

Nilfisk

C120.5 X-TRA

C130.1 X-TRA



Repair Manual

Nilfisk

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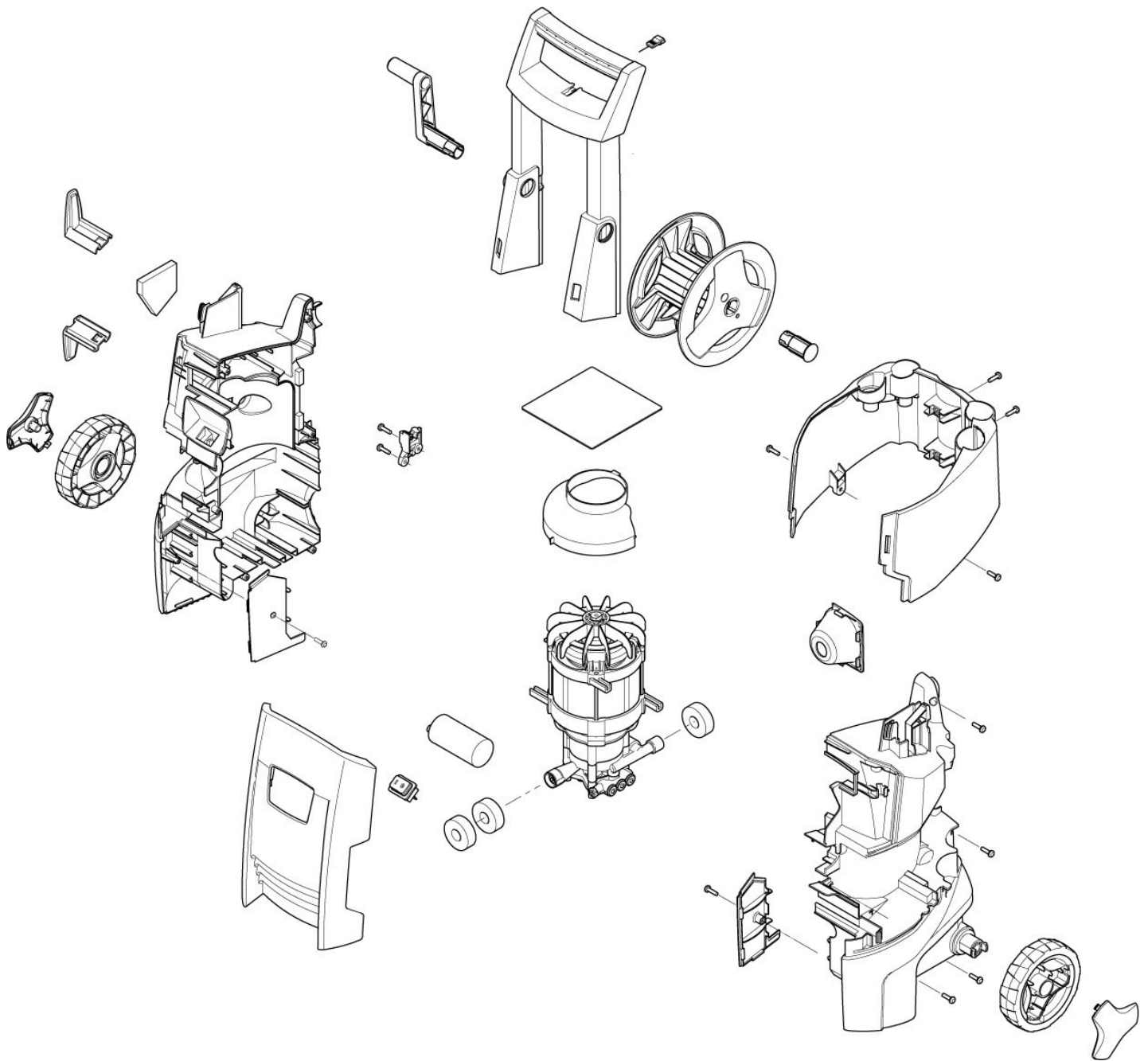
24-25

WARNING!

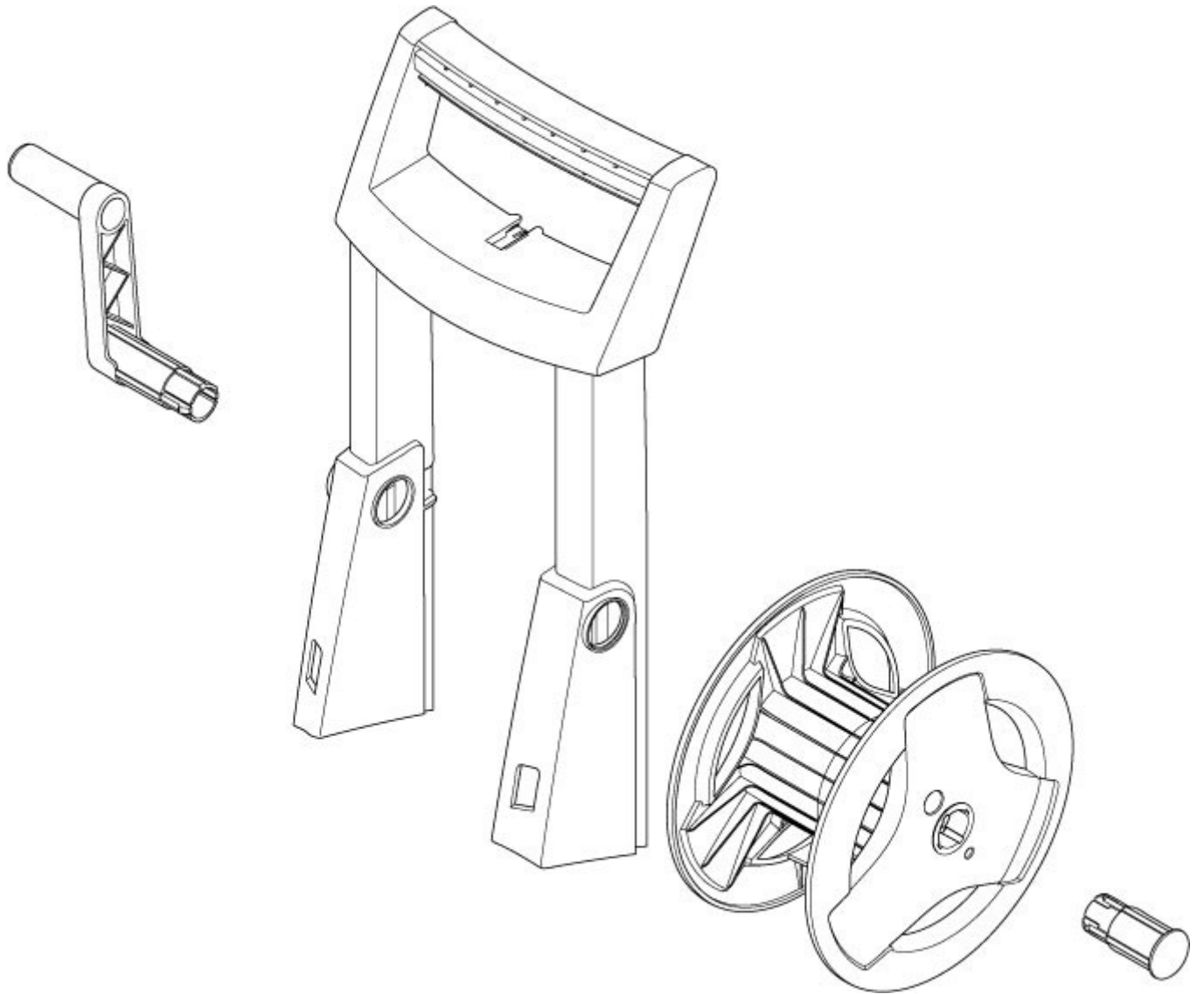
- High pressure jets can be dangerous. Never direct the water jet at persons, pets, live electrical equipment or the machine self.
- The operator and anyone in the immediate vicinity of the site of cleaning should take action to protect themselves from being struck by debris dislodged during operation. 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.

		C120.5	C120.5 X-Tra	C130.1
Product segment: Consumer				
Specification	bar	Max 120	Max 120	Max 130
Voltage	v	230	230	230
Frequency	Hz	50	50	50
Power consumption	A	7,4	7,4	7,8
Power absorbed	KW	1,7	1,7	1,8
Numbers of revolutions	rpm./ min.	2800	2800	2800
Water volume, HP	l / min.	5,5-6,3	5,5-6,3	5,5-6,3
Pump pressure	bar	90-106	90-106	95-111
Nozzle pressure	bar	83-99	83-99	88-104
Opening pressure	bar	110-130	110-130	115-130
Retaining time	min.	5	5	5
Oil contents	ml	80	80	80
Oil type		LHM 32	LHM 32	LHM 32
Max water inlet temperature	C	40	40	40
Max water inlet pressure	bar	10	10	10
High pressure hose length	m	6m Textile	6m Textile	6m Textile
Suction height	m	0,5	0,5	0,5
Electric cable	m	5m	5m	5m
Insulation class		F	F	F
Tightness		IPX5	IPX5	IPX5

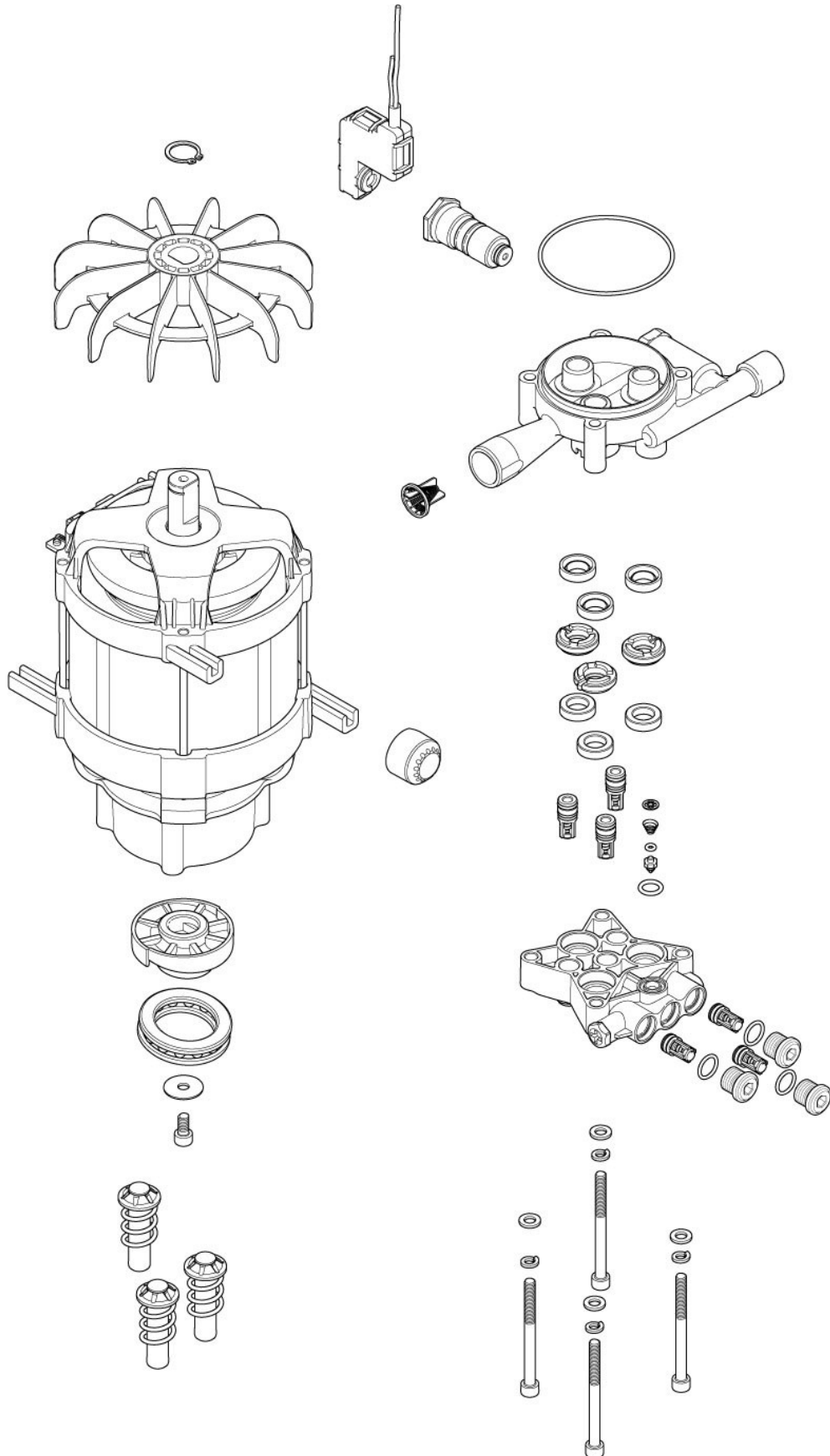
Construction of cabinet parts.



Construction of hose reel.



Construction of motor pump unit.



Dismounting / mounting of front cabinet and accessory storage.

1. Remove the handle (fig. 1) by pressing the 2 * 2 snap locks (fig.2). Loosen one side first and then the other side.
2. Remove the 2 torx (TX20) screws from the bag side (fig. 3) and the 2 torx screws from each side (fig 4 & 5)
3. Loosen the front cabinet from the accessories storage with a screw driver as shown on fig. 6. Now the front cabinet can be lifted upwards to dismount it. The accessories storage can be released by pulling it backwards.

Fig. 1

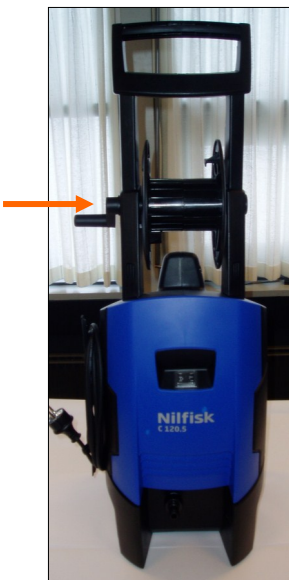


Fig. 2

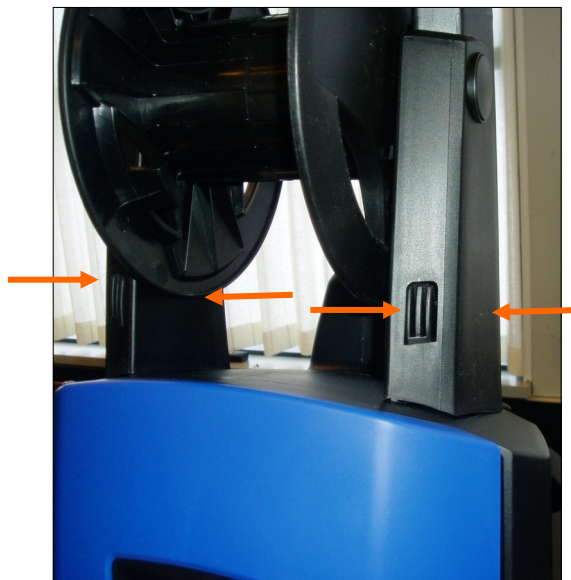


Fig. 3



Fig. 4

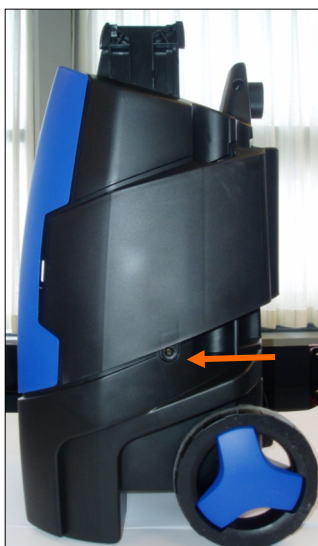
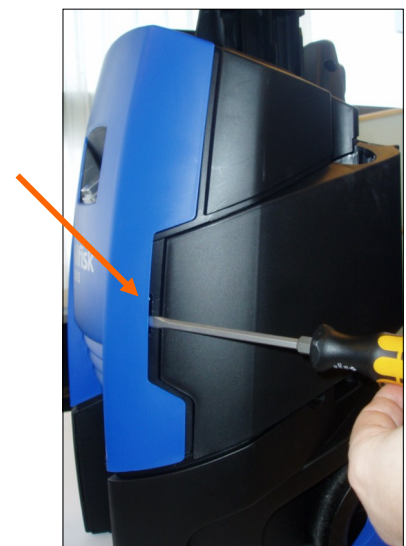


Fig. 5



Fig. 6



NOTE:

- When mounting the front cabinet first step is to slide the cabinet down (fig. 1) in the grooves (fig. 2) making sure that all grooves are fitted together.
- Then the accessories storage must be mounted. It is in the right position when the front cabinet and the accessories storage are clicked together, this must be done before to mount the screws.
- Last step after all is assembled is to mount the water outlet protection (fig. 3). This can easily be mounted by lightly pushing it in with the hand (fig. 4).



Fig. 1

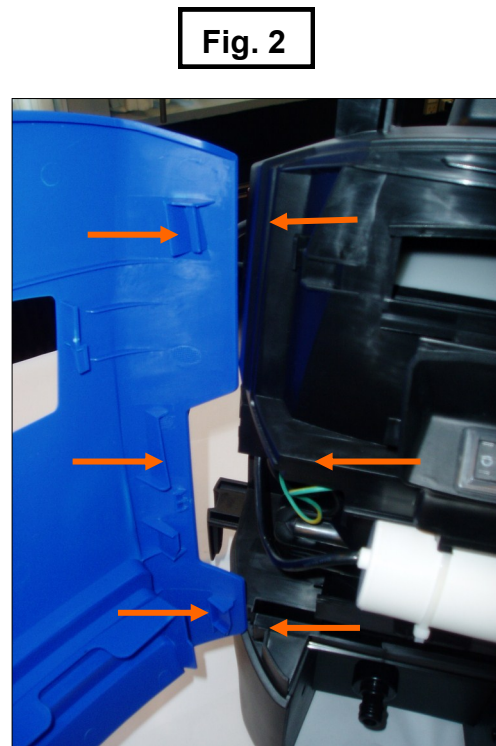


Fig. 2

Fig. 3

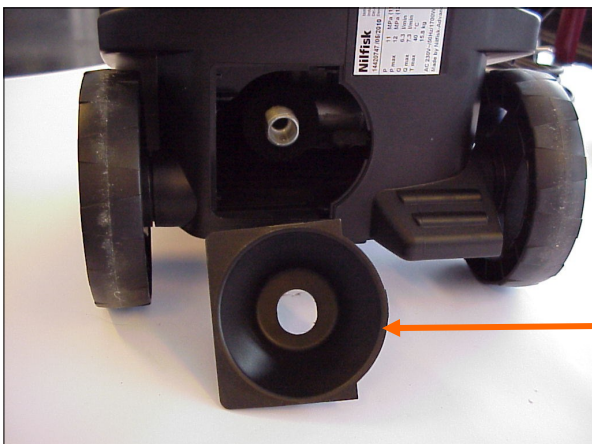
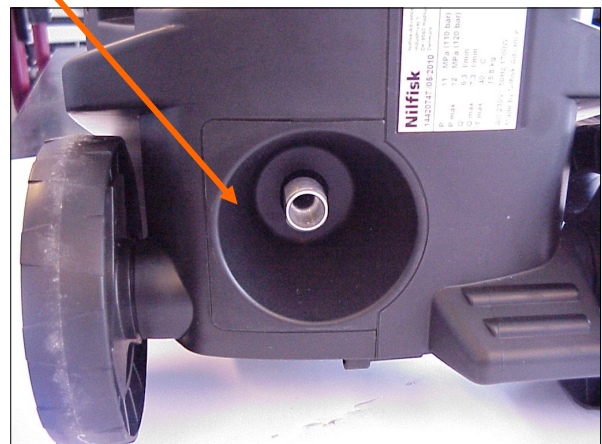


Fig. 4



Dismount / Mounting of Motor cover.

1. Remove the foam plug protection (fig. 1)
2. Unplug the capacitor wire, the motor wire and the earth connection.
3. Turn the MPU to the other side so that the screws are visible. Take off the wheel cap—loosen it with a screw driver or similar (fig. 3) and then take off the wheel by pressing the two taps together (fig. 4)
4. Remove the 6 torx (TX20) screws. (fig. 5) and then the top plastic part can easily be removed!

Fig. 1

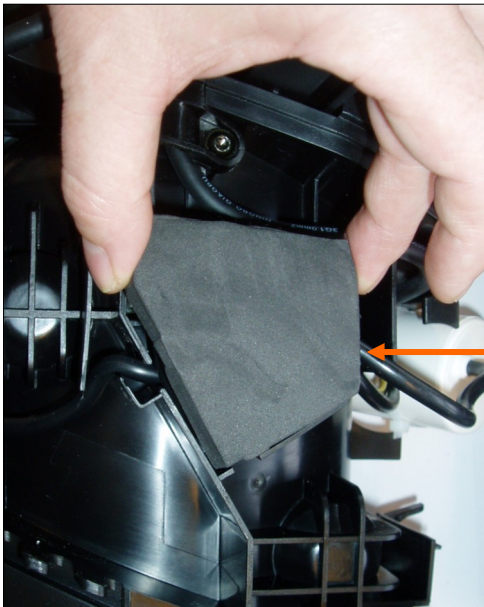


Fig. 2

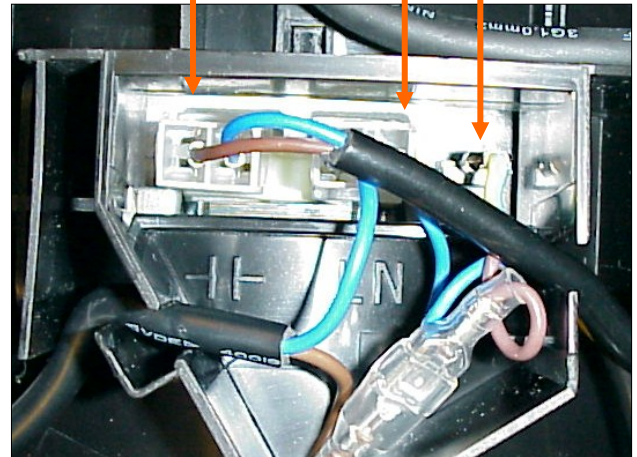


Fig. 5

Fig. 3

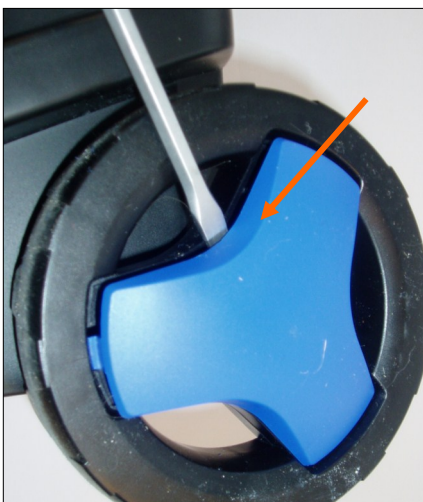
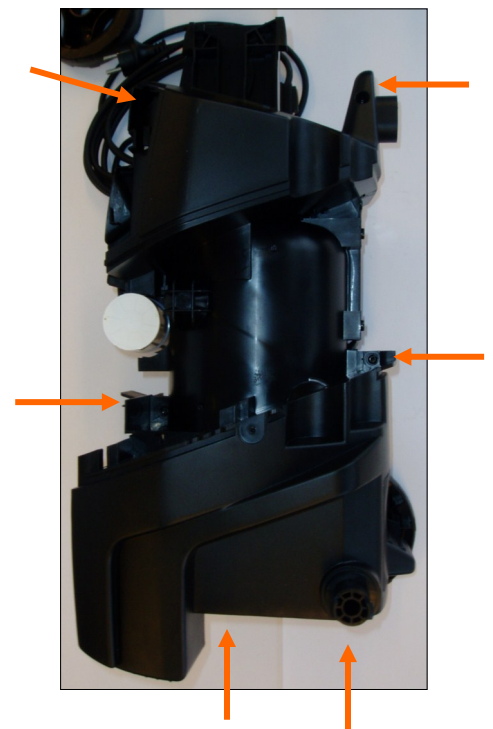
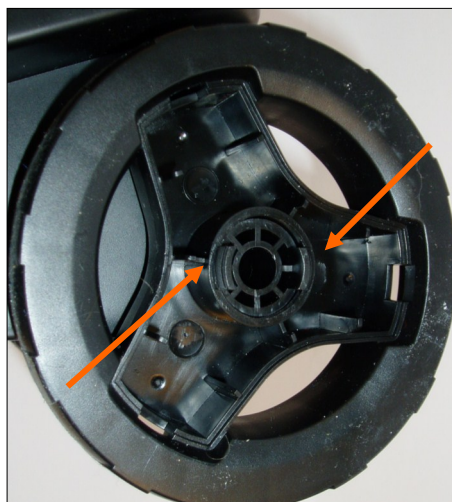


Fig. 4



Dismount / mounting of motor cover.

The motor / pump unit can now be lifted up from the cabinet, but the micro switch house must be dismantled before the MPU can be totally removed (fig. 1).

The micro switch box is removed by hand. It can be hard but it is just to be “broken” off!

When mounting the MPU again, first step is to mount the micro switch box. This can be done by hand (*alternatively use a plastic hammer (fig. 2), but be very careful to mount in the correct position*) Then place the MPU inside the cabinet, please be noted to place the wire correct (fig. 3)

Be aware that the two rubber plugs (fig. 4) are mounted before to mount the MPU.

Fig. 1

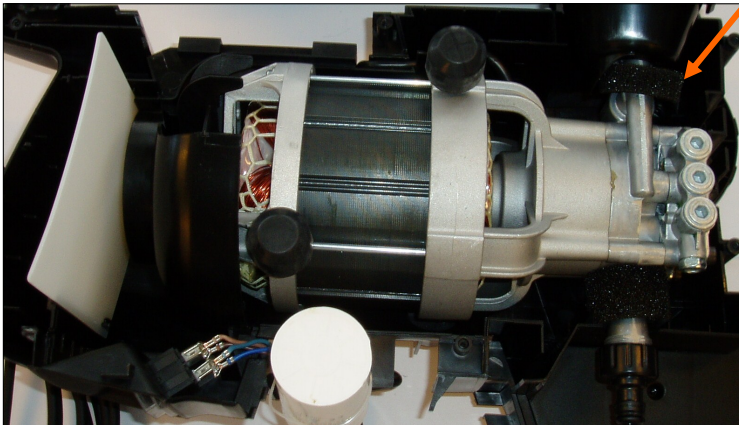


Fig. 2

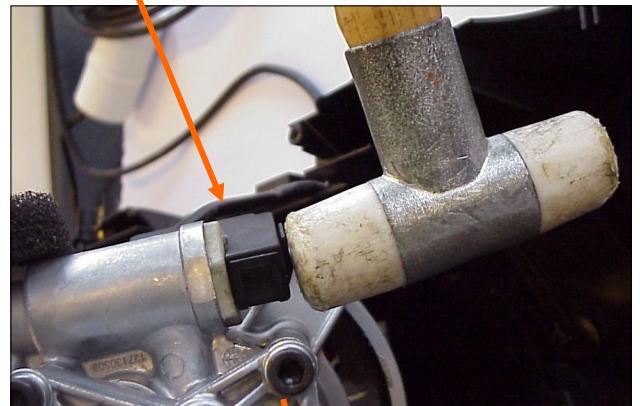


Fig. 3

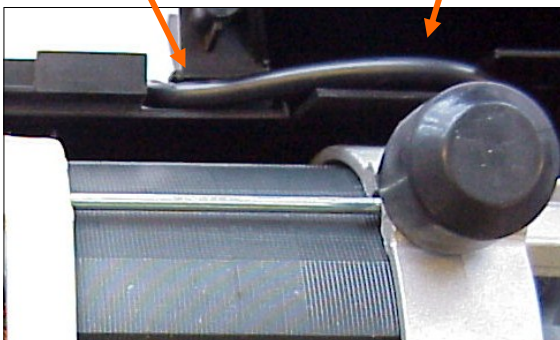
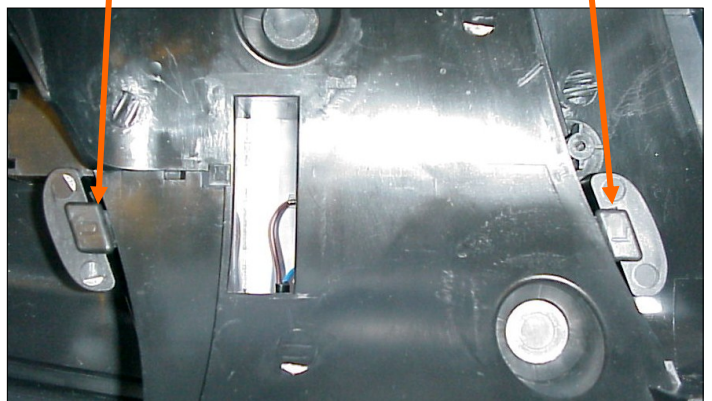


Fig. 4



Dismounting / mounting of motor cover.

- After placing the MPU in the cabinet, next is to mount the fan cover. Be sure that it is fixed in the right position in both sides (fig. 1)
- Then the water protection plate is mounted in the two grooves (fig. 2)

The capacitor must be fixed to the cabinet with a cable binder as shown on fig 3.

Fig. 1

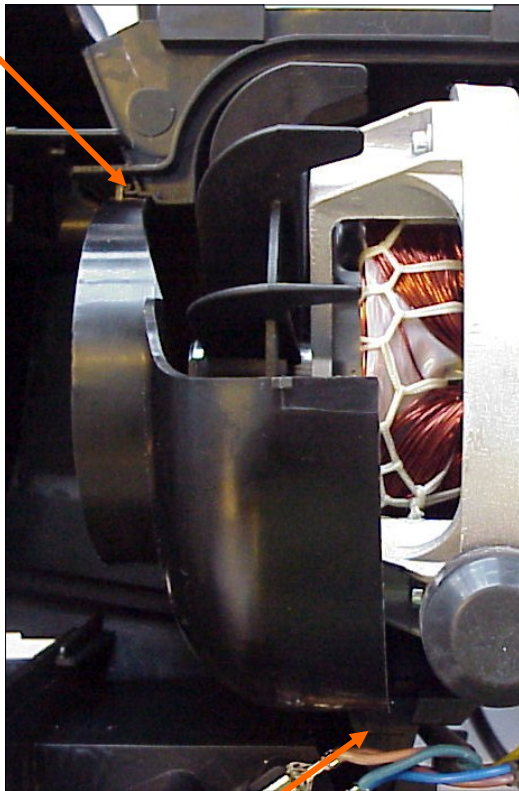
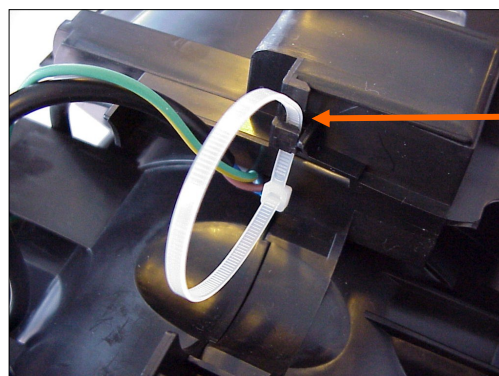


Fig. 2



Fig. 3



Dismounting / mounting of the pump.

1. Loosen the 4 screws that are on top of the pump (fig. 1) then the pump can be opened (fig. 2).

Note that some oil might come out when opening the pump!

2. Fig. 3 is an overview of the parts in the cylinder block.

Fig. 1

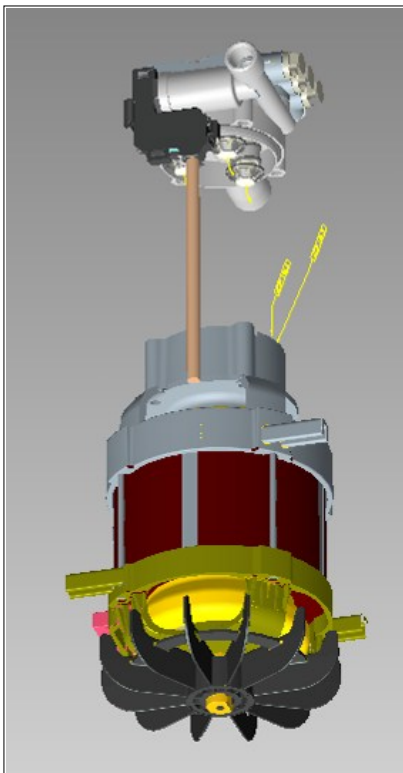


Fig. 2

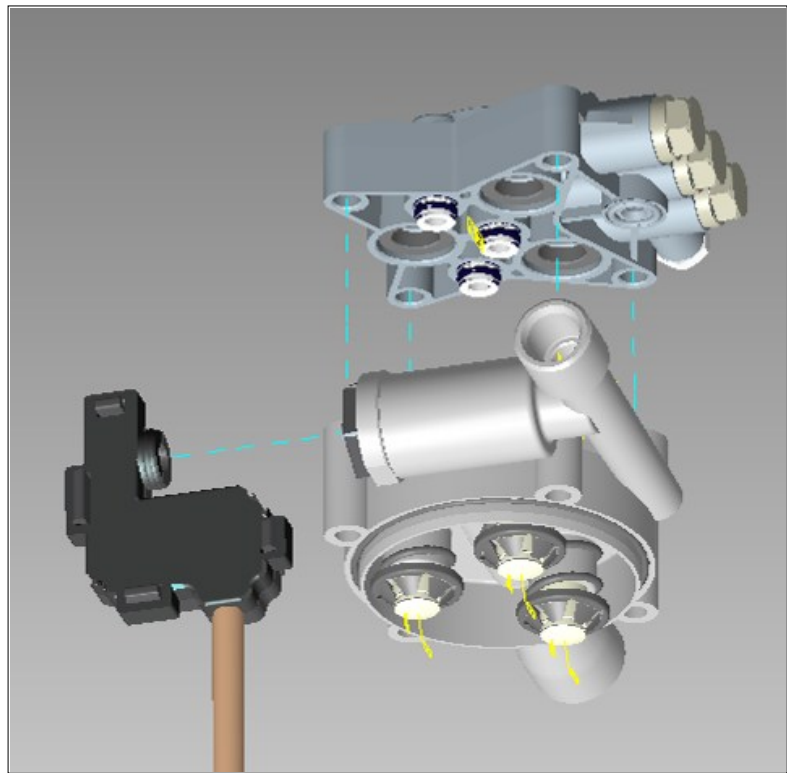
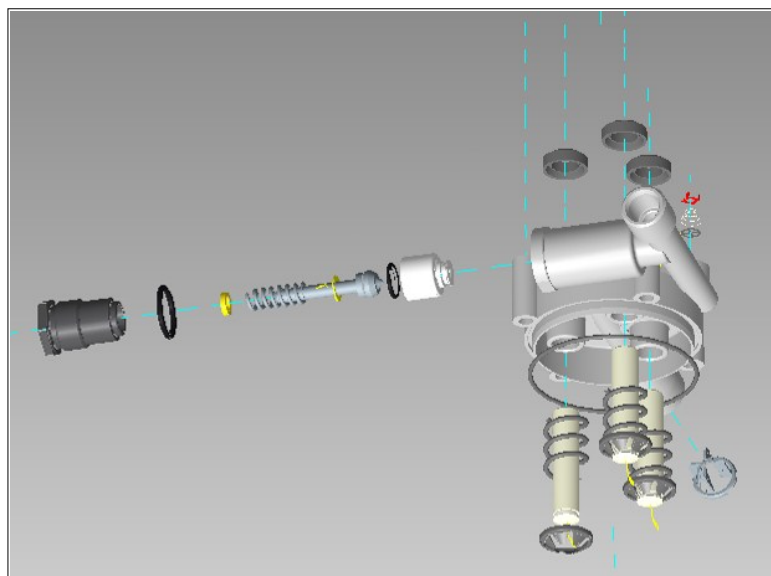


Fig. 3



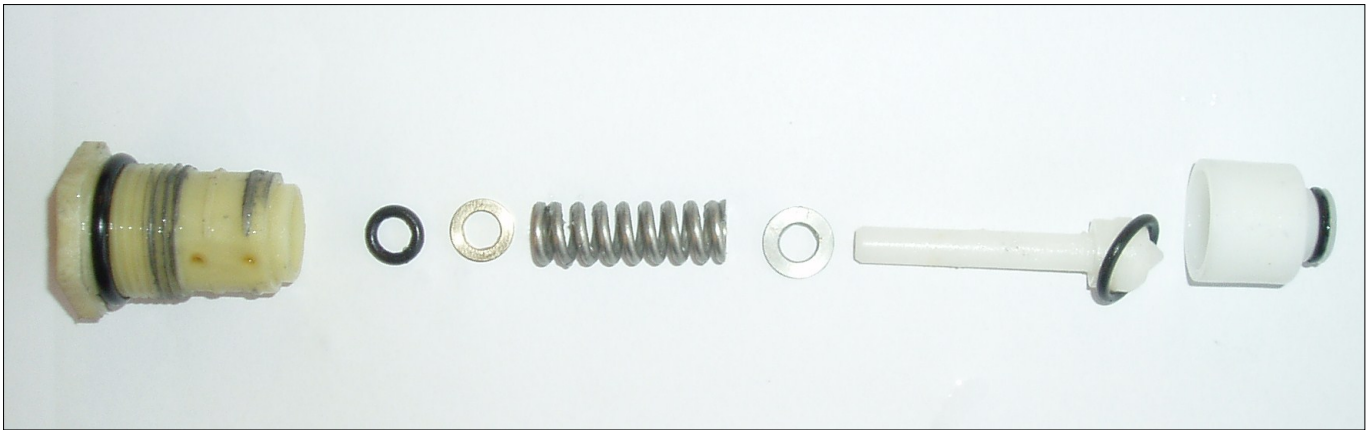
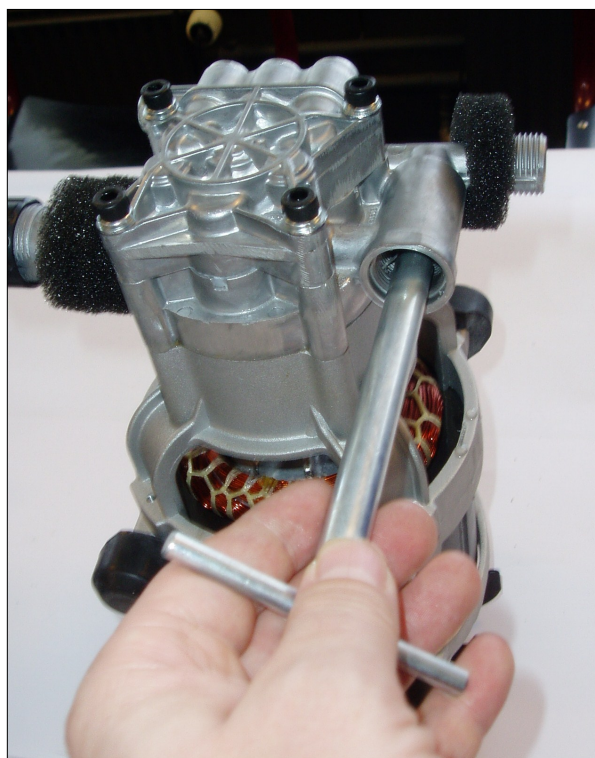
Dismounting / mounting of the start / stop valve.

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

A special tool is needed in order to take out the seat of the start / stop valve (fig 2)

Please use "Puller for valve seat M4" item number 31000189.

NOTE: the valve seat is no longer usable after using the puller.

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

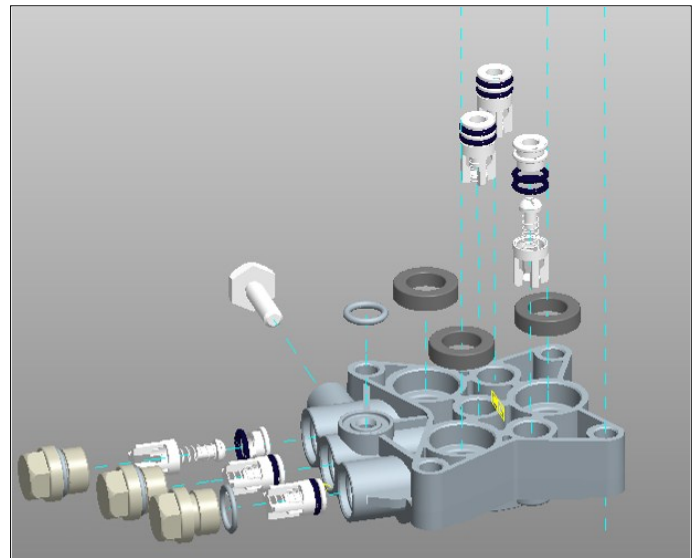


Fig. 3



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.

When mounting the bearing system on the wobble disk, the bearing with the printed number (fig 4) MUST be mounted downwards on the wobble disk (fig 3) , so that the number cannot be seen when mounted.

Fig. 1



Fig. 2

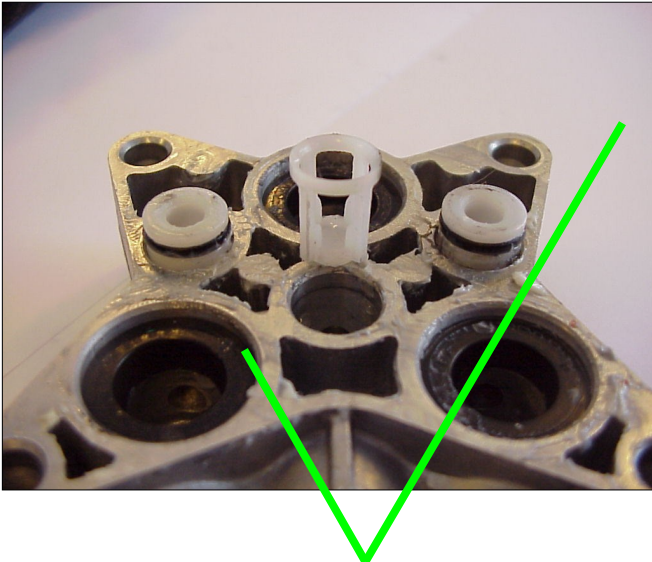


Fig. 3

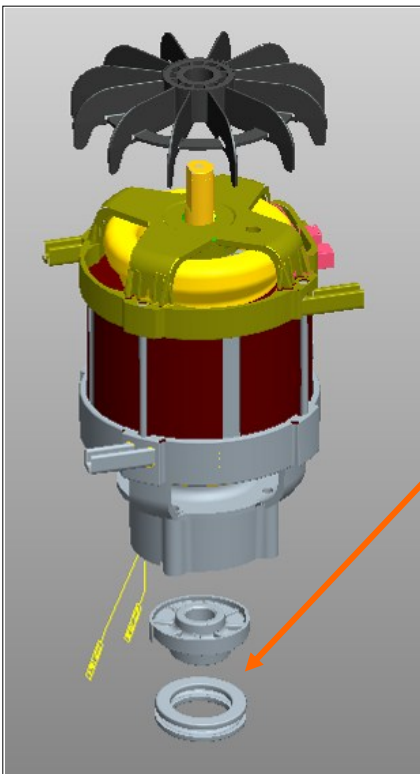
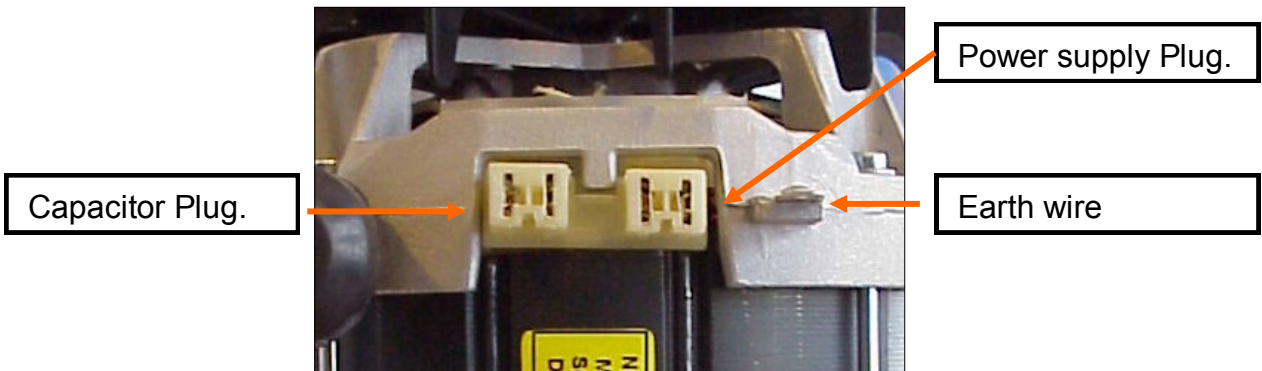
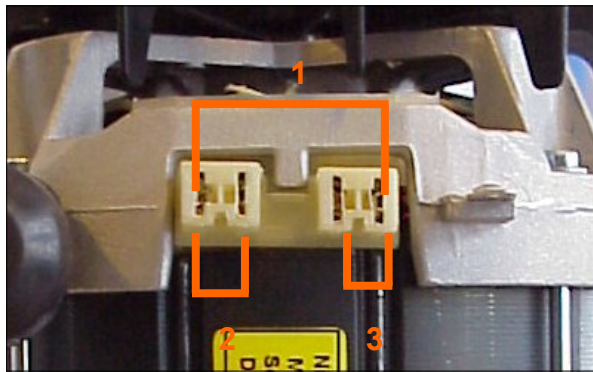


Fig. 4

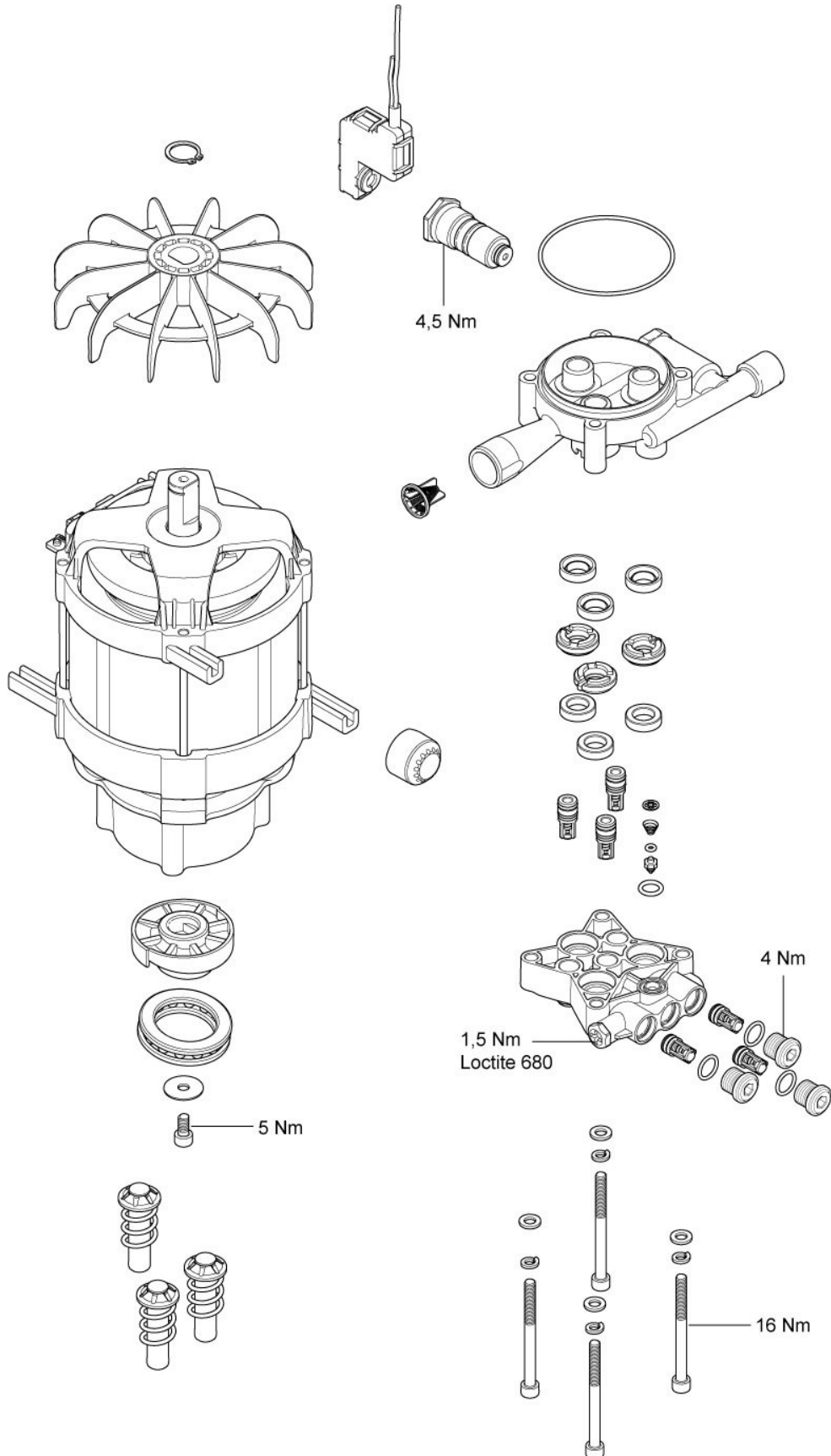


Guidance of measuring the resistance of electrical motor.

- 1,7 KW Motor**
- 1. 6,1 ohm +- 10 %
 - 2. 8,9 ohm +- 10 %
 - 3. 2,8 ohm +- 10 %

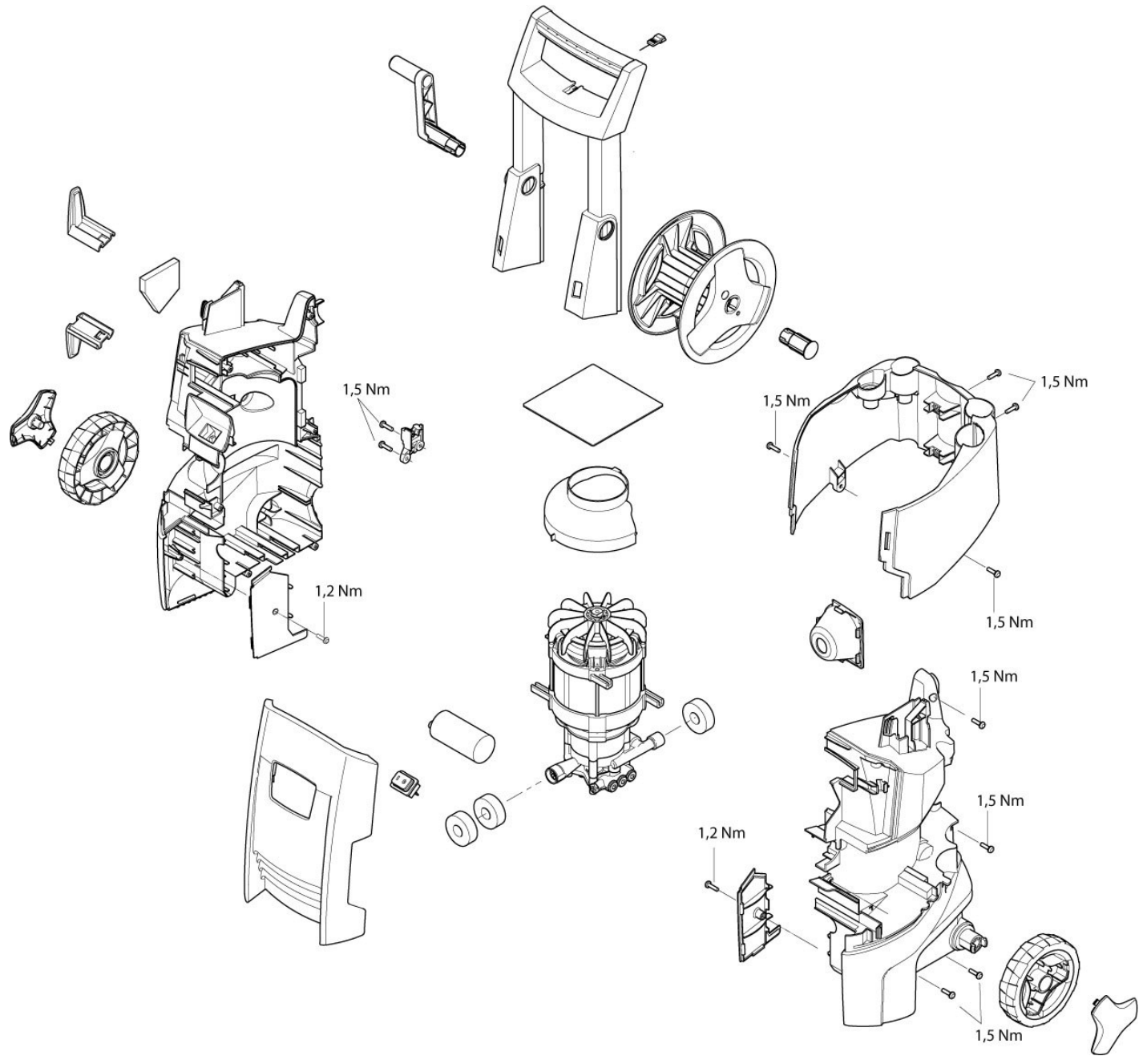


Pump torque.





Cabinet torque.



Recommended oil types:

The pump is filled with 80 ml LHM 32 from the production.

In case of service where the oil must be changed Nilfisk-Advance recommends to use 80 ml Bartran HV 46.

Alternative oil types that are allowed:

BP, Bartram HV 46

Shell, Tellus T 46

Exxon, Statoil Unavis 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

Recommended glue:

Loctite 680, alternatively Loctite 270 or 271

Special tools:

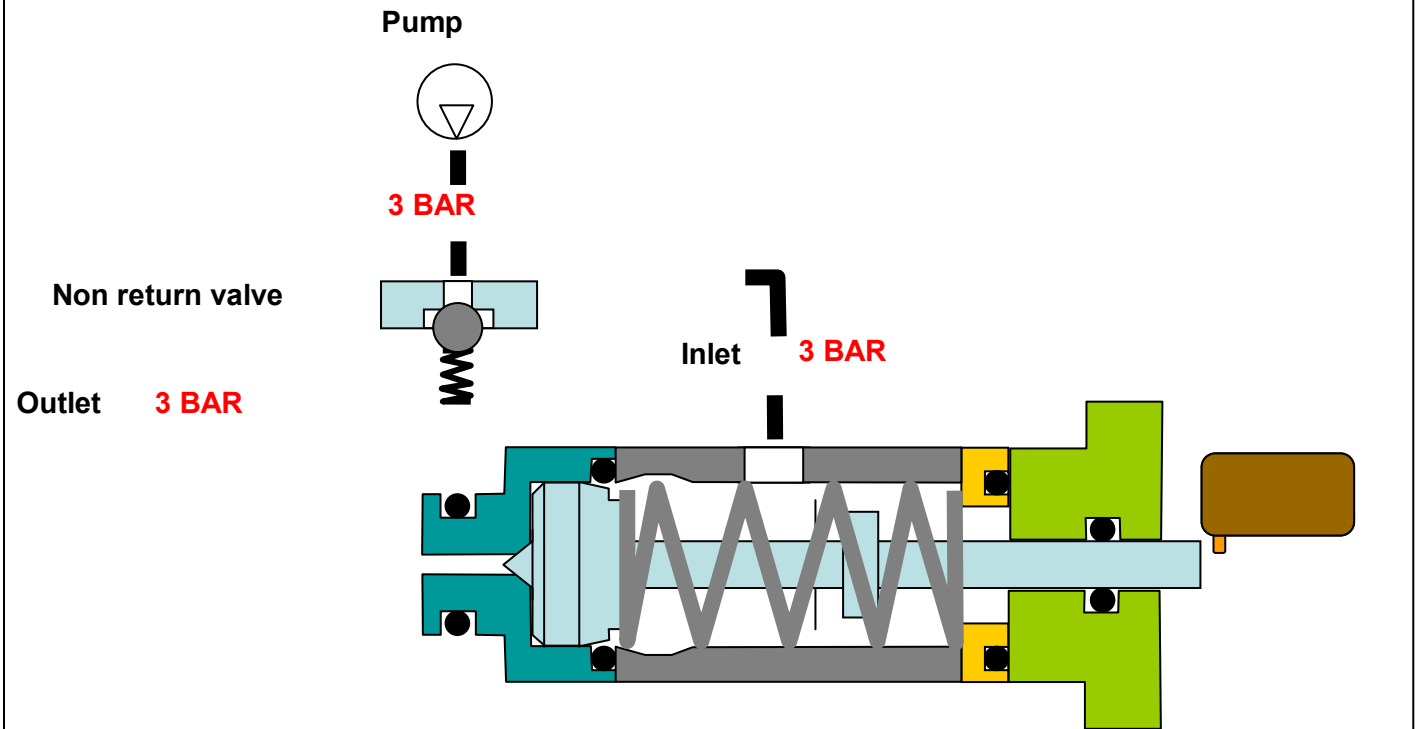
Puller for valve seat M4—item number 31000189 (Page 14).

Puller for valve seat (pressure and suction valve) - item number 1220103 (Page 15)

3.0 Start stop System guide

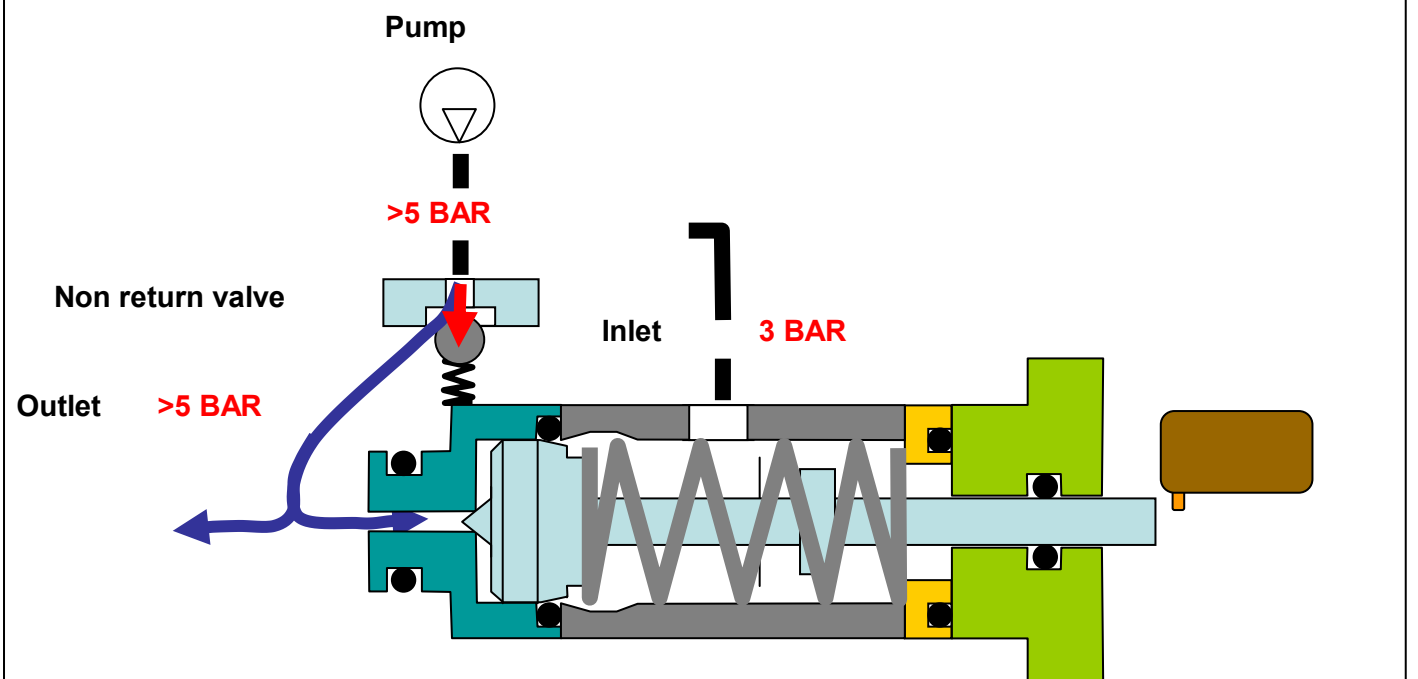
3.1 No pressure in system

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



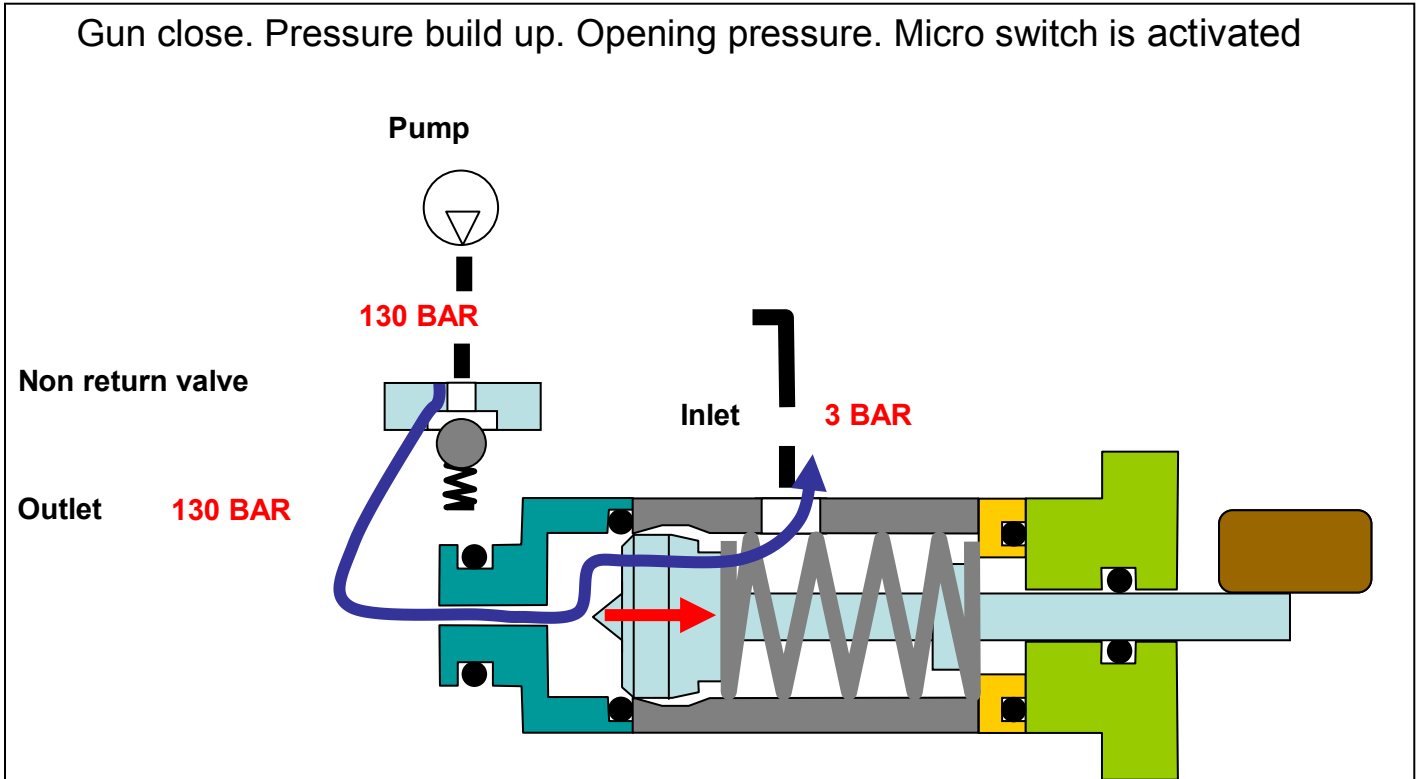
3.2 Start up-pressure build up

Machine switch on / Start up – Pressure build up



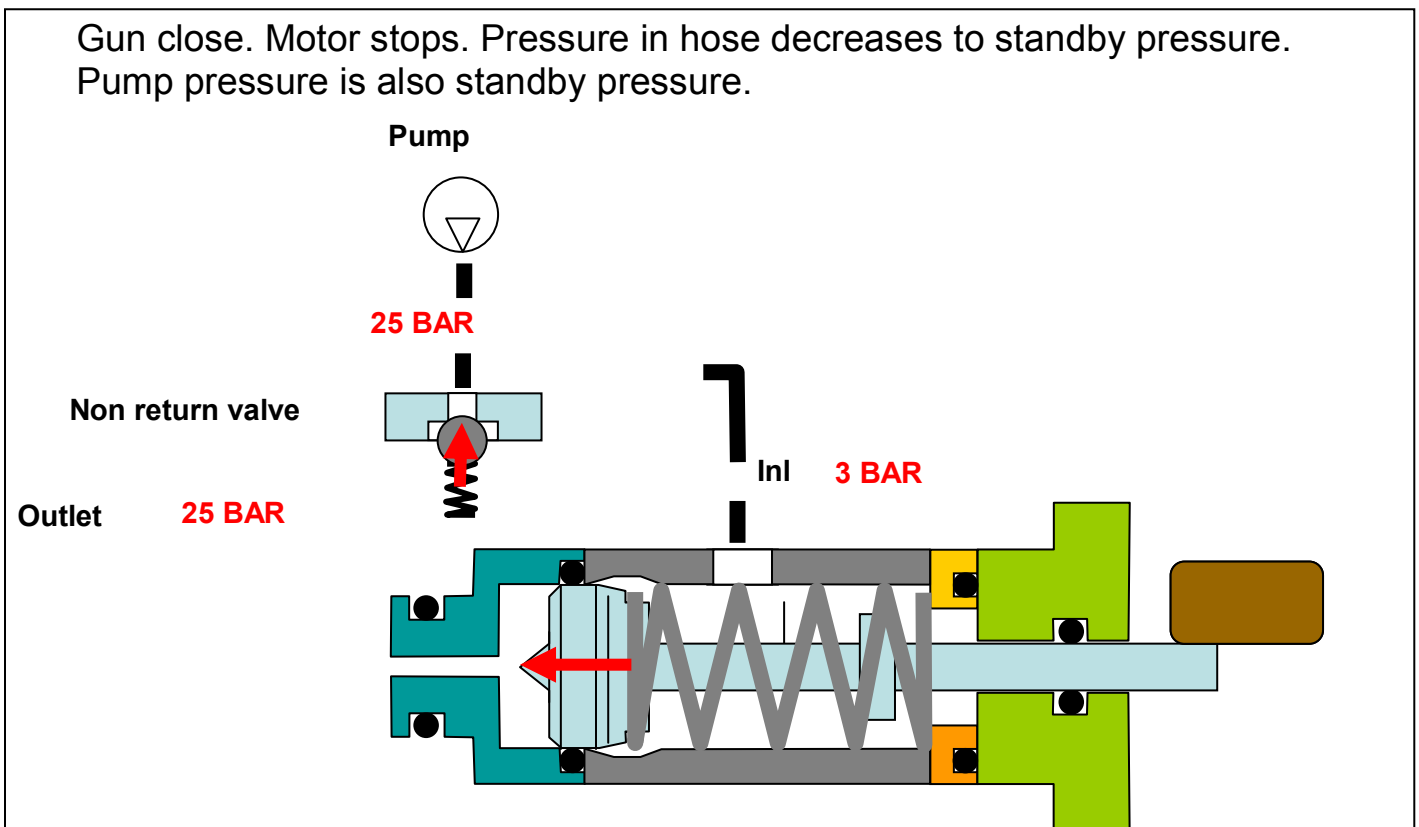
3.3 Pressure build up-opening pressure / close gun

Gun close. Pressure build up. Opening pressure. Micro switch is activated



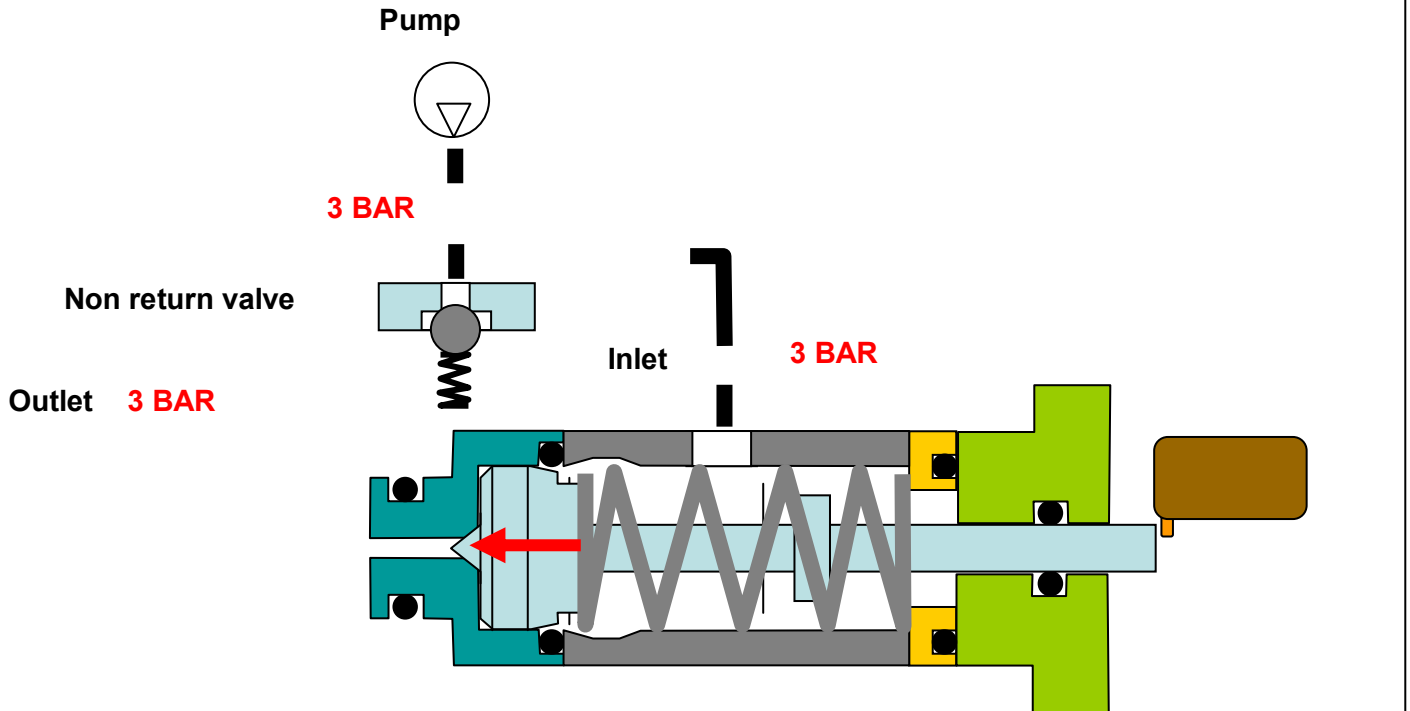
3.4 Motor stop – Standby pressure

Gun close. Motor stops. Pressure in hose decreases to standby pressure. Pump pressure is also standby pressure.



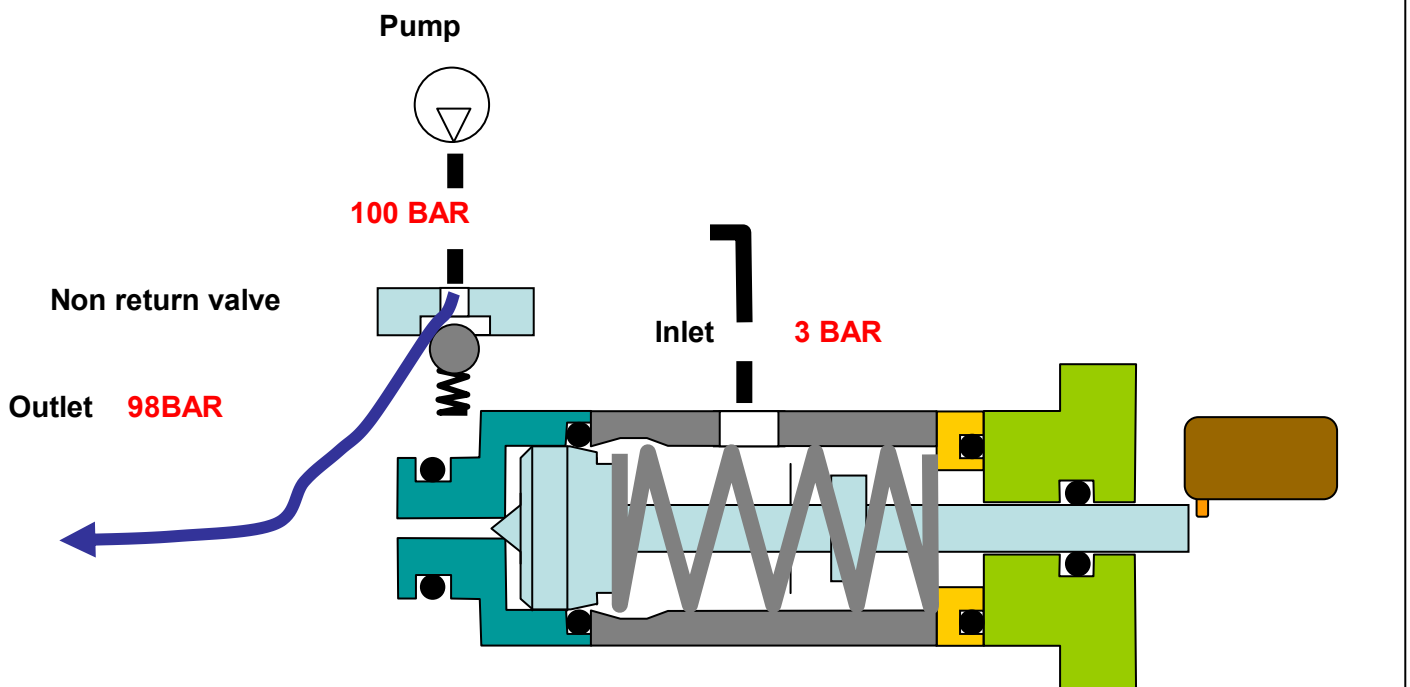
3.5 Gun is activated

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

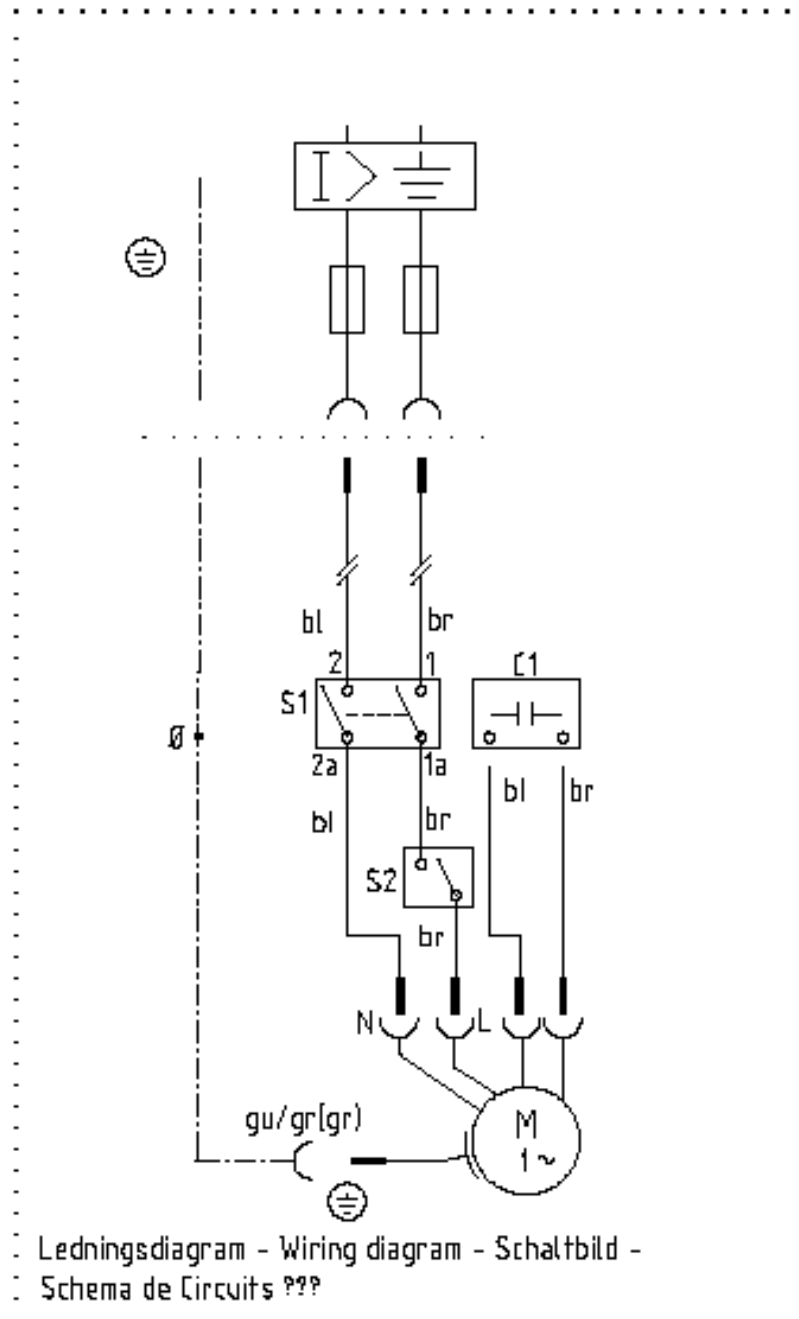


3.6 Machine run

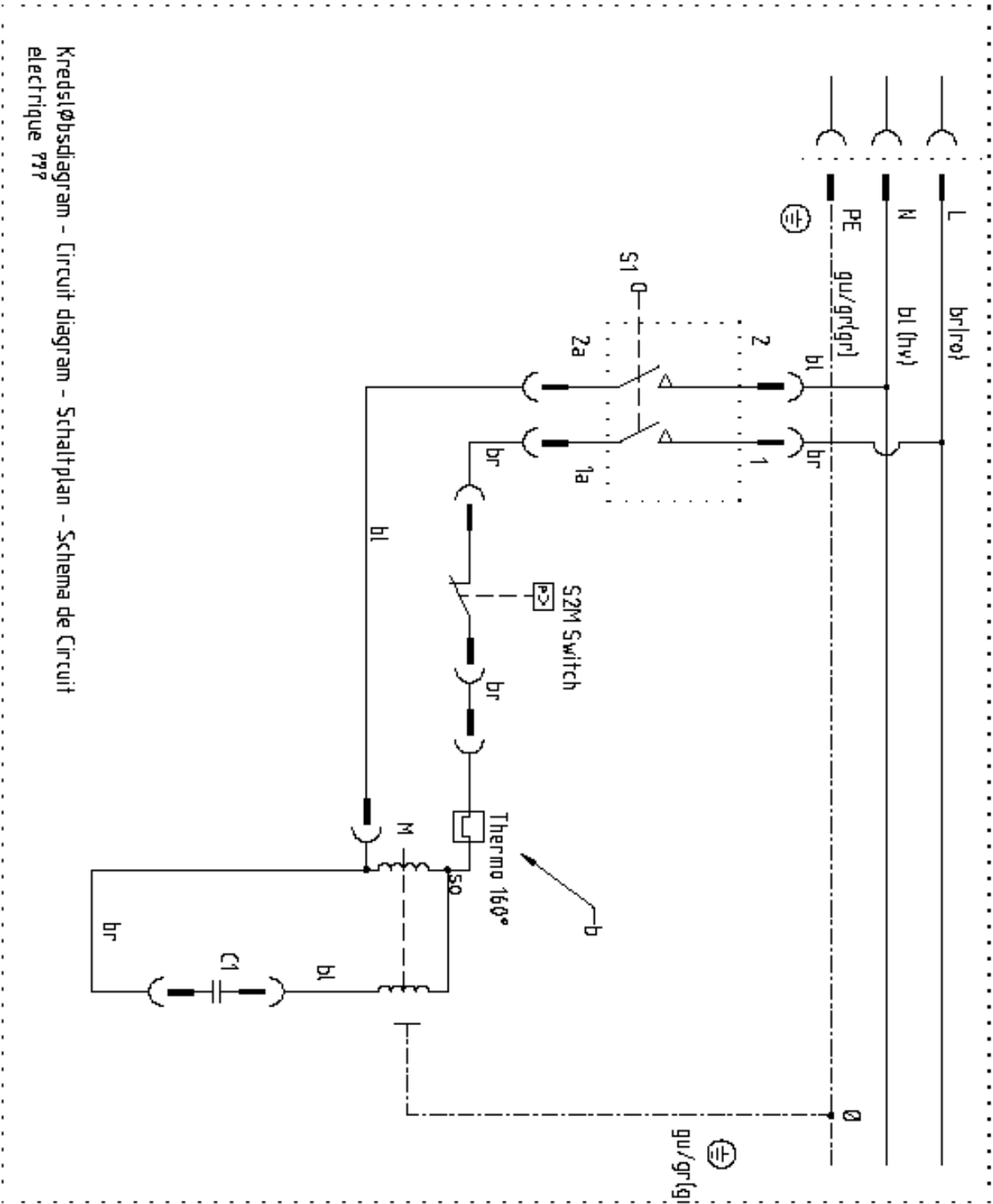
Machine runs (normal working pressure). Gun is open.



Wiring Diagram



Wiring Diagram



Kredsløbsdiagram - Circuit diagram - Schaltplan - Schema de Circuit
 électrique ???