



MACCHINE DA CAFFE' AUTOMATICA AUTOMATIC COFFEE MACHINES

DE LONGHI ECAM23.210 DE LONGHI ECAM23.217
DE LONGHI ECAM21.210

(INT/CH/IT/AT)

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

Voltaggio / Voltage / Spannung / Voltage / Voltaje	V / Hz 220 - 240 / 50 - 60
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Max. potenza assorbita / Max. input power	W 1450
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SEZIONE CAFFE' / COFFEE SECTION

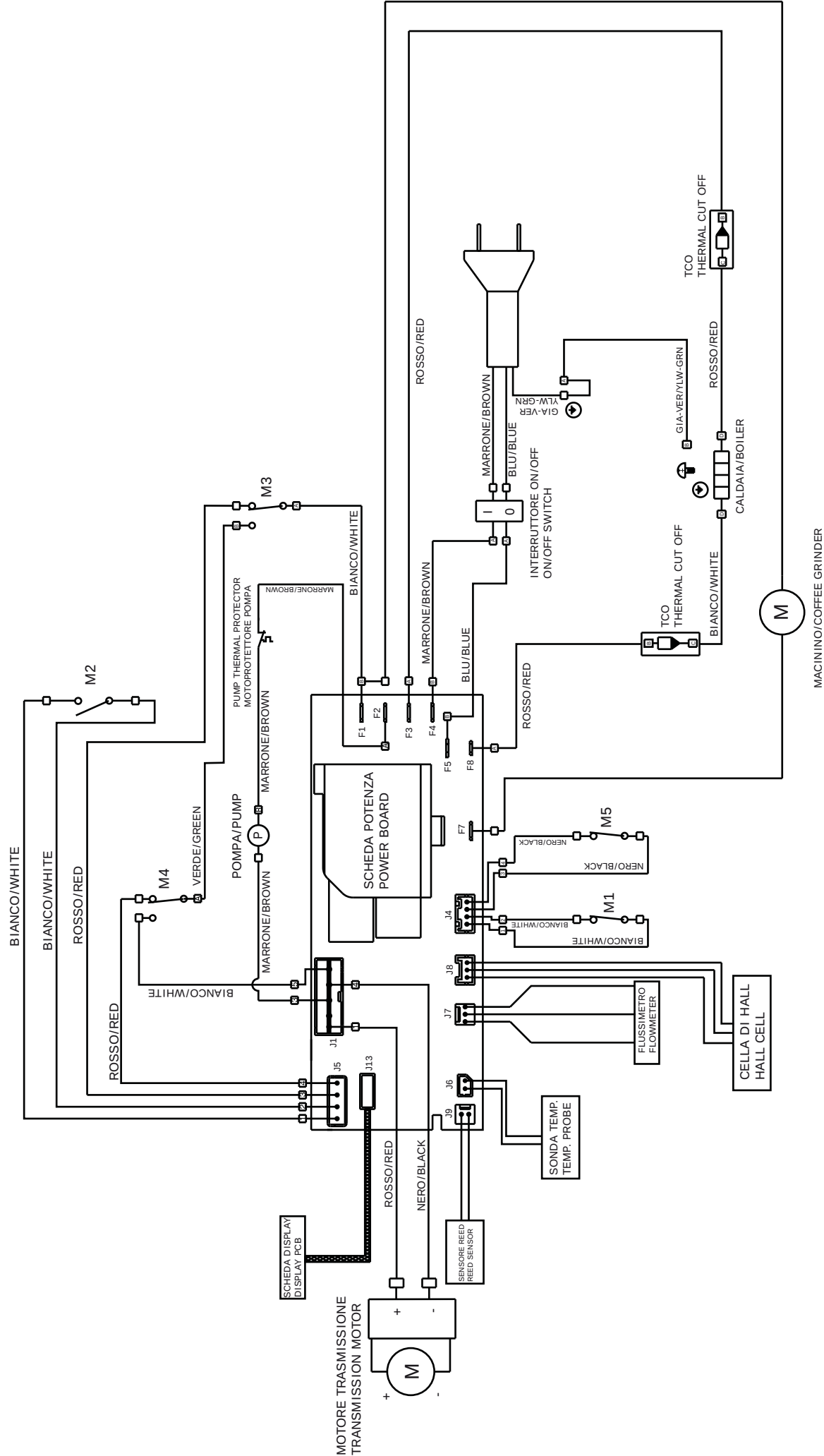
Sonda termica / Temperature probe	°C 98 (Caffè / Acqua calda) (Coffee / Hot water)
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Fusibile termico TCO / Thermal fuseTCO	°C 192
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Resistenza riscaldamento	W 1400
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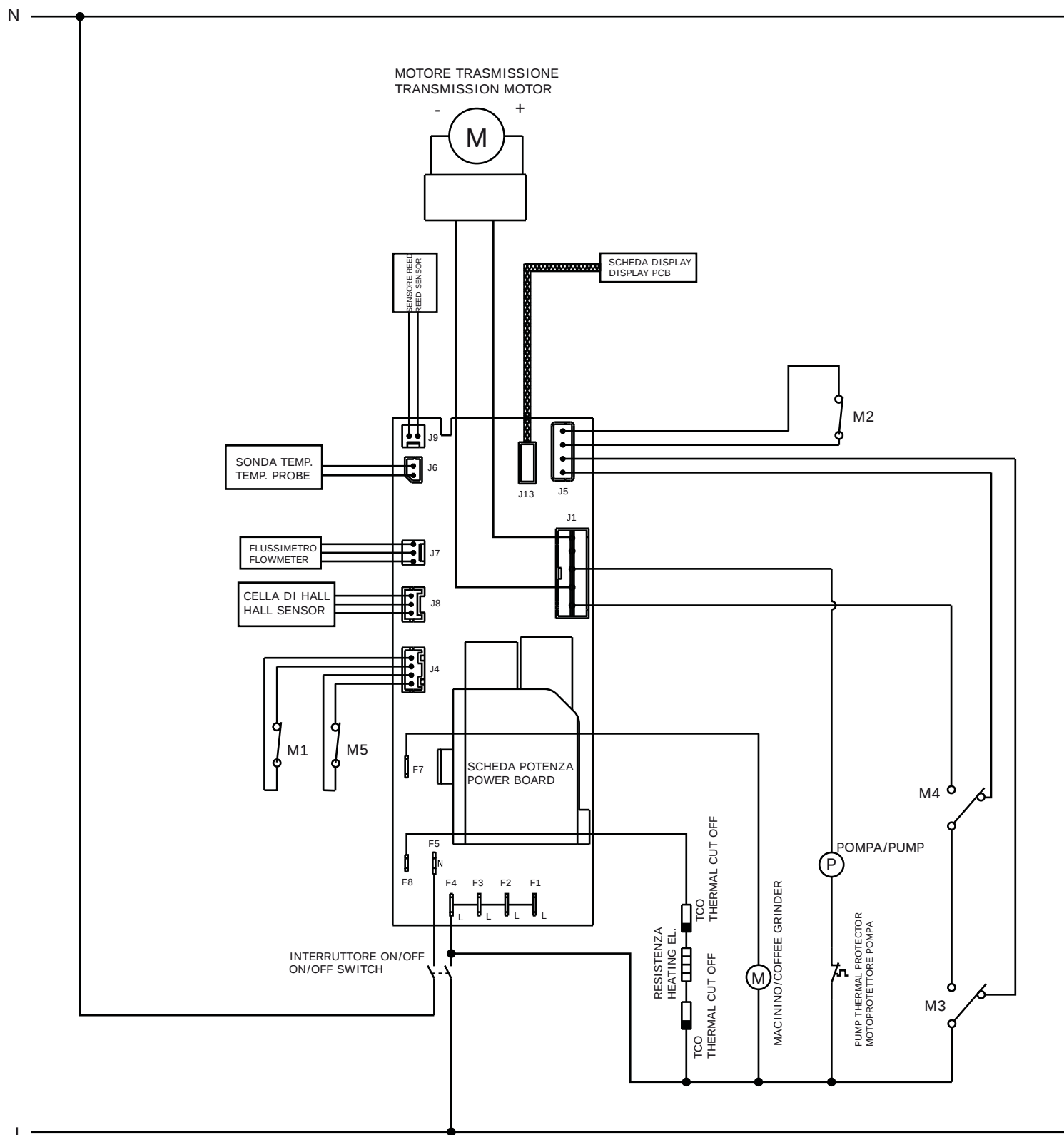
Pompa / Pump	TYPE / W ULKA EP5W / 48
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SCHEMA ELETTRICO / ELECTRICAL DIAGRAM

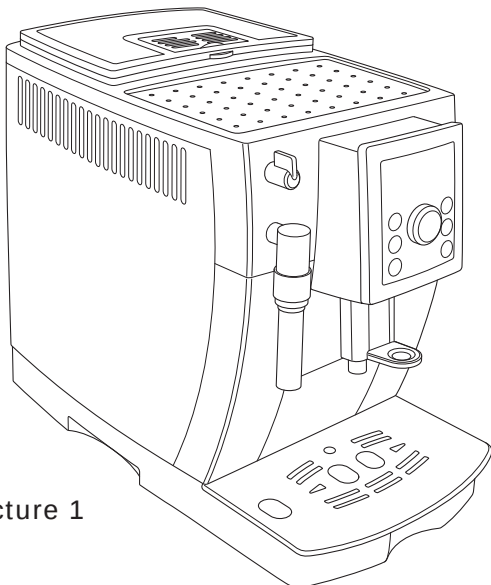


LEGENDA MICRO / MICROSWITCHES	
M1	Infusore alto / Infuser top position
M2	Infusore basso / Infuser bottom position
M3	Cassetto fondi / Coffee grounds container
M4	Tanica / Tank
M5	Rubinetto / Tap

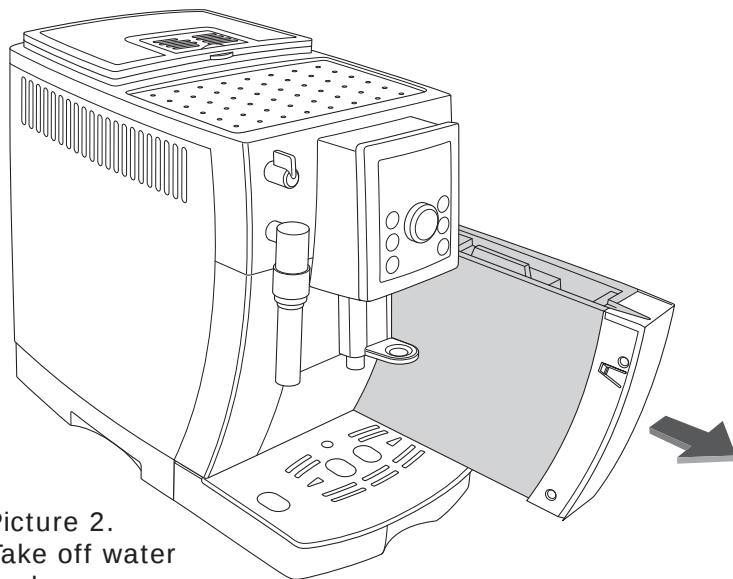
SCHEMA ELETTRICO / ELECTRICAL DIAGRAM



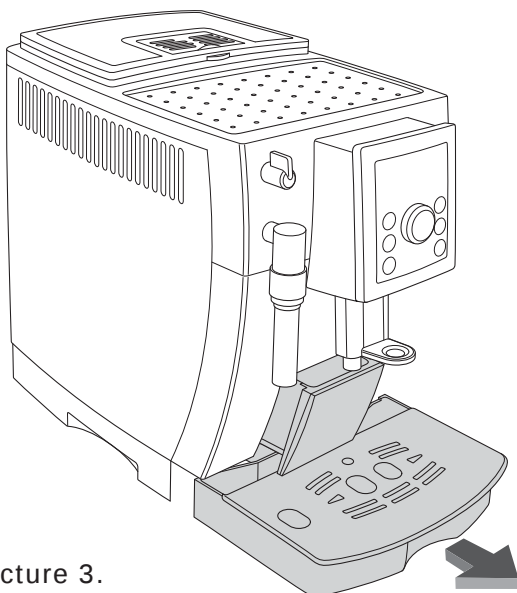
ACCESSIBILITY



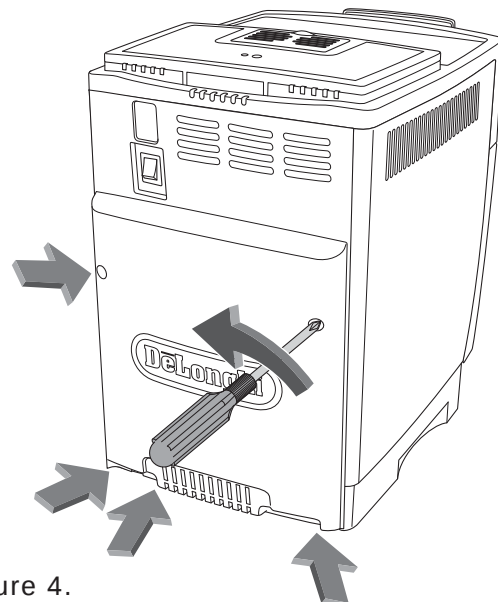
Picture 1



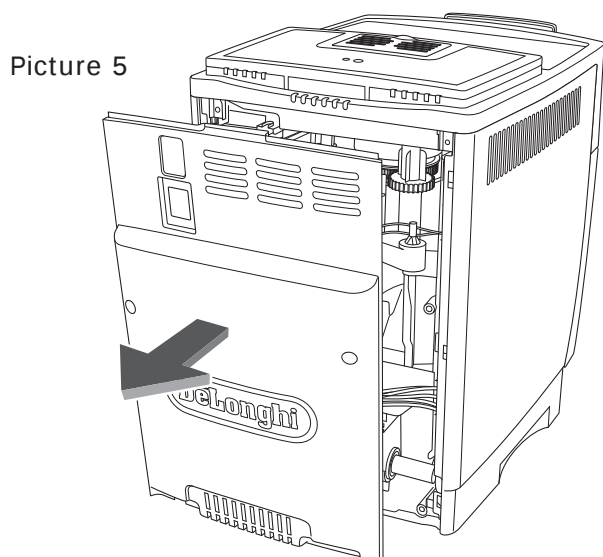
Picture 2.
Take off water
tank



Picture 3.
Take off drip tray
and waste container

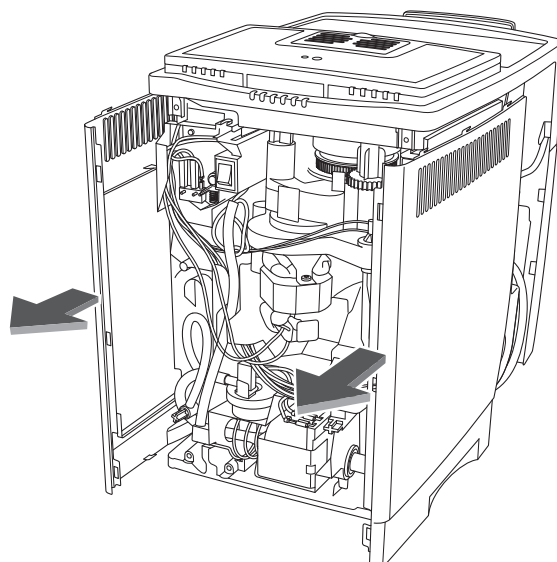


Picture 4.
Unscrew the 5 indicated screws
(Torx T20)



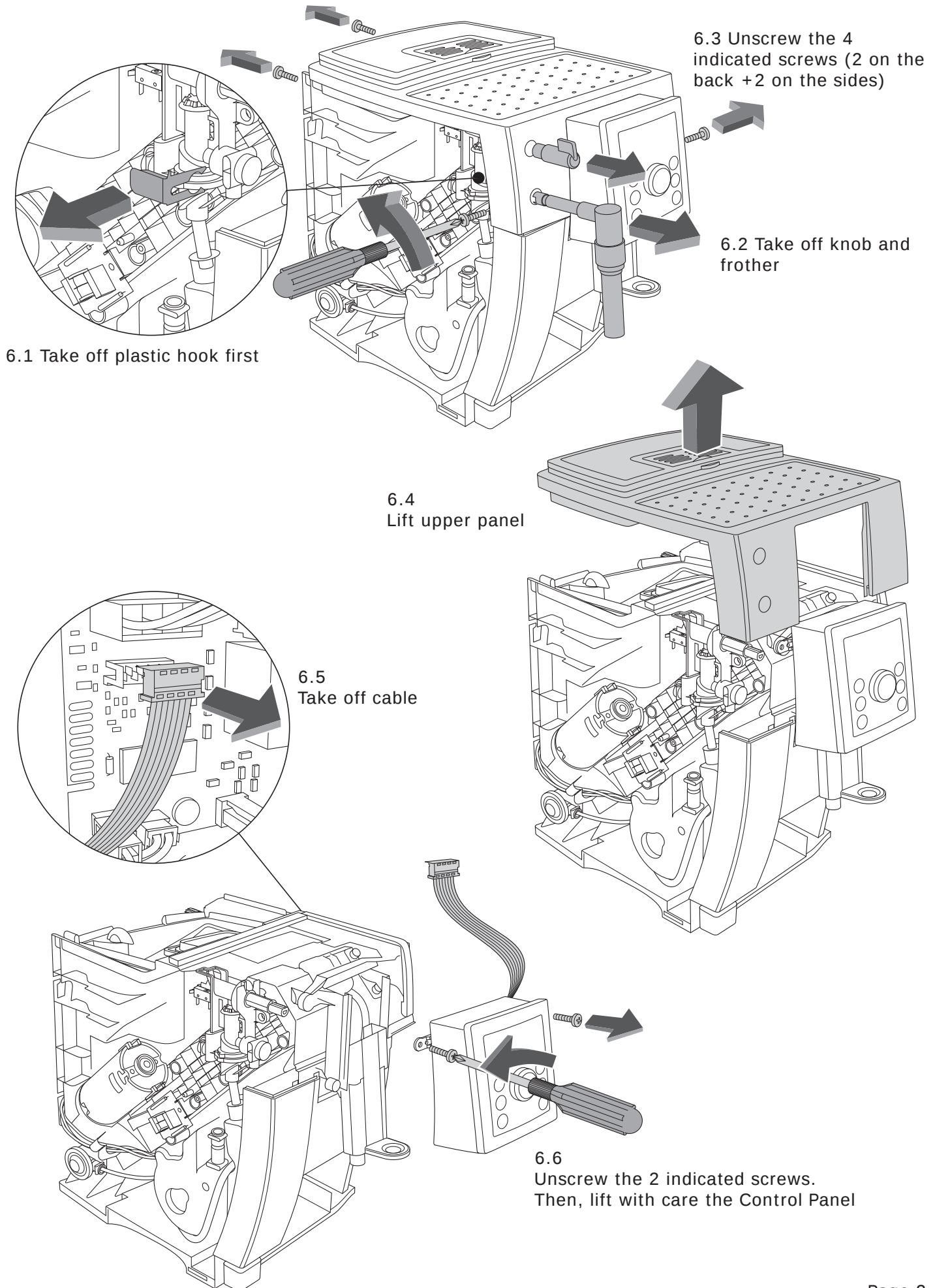
Picture 5

5.1 Remove back panel

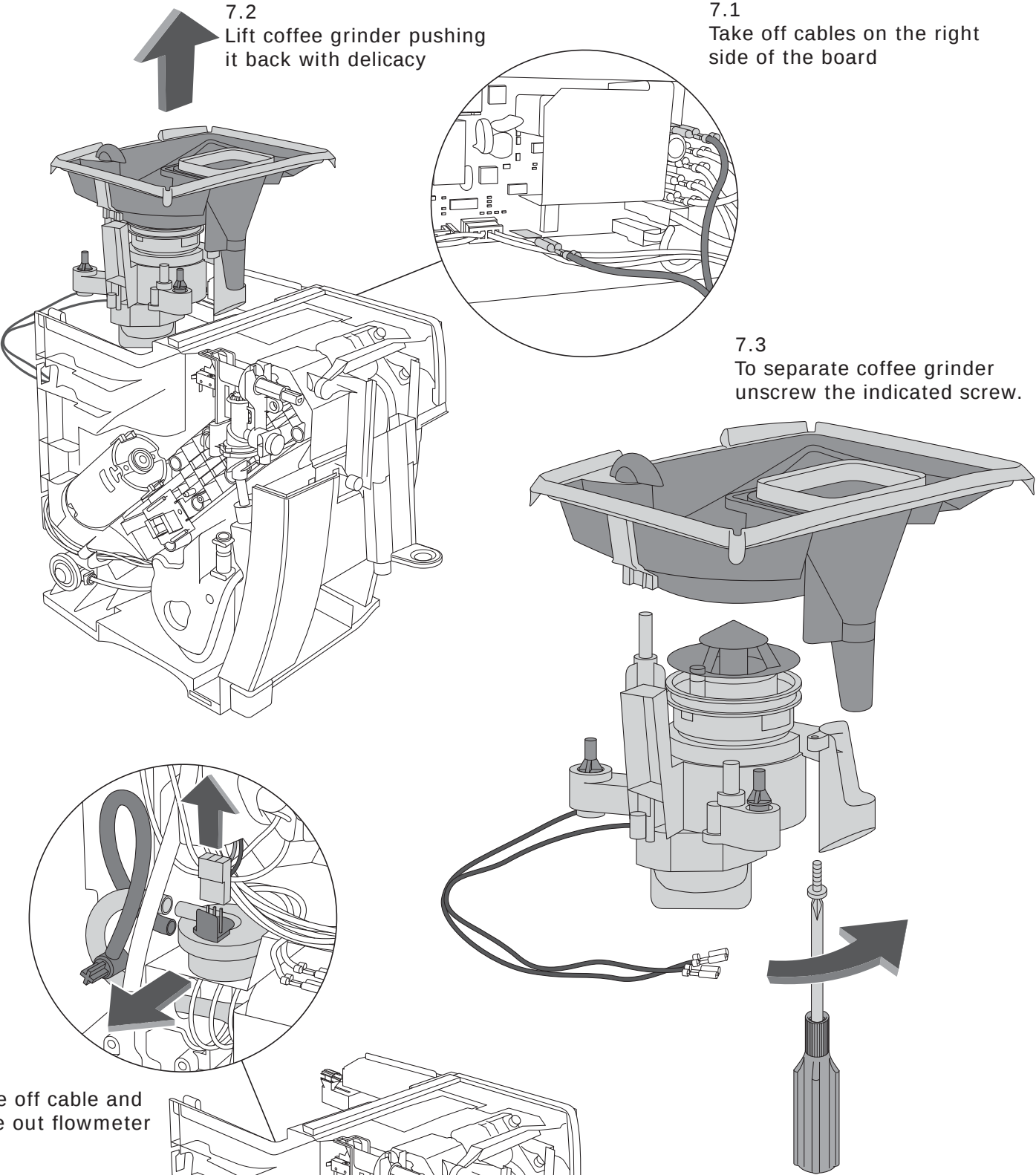


5.2 Unhook side panels

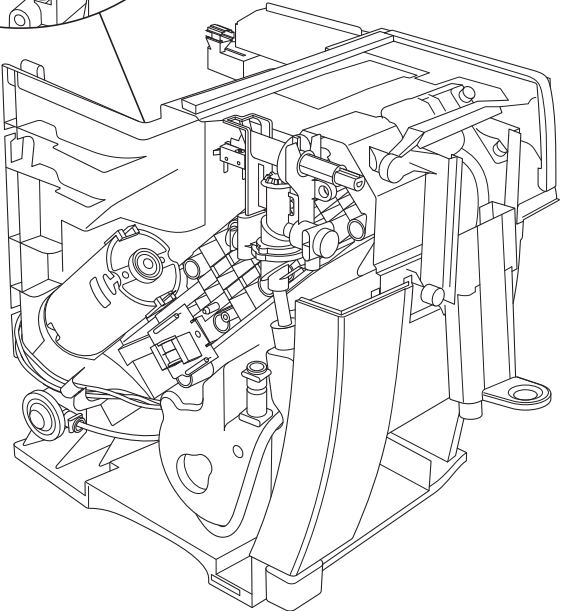
Picture 6 - **TO REMOVE CONTROL PANEL**



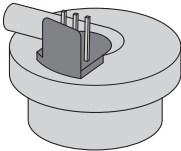
Picture 7 - **TO REMOVE COFFEE GRINDER**



8.1
Take off cable and
take out flowmeter

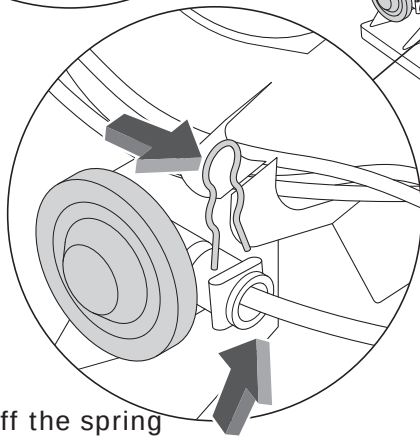
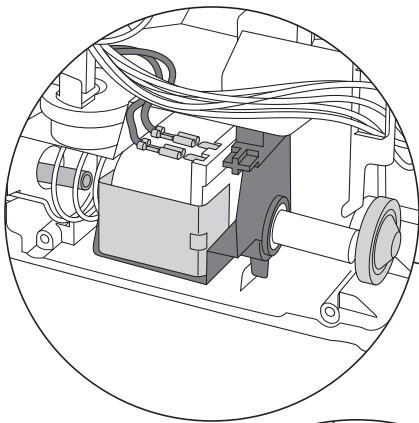


Picture 8 - **TO REMOVE FLOWMETER**

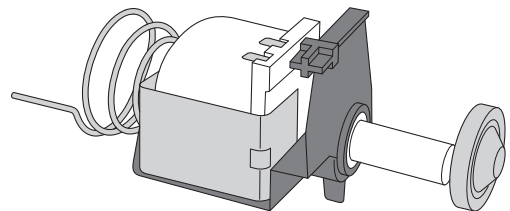
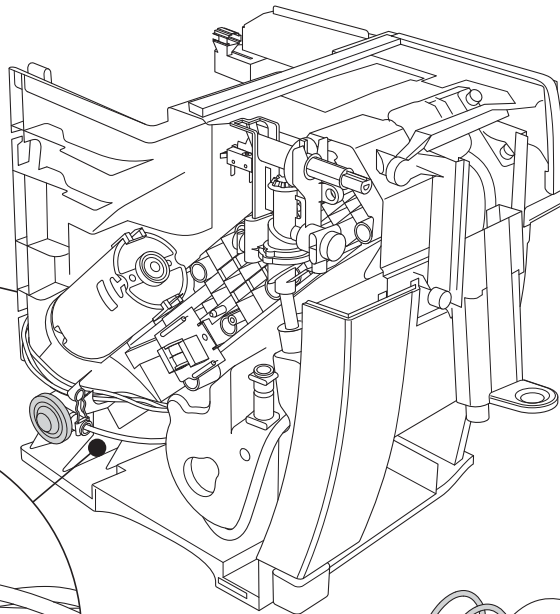


9.2
Take off pump

Picture 9 - **TO REMOVE PUMP**

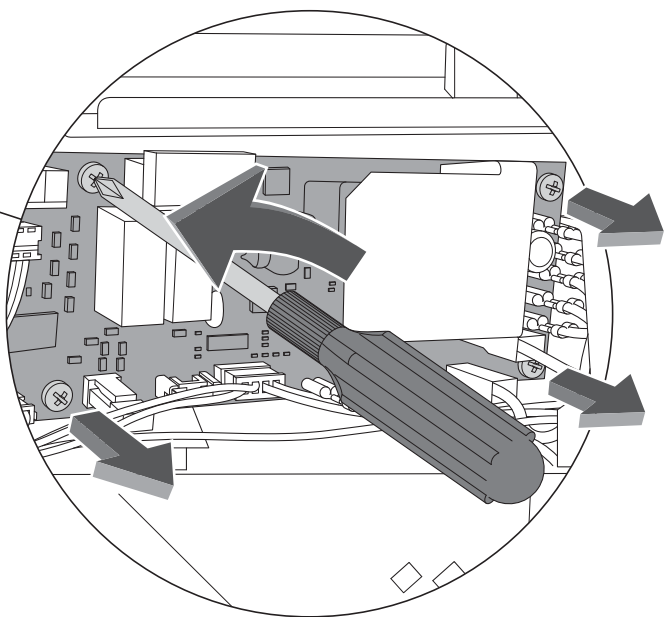
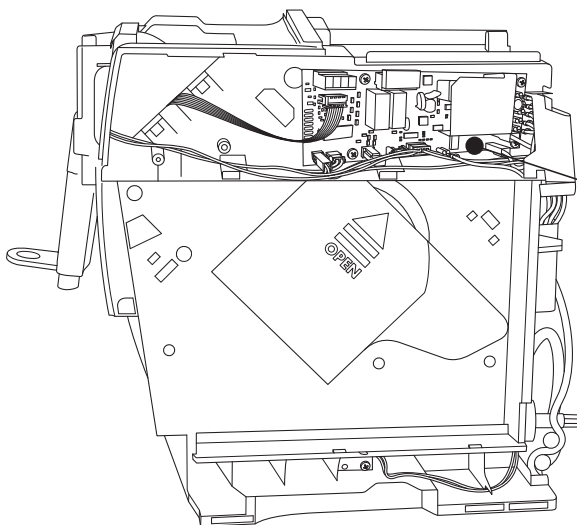


9.1
Take off the spring
and then the tube
Attention: Some water could come out
from the tube, since the water circuit is
emptying out



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

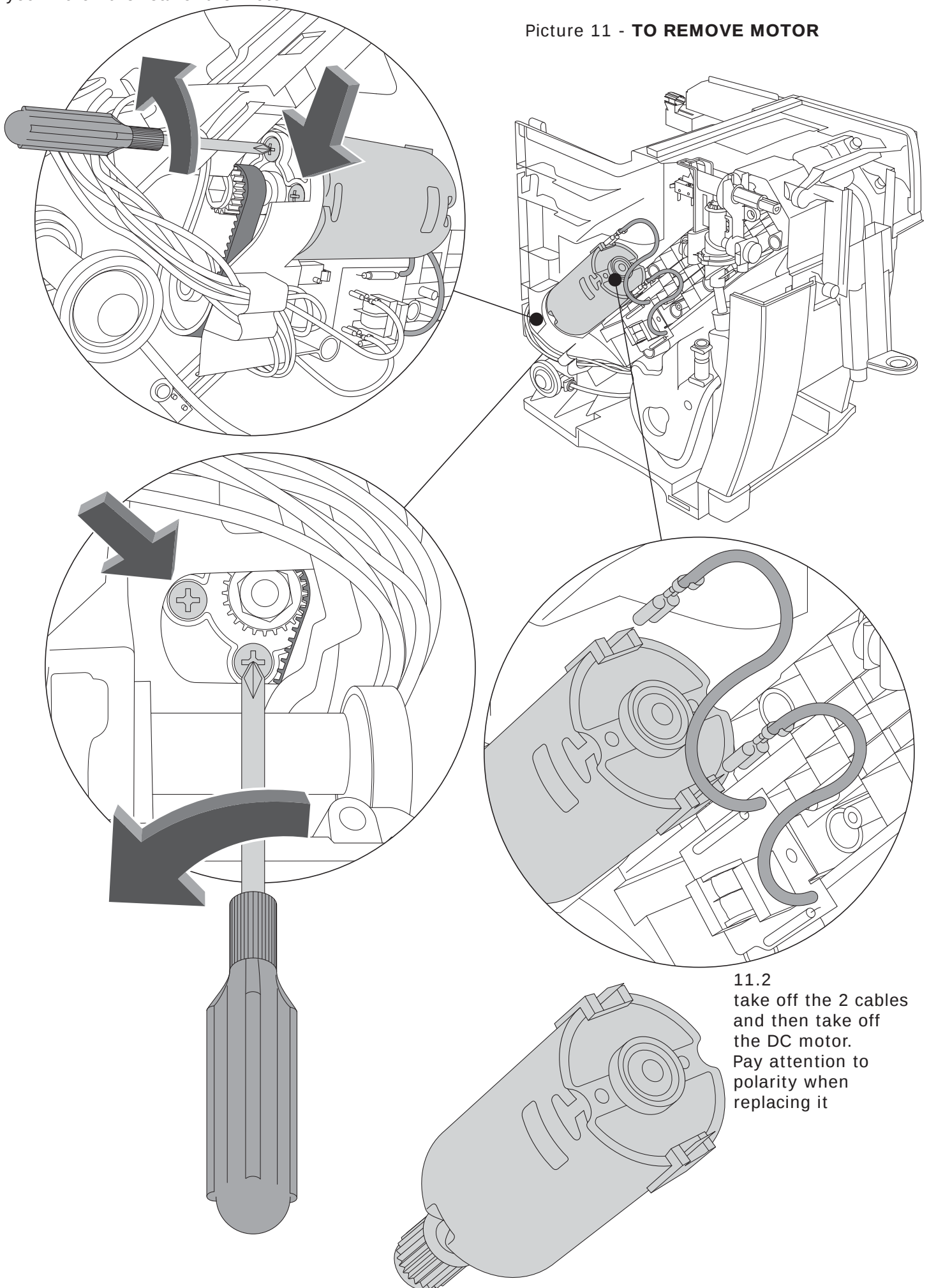
Picture 10 - **TO REMOVE BOARD**



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

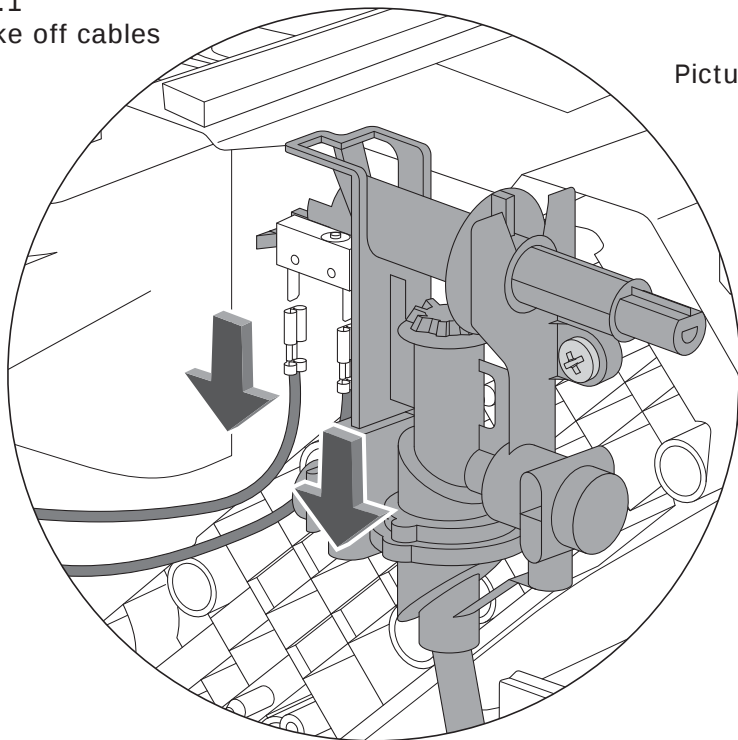
11.1
Unscrew the 4 indicated screw
you find on the rear of the motor

Picture 11 - **TO REMOVE MOTOR**

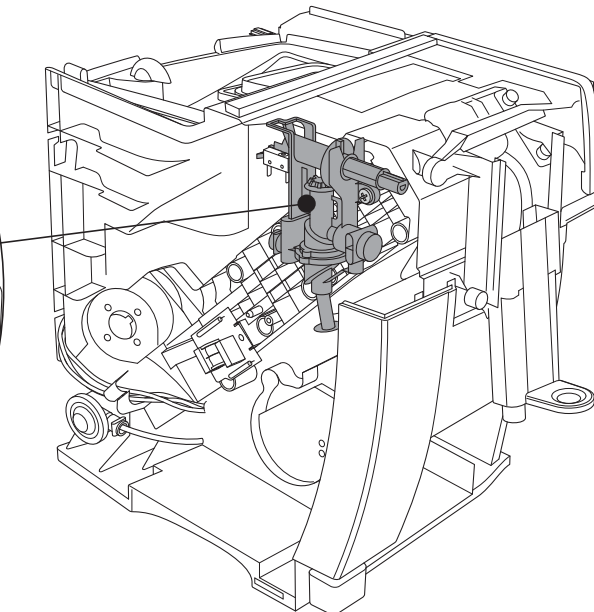


11.2
take off the 2 cables
and then take off
the DC motor.
Pay attention to
polarity when
replacing it

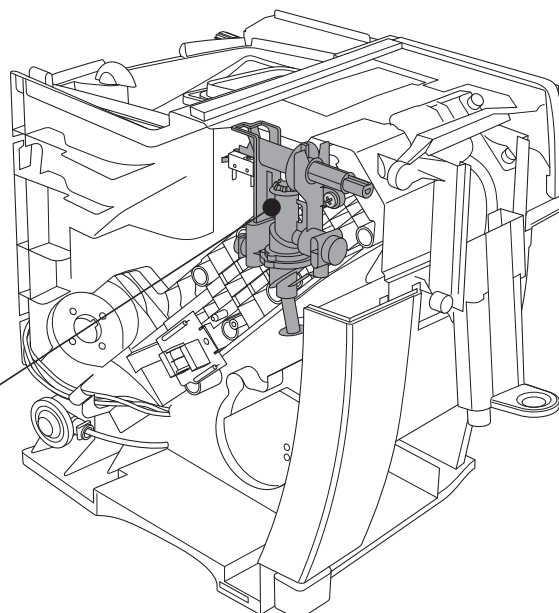
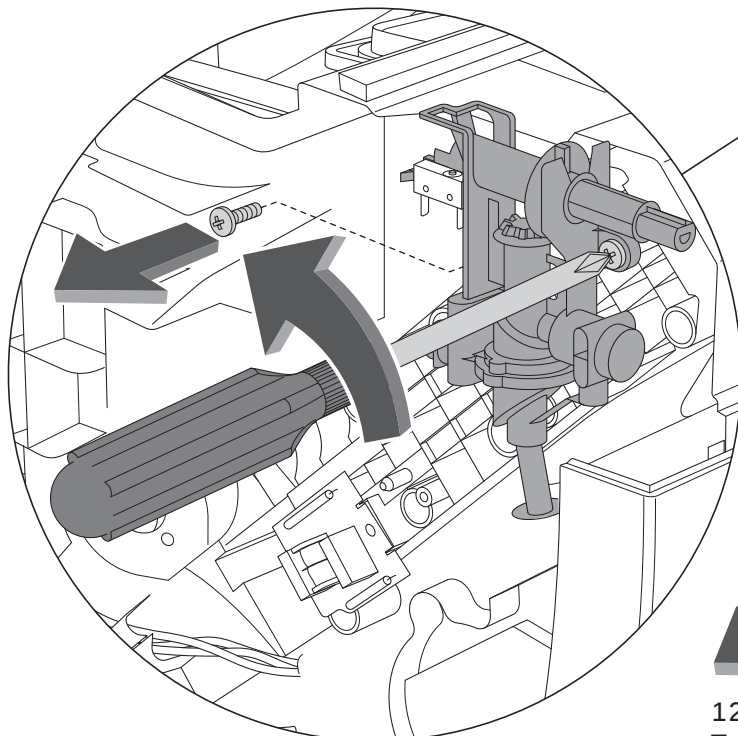
12.1
Take off cables



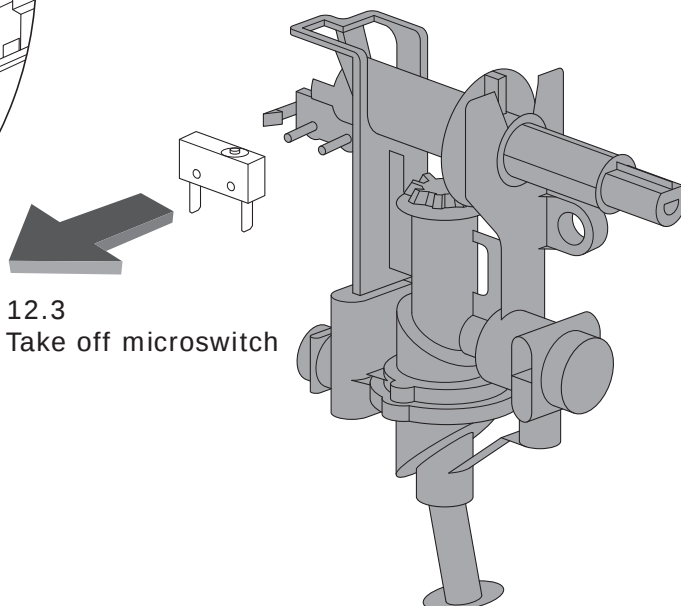
Picture 12 - **TO REMOVE TAP STEAM / HOT WATER**



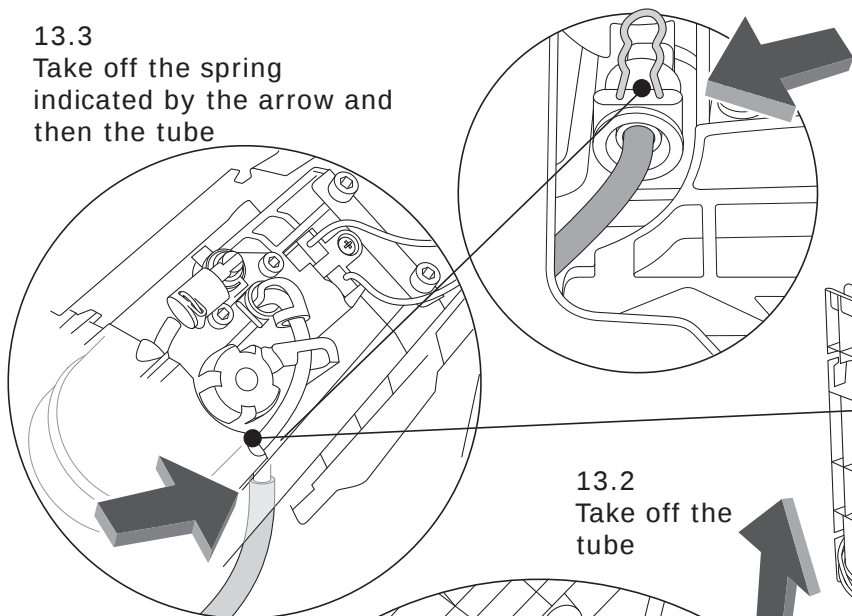
12.2
Unscrew the 2 indicated screws



12.3
Take off microswitch

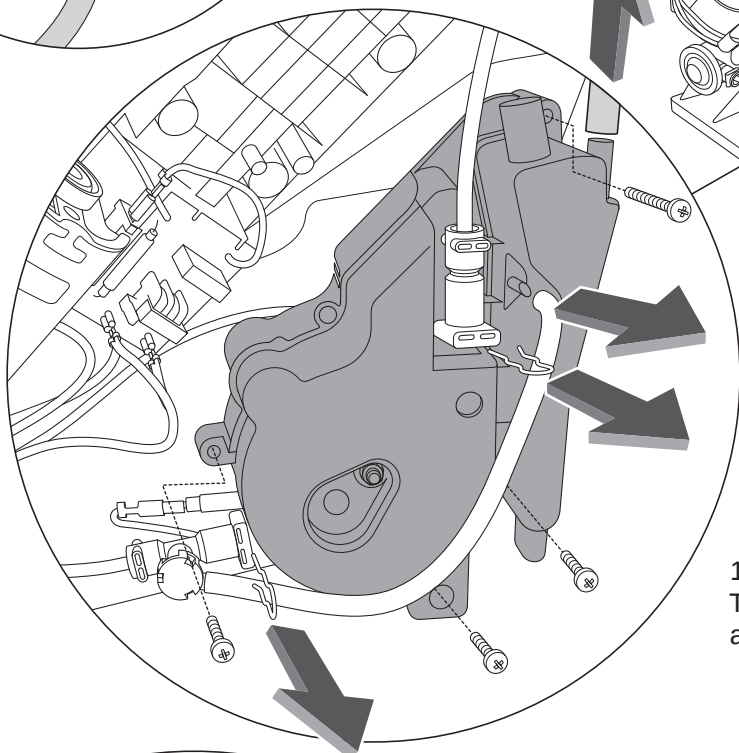


13.3
Take off the spring
indicated by the arrow and
then the tube



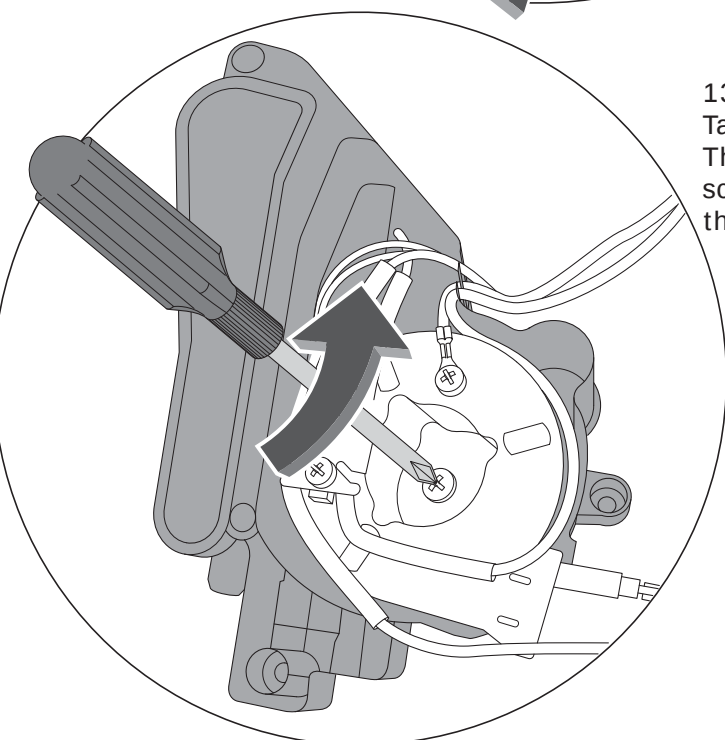
Picture 13 - **TO REMOVE BOILER**

13.2
Take off the
tube

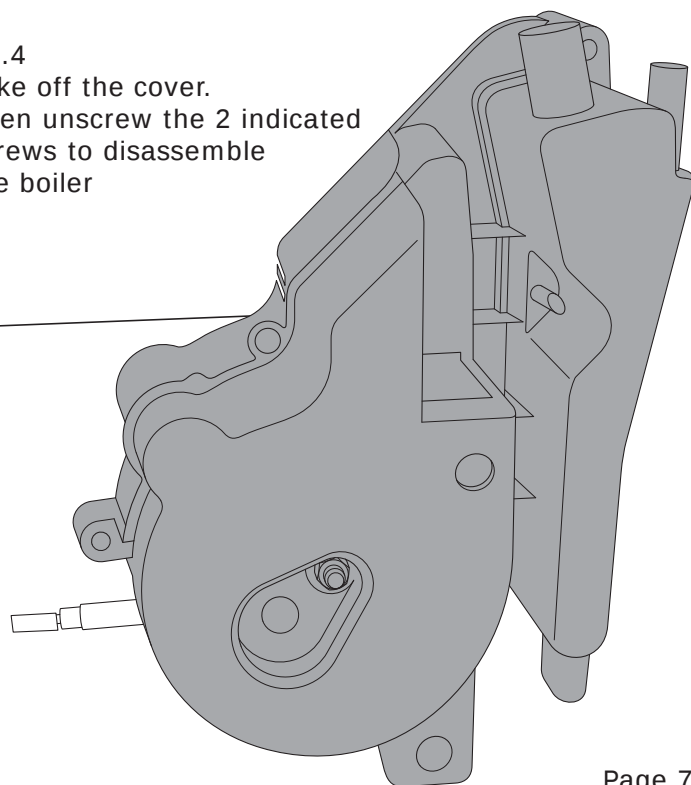


Attention: to take off the boiler,
push with delicacy the plastic panel

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**

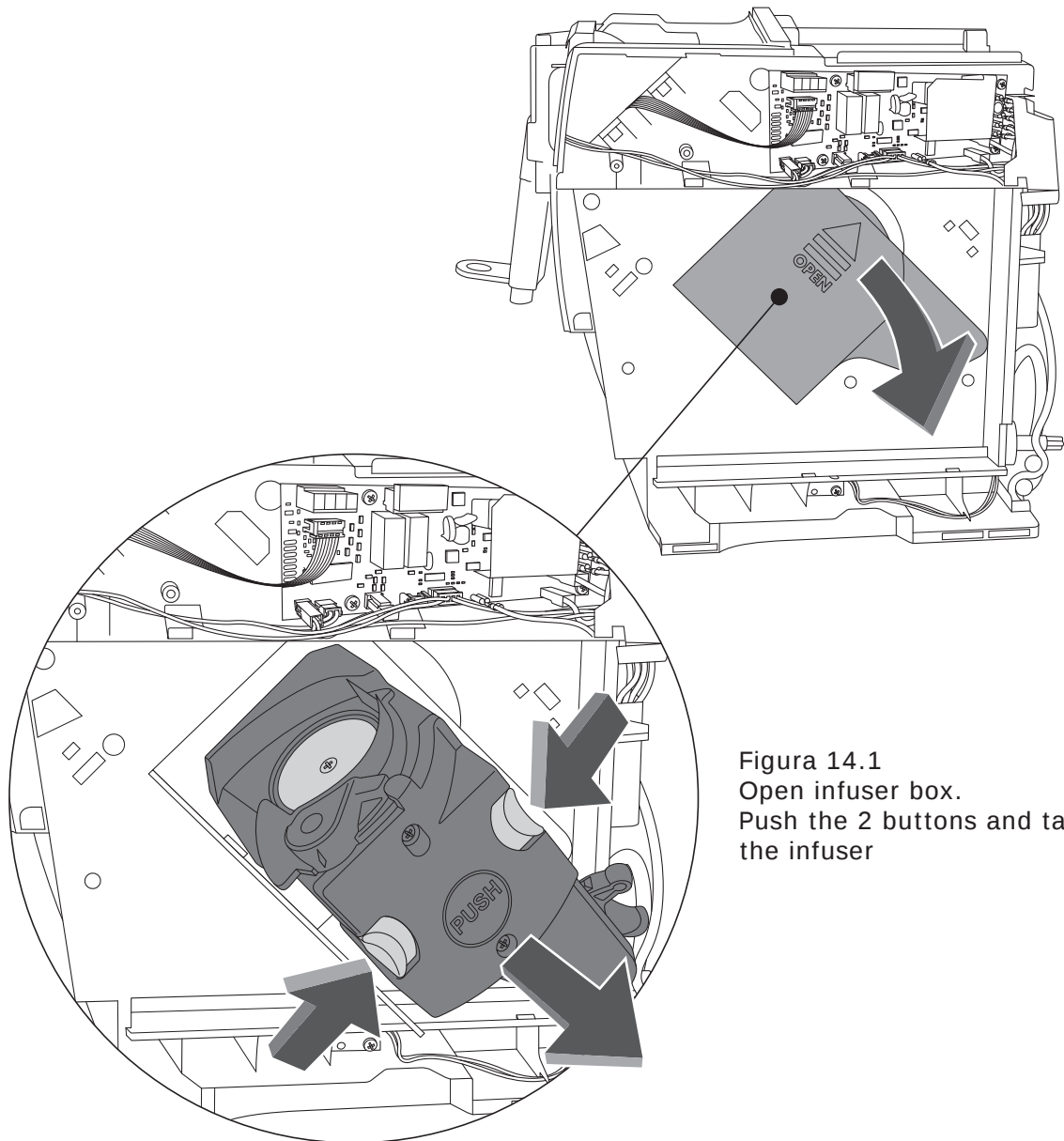
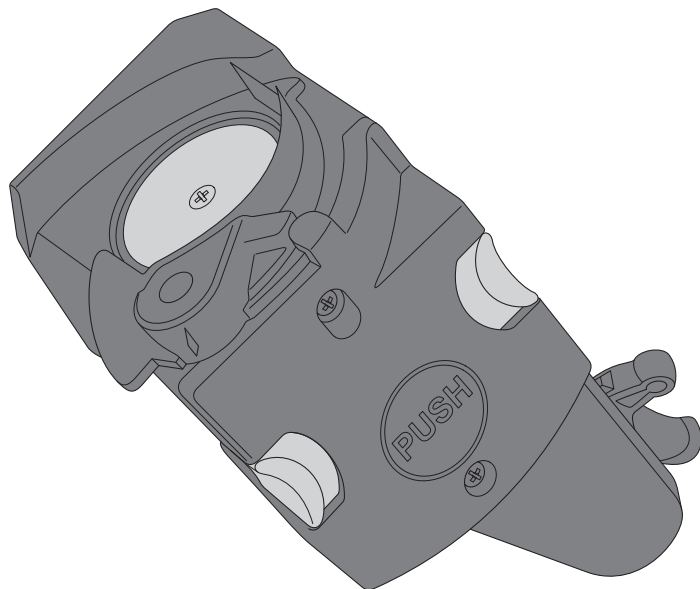
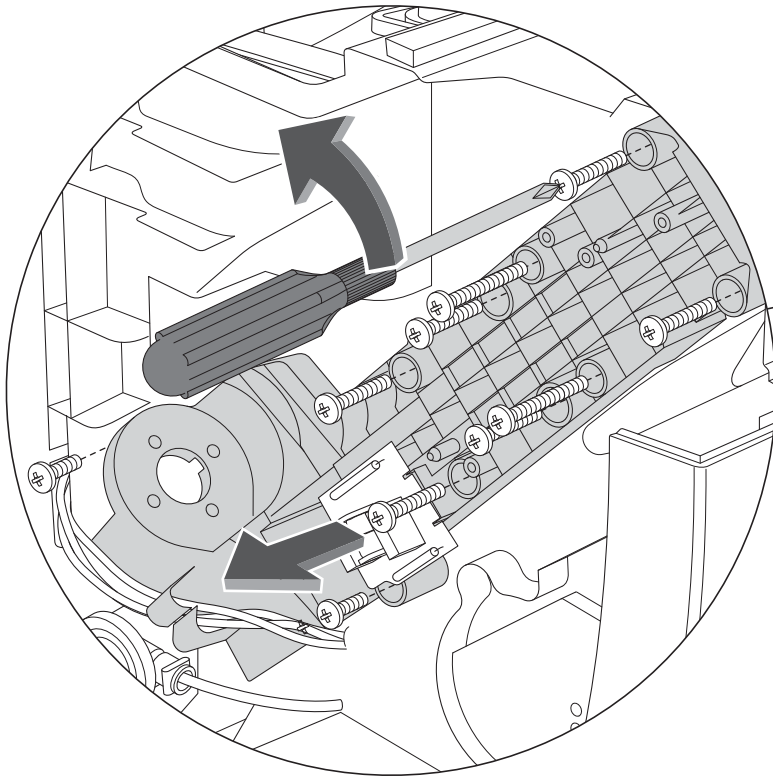


Figura 14.1
Open infuser box.
Push the 2 buttons and take out
the infuser

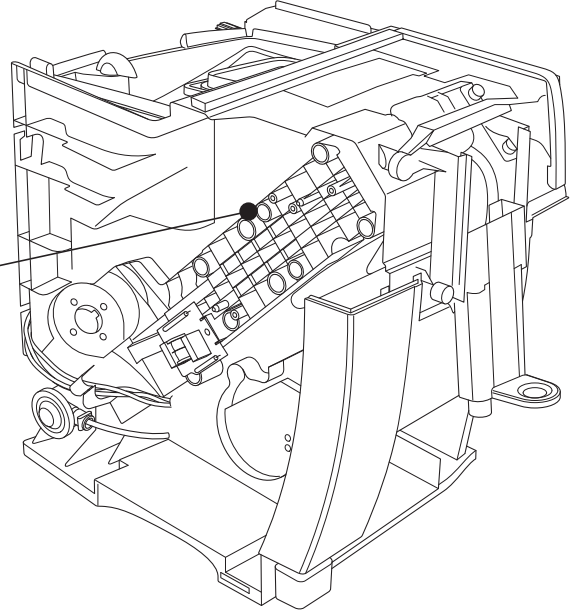


15.1

Unscrew the 10 indicated screws

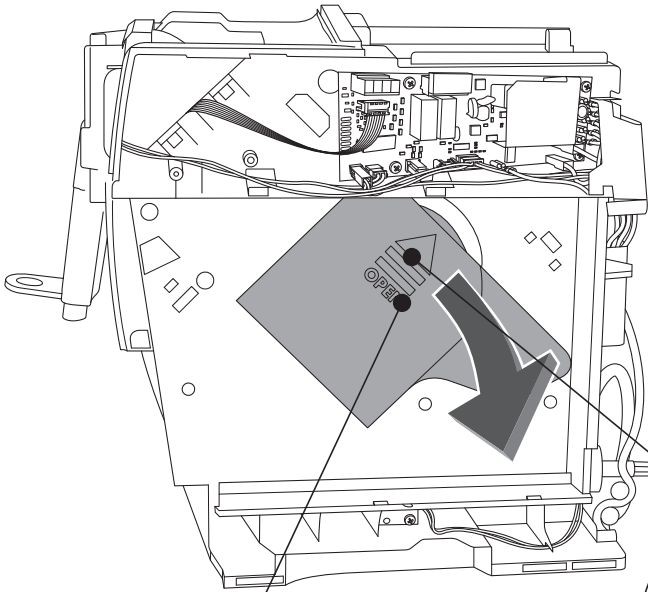


Picture 15 - **TO REMOVE TRANSMISSION KIT**



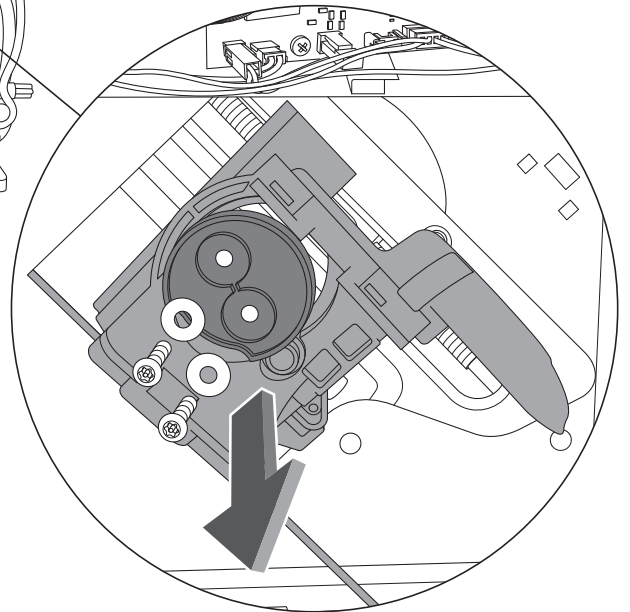
15.2

Open infuser box



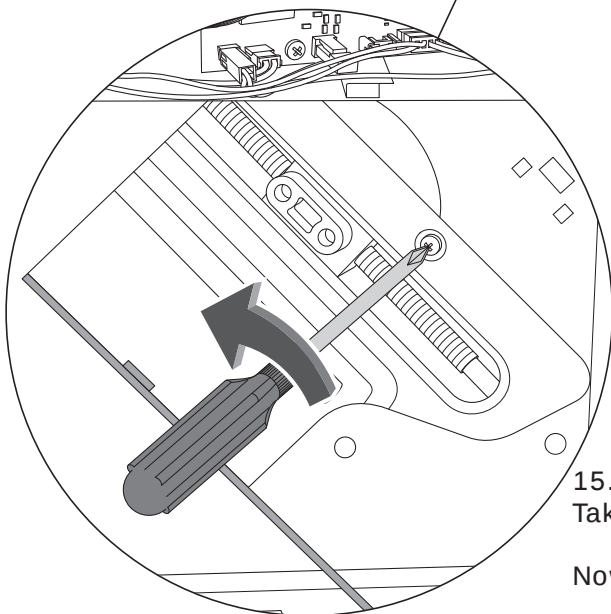
15.3

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



15.4

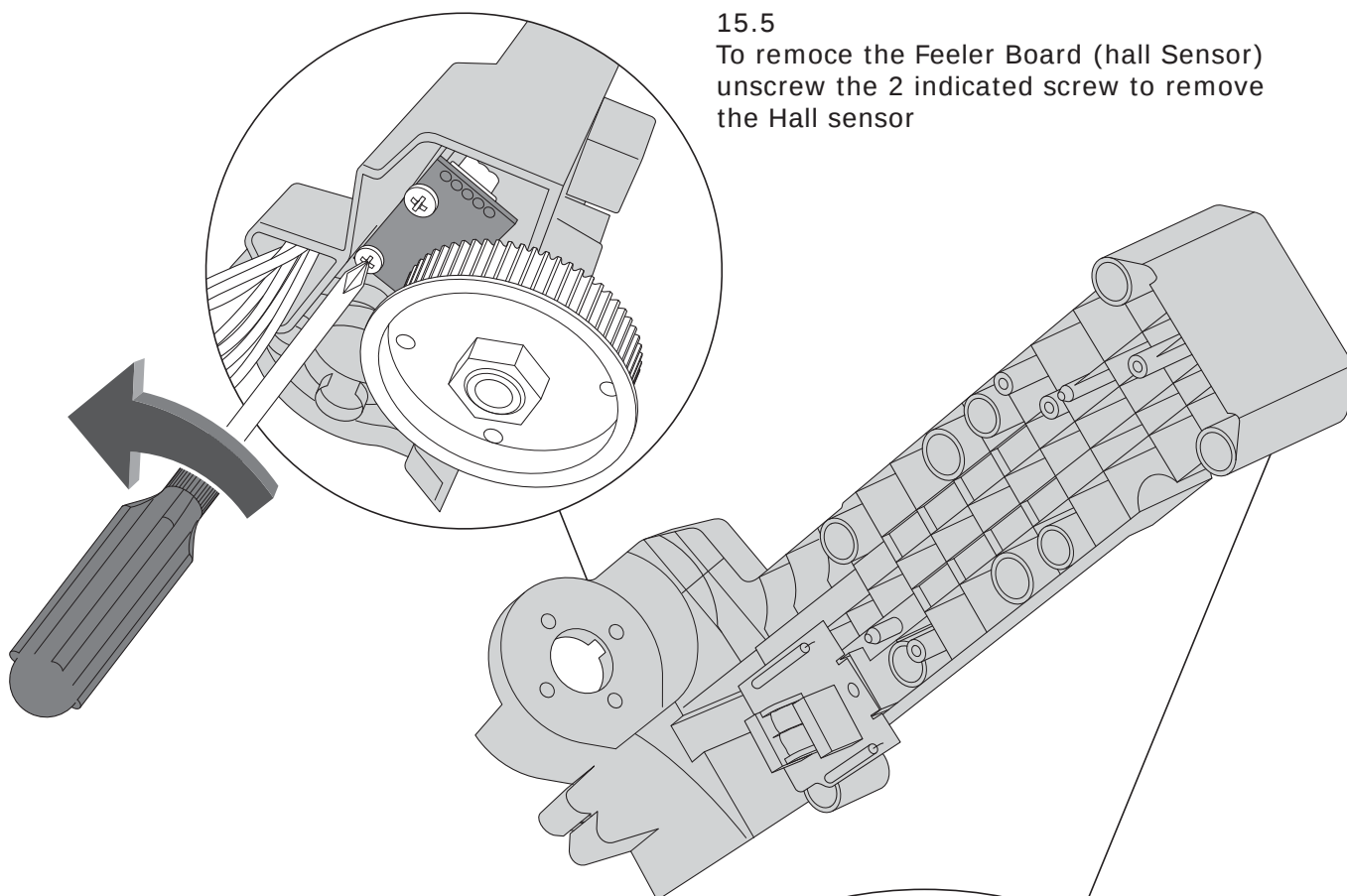
Take off the indicated screw



Now the TRASMISSION KIT is free and can be removed

15.5

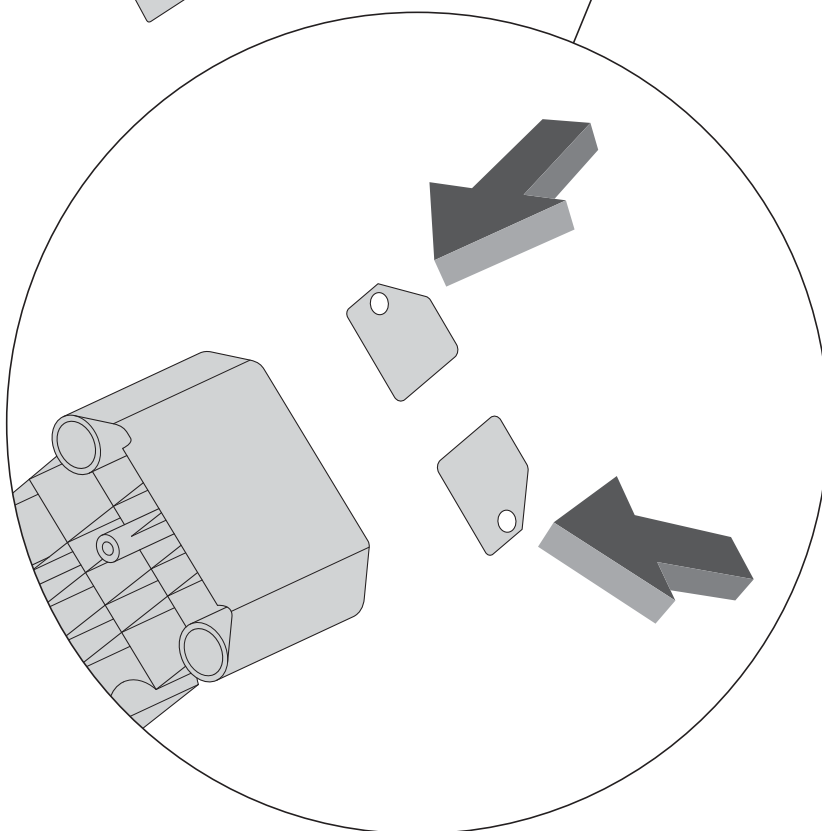
To remove the Feeler Board (hall Sensor) unscrew the 2 indicated screw to remove the Hall sensor



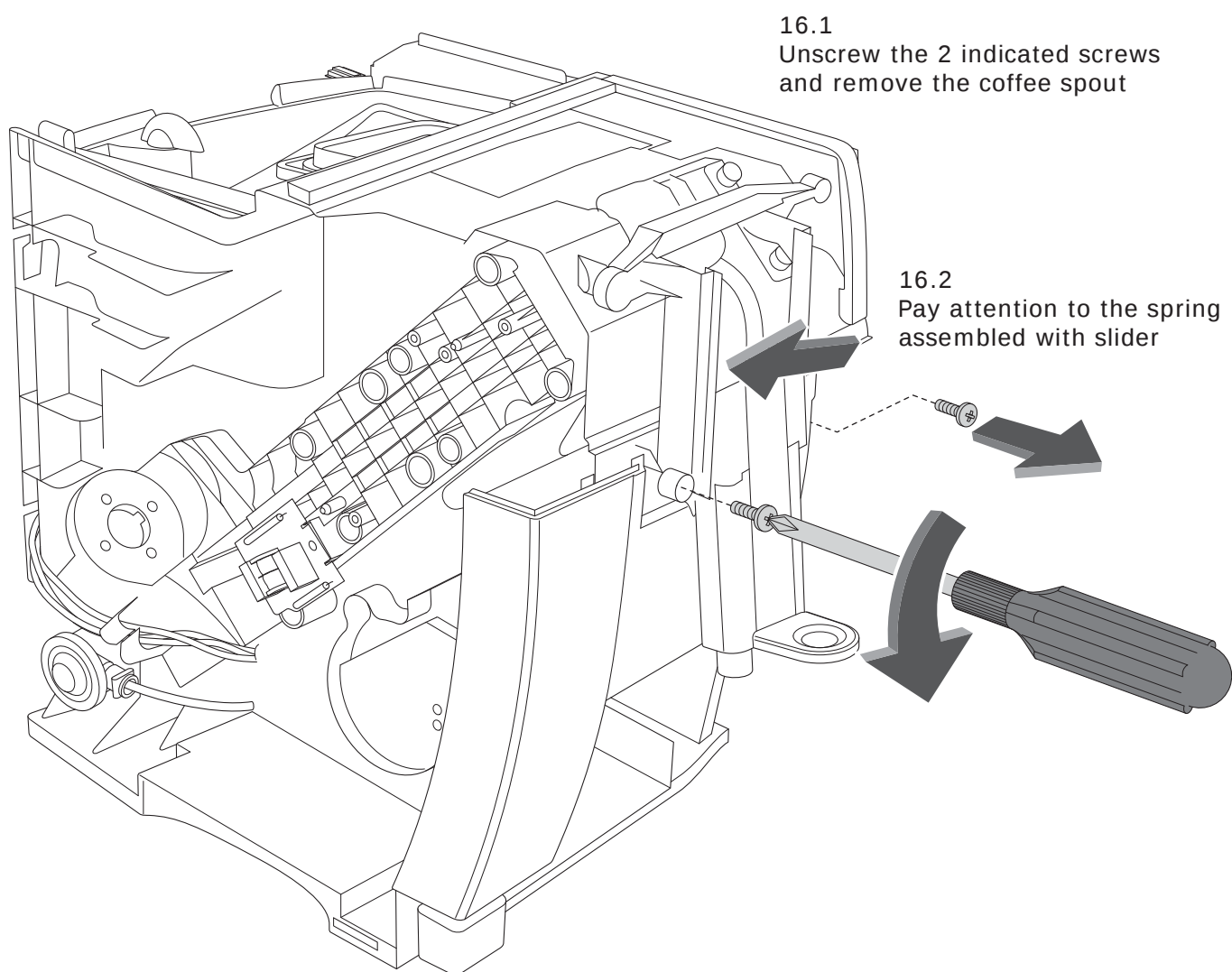
15.6

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

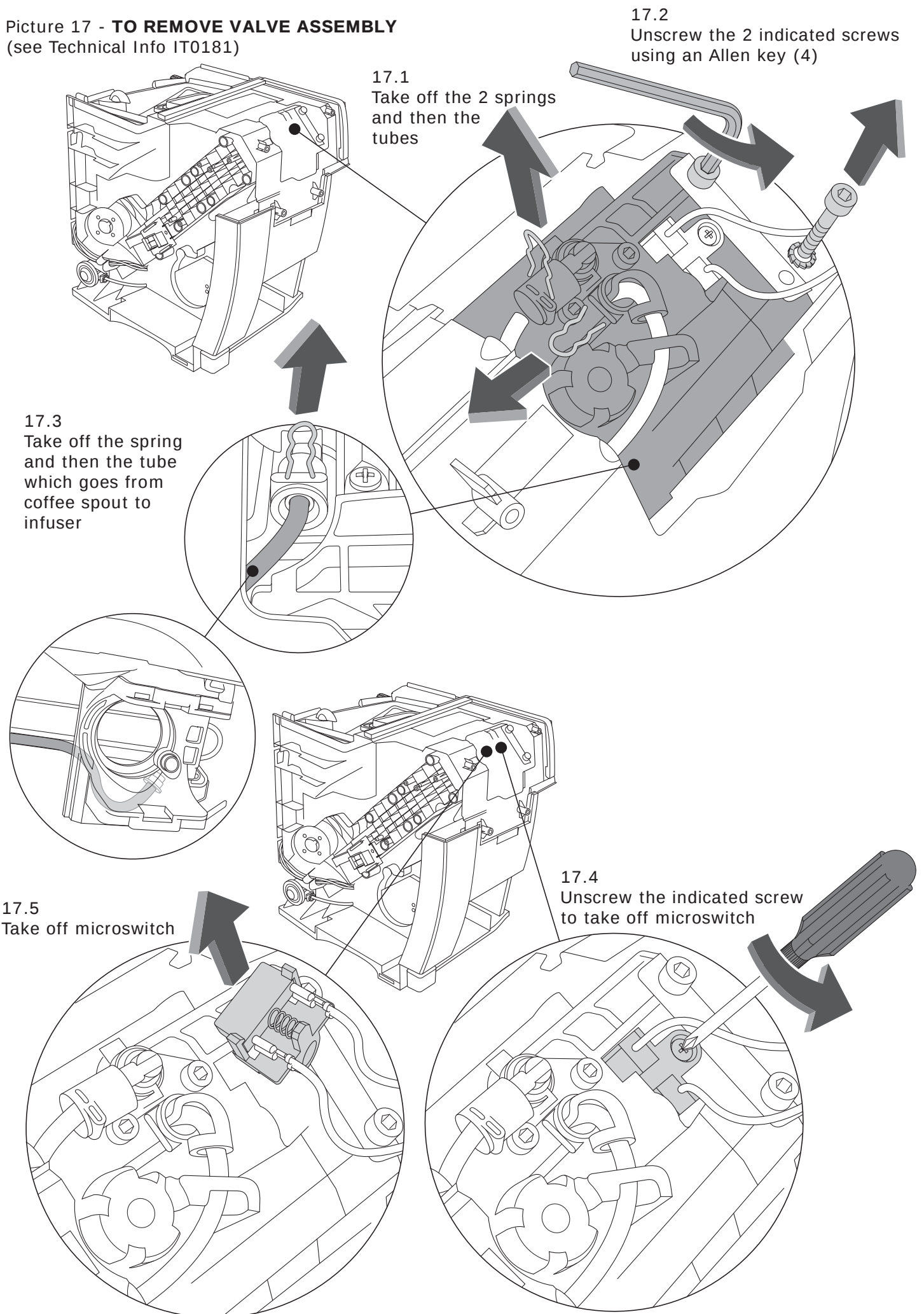
(ATTENTION: about metal spacers see Technical Info IT0181)



Picture 16 - **TO REMOVE COFFEE SPOUT**



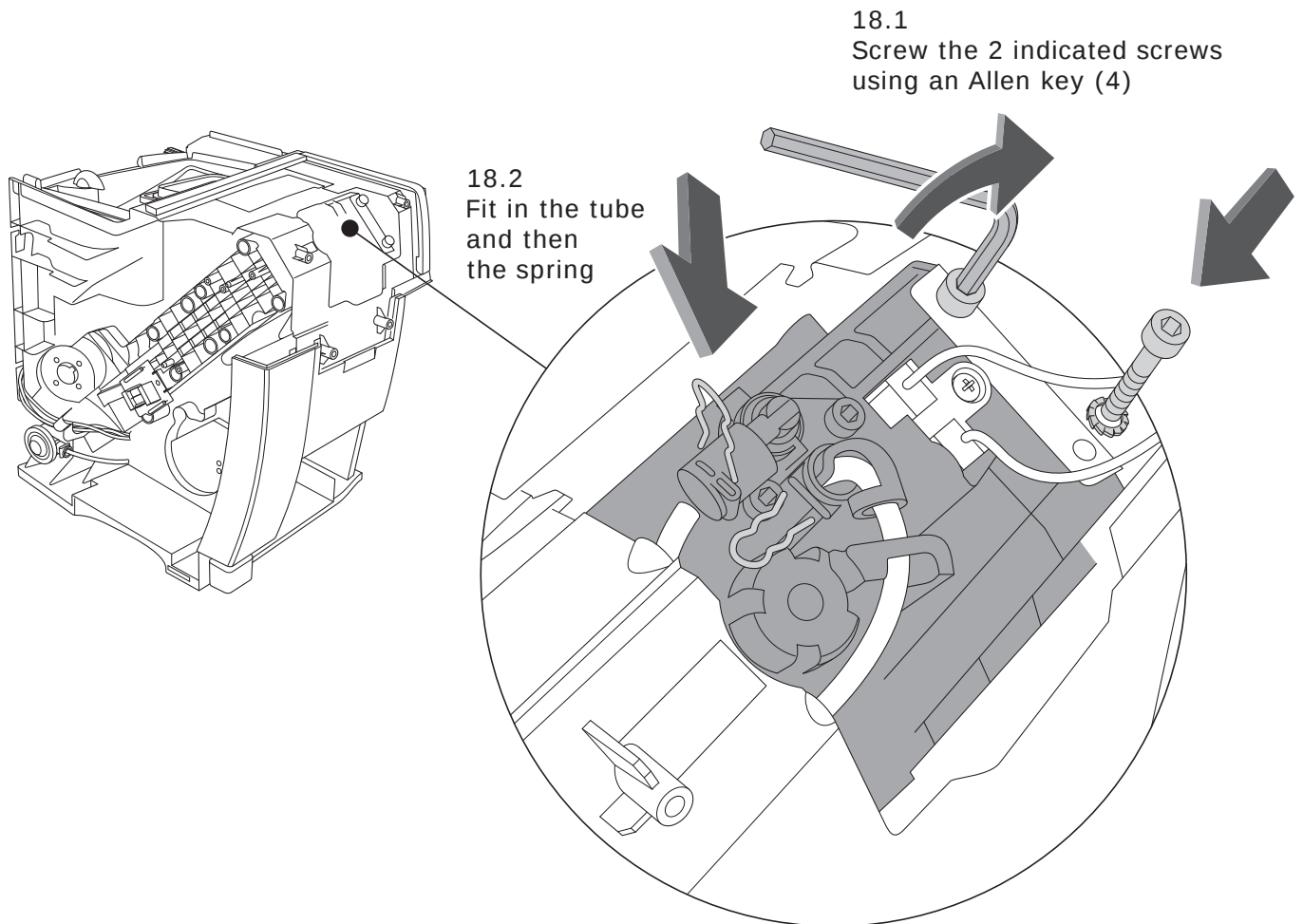
Picture 17 - **TO REMOVE VALVE ASSEMBLY**
(see Technical Info IT0181)



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 - MICROSWITCH 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 led,
Waste container led
and Steam tap led blink
when micro are open

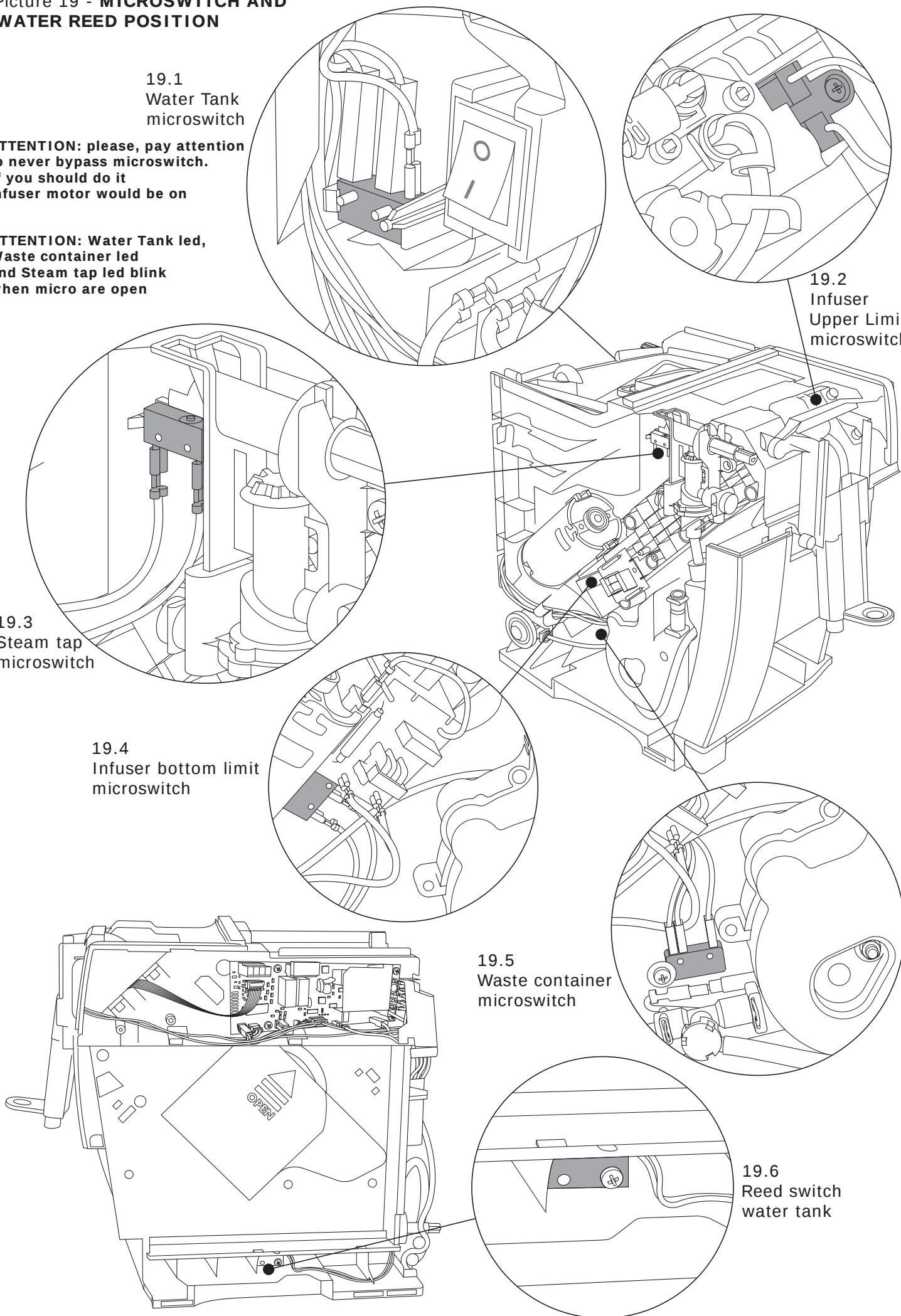
19.2
Infuser
Upper Limit
microswitch

19.3
Steam tap
microswitch

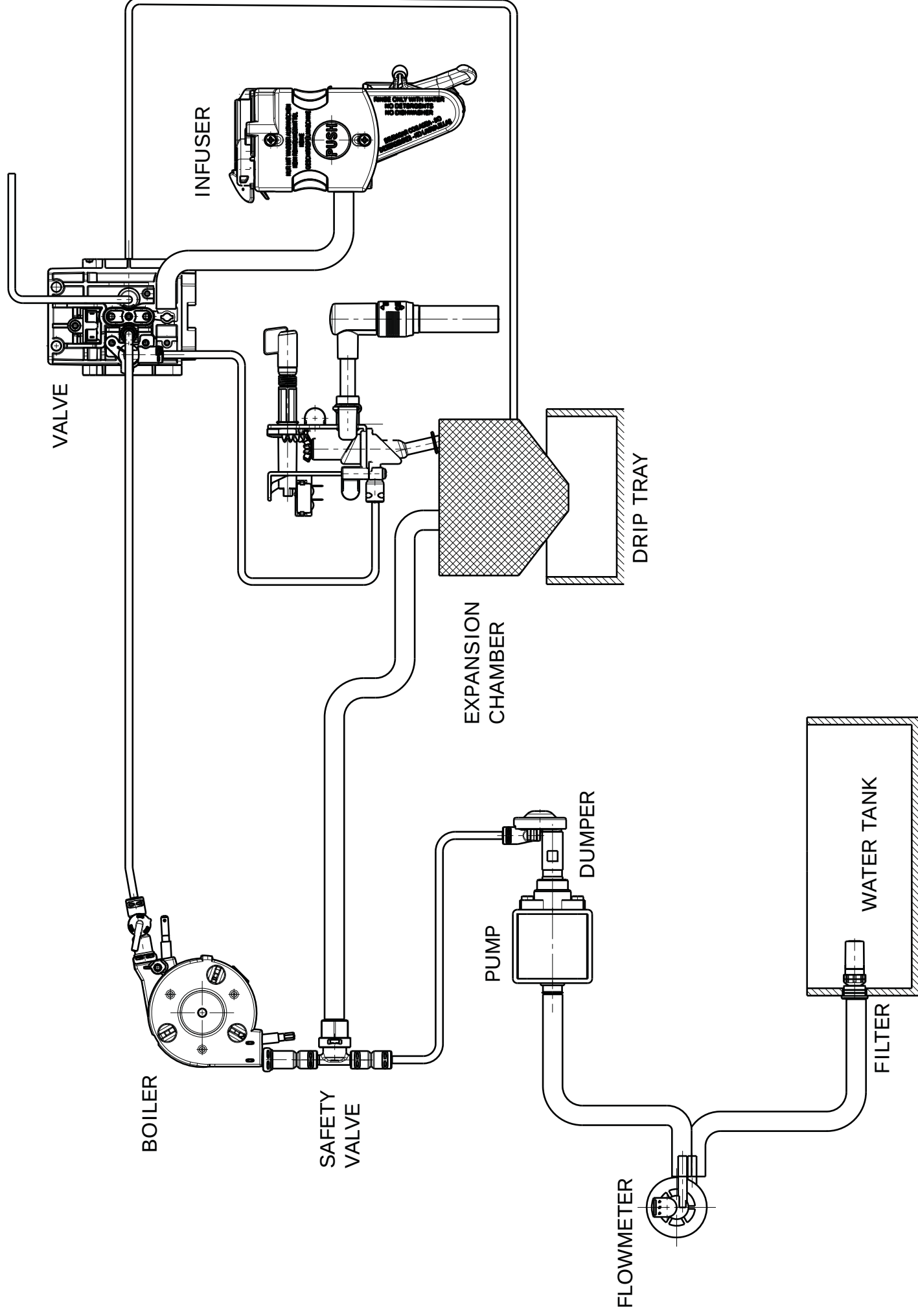
19.4
Infuser bottom limit
microswitch

19.5
Waste container
microswitch

19.6
Reed switch
water tank



WATER CIRCUIT



TEST PROCEDURE



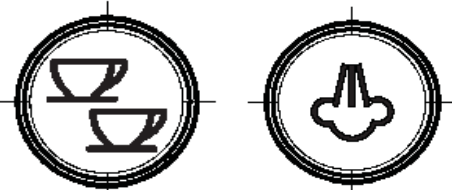
TEST PROCEDURE		Pressing each icon below, we can manually check the devices:	
		icon	device
Put Steam Tap on 0. Plug the machine ON. Press and hold: 1 Coffee + Steam buttons   Press On/Off Switch (position I) NOTE: Release bttens when motor starts moving.			Coffe Boiler ON
			Grinder ON
			Motor UP,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

NOTE: Every led blinks when the microswitch is open

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

DISPLAY TEST PROCEDURE



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  Press On/Off Switch (position I)			
			
			
			
			
			
Note: Release buttons some seconds after icons blinked.			
		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 complete it.

ACCESSIBILITA'

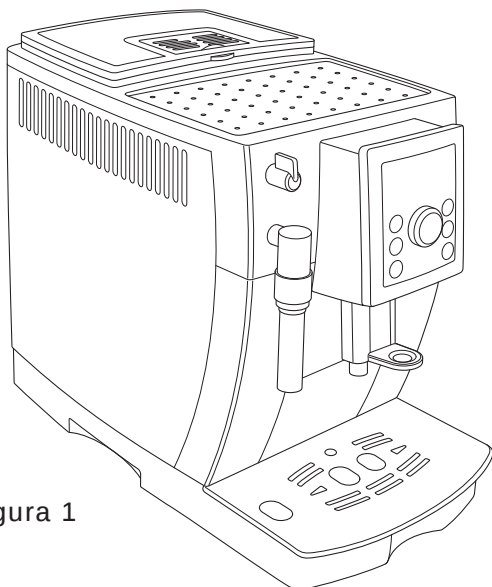


Figura 1

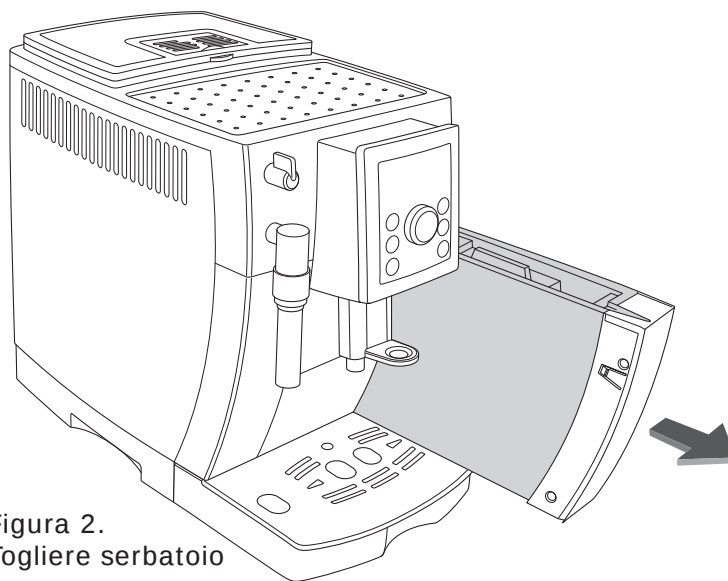


Figura 2.
Togliere serbatoio
acqua

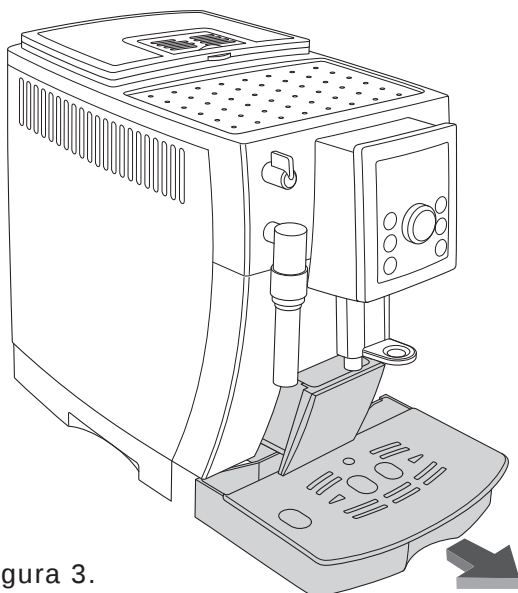


Figura 3.
Togliere il cassetto
raccolta fondi

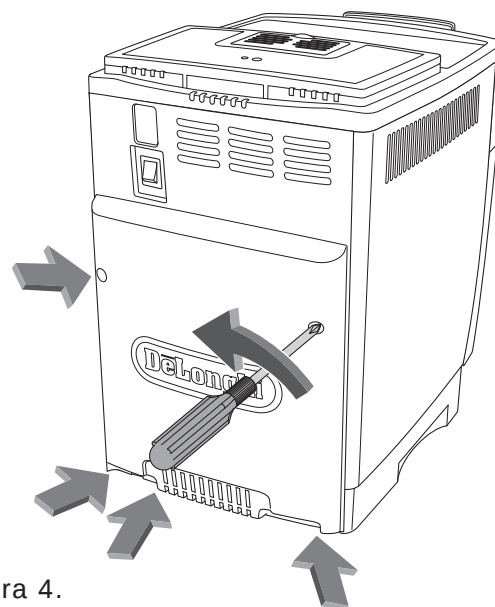


Figura 4.
Svitare le 5 viti indicate
(Torx T20)

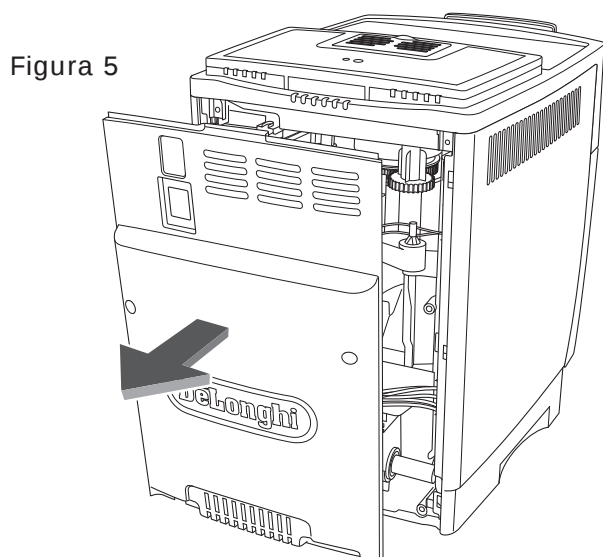


Figura 5

5.1 Sfilare lo schienale

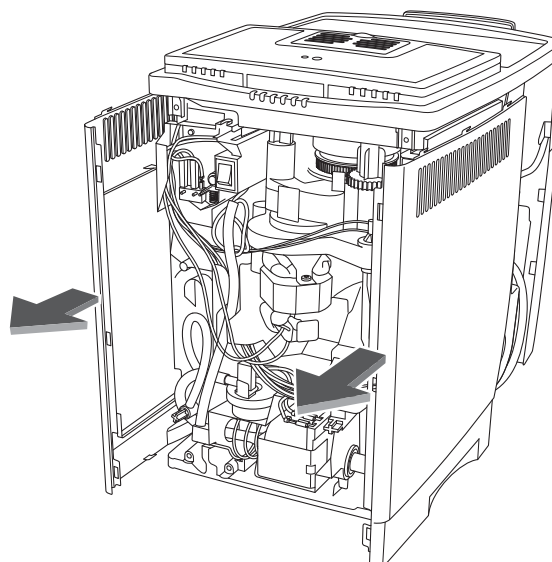


Figura 5.2 Sganciare i fianchi

Figura 6 - **SMONTAGGIO CRUSCOTTO**

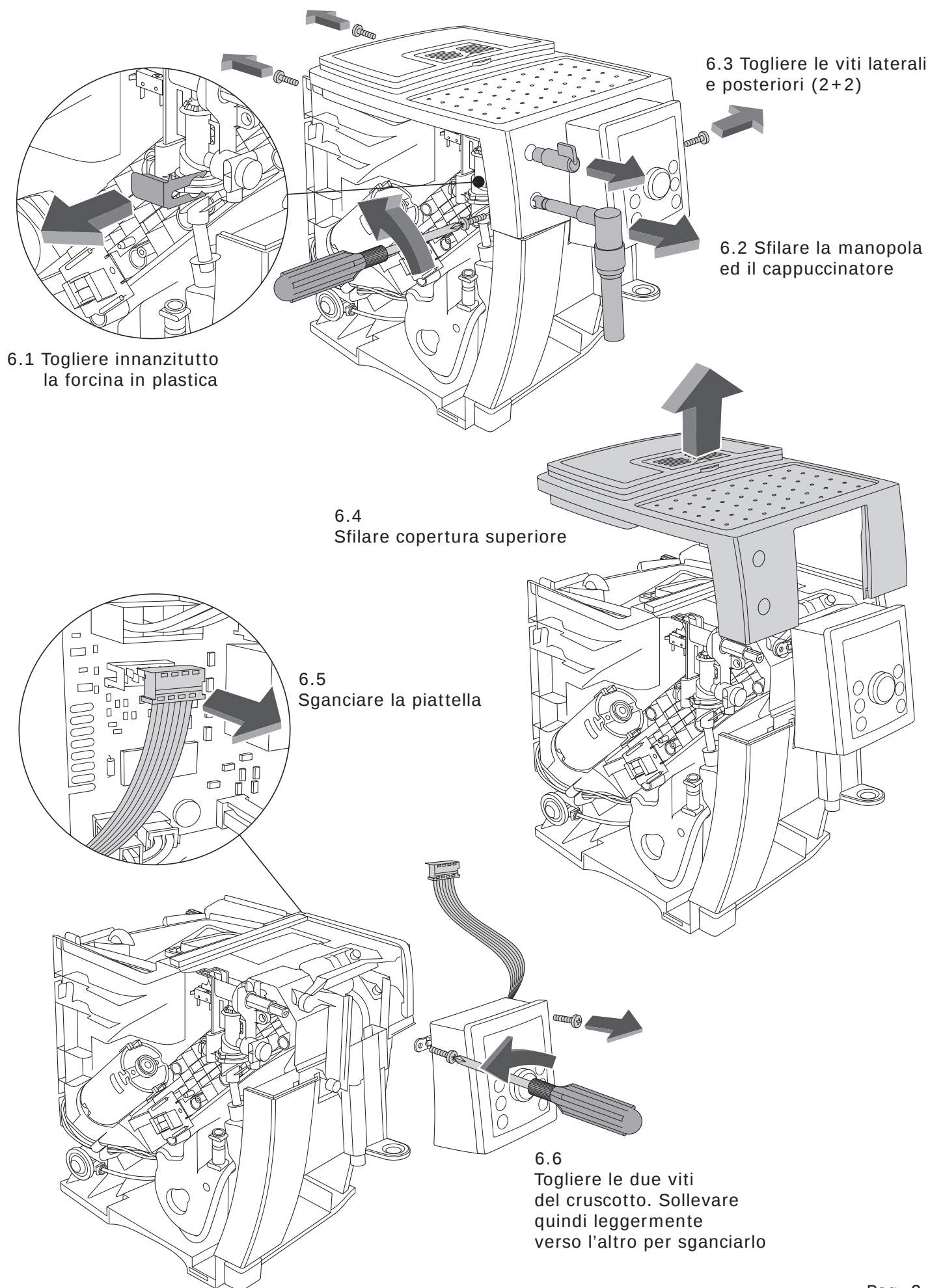


Figura 7 - **SMONTAGGIO MACININO**

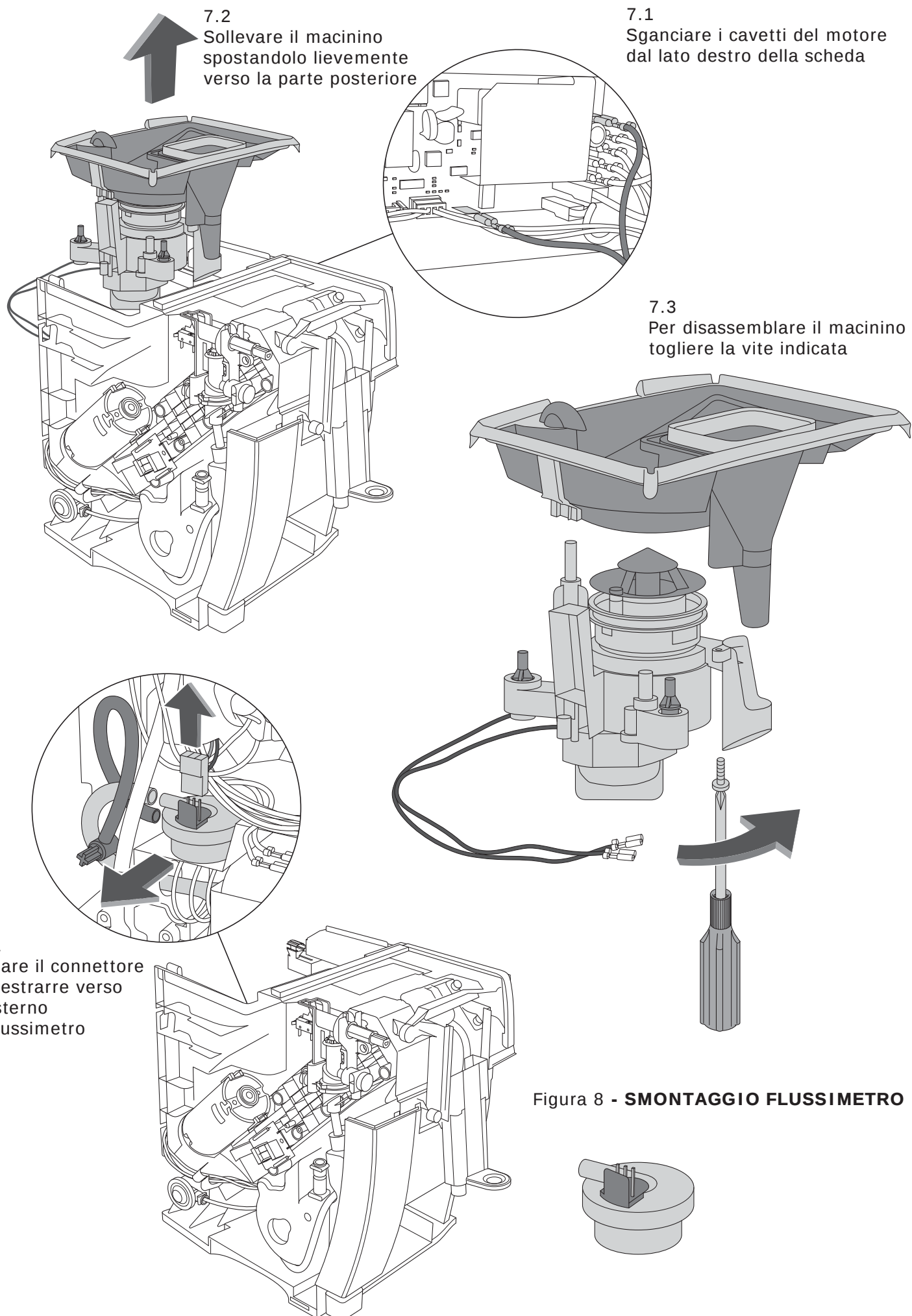
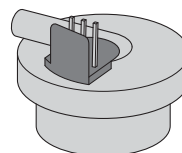
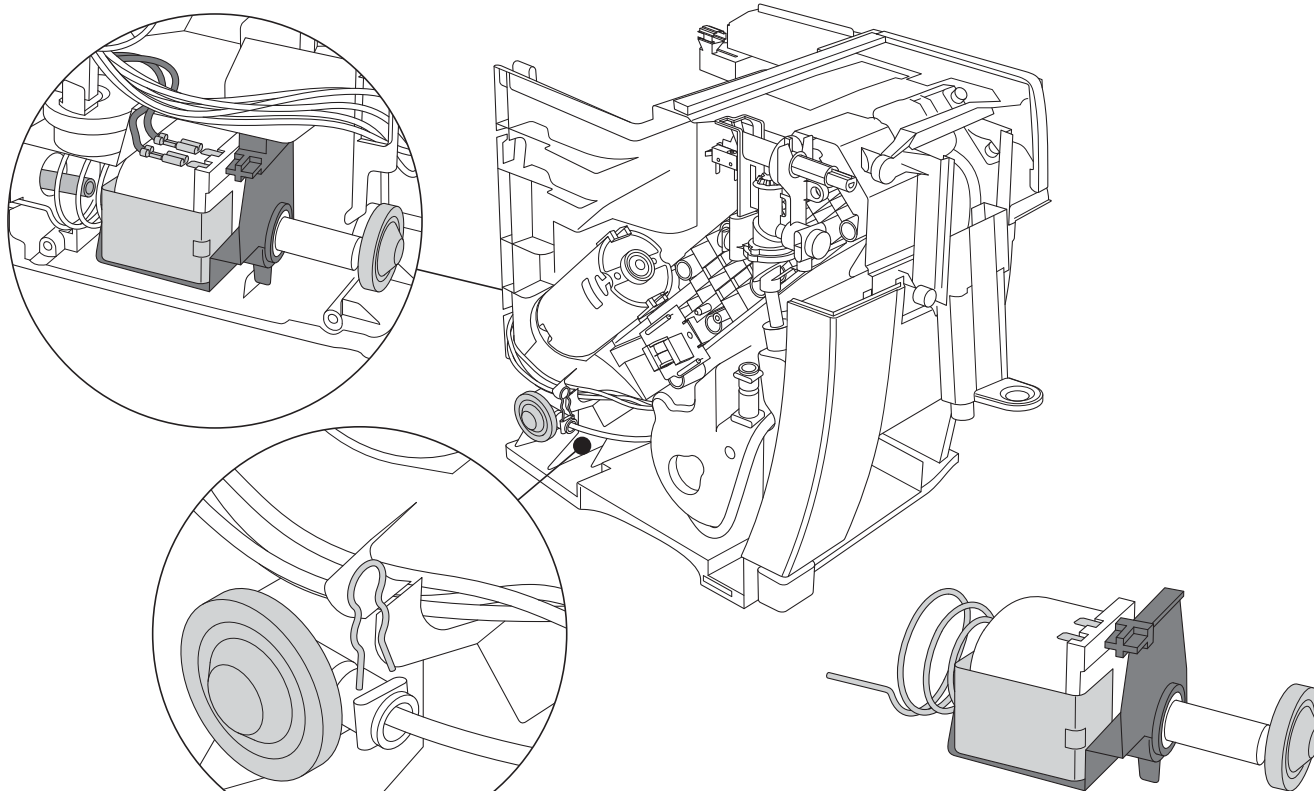


Figura 8 - **SMONTAGGIO FLUSSIMETRO**



9.2
Sfilare la pompa

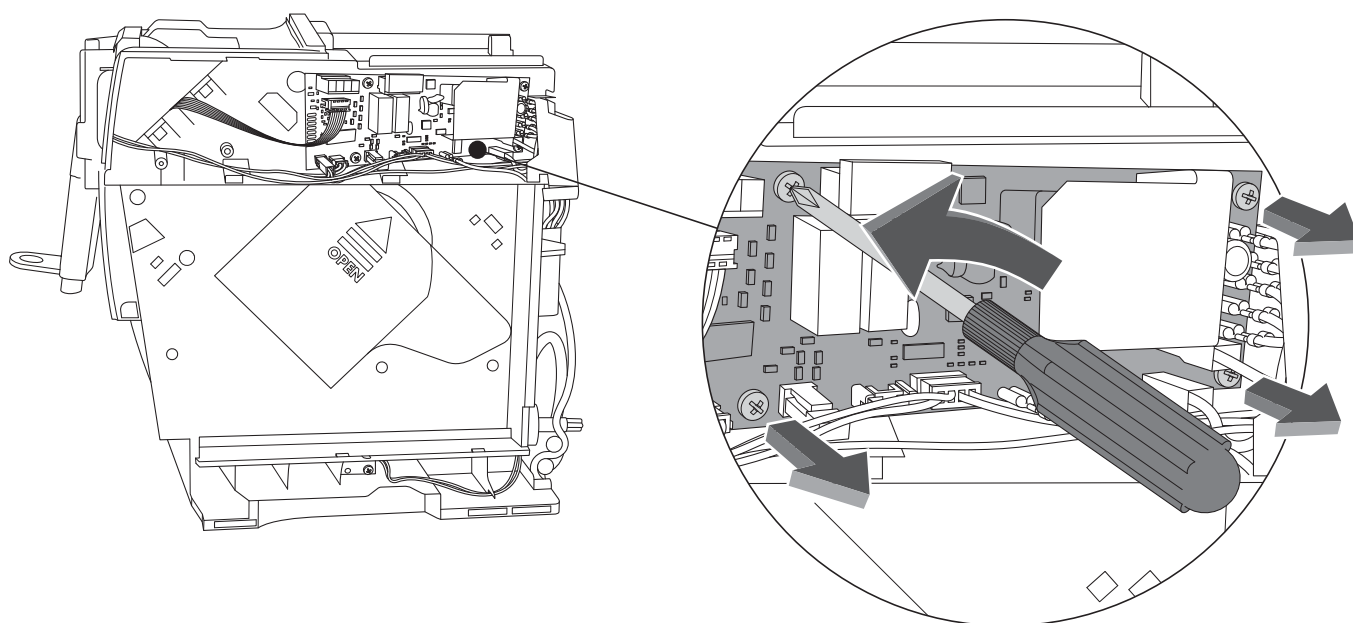
Figura 9 - **SMONTAGGIO POMPA**



9.1
Togliere la forcina di aggancio e quindi sfilare il tubo
Attenzione: dal tubo potrebbe uscire una piccola quantità d'acqua, in quanto il circuito idraulico si svuota

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**

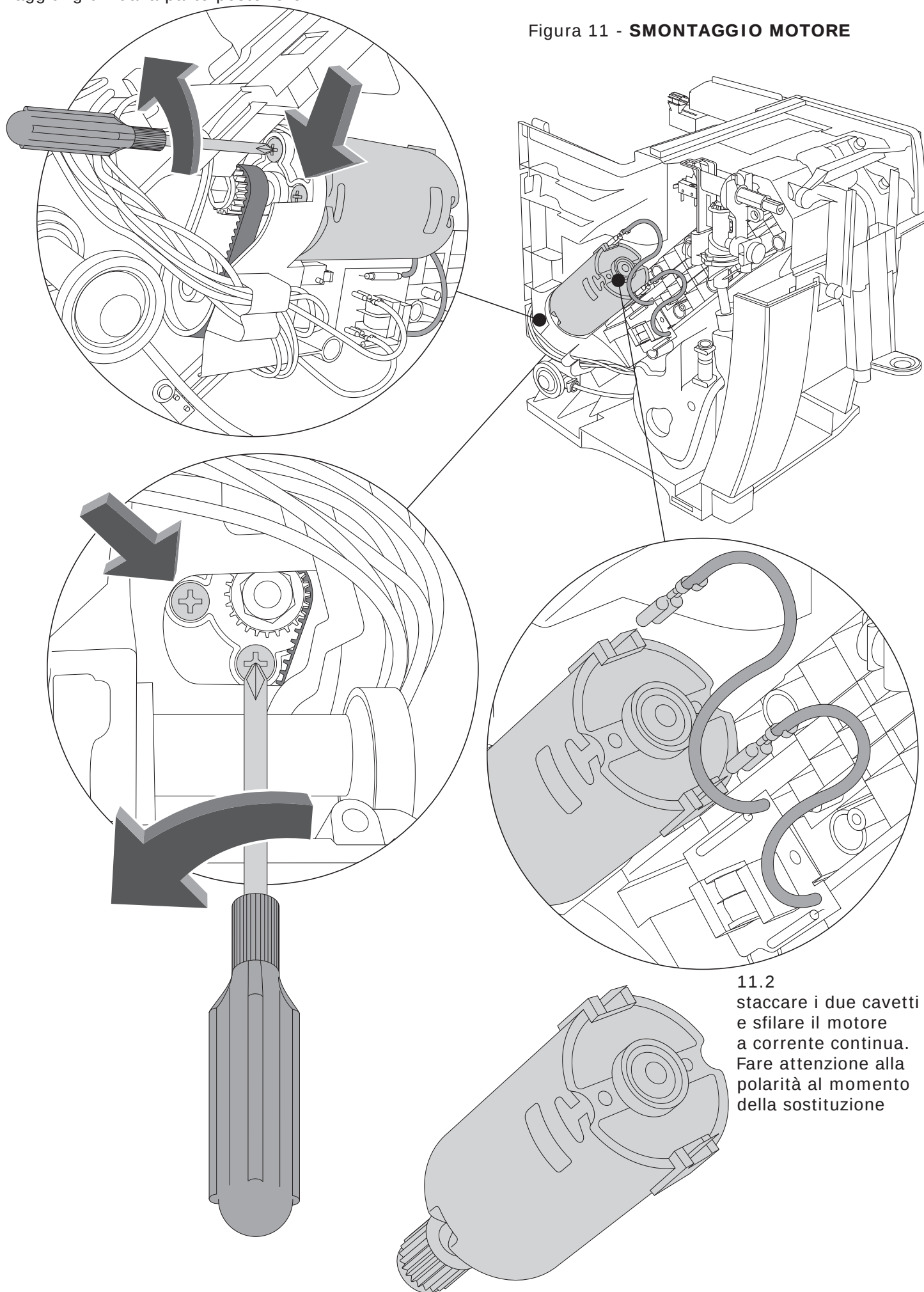


10.1
Togliere le quattro viti indicate. Dopo aver staccato i cablaggi, sfilare la scheda

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

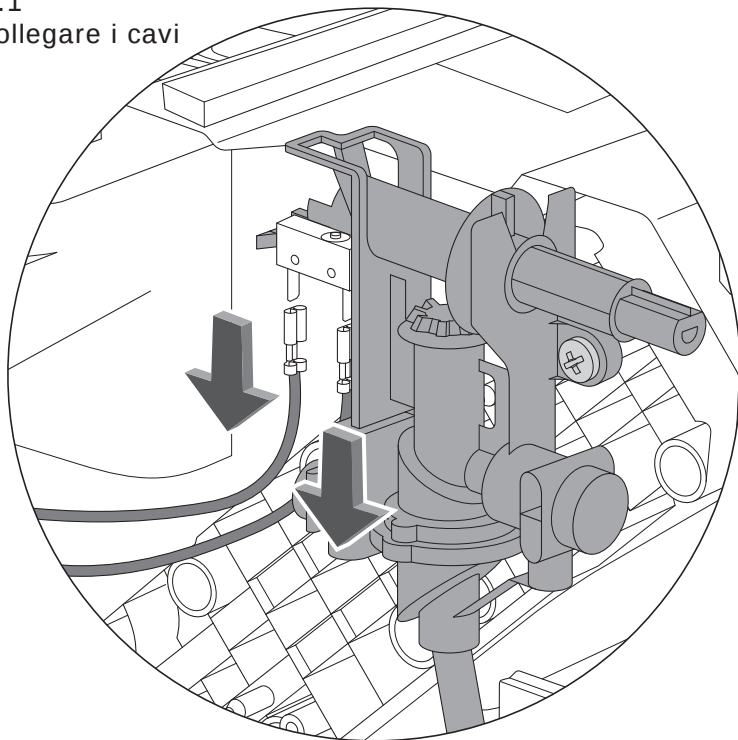
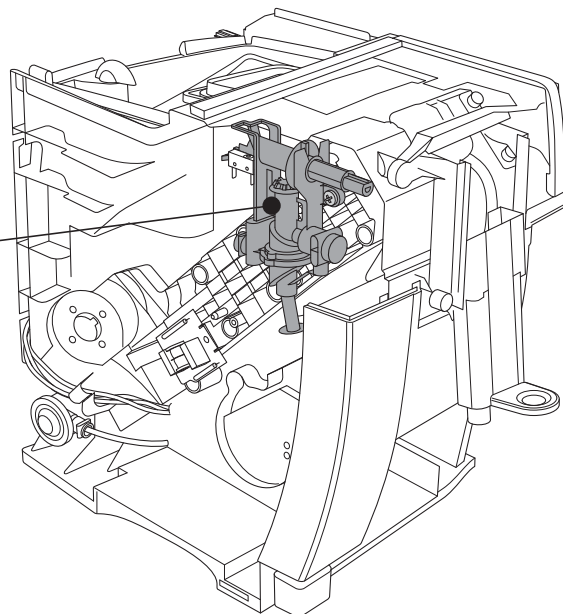
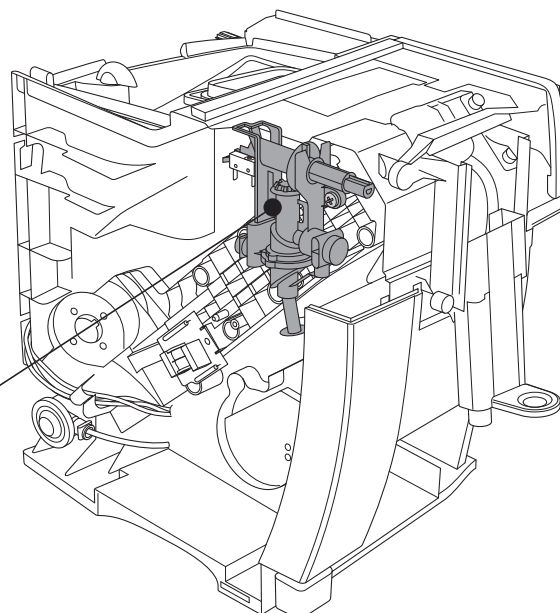
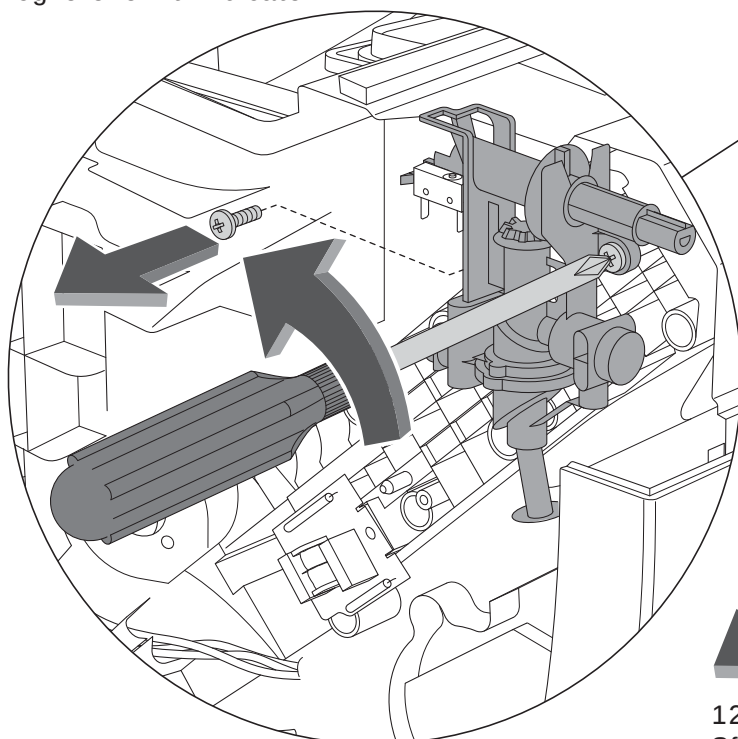


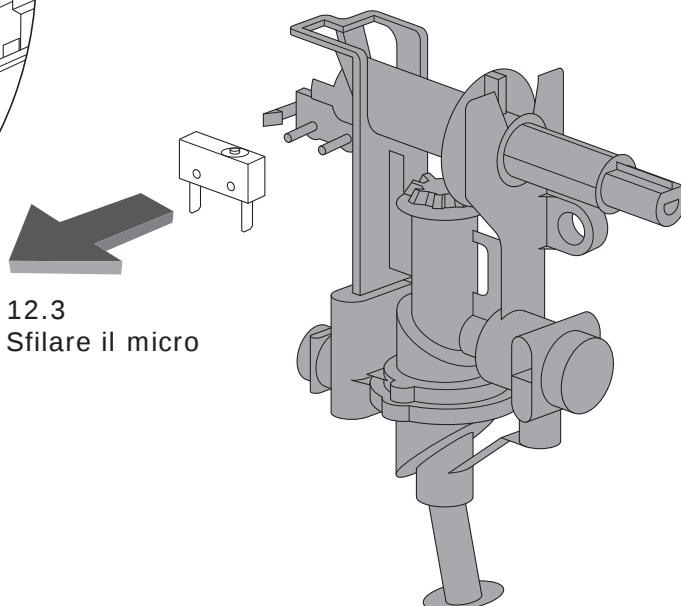
Figura 12 - SMONTAGGIO RUBINETTO



12.2
Togliere le viti indicate



12.3
Sfilare il micro



13.3
Togliere la forcina indicata
dalla freccia e sfilare il tubo

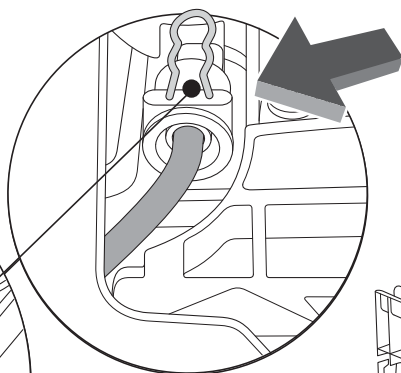
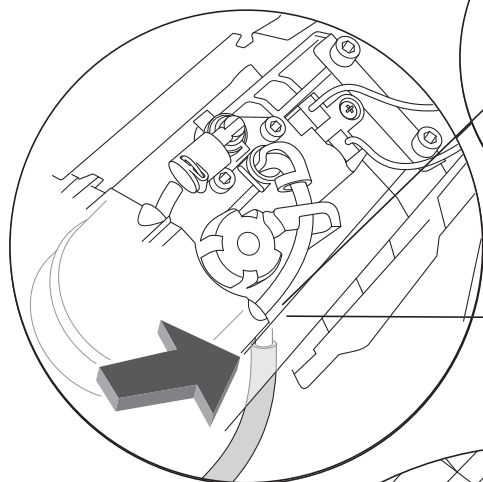
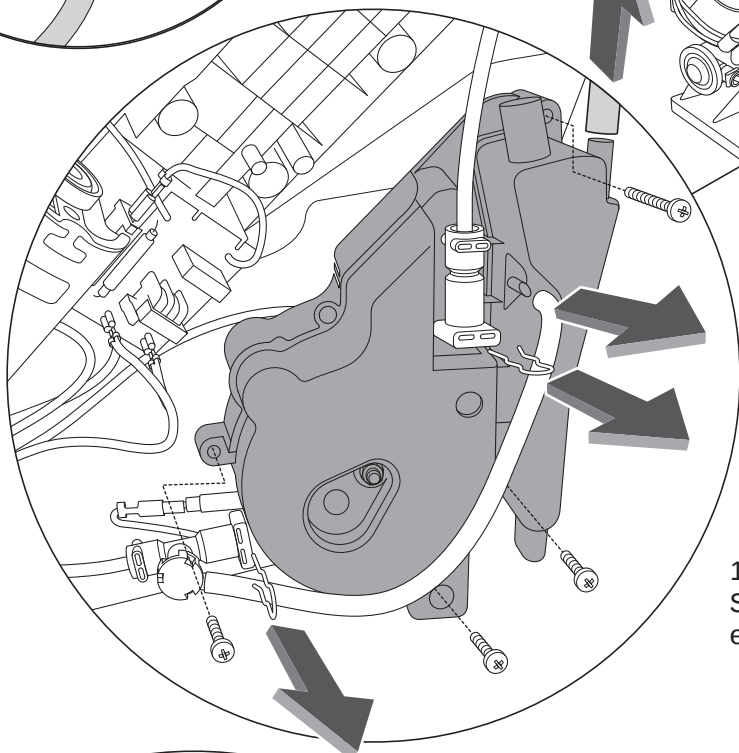


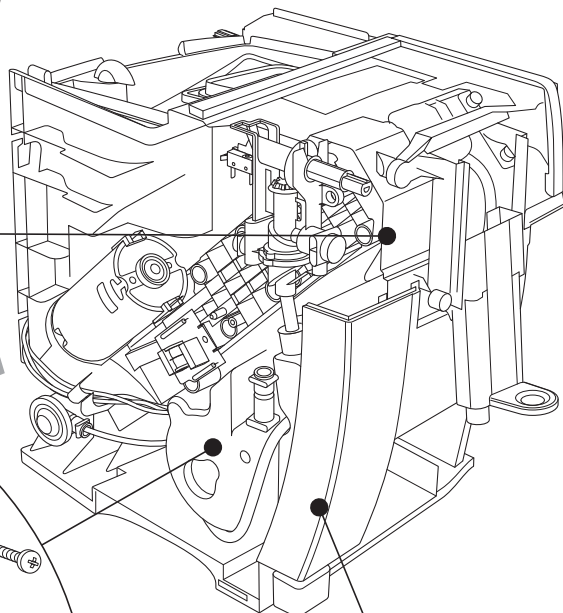
Figura 13 - **SMONTAGGIO CALDAIA**

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

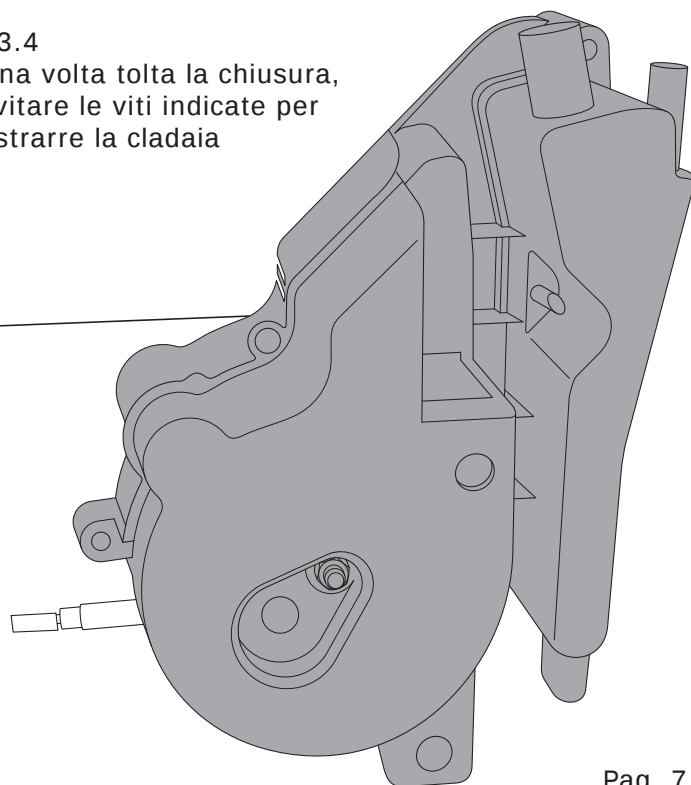
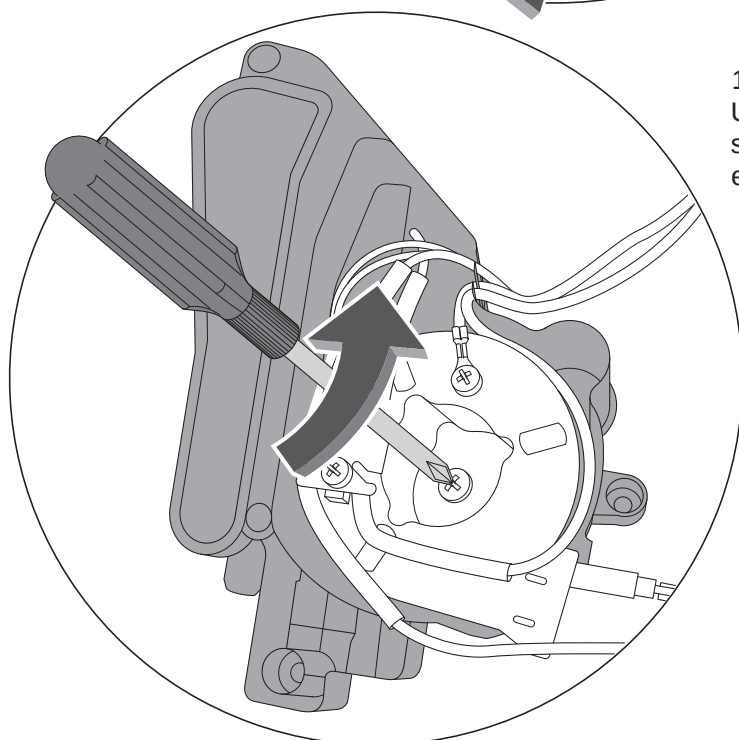


Figura 14 - **ESTRAZIONE INFUSORE**

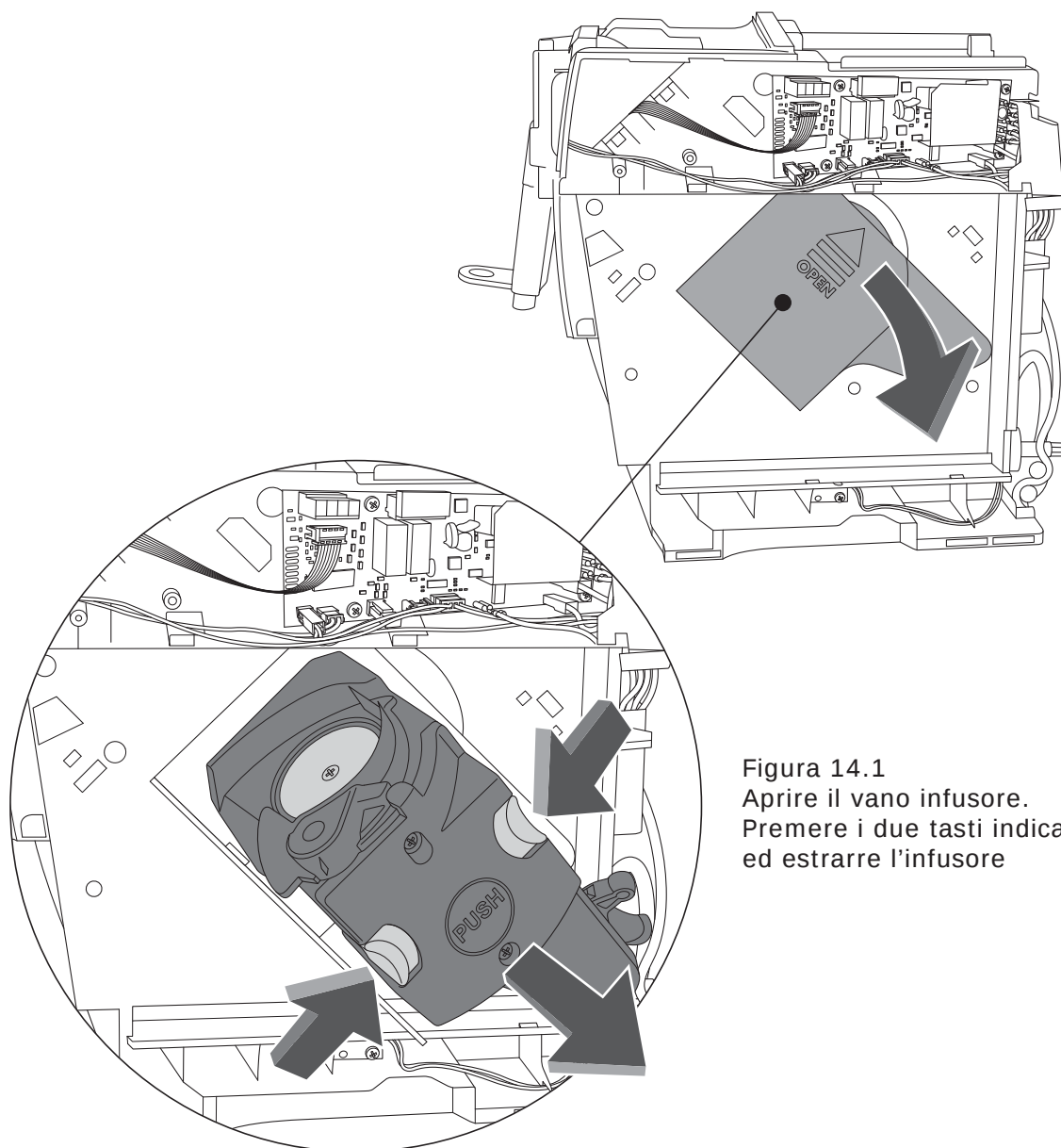
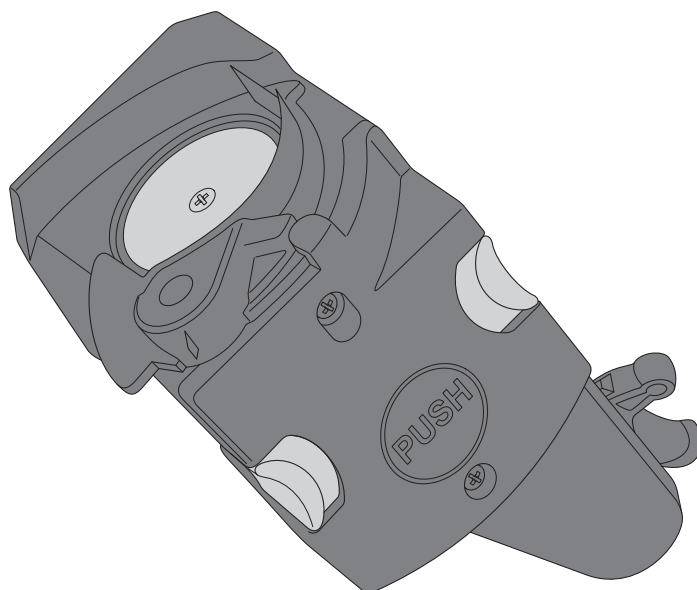


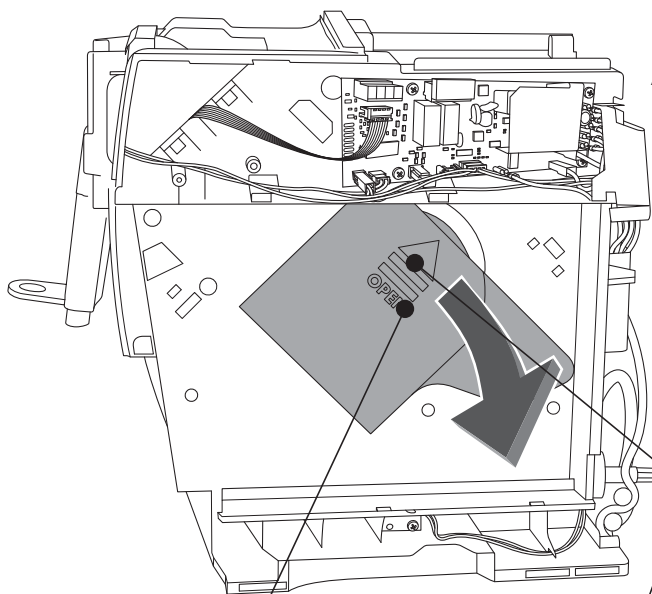
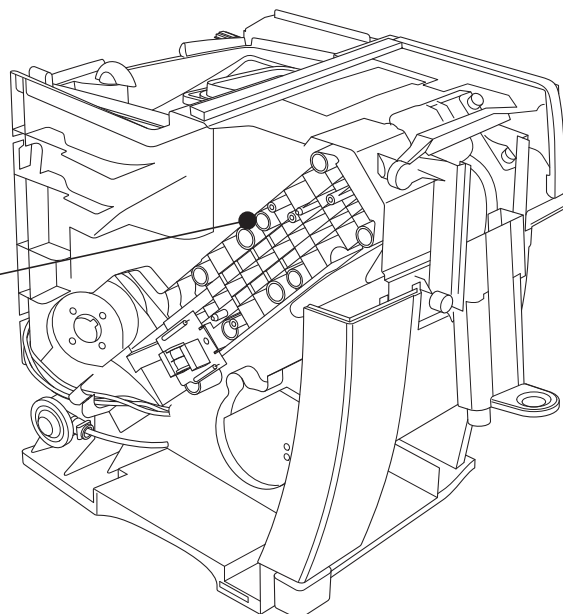
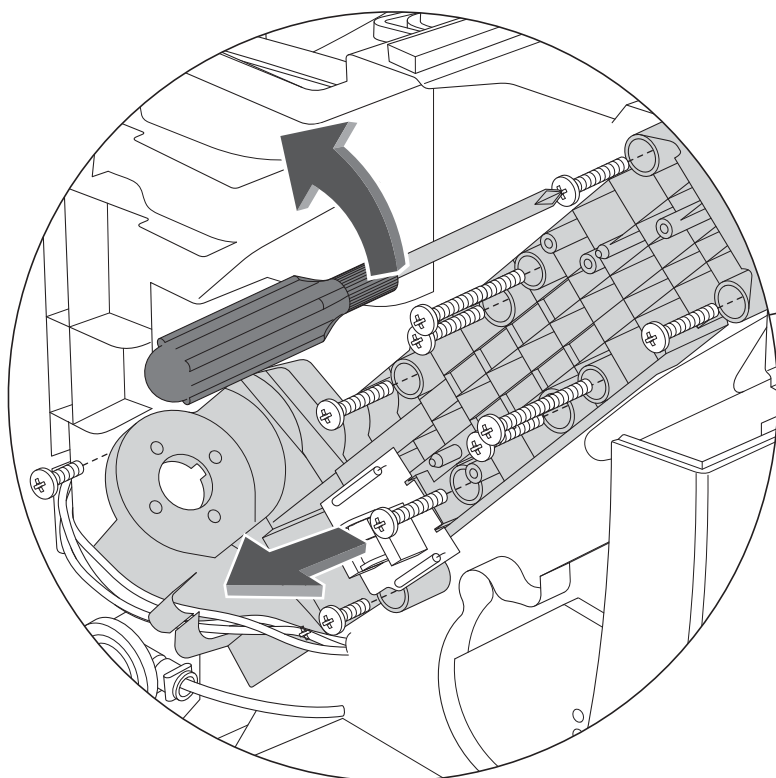
Figura 14.1
Aprire il vano infusore.
Premere i due tasti indicati
ed estrarre l'infusore



15.1

Togliere le 10 viti indicate

Figura 15 - **SMONTAGGIO GRUPPO MOVIMENTAZIONE**

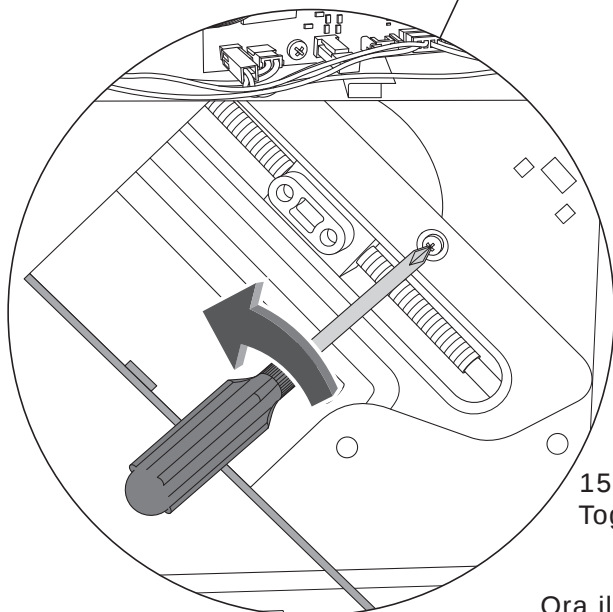
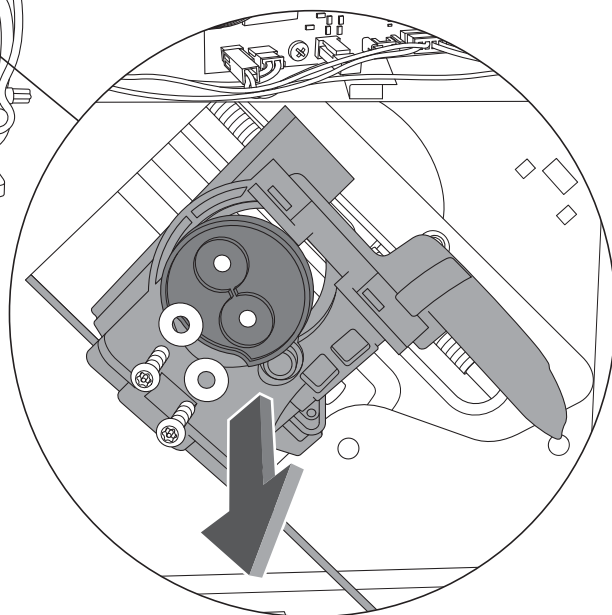


15.2

Aprire vano infusore

15.3

Togliere le 2 viti indicate
(Torx T20)

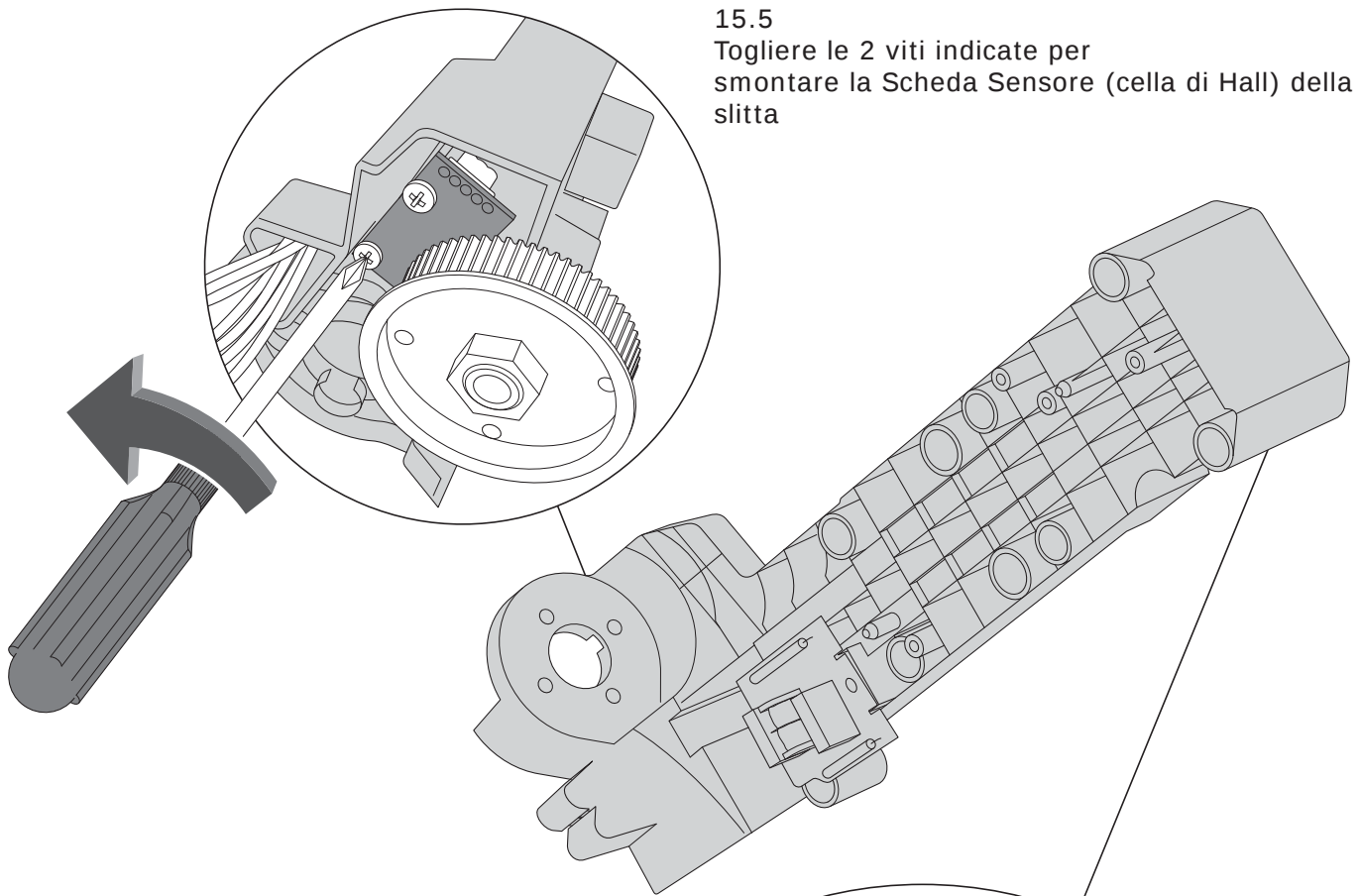


15.4

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)

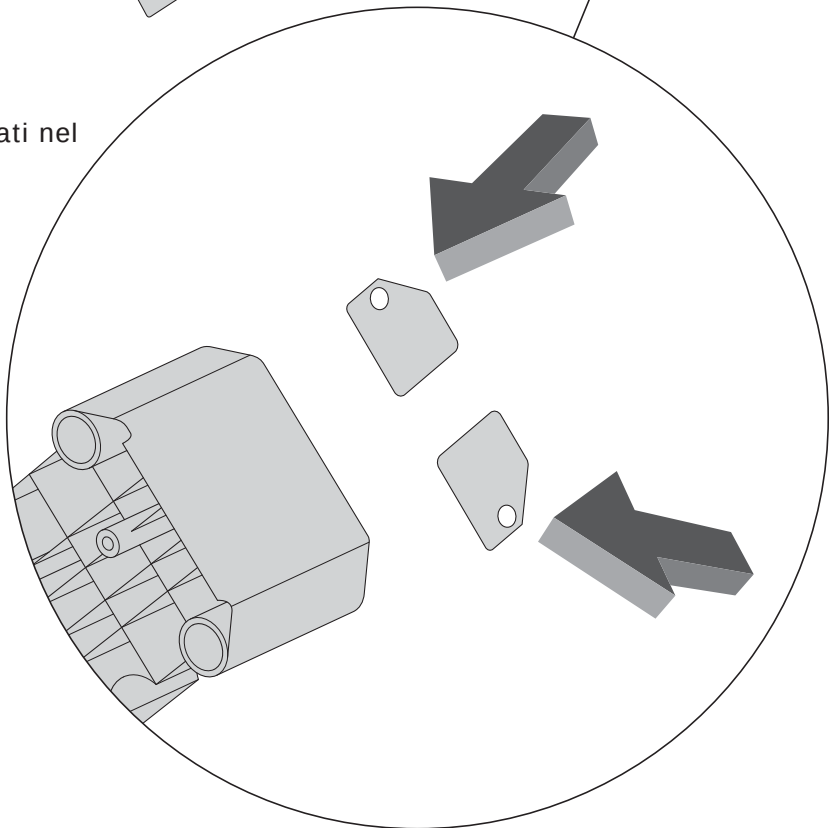


Figura 16 - **SMONTAGGIO EROGATORE CAFFE'**

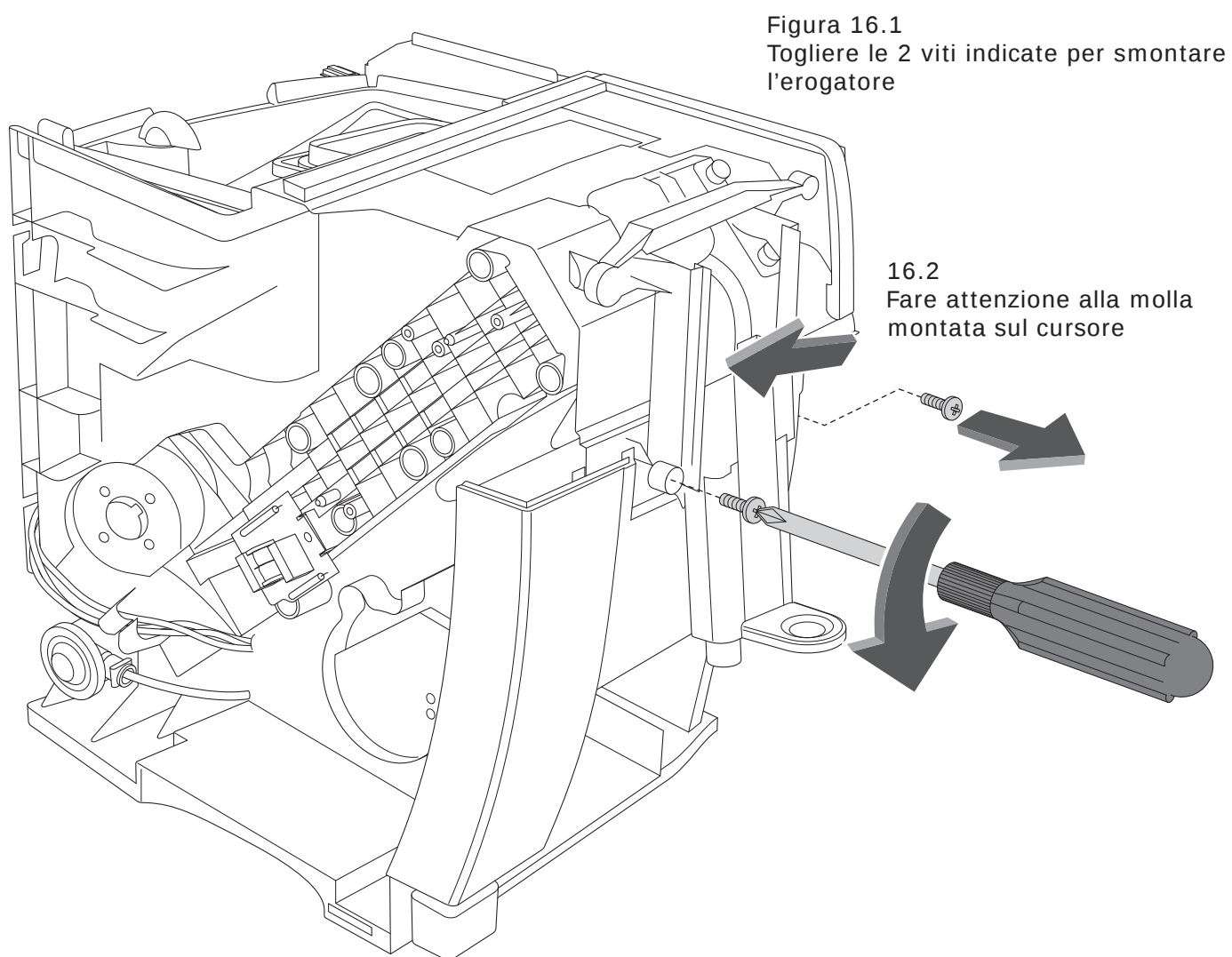


Figura 17 - **SMONTAGGIO MECCANOVALVOLA**
(ATTENZIONE: vedere info IT0181)

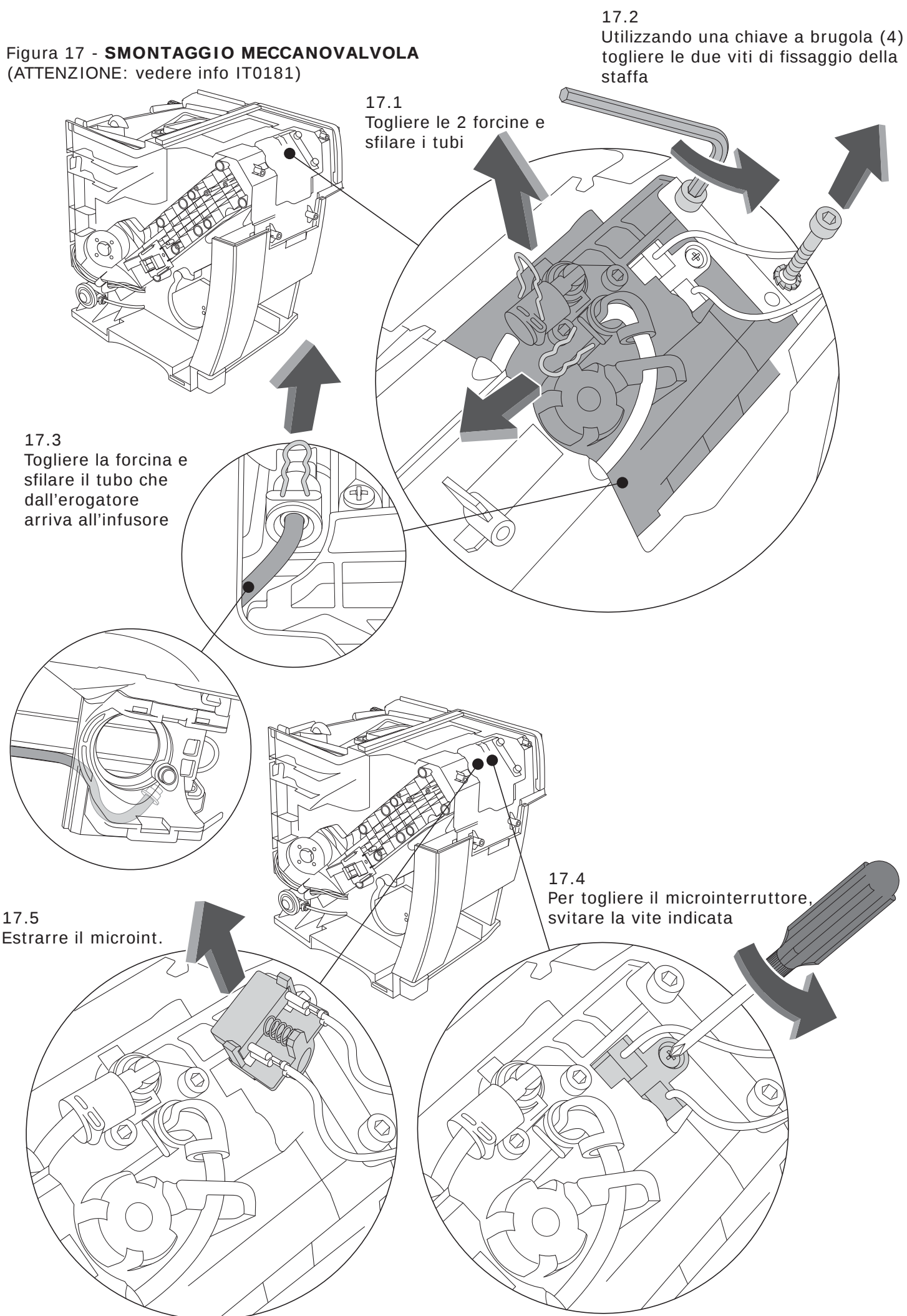


Figura 18 - **ALLINEARE LA MECCANOVALVOLA**

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 (4)

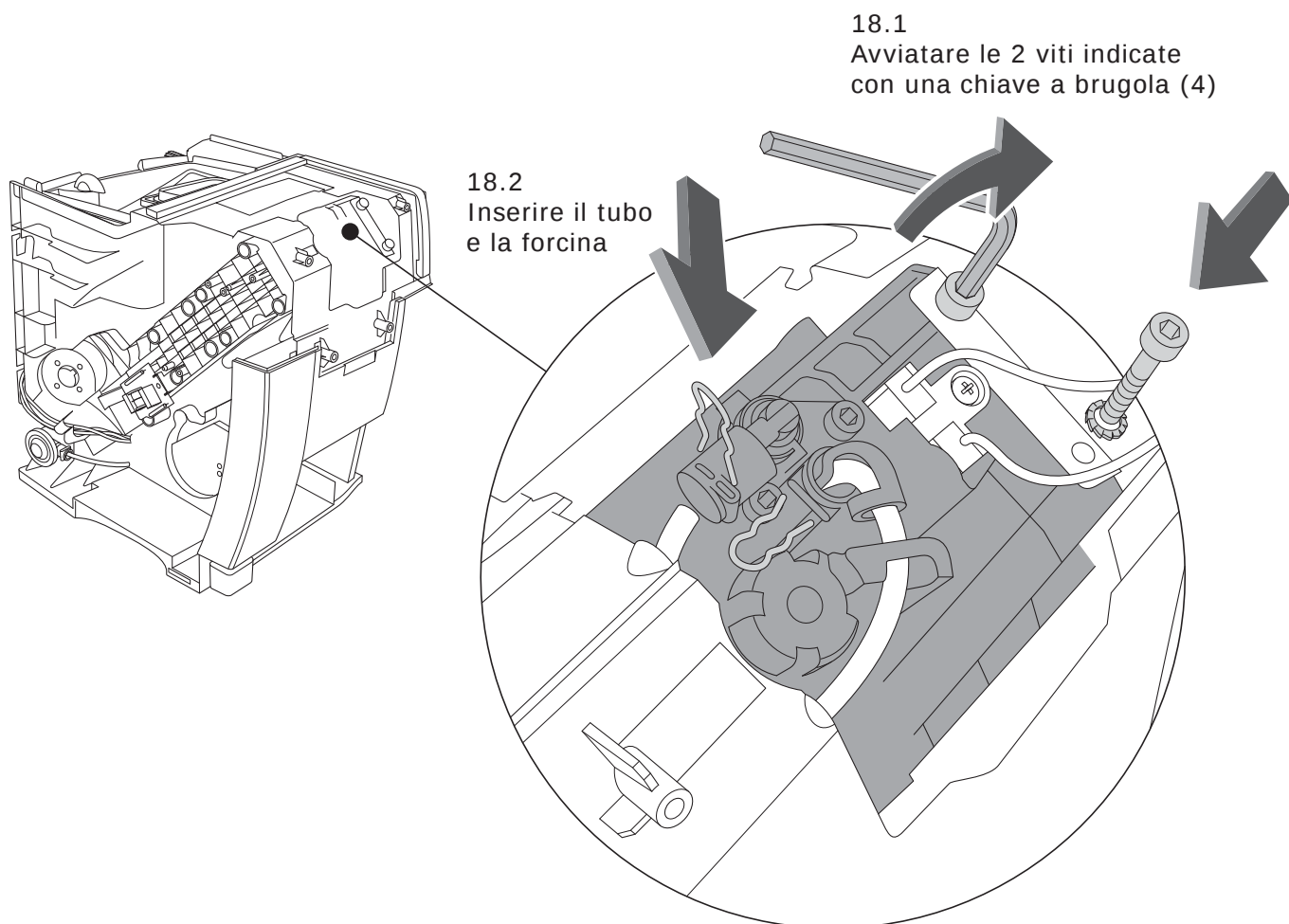


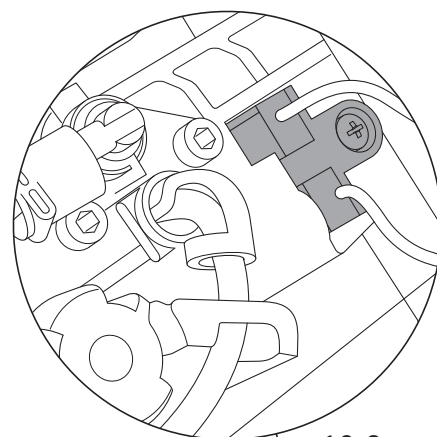
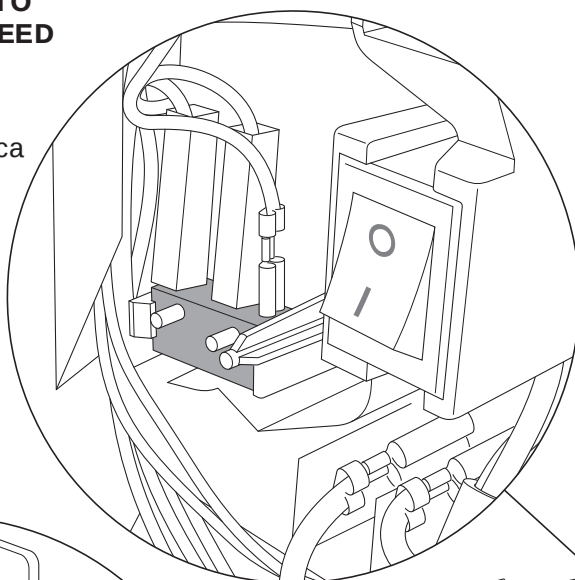
Figura 19. POSIZIONAMENTO MICROINTERRUTTORI E REED

19.1

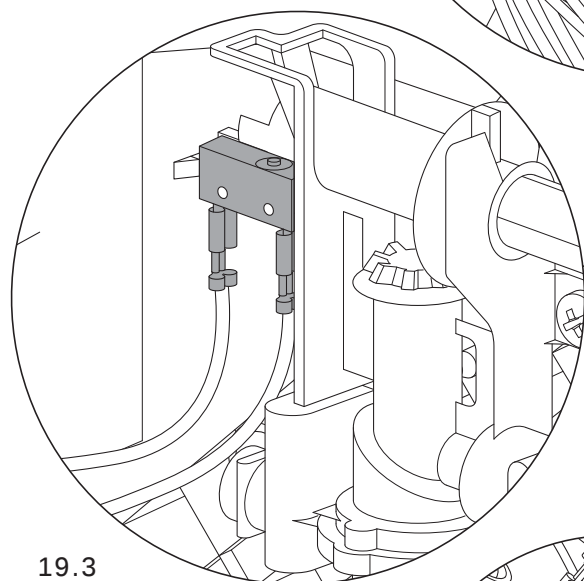
Microinterruttore Tanica

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

ATTENZIONE: i micro Tanica,
Cassetto Fondi e Rubinetto fanno
lampeggiare i propri led quando
aperti

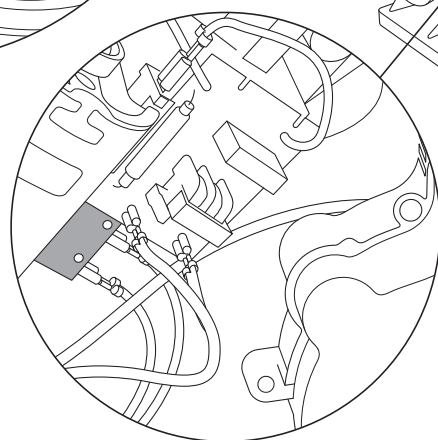


19.2 Microint. fine corsa Infusore



19.3

Microinterruttore Rubinetto

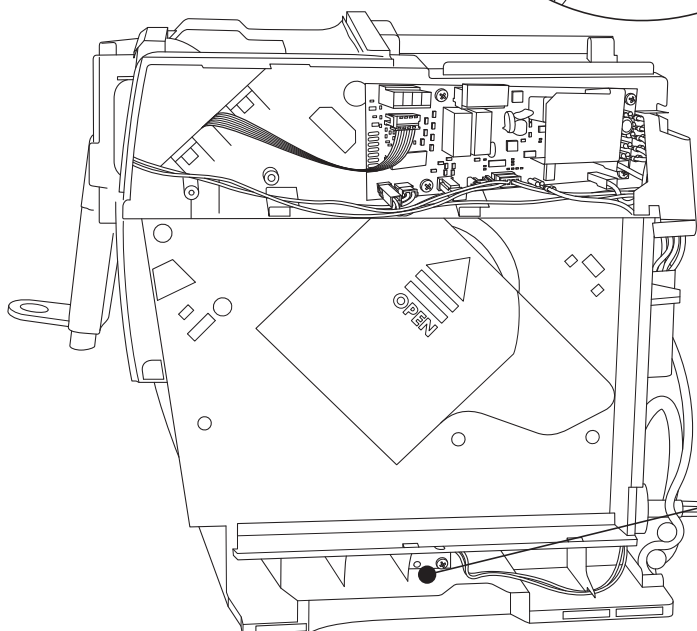
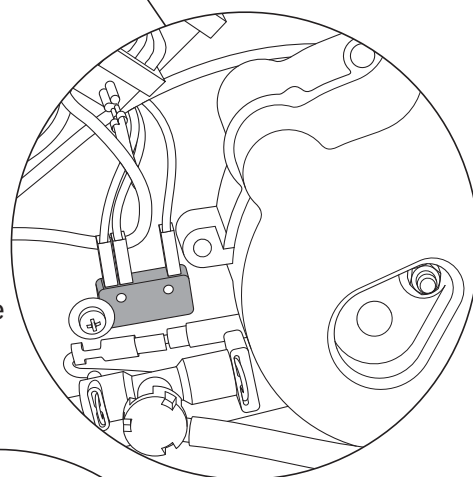


19.4

Microinterruttore inizio corsa Infusore

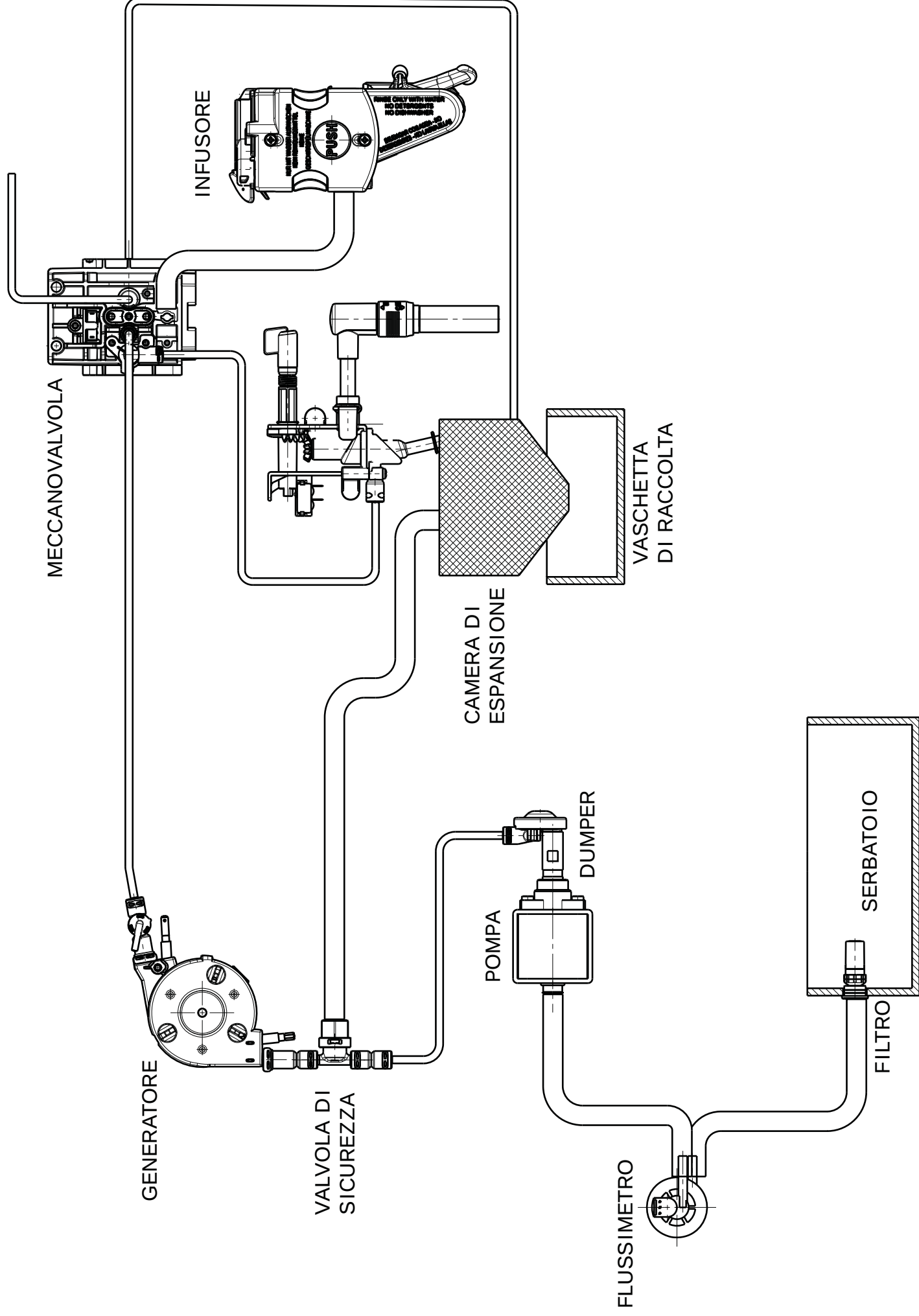
19.5

Microinterruttore Cassetto fondi



19.6 Reed tanica

SCHEMA IDRAULICO



PROCEDURA DI TEST



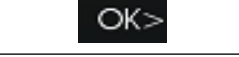
PROCEDURA	Premendo le varie icone, si alimentano i seguenti dispositivi:	
	icona	dispositivo
Chiudere il rubinetto vapore (pos. 0). Attaccare il cavo di rete. Tenere premuti i tasti: 1 Tazza + Vapore   Premere l'interruttore On/Off (pos. I)		Caldaia Caffè ON
		Motore Macinino ON
		Motore, verso l'alto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

NOTA: I micro accendono i led corrispondenti quando attivati.

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

PROCEDURA DI TEST DISPLAY



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		       	       
  Premere l'interruttore On/Off (pos. 1)		Girando la manopola, il Display mostrerà la barra di incremento e decremento	
Nota: Rilasciare i tasti qualche secondo dopo la visualizzazione di tutte le icone.			

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 un minuto.