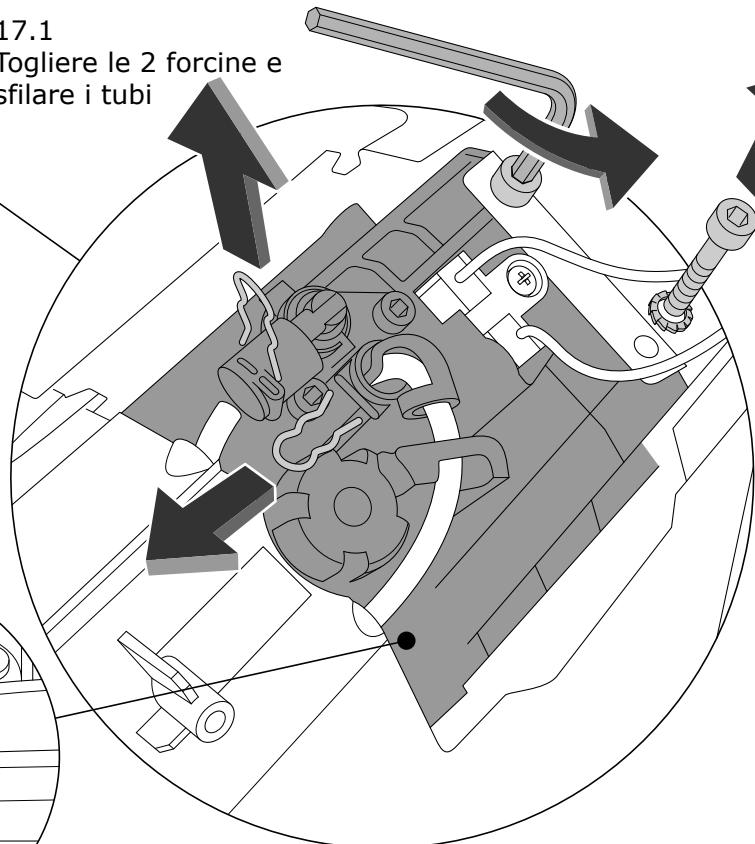
17.2
Utilizzando una chiave a brugola (4)
togliere le due viti di fissaggio della
staffa



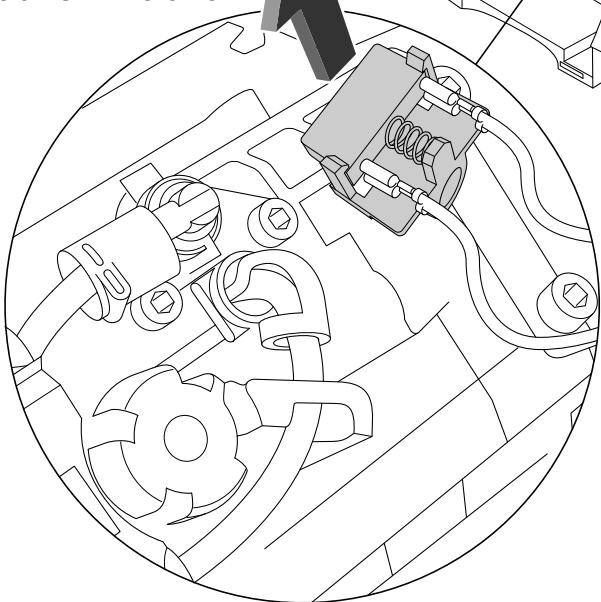
17.3
Togliere la forcina e
sfilare il tubo che
dall'erogatore
arriva all'infusore



17.1
Togliere le 2 forcine e
sfilare i tubi



17.5
Estrarre il microint.



17.4
Per togliere il microinterruttore,
svitare la vite indicata

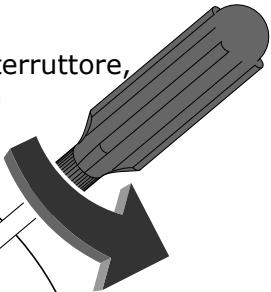
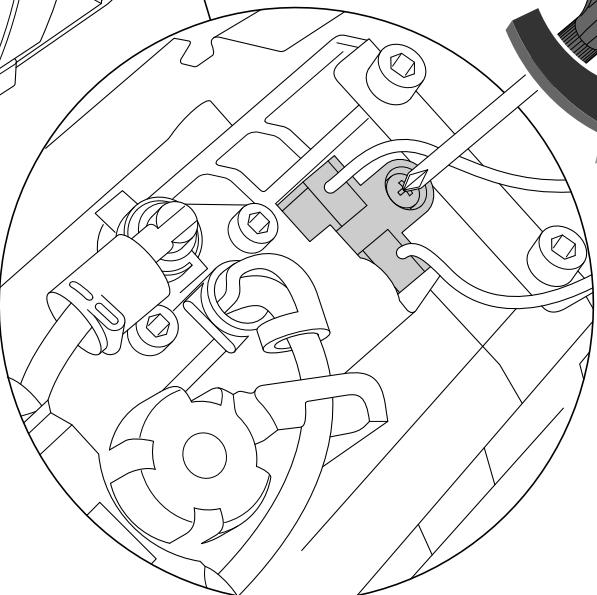


Figura 18 - ALLINEARE LA MECCANOVALVOLA

Far salire l'infusore fino a farlo arrivare a contatto della meccanovalvola, senza esercitare pressione per farli entrare in contatto: devono solo essere allineati.

Una volta completata l'operazione, fissare le due viti (fig. 18.2) con una chiave a brugola

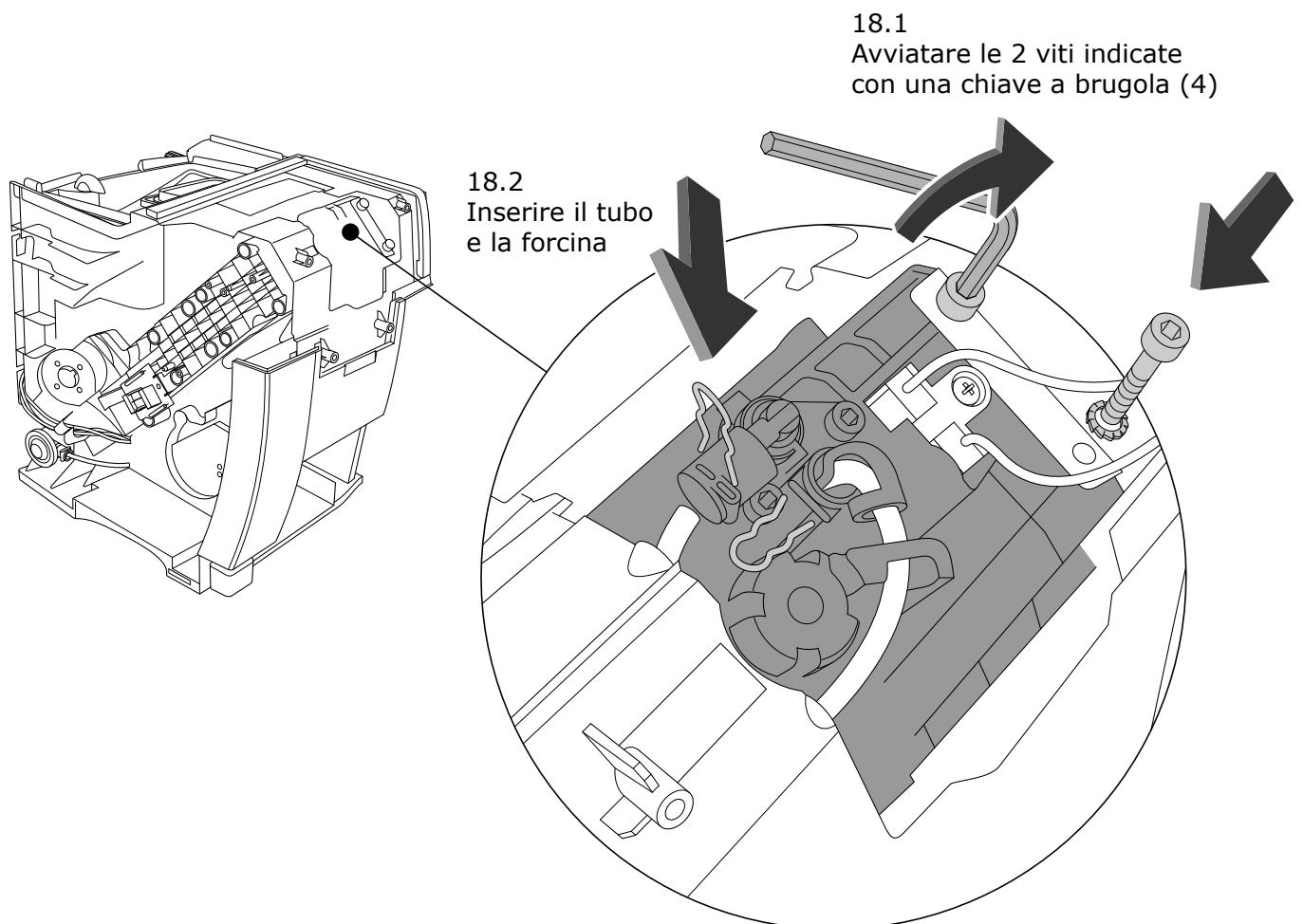
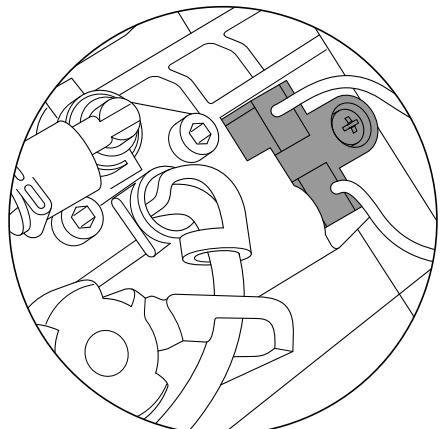
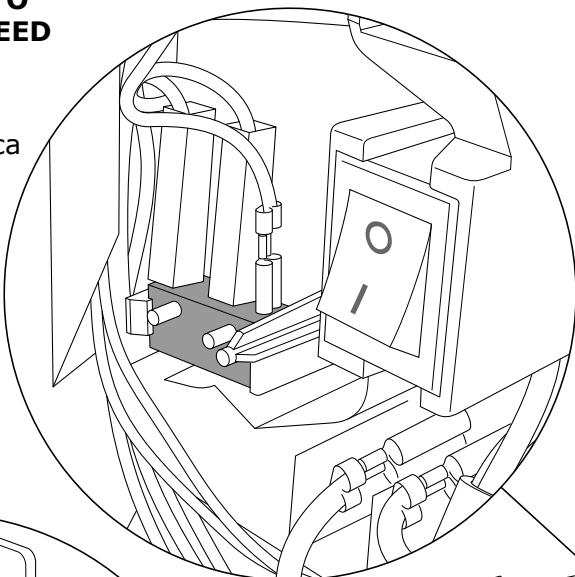


Figura 19. POSIZIONAMENTO MICROINTERRUTTORI E REED

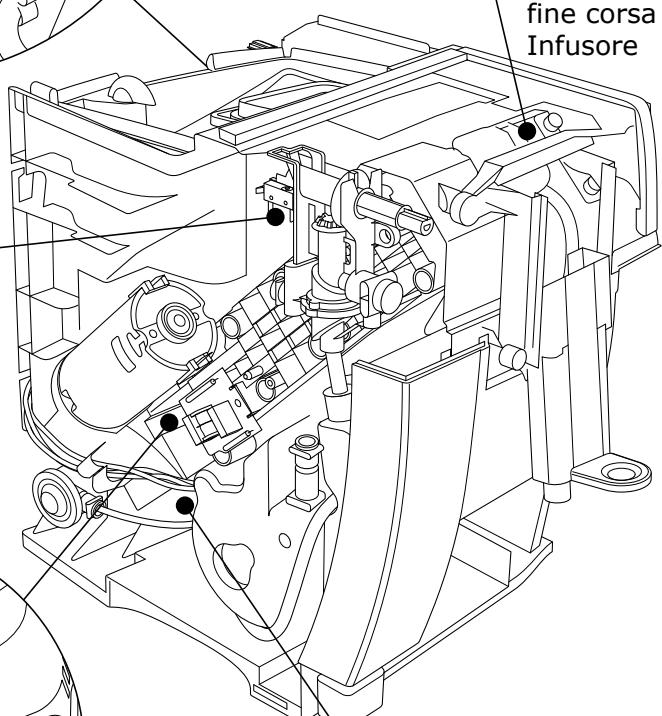
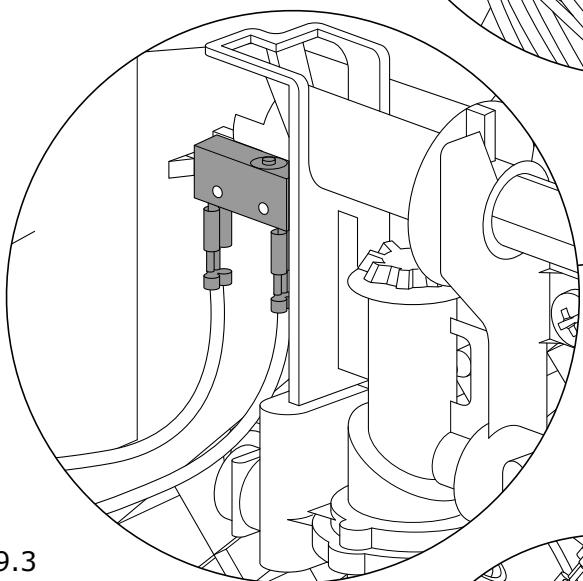
19.1
Microinterruttore Tanica

ATTENZIONE: fate attenzione a non bypassare il micro: se dovete farlo, il motore infusore resterebbe in funzione

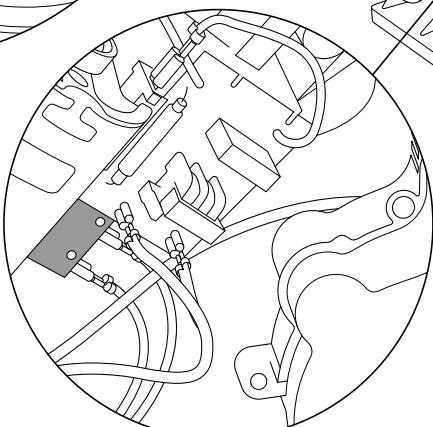
NOTA : I micro Tanica, Cassetto Fondi e Vapore emettono un beep quando sono aperti



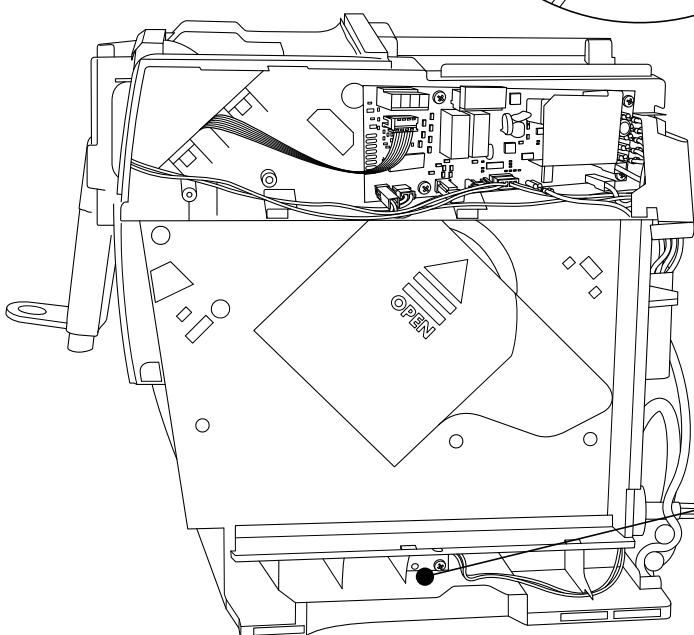
19.2
Microint.
fine corsa
Infusore



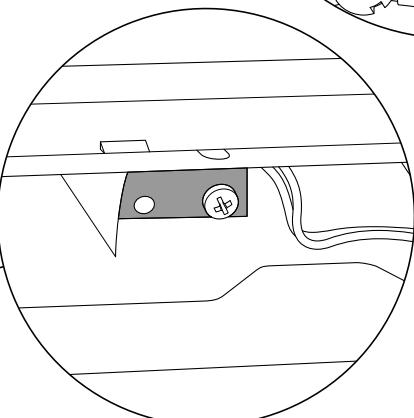
19.3
Microinterruttore
Rubinetto



19.4
Microinterruttore inizio corsa
Infusore

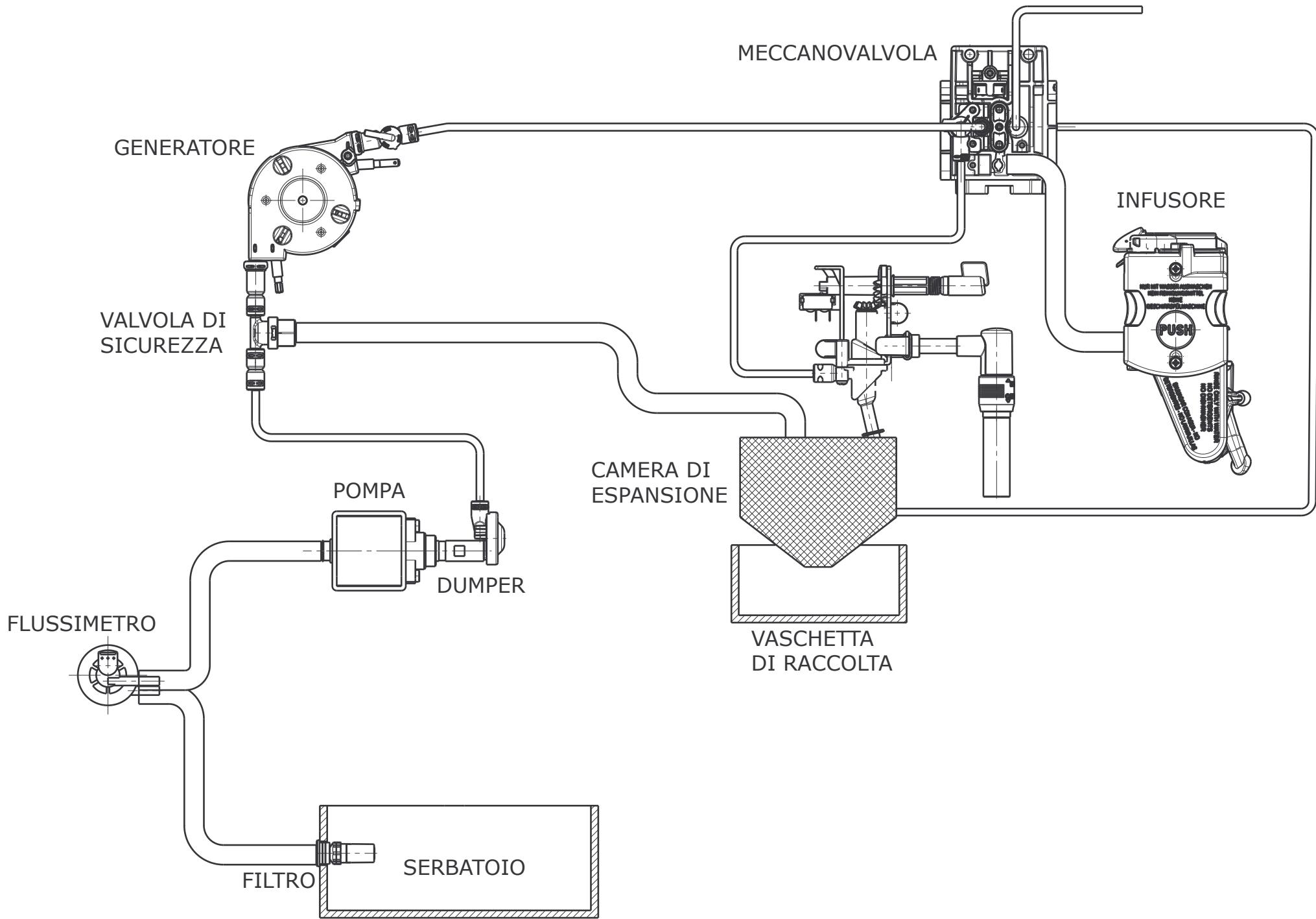


19.5
Microinterruttore
Cassetto fondi



19.6
Reed tanica

SCHEMA IDRAULICO



PROCEDURA DI TEST PER LA ECAM23.420 INTENSA



| PROCEDURA | Premendo le varie icone, si alimentano i seguenti dispositivi: | |
|--|--|---|
| | icona | dispositivo |
| Chiudere il rubinetto vapore (pos. 0). Attaccare il cavo di rete. Tenere premuti i tasti: 1 Tazza + Vapore | | Caldaia Caffè ON |
| | | Motore Macinino ON |
| | | Motore, verso l'alto "Micro fine corsa" e verso il basso "Micro inizio corsa" |
| | | Pompa Acqua ON |
| Premere l'interruttore On/Off (pos. I) | | |
| NOTA: Rilasciare i tasti quando il motore quando inizia la movimentazione | | |

NOTA : I micro Tanica, Cassetto Fondi e Vapore emettono un beep quando sono aperti

Per USCIRE dalla procedura, premere l'interruttore On/Off (pos. 0) o staccare il cavo di alimentazione.



PROCEDURA DI TEST DISPLAY PER ECAM23.420 INTENSA



| PROCEDURA DI TEST DISPLAY | Premendo su ciascuna icona, si visualizza il seguente messaggio | |
|--|---|-----------|
| | icona | messaggio |
| Per entrare nella procedura di test: Attaccare il cavo di rete. Tenere premuti i tasti: 1 Tazza + Vapore | | BUTTON 1 |
| Premere l'interruttore On/Off (pos. I) | | BUTTON 2 |
| | | BUTTON 3 |
| | | BUTTON 4 |
| | | BUTTON 5 |
| | | BUTTON 6 |
| | | BUTTON 7 |
| Nota: Rilasciare i tasti dopo il messaggio "DISPLAY TEST MODE". | Girando la manopola, il Display mostrerà la barra di incremento e decremento | |

NOTA: Dopo aver eseguito il test, è necessario inizializzare la macchina.

Per USCIRE dalla procedura, premere l'interruttore On/Off (pos. 0) o staccare il cavo di alimentazione.

La macchina esce automaticamente dalla procedura di test dopo 1 minuto.