

# Nilfisk

## Core 125

## Core 130



## Repair Manual ver. 1.0

# Nilfisk

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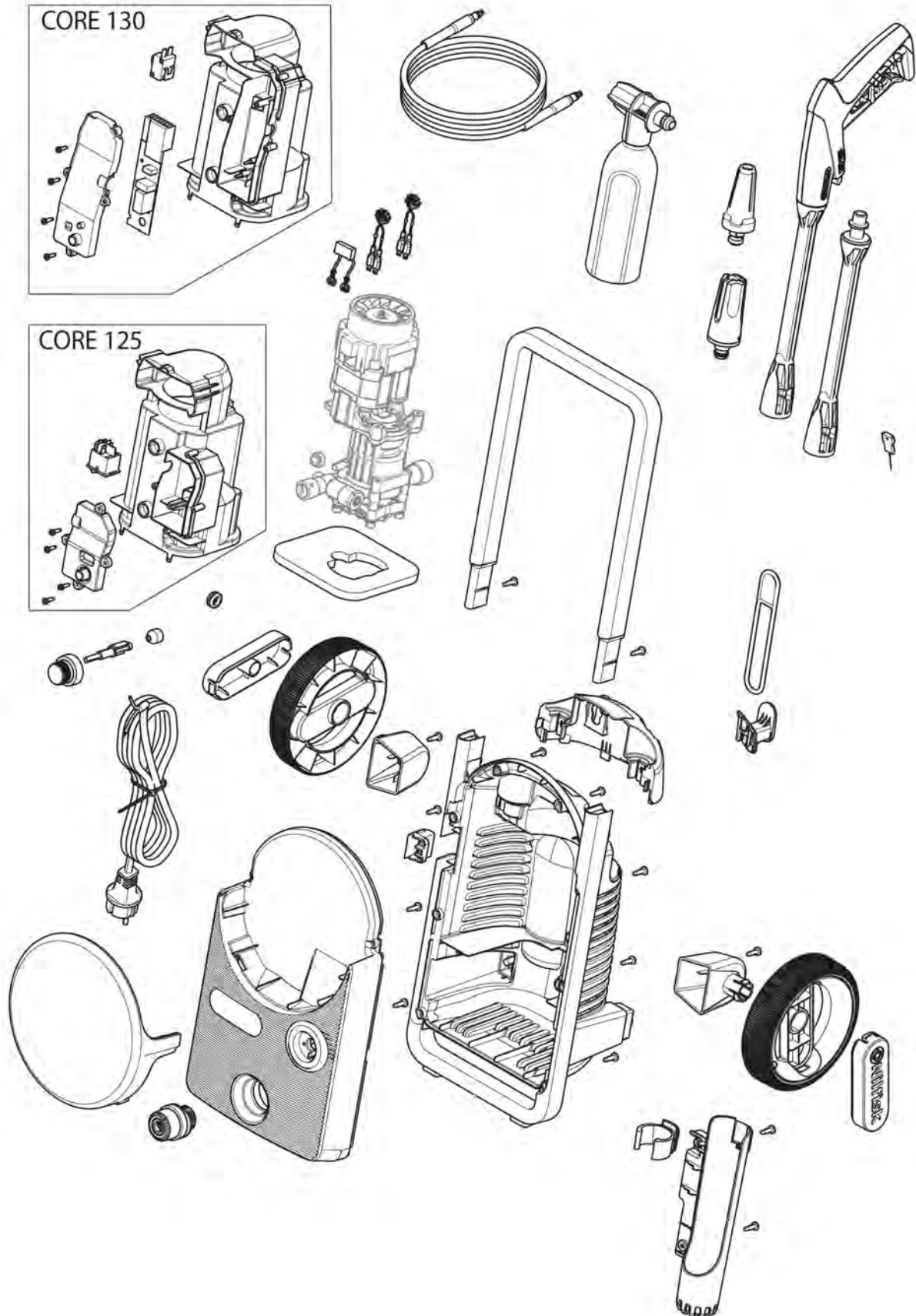
**WARNING!**

- High pressure jets can be dangerous. Never direct the water jet at persons pets, live electrical equipment or the machine self.
- The operator and anyone in the immediate vicinity of the site of cleaning should take action to protect themselves from being struck by debris dislodged during operation. Wear goggles during operation.
- Never try to clean clothes or footwear on yourself or other persons.
- Do not let children or people who have not read the instruction manual operate the machine.
- Never use the machine in an environment where there could be a danger of explosion. If any doubt arises, please contact the local authorities.
- It is not allowed to clean asbestos- containing surfaces with high pressure.
- This high pressure washer must not be used at temperatures below 0°C.
- Never let any persons stay under the product when stored on the wall.

Product segment:Consumer		Core 125	Core 130
Specification	bar	Max 125	Max 130
Voltage	V	220-240	220-240
Frequency	Hz	50-60	50-60
Power consumption	A	5,8	6,5
Power absorbed	KW	1,4	1,5
Water volume,HP	l/min.	5,2	5,4
Pump pressure	bar	85	95
Opening pressure	bar	110-130	110-130
Retaining time	min.	5	5
Oil contents	ml	55	55
Oil type		GB3141 N32/ ISO VG32	GB3141 N32/ ISO VG32
Max water inlet temperature	C	40	40
Max water inlet pressure	bar	10	10
High pressure hose length	m	5m G1 Soft Hose Ø10mm	6 m G1 Soft Hose Ø10mm
Suction height	m	Max 0.5	Max 0.5
Electric cable	m	5	5
Insulation class		F	F
Tightness		IPX5	IPX5

## Core 125—Core 130

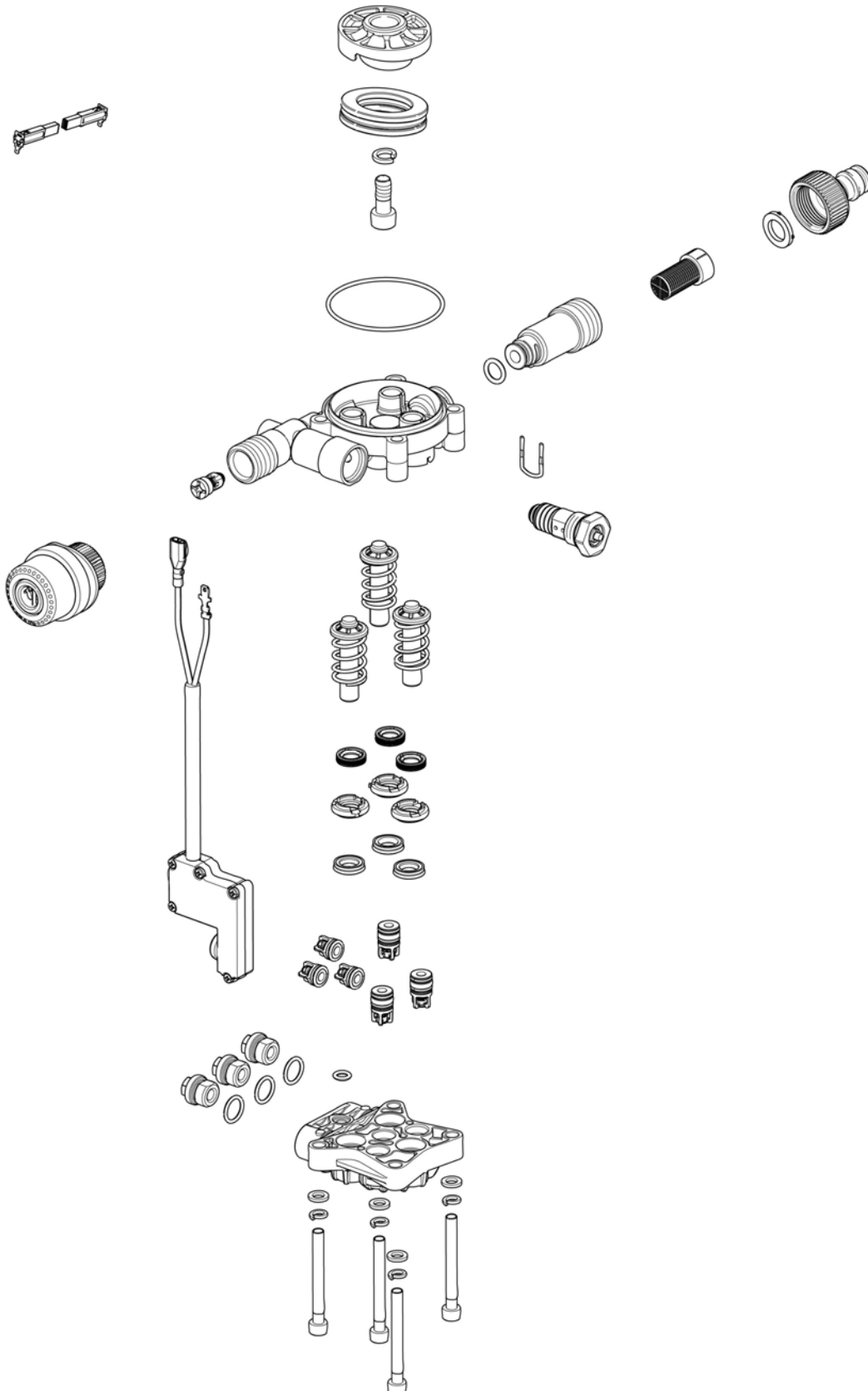
### Construction of cabinet parts.



Core 125

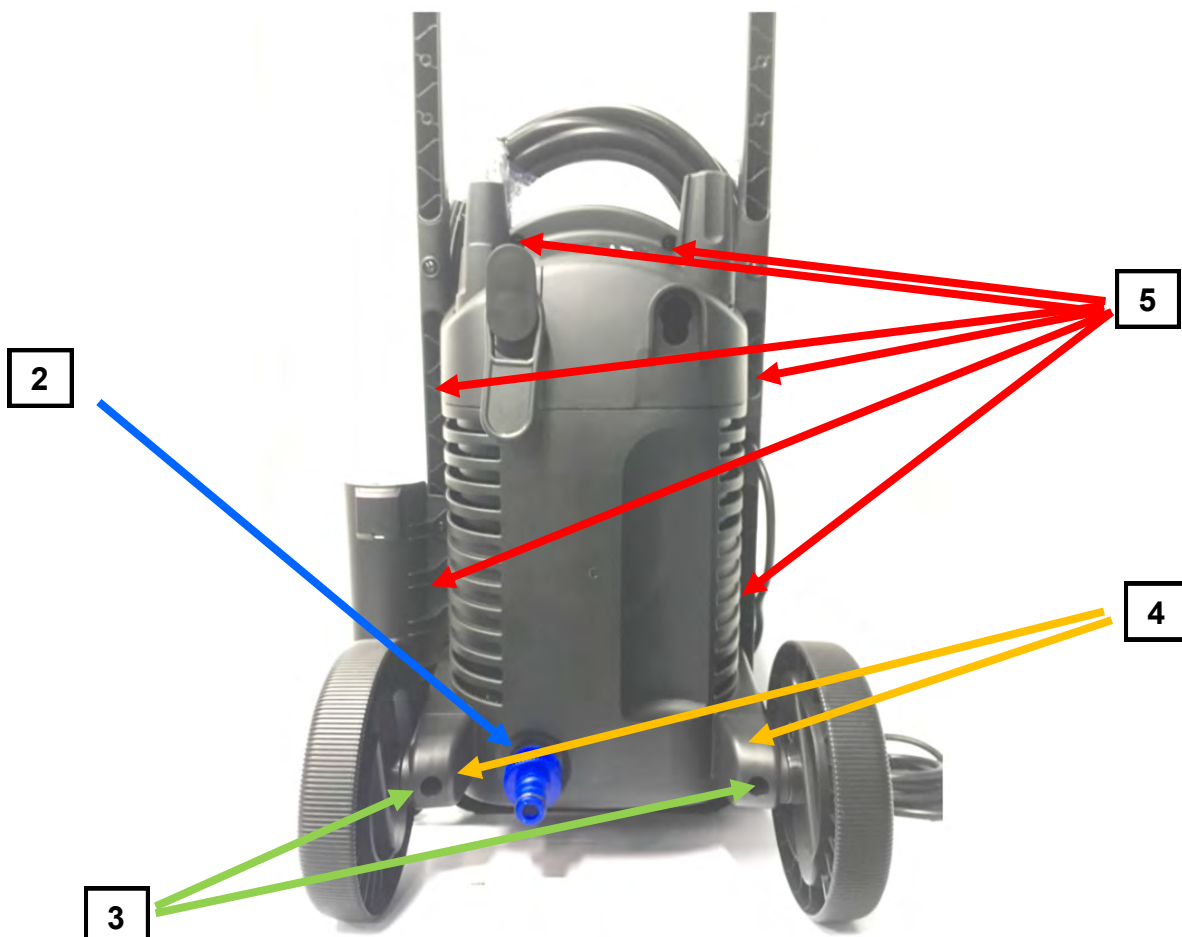
Core 130

Construction of pump unit.



**Dismounting of cabinet rear part on following variants: Core 125 Core 130**

1. Tools: Screwdriver PH2 (fig.1)
2. Remove the water inlet coupling (fig. 2)
3. Remove the 2 screws to remove the wheels for easy disassembly (fig. 2)
4. Remove the 2 screws behind the wheels (fig.2)
5. Remove the remaining 6 screws fixing the cabinet rear part (fig.2)
6. The cabinet rear part can be removed and there is now access to the motor pump unit

**Fig. 1****Fig. 2**



## Dismount / mounting of switch box cover and switch box Core 125.

1. Remove the 4 screws. (fig 1)
2. Remove the switch box cover. (fig 1)
3. *Assembly: Ensure that the single cords are inside the box and are not squeezed during assembly and that cable relief is mounted correctly in the slit in the switchbox.*
4. *Assembly: Ensure that the switch is correctly mounted the fixing slits inside the switch box. (fig 2)*

**Fig. 1**



**Fig. 2**

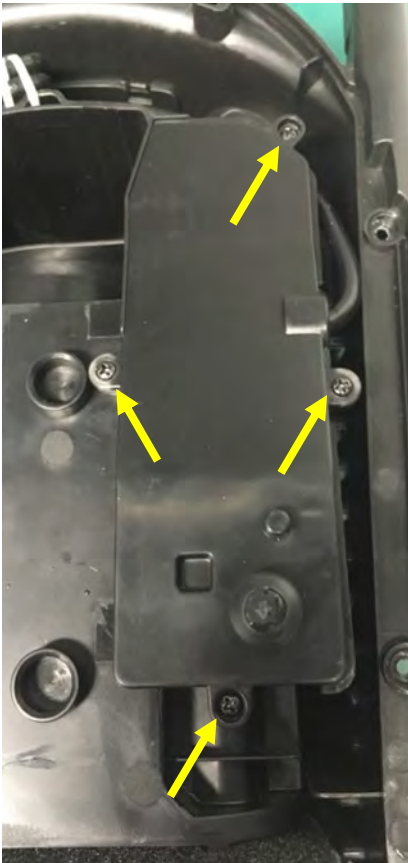




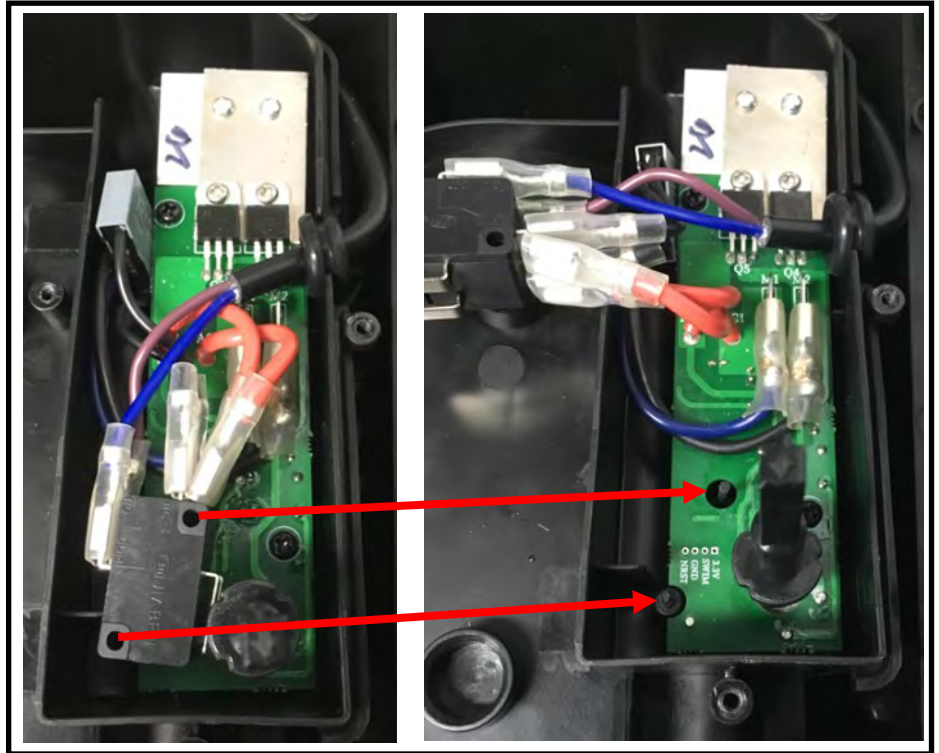
## Dismount / mounting of switch box cover and switch box Core 130 / Core 140.

1. Remove the 4 screws. (fig 1)
2. Remove the switch box cover. (fig 1)
3. *Assembly: Ensure that the single cords are inside the box and are not squeezed during assembly and that cable relief is mounted correctly in the slot in the switchbox.*
4. *Assembly: Ensure that the switch is correctly mounted the two fixing tap's (fig 2)*
5. *Assembly: Turn knob axle counter clockwise, and align with knob in its right position when mounting the front part including the knob.*

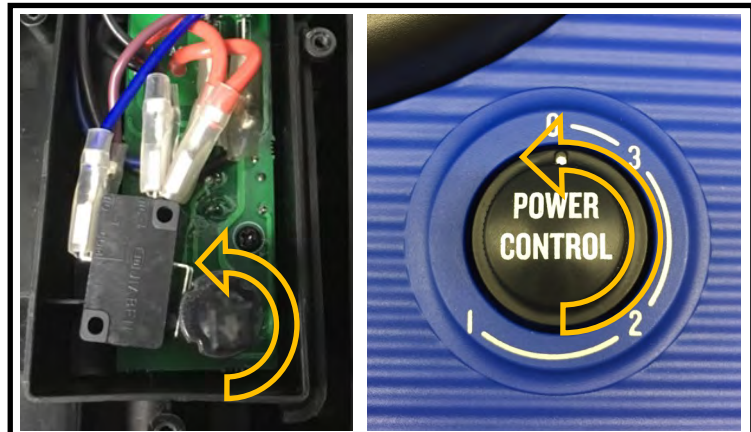
**Fig. 1**



**Fig. 2**



**Fig. 3**



**Dismounting / mounting of the start / stop valve Core 125 - Core 130.**

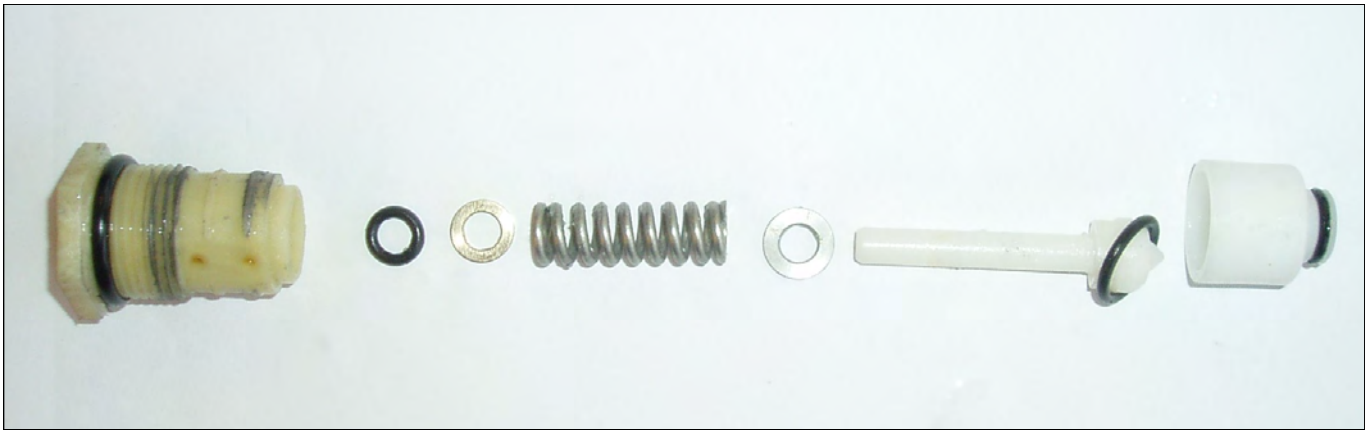
Fig 1 is showing how the start / stop valve must be assembled.

There is no special tool available to dismount the seat of the start / stop valve

It will be possible to use a long 3 mm self cutting screw (eg. for wood) Fig.2

*NOTE: the valve seat is no longer usable after dismounting*

**Fig. 1**



**Fig. 2**



## Dismounting / mounting of water / oil seal and valves.

To change the oil seals, water seals and pressure valve, use a screw driver to dismount the parts (fig 3 & 4).

Alternatively there is a puller number 1220103 to pull out the valves seats (pressure and suction valves).

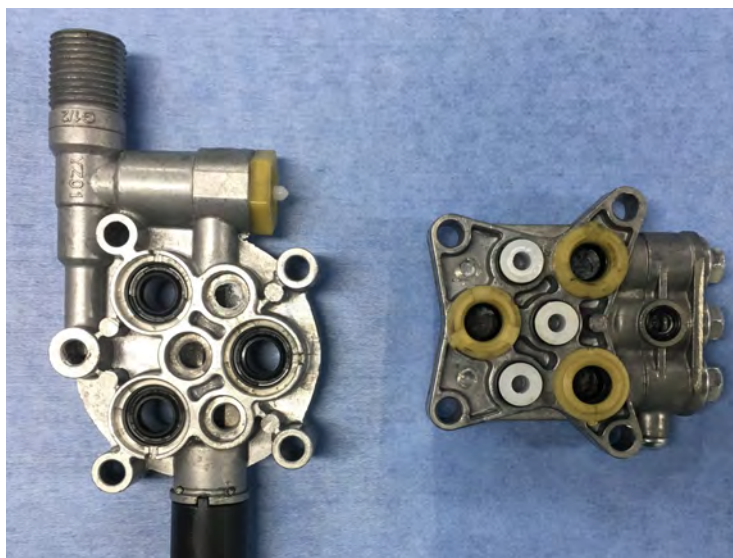
Note: the seat is no longer usable after using the puller

Cleanup and lubricate before mounting!

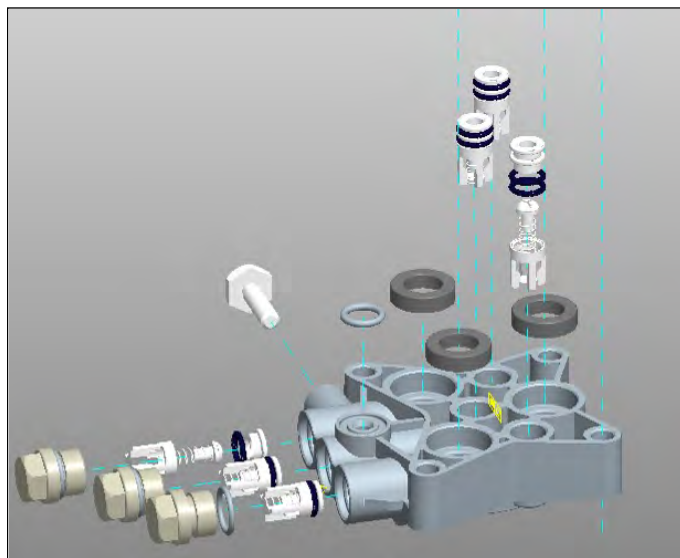
Fig 1 is showing the pump after opening the cylinder head from the cylinder block.

Fig 2 is showing how all the parts must be assembled into the cylinder head.

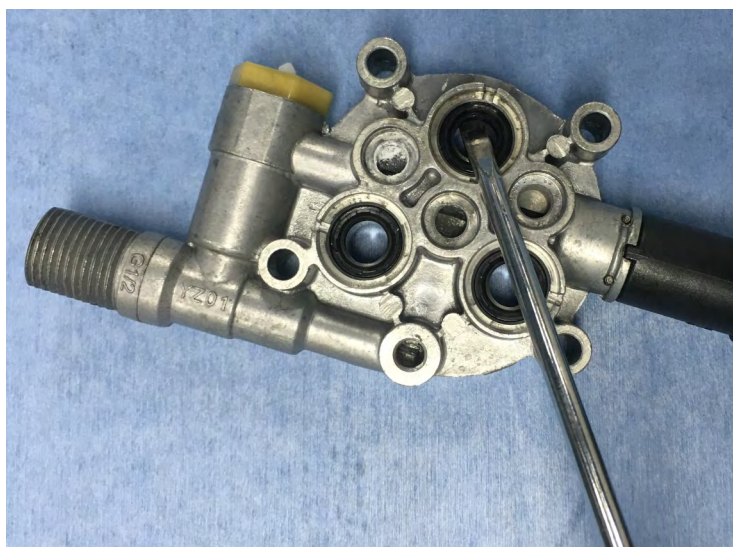
**Fig. 1**



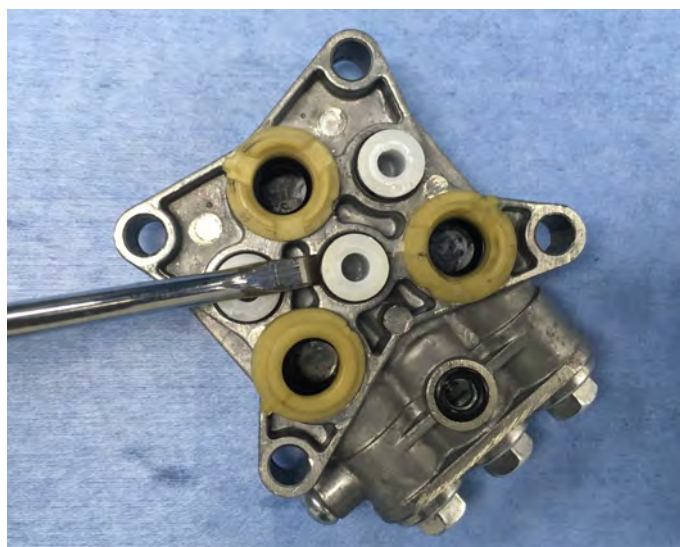
**Fig. 2**



**Fig. 3**



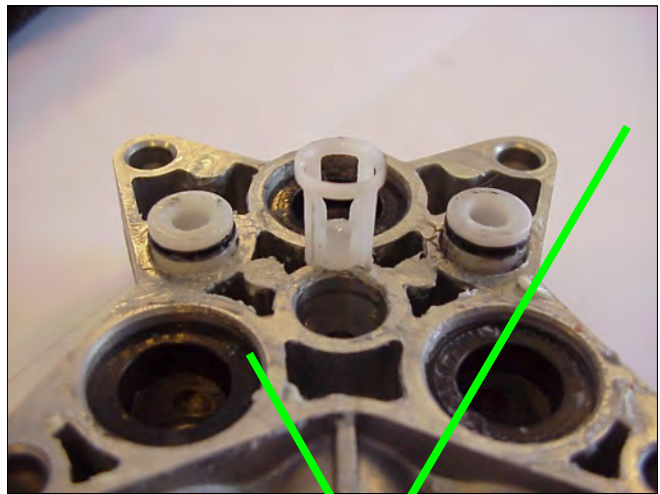
**Fig. 4**





**IMPORTANT mounting information:**

In order to optimize the self suction mode the valve bodies must be positioned correct according to the water canals inside the cylinder head. The “leg” of the valve body must not be placed in front of a canal. Fig 1 is showing the WRONG positioning and fig 2 is showing the CORRECT positioning.

**Fig. 1****Fig. 2**

## Core 125:

### Precaution when assembling the switch box.

1. Ensure that the cable and cable relief is mounted correct in the switch box (fig. 1)

### Precautions when assembling the switch box.

1. Ensure the cable relief is mounted correctly on the cabinet (fig. 2)

Fig. 1

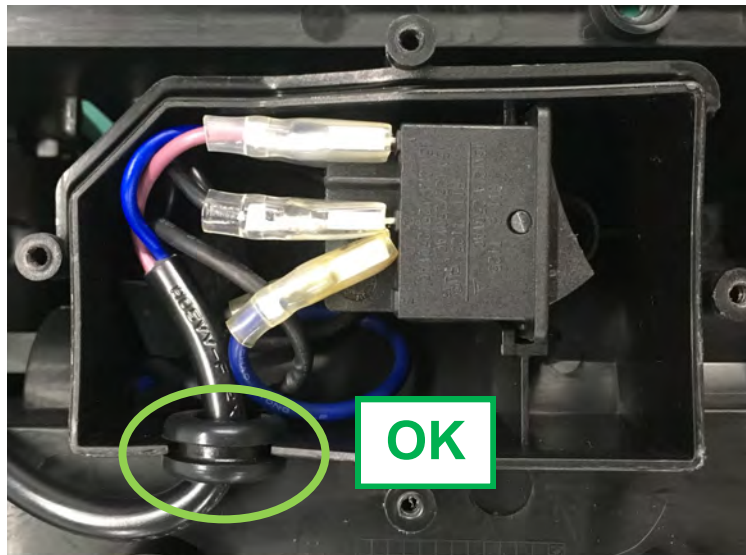


Fig. 2



## Core 130 + Core 140:

### Precaution when assembling the switch box.

1. Ensure that the cable and cable relief is mounted correct in the switch box (fig. 1)

### Precautions when assembling the switch box.

1. Ensure the cable outside switch box is put between switch box and cabinet part. (fig. 2)

Fig. 1

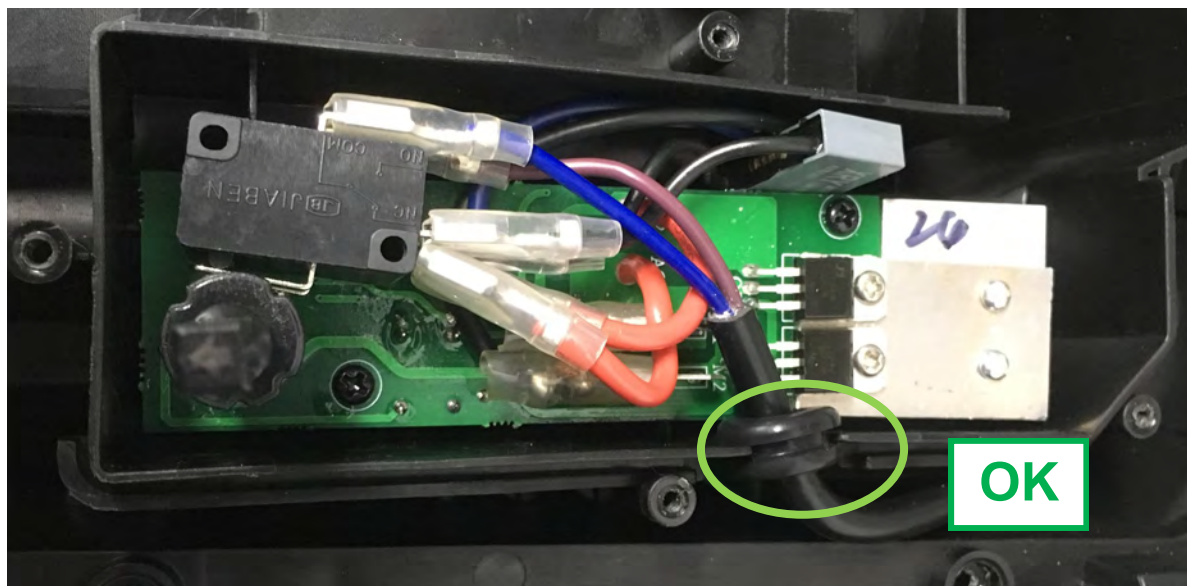
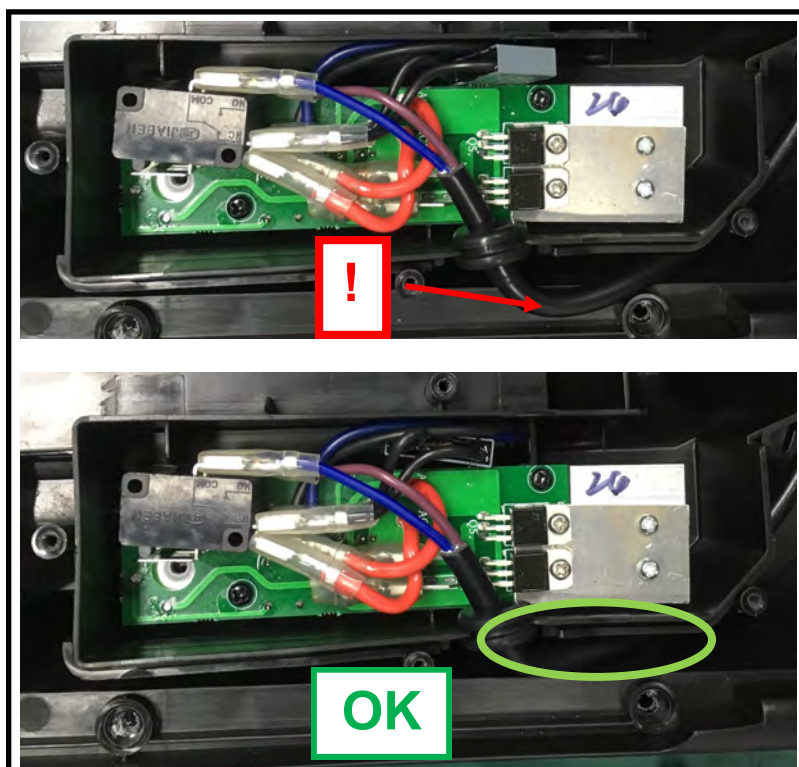


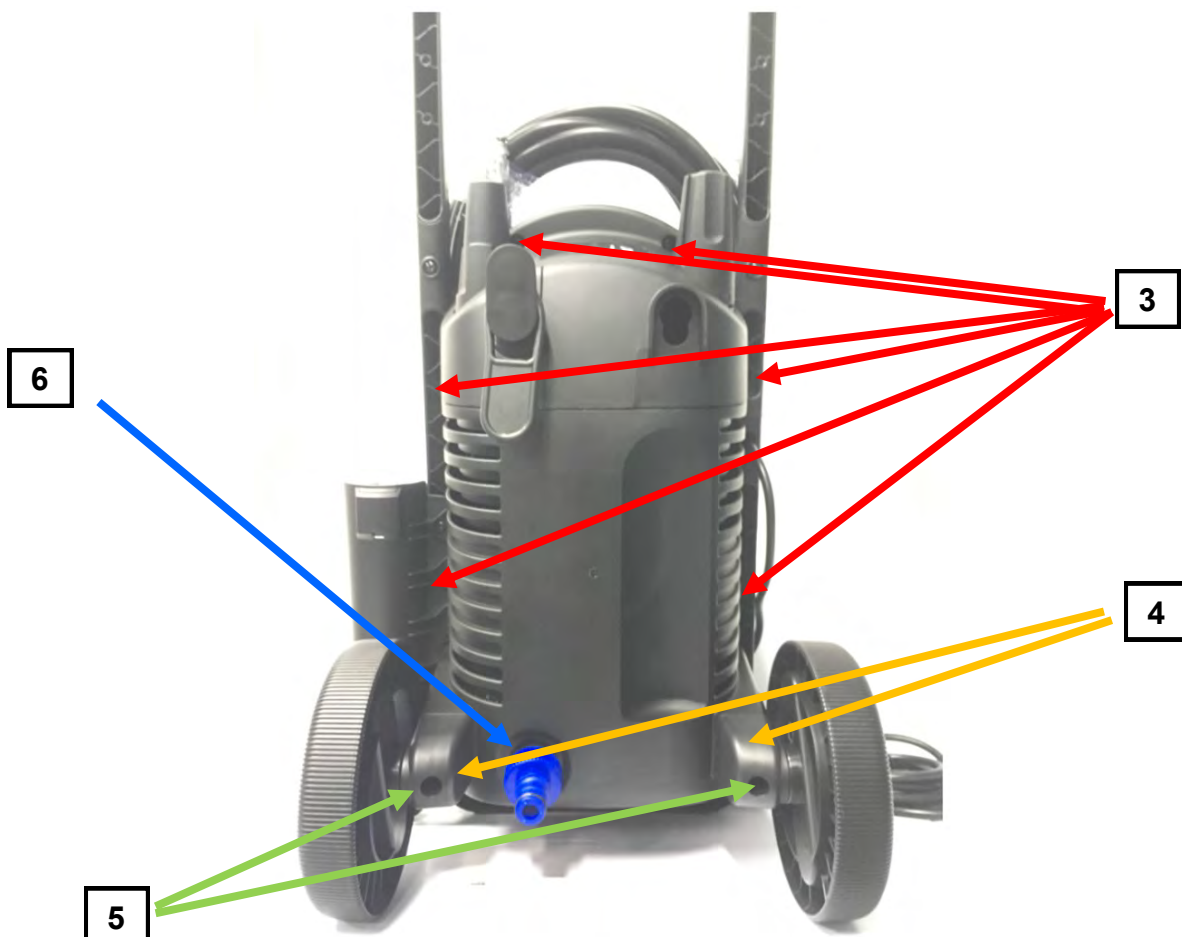
Fig. 2





**Mounting of cabinet rear part on following variants: Core 125 Core 130**

1. Tools: Screwdriver PH2 (fig.1)
2. Put the motor pump unit in its right position and mount rear cabinet part
3. Mount the remaining 6 screws fixing the cabinet rear part (fig.2)
4. Mount the 2 screws behind the wheels (fig.2)
5. Mount the wheels with the 2 screws (fig. 2)
6. Mount the water inlet coupling (fig. 2)

**Fig. 1****Fig. 2**

**Pairing of the machine and the Wireless handle (Only Core 140 IH).**

Pairing of the wireless devices is needed if:

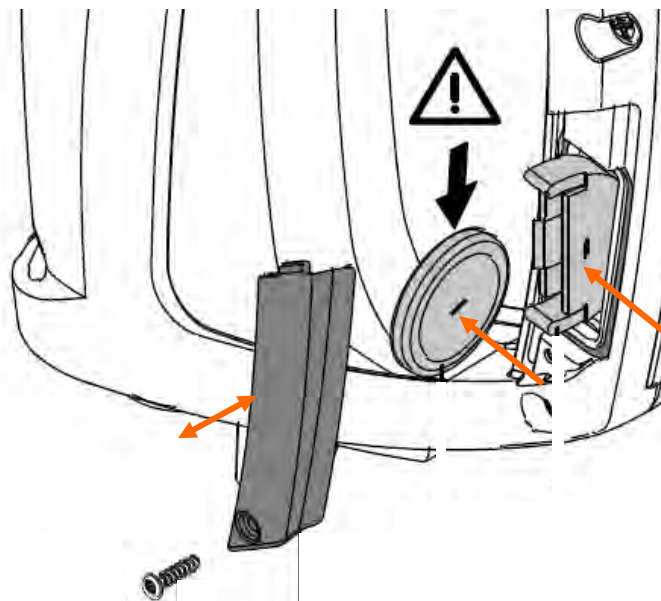
- the Wireless Handle has been exchanged
- the Wireless Unit inside the Wireless handle has been exchanged
- the Control Unit in the machine has been exchanged
- the Wireless Unit has been exchanged in the machine
- Or if the user hasn't paired the machine and the Wireless Handle

Pairing of the machine and the Wireless Handle:

1. Ensure that the machine is not turned on
2. Dismount the battery and mount the battery again
3. Orange indicator on the handle is now blinking in approx. 2 minutes, indicating that the handle is in pairing mode.
4. Turn on the machine within the 2 minutes of pairing mode, when the orange indicator stops blinking, the handle and the machine has been paired and can now be operated.

**Exchange battery (cell type: CR 2032 ) in Wireless Handle.**

1. Dismount the screw (Phillips) and the cover to the battery. Dismount the old battery
2. Ensure that the new battery is mounted with the right polarity in the battery holder
3. Mount the battery cover and mount the screw



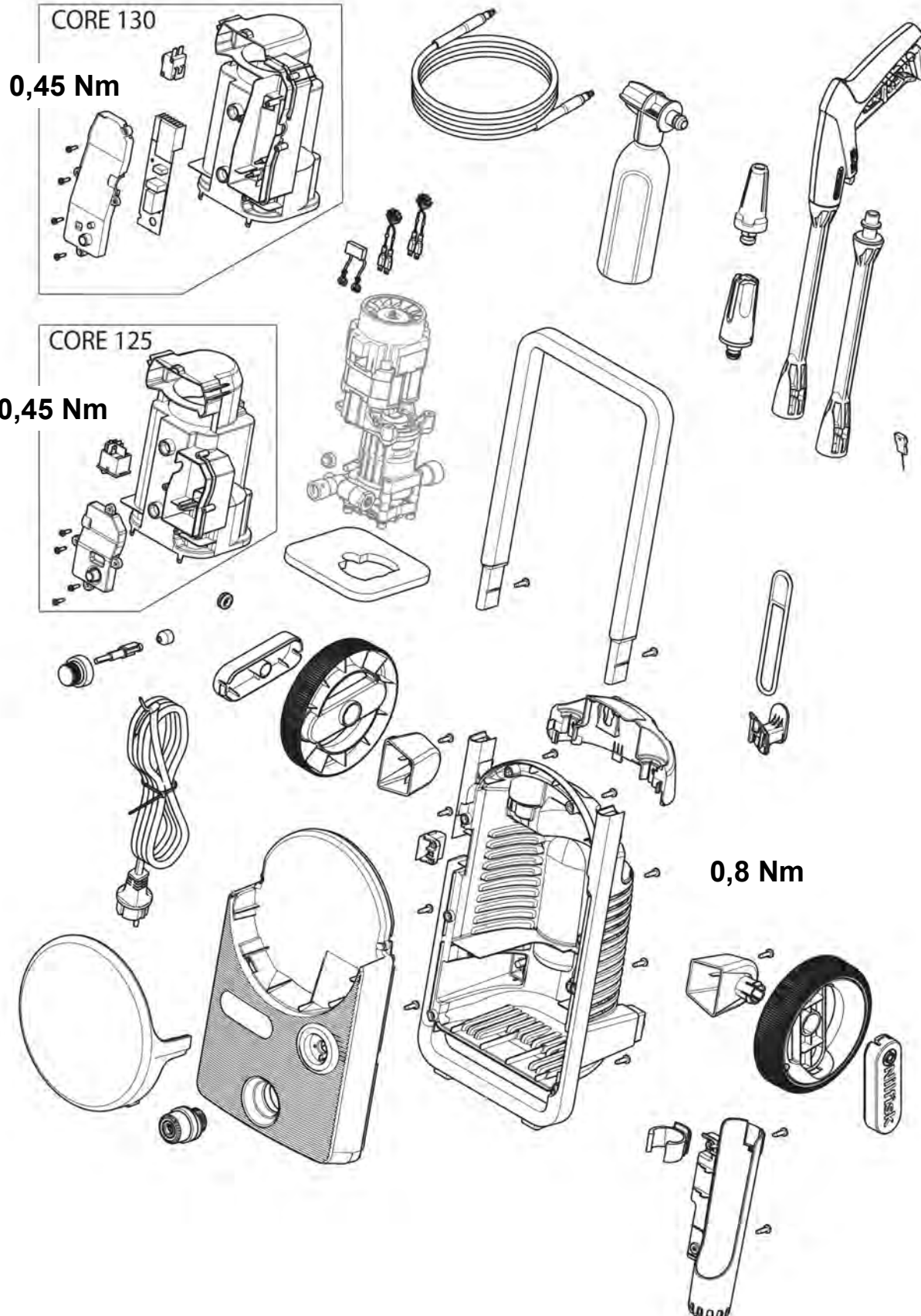
18 Nm

8 Nm

17 Nm

11 Nm

**Cabinet screw torque.    Core 125 - Core 130**



## Recommended oil types:

The pump is filled with 55 ml GB3141 N32/ISO VG32 from the production.

In case of service where the oil must be changed Nilfisk recommends to use 55 ml ISO VG46 / Bartran HV 46.

### Alternative oil types that are allowed:

BP, Bartran HV 46

Shell, Tellus T 46

Exxon, Statoil Univas N 46

Mobil Oil Mobil DTE 25

## Recommended lubrication:

### White grease for o-rings, sealings etc.:

Silicone grease, DOW CORNING(R) 55 O-RING LUBRICANT

## Special tools:

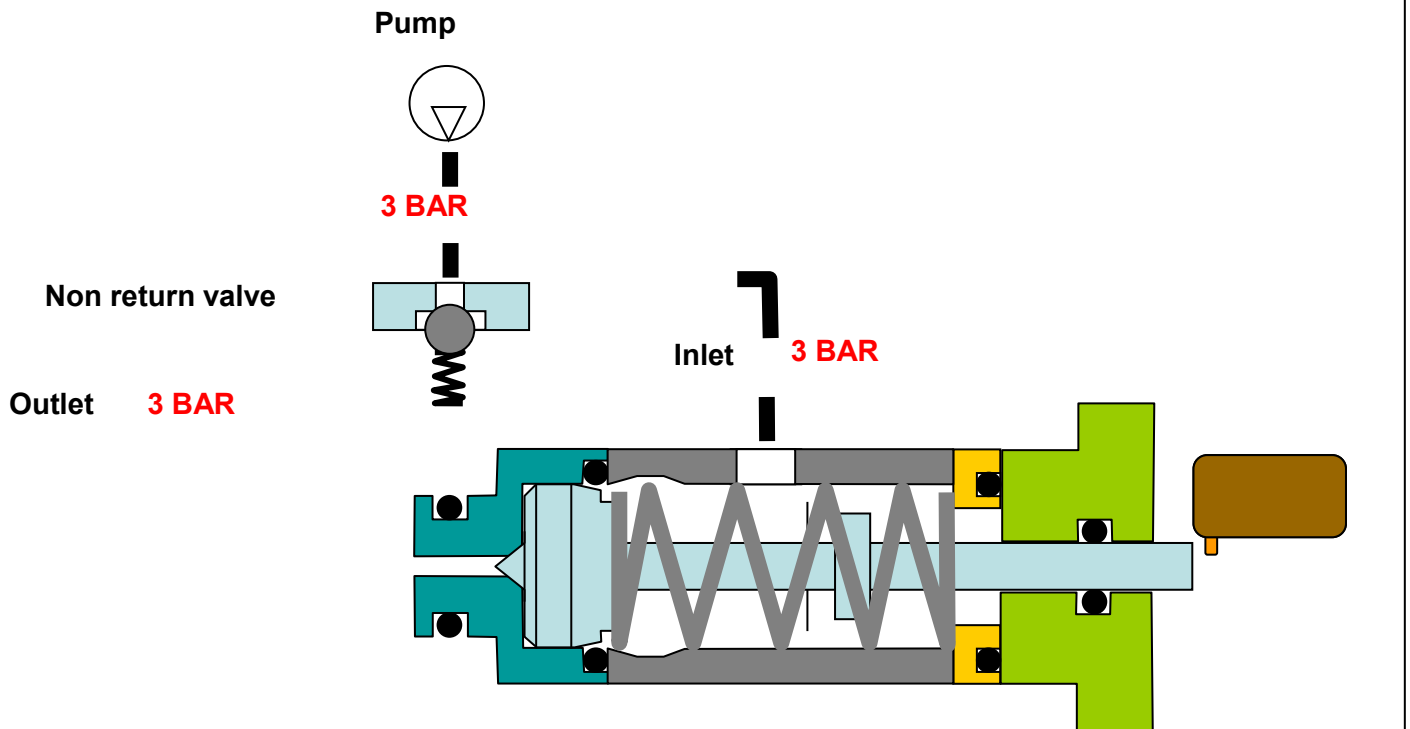
Puller for valve seat M4—item number 31000189 (Page 12).

Puller for valve seat (pressure and suction valve) - item number 1220103 (Page 13)

## 3.0 Start stop System guide

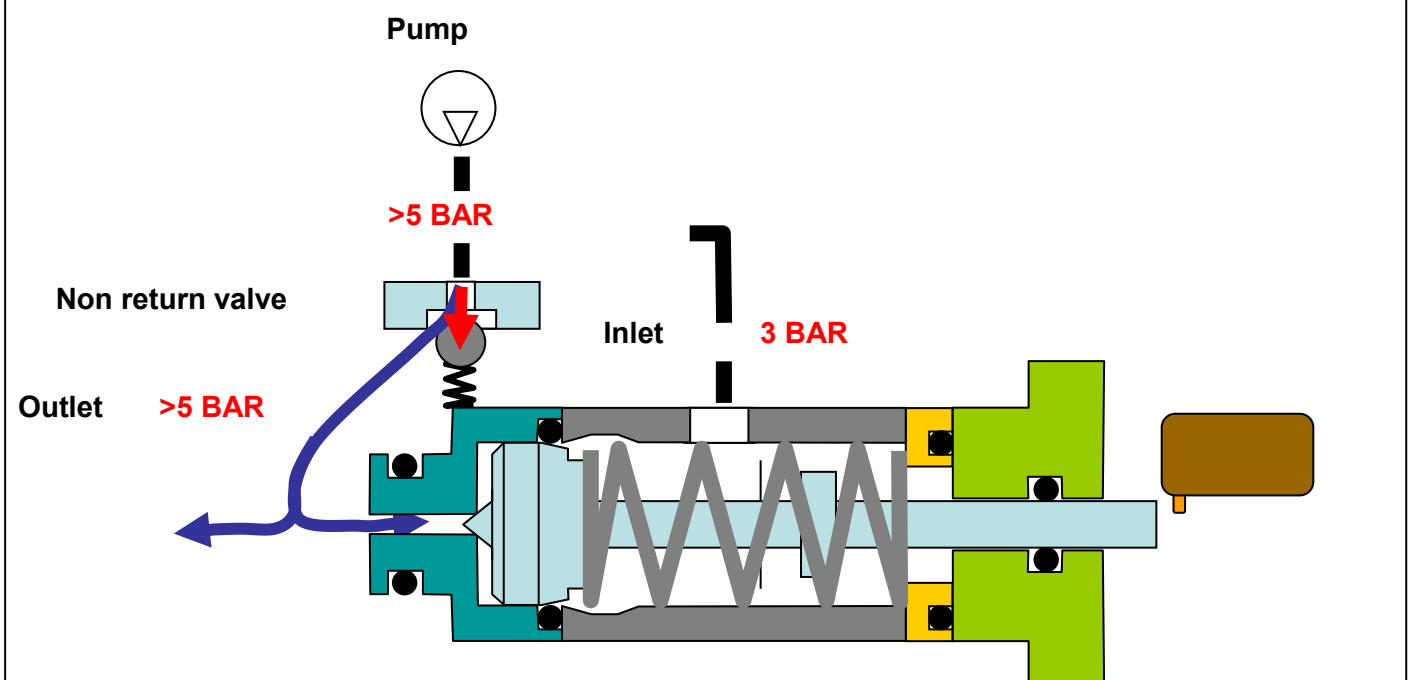
3.1 No pressure in system (Core 125, Core 130, Core 140 and Core 140 IH)

No pressure in system - except inlet pressure 3 bar. Machine switch off.



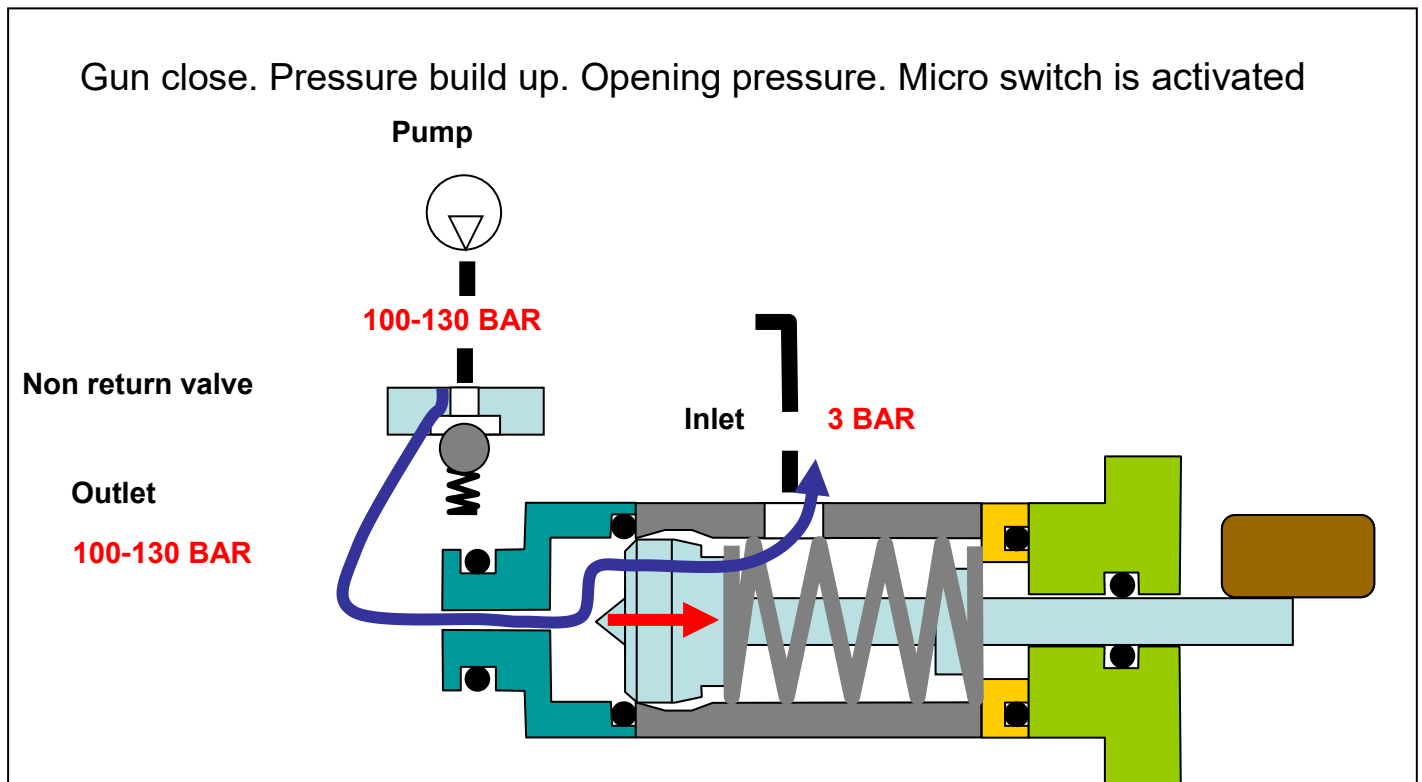
3.2 Start up-pressure build up (Core 125, Core 130, Core 140 and Core 140 IH)

Machine switch on / Start up – Pressure build up

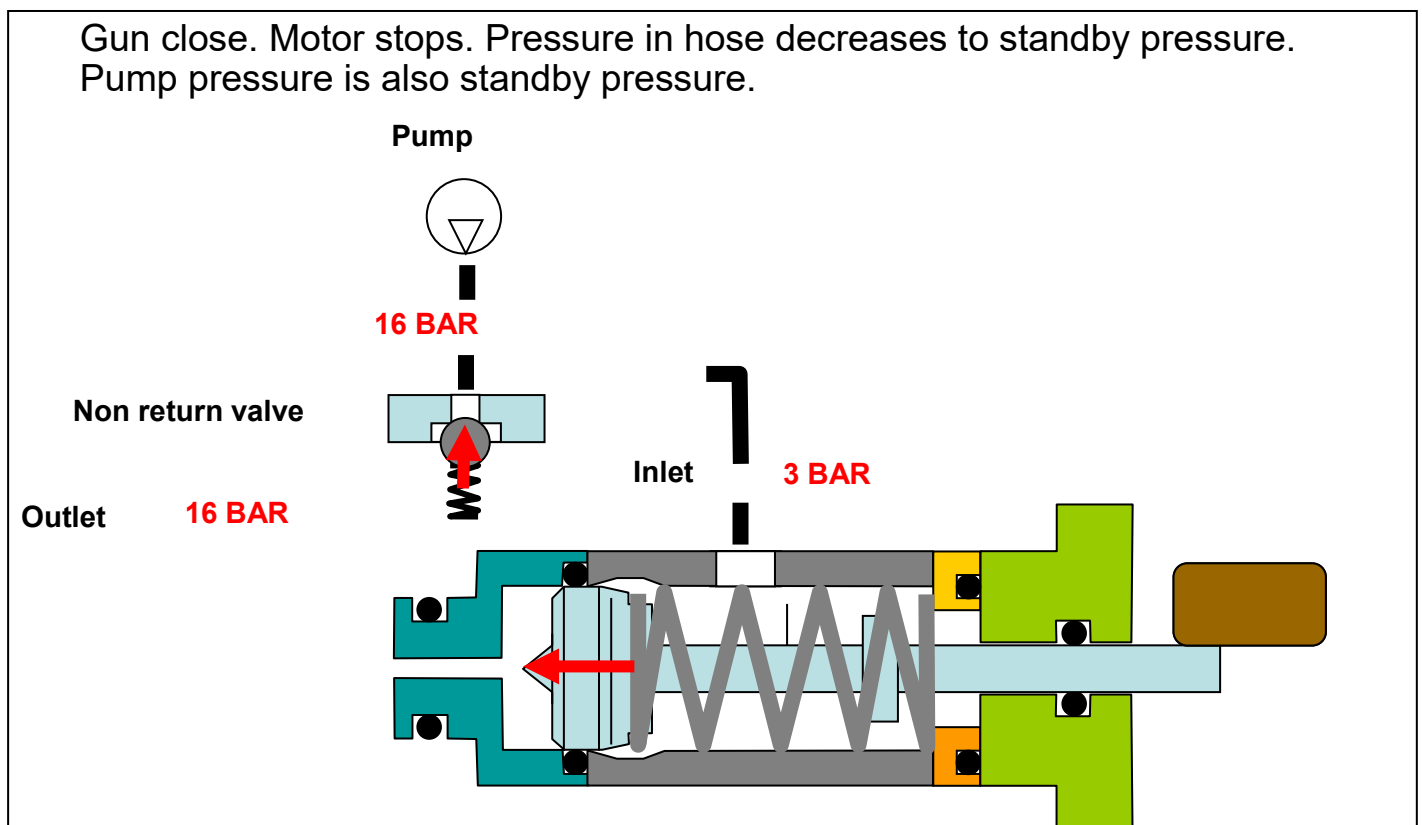




## 3.3 Pressure build up-opening pressure / close gun (Core 125 and Core 130)

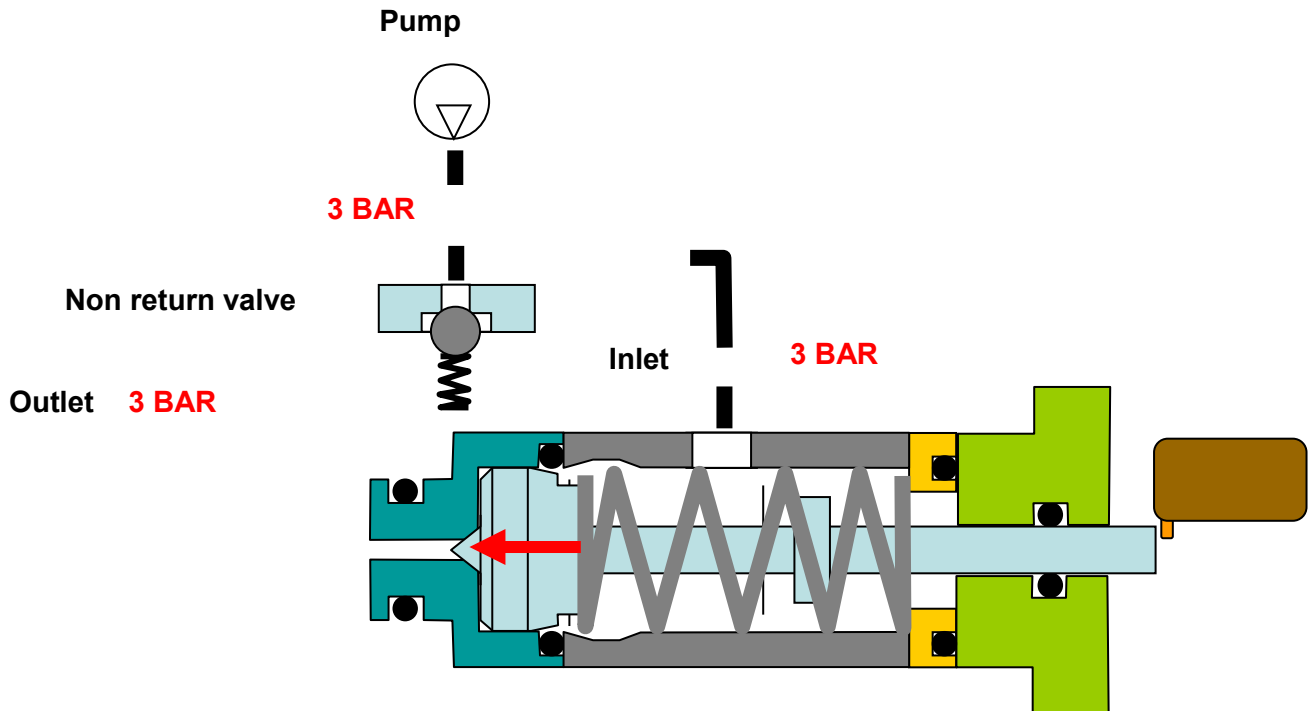


## 3.4 Motor stop – Standby pressure (Core 125 and Core 130)



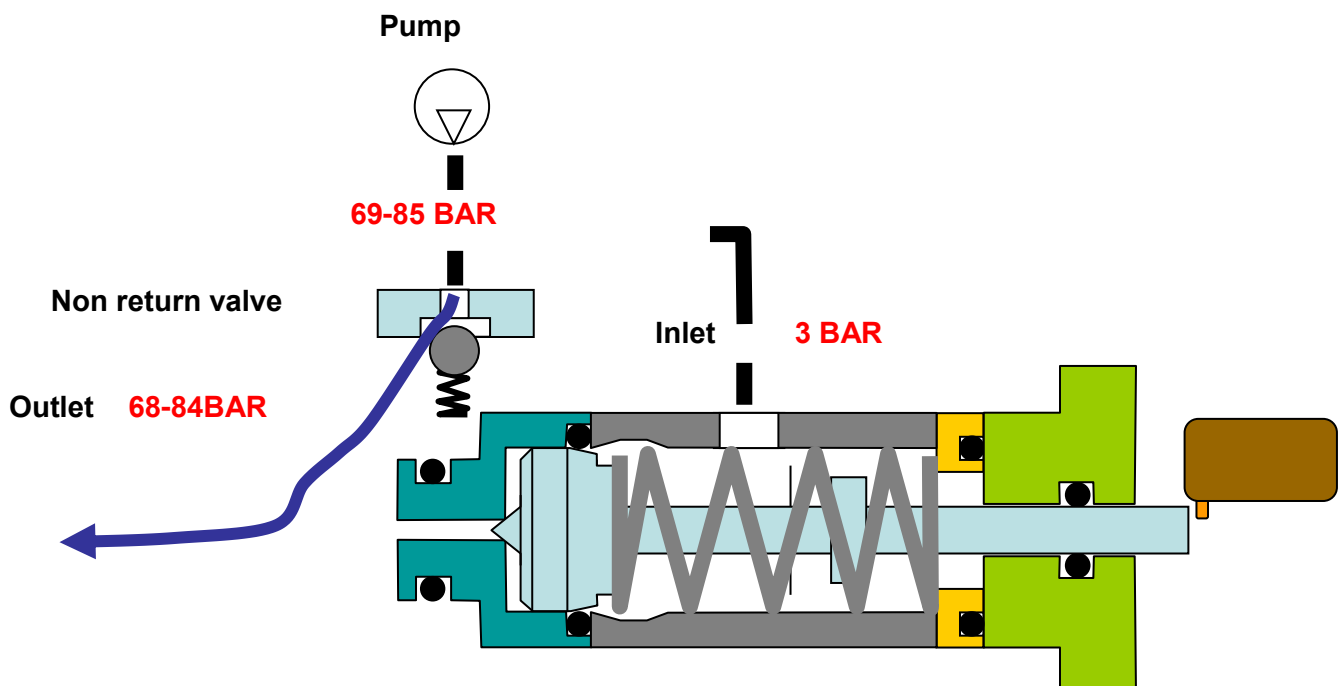
## 3.5 Gun is activated (Core 125)

Gun is open - Control piston is closed. Micro switch is deactivated. Motor starts.



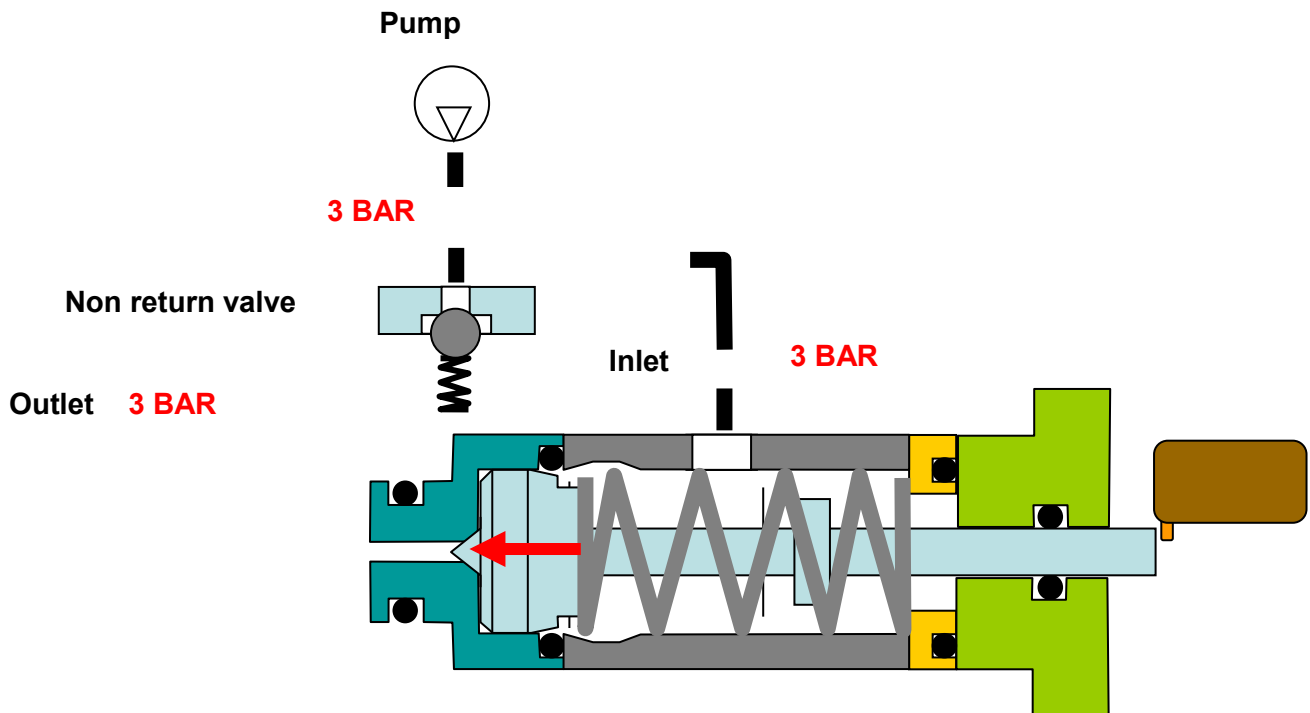
## 3.6 Machine run (Core 125)

Machine runs (normal working pressure). Gun is open.



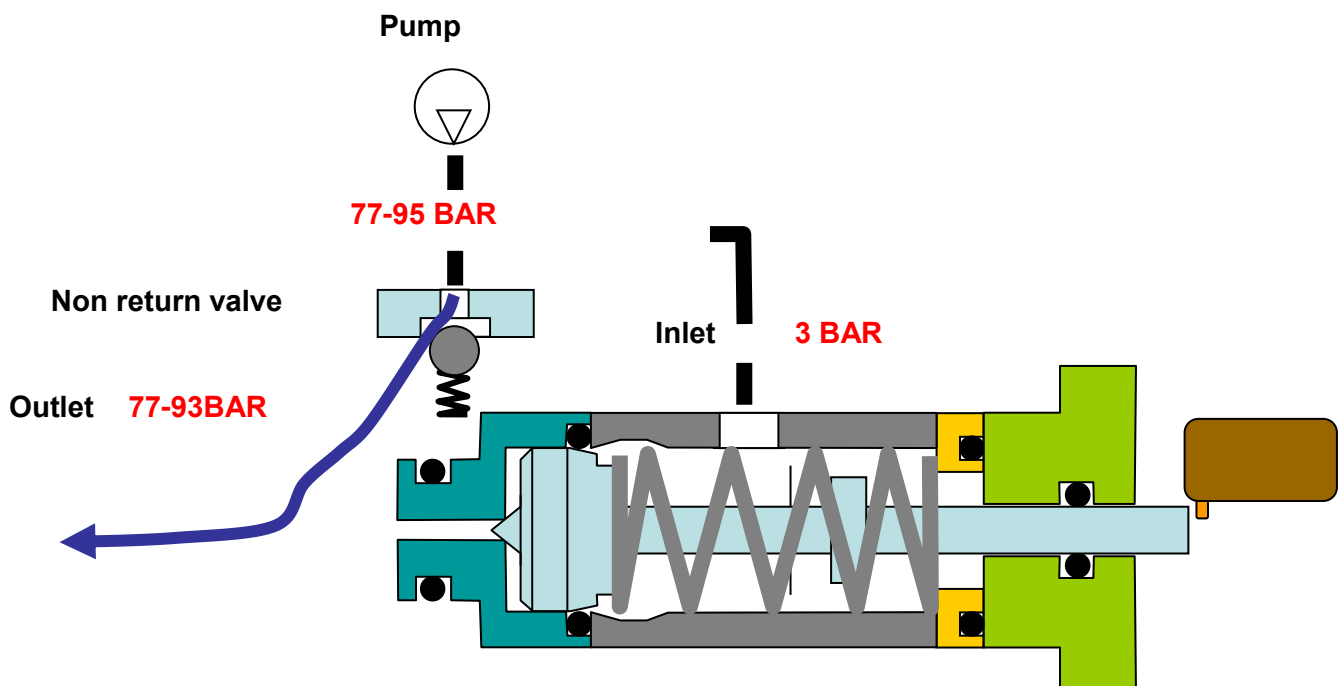
## 3.5 Gun is activated (Core 130)

Gun is open - Control piston is closed. Micro switch is deactivated. Motor starts.

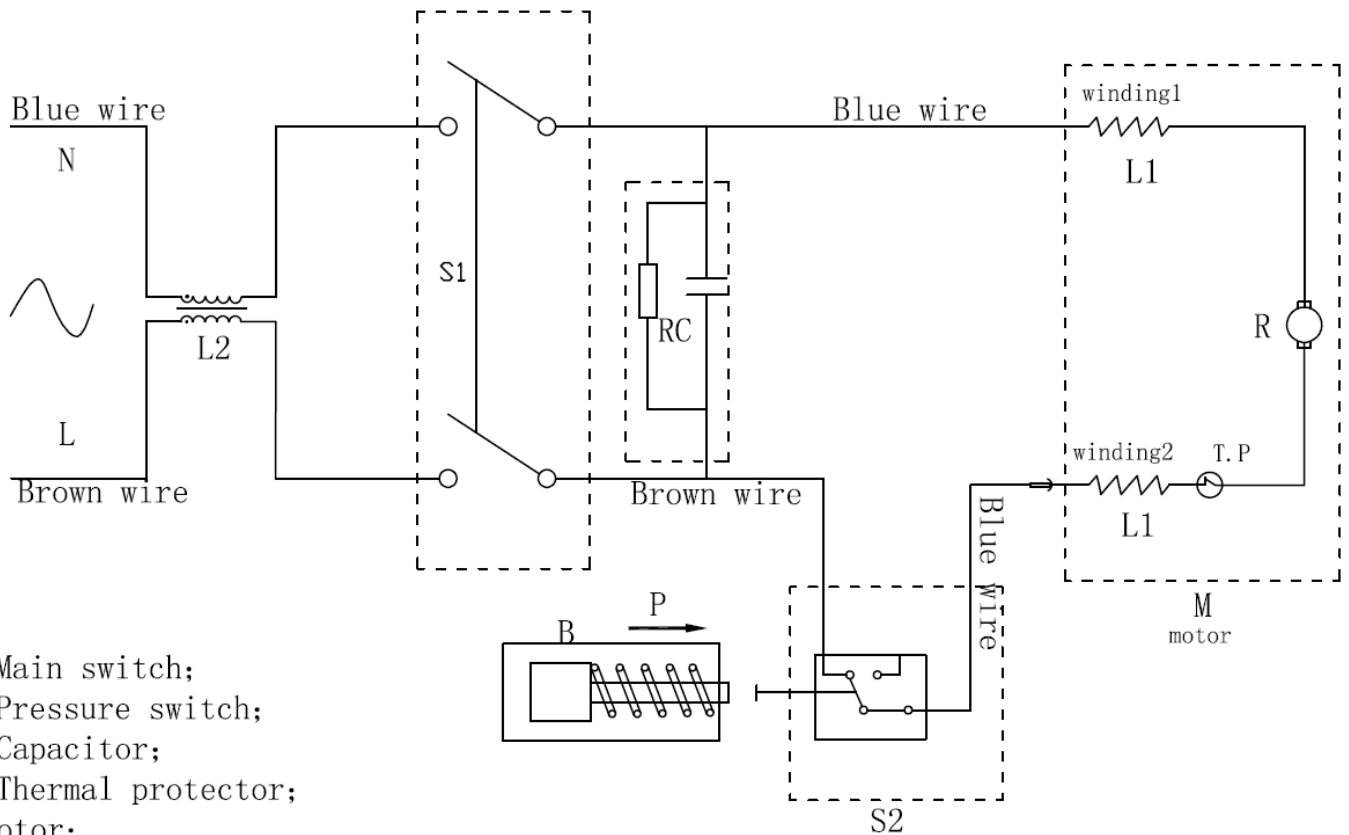


## 3.6 Machine run (Core 130)

Machine runs (normal working pressure). Gun is open.



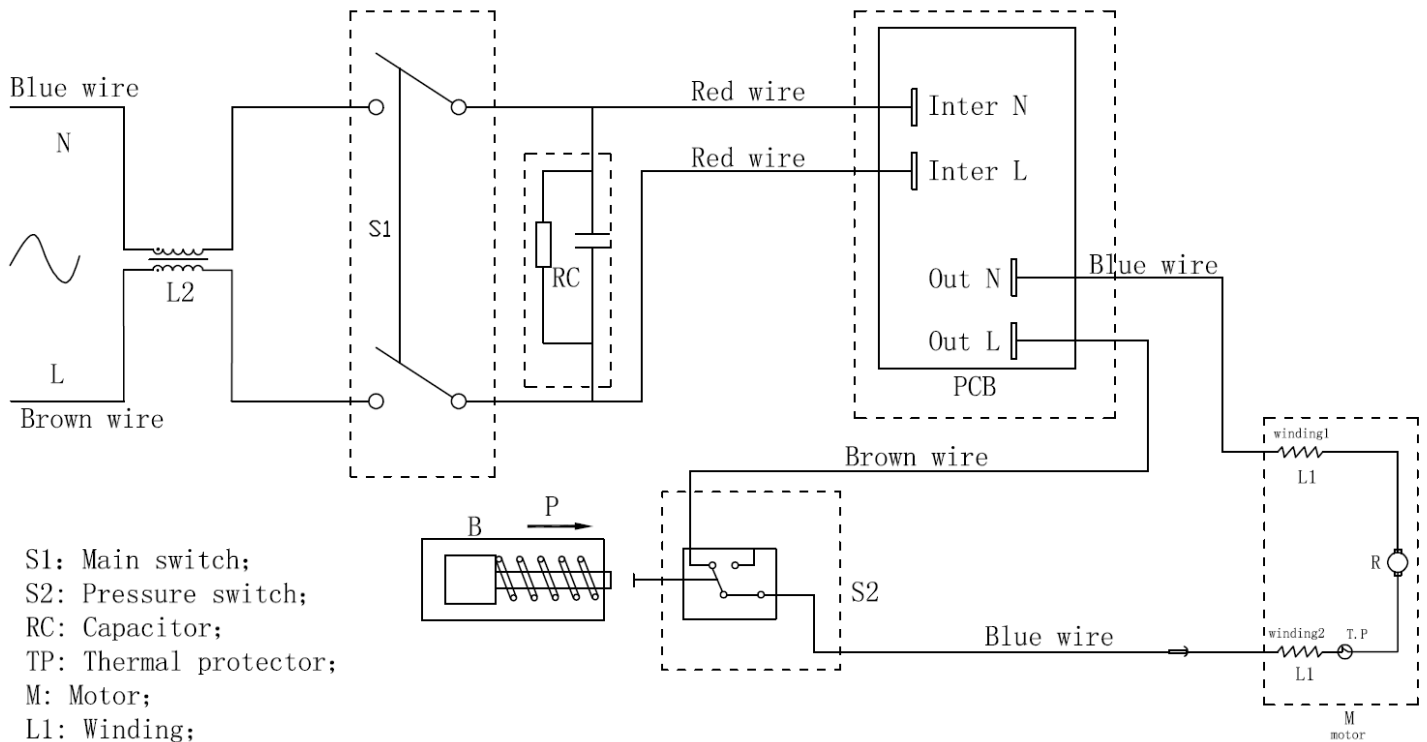
## Wiring and Circuit Diagram Core 125 only



S1: Main switch;  
 S2: Pressure switch;  
 RC: Capacitor;  
 TP: Thermal protector;  
 M: Motor;  
 L1: Winding;  
 L2: Common mode Choke;  
 B: Bypass valve;  
 R: Rotor;  
 P: Pressure;

	DANSK	ENGLISH	DEUTSCH	FRANCAIS
br	Brun	Brown	Braun	Brun
bl	Blå	Blue	Blau	Bleu
RC	Kondensator	Capacitor	Kondensator	Condensateur
S1	Afbryder	Switch	Schalter	Disjonteur
S2	Enpolet afbryder/ Mikroschitch	Single-pole switch/ micro switch	Einpölig Schalter/ Micro schalter	Disjonteur monopolaire/ Micro schwitch
M	Motor	Motor	Motor	Moteur

## Wiring and Circuit Diagram Core 130 and Core 140 only



S1: Main switch;  
S2: Pressure switch;  
RC: Capacitor;  
TP: Thermal protector;  
M: Motor;  
L1: Winding;  
L2: Common mode Choke;  
B: Bypass valve;  
R: Rotor;  
P: Pressure;  
PCB: Speed control board;

### DANSK

Brun  
Blå  
Rød

### ENGLISH

Brown  
Blue  
Red

### DEUTSCH

Braun  
Blau  
Rot

### FRANCAIS

Brun  
Bleu  
Rouge

RC  
S1  
S2

Kondensator  
Afbryder  
Enpolet afbryder/  
Mikroschwich

Capacitor  
Switch  
Single-pole switch/  
micro switch

Kondensator  
Schalter  
Einpolig Schalter/  
Micro schalter

Condensateur  
Disjonteur  
Disjonteur monopolaire/  
Micro schwitch

M

Motor

Motor

Motor

Moteur