

® Operating Instructions  
High-Pressure Cleaner



THE LATEST TECHNOLOGY AT AFFORDABLE PRICES



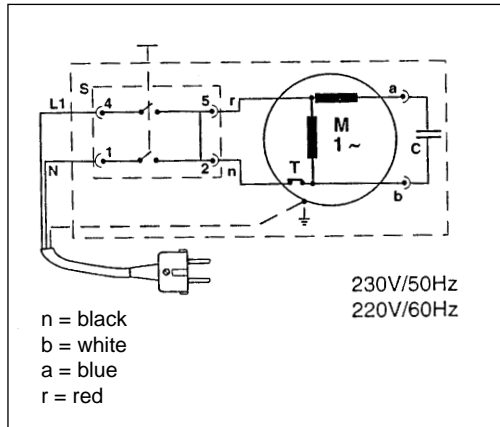
Art.-Nr.: 41.409.74

HT **2020 F**

**⚠ Important!**

Please read these instructions carefully before installing and operating the high-pressure cleaner.

**Circuit diagram and codes:**

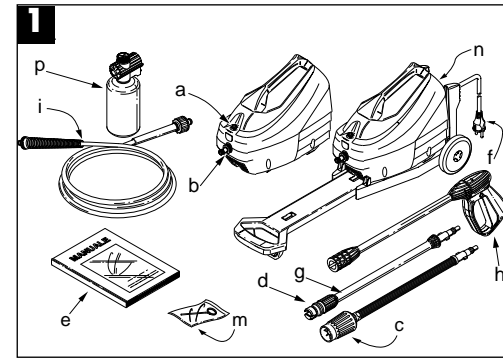


Kickback force on the pistol at maximum pressure:  
14.3 N. Sound pressure level measured with a sound level meter at ear height at a distance of 1 m: 70 dB(A).

**Technical data:**

Operating pressure max.:	115 bar
Volume flow max.:	5.5 l/min.
Power supply:	230 V - 50 Hz
Motor rating:	1,8 kW
Water inlet max.:	60°C
Water inlet max.:	10 bar
Weight:	13 kg
Kickback force on the pistol	
at max. pressure:	14.3 N
Measured sound pressure level:	70 dB (A)

**Overview:**



**Fig. 1**

- a = Water outlet
- b = Water inlet with filter
- c = Rotating nozzle (special accessory)
- d = Adjustable nozzle head
- e = Operating instructions
- f = Mains cable with plug
- g = Lance
- h = Pistol handle
- i = High-pressure hose
- m = Cleaner for the nozzle head
- n = ON/OFF switch
- p = Detergent tank

**1. Introduction**

The high-pressure cleaner you have bought is a piece of high-tech equipment made by one of Europe's most experienced manufacturers of high-pressure pumps. To get the most out of your equipment, it is vital that you read and follow these instructions. We wish you every success with our high-pressure cleaner.

## 2. Safety regulations

### Warning:

- Never use the high-pressure cleaner with inflammable, toxic or other such liquids as could impair the correct operation of the high-pressure cleaner. Risk of explosion or poisoning!
- Never direct the water jet at persons, animals or plants.
- To avoid the risk of electrical shock, never direct the water jet at the machine itself, at electrical parts or other electrical equipment.
- Never use the high-pressure cleaner in the rain. Risk of short-circuiting!
- Never allow the high-pressure cleaner to be used by children or unauthorized persons. Risk of injury!
- Never touch the plug or socket-outlet with wet hands as this could result in electric shock!
- Never operate the high-pressure cleaner when the mains cable is damaged. Risk of electric shock and short-circuiting!
- Never operate the high-pressure cleaner with a damaged high-pressure hose. Risk of bursting!
- Never lock the pistol trigger in the ON position. Risk of injury!
- Never change or adjust the setting of the control valve. Risk of bursting!
- To avoid malfunctioning, never change the original diameter of the water jet.
- Never leave the high-pressure cleaner unattended.
- To avoid the risk of short-circuiting, do not carry the high-pressure cleaner by the mains cable.

### Safety precautions

- To avoid short-circuiting, all live parts must be protected against the water jet.
- Connect up the high-pressure cleaner only to an approved, earthed power source. An earth-leakage circuit-breaker (30 mA) will provide additional personal protection.
- As the high pressure can cause parts to rebound, always wear protective clothing and goggles when operating the machine.
- To prevent the high-pressure cleaner from starting up by accident, always disconnect from the mains before doing any maintenance or repair work on the machine.
- As the high-pressure jet has a kickback effect, make sure you have a firm hold of the pistol when pressing trigger.

- Observe the regulations of your local water board. Under DIN 1988, the high-pressure cleaner can be connected up to the drinking-water supply only if the feed pipe is fitted with a safety device to prevent backwater with drainage.
- The electrical parts must be serviced and repaired only by a qualified electrician.
- Always release the residual pressure before disconnecting the hose from the high-pressure cleaner.
- Make sure the screwed parts are screwed on tightly and check the other components of the high-pressure cleaner for damage or wear and tear both before use and at regular intervals.
- Make sure that people and animals do not come within 15 m of the high-pressure cleaner when in use.

## 3. General regulations

### Please keep these instructions carefully for future reference.

- Before switching on the high-pressure cleaner, make sure the water supply is in good working order. Dry running will cause serious damage to the seals.
- Never pull on the mains cable in order to remove the plug.
- If the high-pressure cleaner is too far away from the objects to be cleaned, do not move it by pulling the high-pressure hose but instead use the handle provided.
- To avoid damaging the seals, do not operate the high-pressure cleaner for longer than 1 minute when the pistol is closed.
- In the winter months, store the high-pressure cleaner in a frost-free place.
- Make sure the air vents are not blocked when operating the machine.
- The cross-section of the extension cable must be in keeping with the length, i.e. the longer the lead, the thicker the cable must be. Furthermore, use only cables of the protection type „IP X 5“. The exact values are listed in the table.

**Motor:**

Voltage 230V ~ 50Hz

Extension up to 25 m      cross section 3 x 1.5 mm<sup>2</sup>Extension up to 50 m      cross section 3 x 2.5 mm<sup>2</sup>

Voltage Volt 100-115

Extension up to 25 m      cross section 3 x 2.5 mm<sup>2</sup>Extension up to 50 m      cross section 3 x 4 mm<sup>2</sup>

- Use the high-pressure cleaner near the water supply in question.
- The packing materials can be recycled and must therefore be disposed of in compliance with the prevailing regulations.
- The high-pressure cleaner may be operated only with the manufacturer's original accessories and spare parts. The use of original parts is at the same time a guarantee for the safe and fault-free operation of the high-pressure cleaner.
- The high-pressure cleaner may be operated only in a horizontal position.

**Applications**

- The high-pressure cleaner is intended exclusively for the cleaning of vehicles, machines, boats, buildings etc. from which it removes stubborn dirt using a jet of clean water and chemical detergents.
- Use only chemical detergents which have been proven to be biodegradable.
- Vehicles may be cleaned only on premises equipped with the necessary oil separation system.

**Safety system**

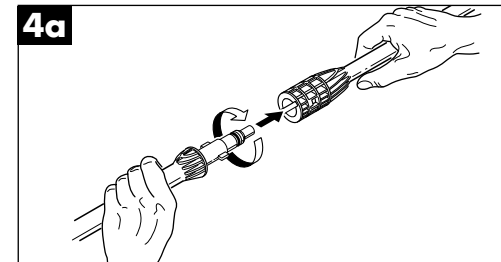
The safety valve also functions as a pressure limiting device. When the pistol is closed, the valve opens and allows the delivered water to circulate in the pump.

**4. Installation**

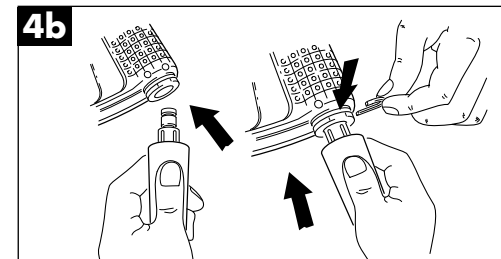
- Connect the lance to the pistol. To do this, insert the lance in the pistol and turn it clockwise as far as it will go.

**Important!**

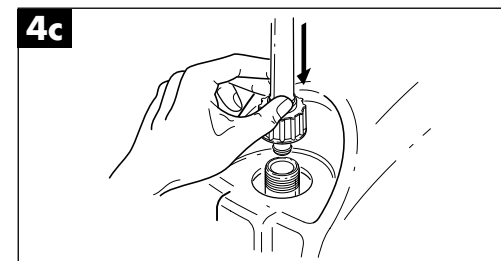
**Make sure the lance is securely attached to the pistol.**



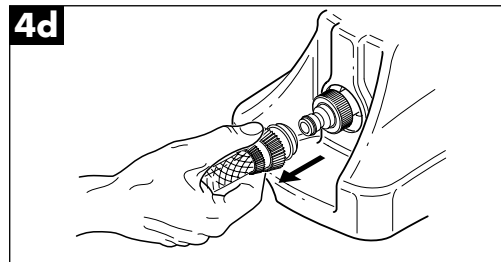
- Connect the pistol to the high-pressure hose.



- Connect the high-pressure hose to the water outlet of the high-pressure cleaner.



- Connect the water supply hose (not supplied) to the inlet of the high-pressure cleaner. The hose must measure at least 13 mm in diameter. The water supply must have sufficient pressure to deliver the quantity of water pumped by the high-pressure cleaner.



The temperature of the water jet is not to exceed 60°C. The water pressure is not to exceed 10 bar.

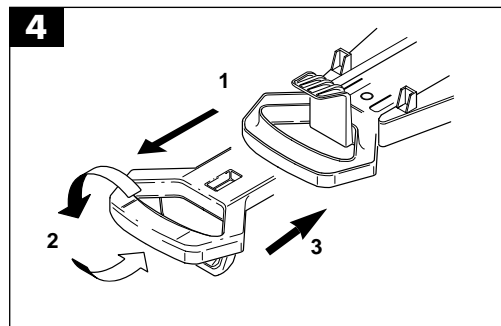
**Important:**

**The high-pressure cleaner should be operated with clean water. Unfiltered water or corrosive chemical agents will damage the high-pressure cleaner.**

- The motor switch must be in the OFF position.
- The socket-outlet intended for the high-pressure cleaner must supply the voltage and frequency specified on the rating plate.
- If the motor stops during operation and does not start up again, wait 2 or 3 minutes before switching it on again.

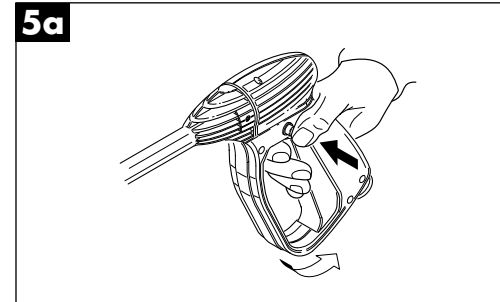
**Attaching the handle: Fig. 4**

1. Pull the handle completely out of its holder
2. Turn the handle 180°.
3. Re-insert the handle in the holder on the chassis.

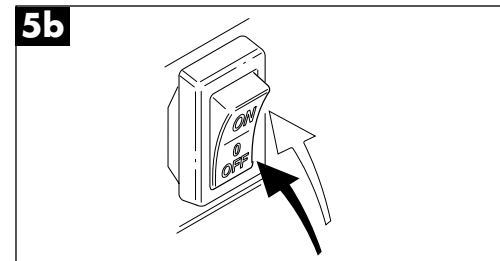


**5. Operation**

- Open the water tap as far as it will go.
- Press the pistol trigger (Fig. 5a) and allow any air to escape.

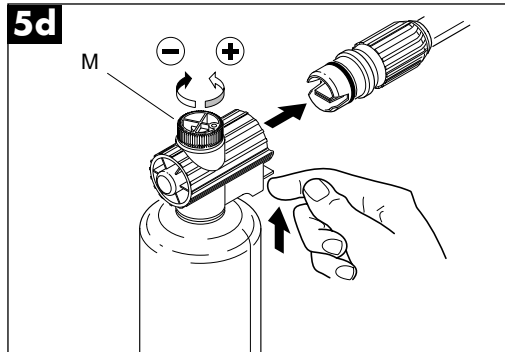


- With the pistol open, switch on the motor by pressing the switch.



**Using detergent**

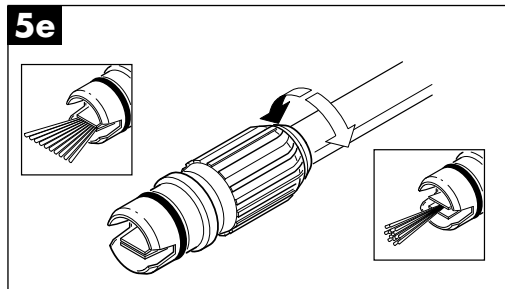
- Fill the tank of the foam spray lance with detergent (capacity approx. 0.5 l).
- Set the nozzle to „flat jet“ and attach the tank for foam cleaning.



- Distribute the detergent delivered and mixed with water.

**Using the standard accessories**

- The high-pressure cleaner is fitted with a nozzle head that allows you to regulate the jet from concentrated to flat jet.



- The nozzle head also has a foam distributor tank with a knob to regulate detergent intake.

**Correct use of the rotating nozzle (only for models with a rotating nozzle)**

To enhance washing performance, use the rotating nozzle supplied as follows:

- Switch off the high-pressure cleaner.
- Take off the regulating lance and attach the rotor nozzle to the pistol handle.
- Switch on the high-pressure cleaner again.

**Cleaning recommendations**

- First release the dirt by spraying the dry surfaces of the object to be cleaned with the flat jet. For vertical surfaces, always work from bottom to top. Allow the detergent to take effect for 1-2 minutes, but make sure it does not dry. Then clean using the flat or high-pressure jet, starting at the bottom and always at a distance of at least 30 cm.
  - Switch off the high-pressure cleaner.
  - Turn off the water tap.
  - Release any residual pressure in the pistol until there is no water left in the adjustable nozzle head.
  - Secure the pistol.
  - Remove the plug from the socket-outlet.
- 
- Before putting away the high-pressure cleaner for the winter, rinse it out with a mild, non-toxic antifreeze.

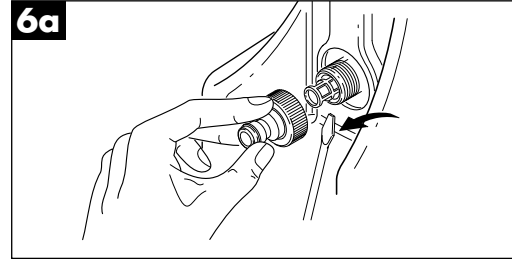
## 6. Maintenance



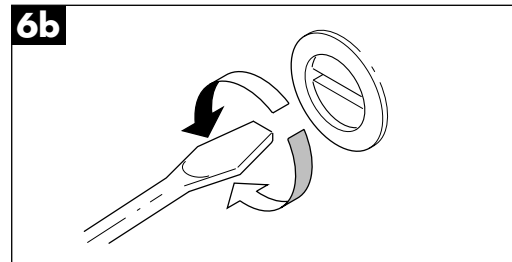
### Important!

Always disconnect from the mains before doing any maintenance or repair work.

- To maintain the high-pressure cleaner in perfect working order, the intake filter must be checked and cleaned after every 50 hours of operation.

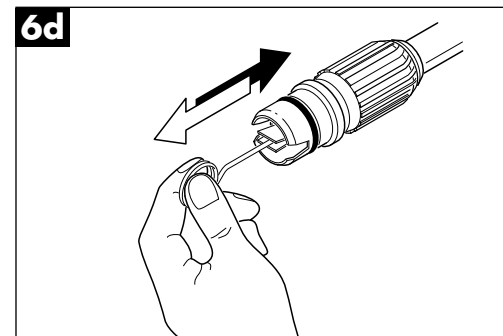
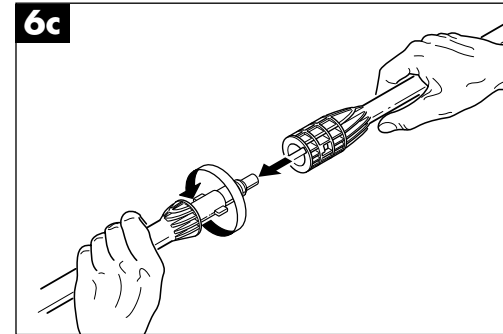


- If the machine has not been used for a long time, it may be furred up inside. Unblock the motor with a screwdriver inserted in the borehole at the rear.



Then remove the key and proceed to start up the high-pressure cleaner.

- Clean the nozzle head using the cleaner supplied. After dismantling the lance (Fig. 6c), remove any dirt from the borehole on the head (Fig. 6d) and rinse thoroughly.




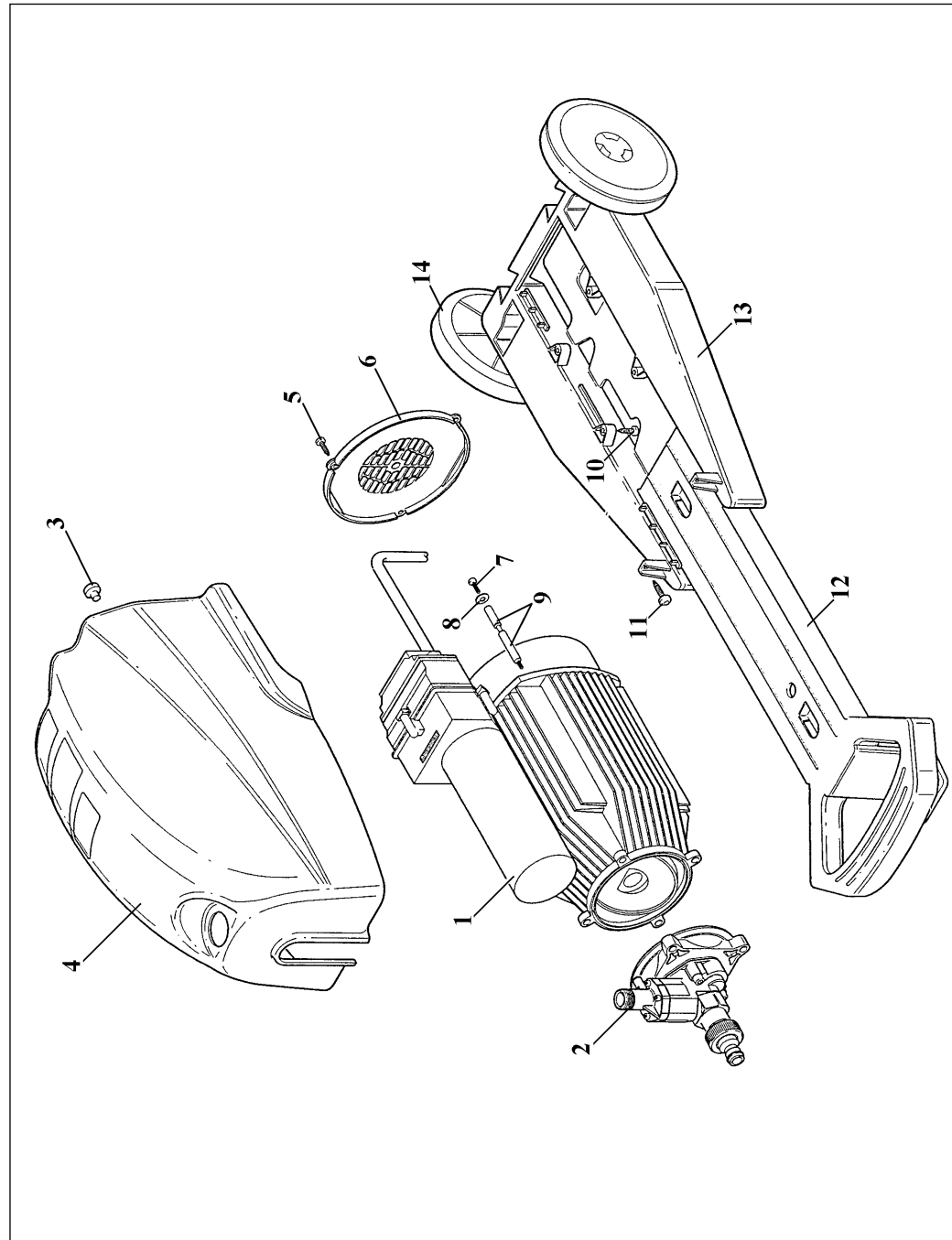
**7. Faults and their remedies**

<b>Fault</b>	<b>Cause</b>	<b>Remedy</b>
- Pump does not generate the prescribed pressure	<ul style="list-style-type: none"> <li>- Wrong or worn nozzle</li> <li>- Intake filter is clogged</li> <li>- Inadequate water supply</li> <li>- Air is being drawn in</li> <li>- Pump has not been rinsed out</li>   <li>- Adjustable head inserted incorrectly</li> </ul>	<ul style="list-style-type: none"> <li>- Replace nozzle</li> <li>- Clean filter</li> <li>- Open tap as far as it will go</li> <li>- Check connections</li> <li>- Switch off high-pressure cleaner and actuate pistol until it produces an even water jet. Switch on again.</li>   <li>- Pull back the head</li> </ul>
- Irregular operating pressure from an external tank	<ul style="list-style-type: none"> <li>- Water is being drawn in</li>   <li>- Watertemperature too high</li> <li>- Nozzle is clogged</li> </ul>	<ul style="list-style-type: none"> <li>- Connect high-pressure cleaner to the water supply</li>   <li>- Lower temperature</li> <li>- Use nozzle cleaner</li> </ul>
- Very noisy	<ul style="list-style-type: none"> <li>- Temperature is too high</li> <li>- Air is being drawn in</li> </ul>	<ul style="list-style-type: none"> <li>- Lower temperature</li> <li>- Check water inlet and outlet</li> </ul>
- Water leaks from head/ oil leak	<ul style="list-style-type: none"> <li>- Worn seals</li> </ul>	<ul style="list-style-type: none"> <li>- Replace seals</li> </ul>
- Motor does not start	<ul style="list-style-type: none"> <li>- No voltage</li> </ul>	<ul style="list-style-type: none"> <li>- Check plug connection and voltage</li> </ul>
- Motor hums but does not start	<ul style="list-style-type: none"> <li>- Mains voltage is lower than that specified</li>   <li>- Loss of voltage extension cable caused by the extension cable (cross section too small, cable too long)</li>   <li>- High-pressure cleaner has not been used for a long time</li> </ul>	<ul style="list-style-type: none"> <li>- Check suitability of the power supply</li>   <li>- Follow the instructions for extension cables</li>   <li>- Unblock the motor inserted in the by with a screwdriver borehole at the rear (Fig. 6b)</li> </ul>
- Mains cable is damaged		<ul style="list-style-type: none"> <li>- Call customer service</li> </ul>

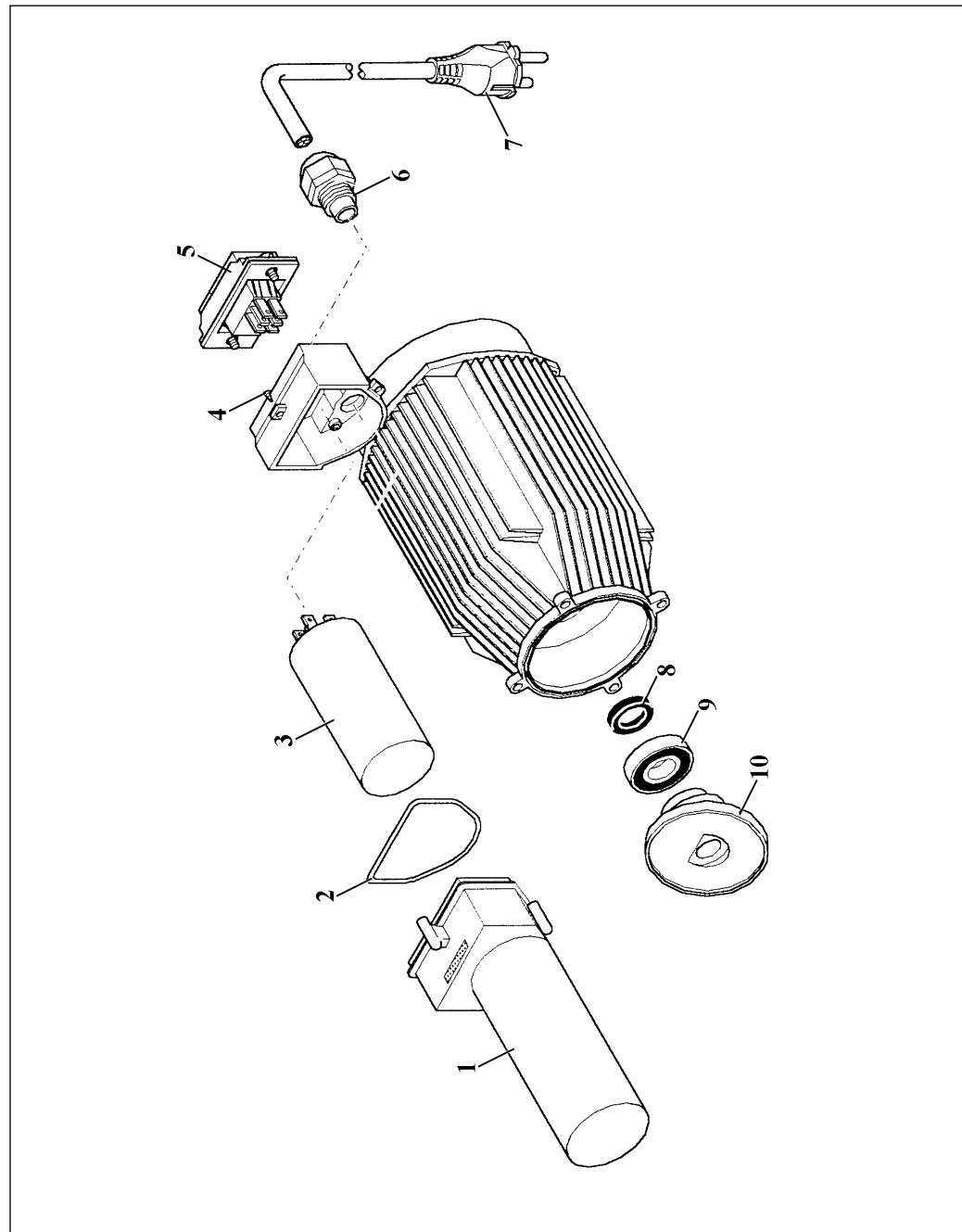
If the motor stops during operation and does not start up again, wait 2 or 3 minutes before switching it on again as the earth-leakage circuit-breaker will have been triggered. If this problem re-occurs, call customer service.



<b>(D)</b>	<b>(GB)</b>	<b>(F)</b>	<b>(NL)</b>	<b>(E)</b>	<b>(P)</b>
<b>EG Konformitätserklärung</b> Der Unterzeichnende erklärt im Namen der Firma	<b>EC Declaration of Conformity</b> The Undersigned declares, on behalf of	<b>Déclaration de Conformité CE</b> Le soussigné déclare, au nom de	<b>EC Conformiteitsverklaring</b> De ondergetekende verklaart in naam van de firma	<b>Declaracion CE de Conformidad</b> Por la presente, el abajo firmante declara en nombre de la empresa	<b>Declaração de conformidade CE</b> O abaixo assinado declara em nome da empresa
<b>ISC GmbH - Eschenstraße 6 - D-94405 Landau/Isar</b>					
<b>daß die</b>	<b>that the</b>	<b>que</b>	<b>dat de</b>	<b>que a/la</b>	<b>que</b>
<b>Maschine/Produkt</b>	<b>Machine / Product</b>	<b>la machine / le produit</b>	<b>machine/product</b>	<b>máquina/producto</b>	<b>a máquina/o produto</b>
<b>Hochdruckreiniger</b>	<b>High-Pressure Cleaner</b>	<b>Nettoyeur haute pression</b>	<b>Hogedrukreiniger</b>	<b>Limpiadora de alta presión</b>	<b>Aparelho de limpeza a alta pressão</b>
<b>Marke</b>	<b>produced by:</b>	<b>du fabricant</b>	<b>merk</b>	<b>marca</b>	<b>marca</b>
 <b>JMB</b> THE LATEST TECHNOLOGY AT AFFORDABLE PRICES					
<b>Typ</b>	<b>Type</b>	<b>Type</b>	<b>type</b>	<b>tipo</b>	<b>tipo</b>
<b>HT 2020 F</b>					
- Seriennummer auf dem Produkt - <input checked="" type="checkbox"/> EG Maschinenrichtlinie 89/392/EWG mit Änderungen <input checked="" type="checkbox"/> EG Richtlinie Elektro-magnetische Verträglichkeit 89/336 EWG mit Änderungen entspricht.	- Serial number specified on the product - <input checked="" type="checkbox"/> EC Directive regarding machinery 89/392 EEC, as amended; <input checked="" type="checkbox"/> EC Directive regarding electromagnetic compatibility 89/336 EEC, as amended.	- no. série indiqué sur le produit - <input checked="" type="checkbox"/> Directive CE relative aux machines 89/392 CEE avec les modifications y apportées; <input checked="" type="checkbox"/> Directive CE relative à la compatibilité électro-magnétique 89/336 CEE avec les modifications y apportées.	- seriennummer op het produkt- conform de volgende richtlijnen is: <input checked="" type="checkbox"/> EG machinerichtlijn 89/392/EWG met wijzigingen <input checked="" type="checkbox"/> EG richtlijn Elektro-magnetische compatibiliteit 89/336 EWG met wijzigingen	- No. de serie en el producto: satisface las disposiciones pertinentes siguientes: <input checked="" type="checkbox"/> Disposición de maquinaria de la CE 89/392/CEE con modificaciones <input checked="" type="checkbox"/> Disposición de la compatibilidad electro-magnética de la CE 89/336 CEE con modificaciones.	- cujo número de série encontra-se no produto - <input checked="" type="checkbox"/> Directiva da CE de máquinas 89/392/CEE, com alterações <input checked="" type="checkbox"/> Directiva da CE de compatibilidade electro-magnética 89/336 CEE, com alterações
<b>EN 60204; EN 292; EN 50082-1; EN 55014; EN 60555-2; EN 60555-3</b>					
Landau/Isar, den 11.02.1998	Landau/Isar, (date) 11.02.1998	Landau/Isar, (date) 11.02.1998	Landau/Isar, datum 11.02.1998	Landau/Isar 11.02.1998	Landau/Isar 11.02.1998
 Stiller Produkt-Management	 Stiller Produkt-Management	 Stiller Produkt-Management	 Stiller Produkt-Management	 Stiller Produkt-Management	 Stiller Produkt-Management
Archivierung / For archives: HT-0555-22-704-E					



<b>Pos.</b>	<b>Bezeichnung</b>	<b>Ersatzteil-Nr.</b>
01	Motor komplett	41.409.70.00
02	Pumpe komplett	41.409.70.10
03	Gummifuss	41.405.00.A2
04	Gehäuseoberteil	41.409.70.01
05	Blechschaube	41.409.70.02
06	Flügelradabdeckung	41.409.70.03
07	Schraube	41.409.70.04
08	Unterlegscheibe	41.409.70.05
09	Schraubbolzen	41.409.70.06
10	Blechschaube	41.409.70.07
11	Schraube	41.416.00.82
12	Griff	41.409.70.08
13	Fahrgestell	41.409.70.09
14	Rad	41.409.70.11



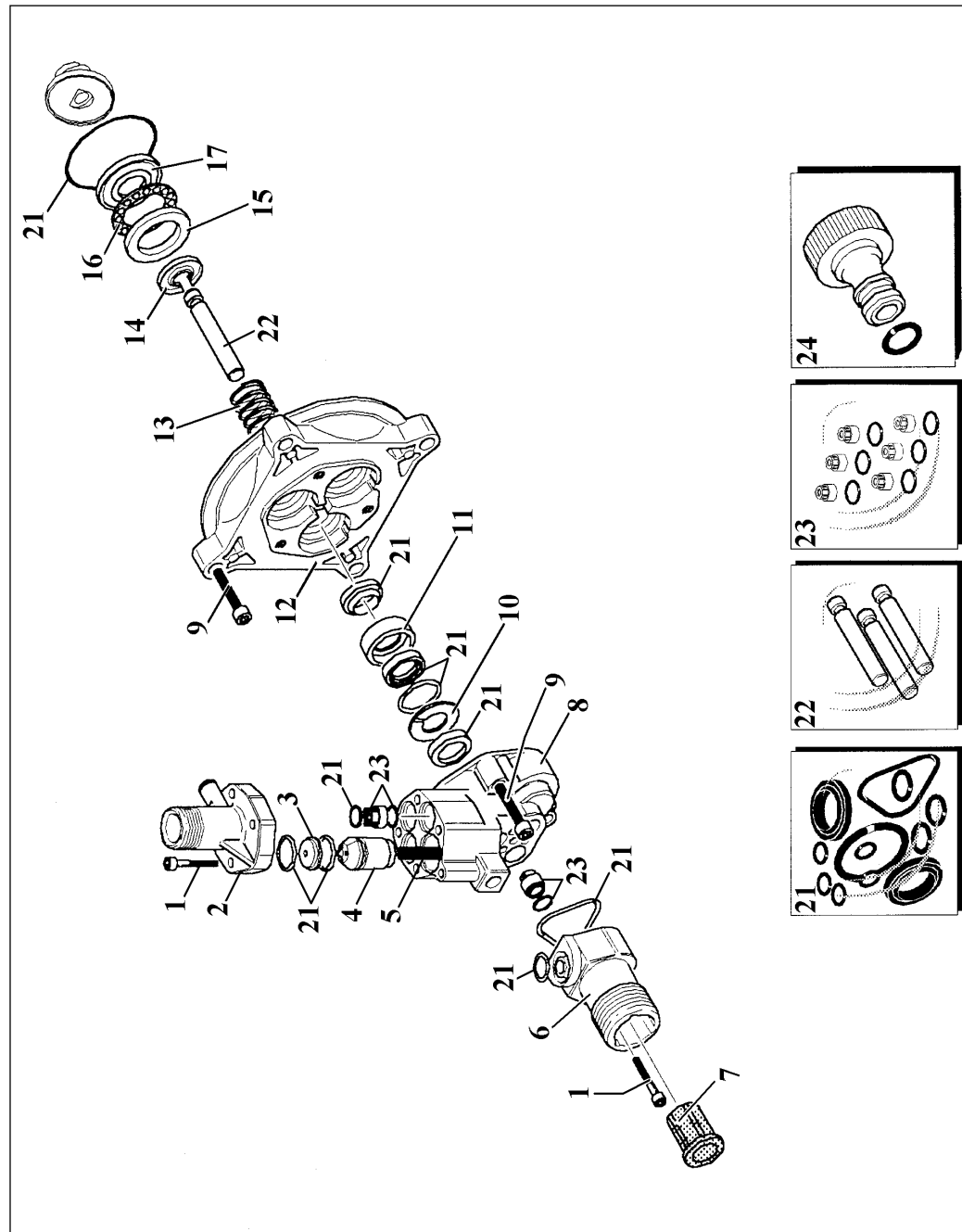
**Ersatzteilliste -B-  
Motor komplett**

HT 2020-F

Art.-Nr.: 41.409.74

I.-Nr.: 91017

<b>Pos.</b>	<b>Bezeichnung</b>	<b>Ersatzteil-Nr.</b>
01	Kondensatorgehäuse	41.409.70.12
02	Dichtung	41.409.70.13
03	Kondensator 25yF	41.409.70.14
04	Schraube selbstschneidend	41.416.00.82
05	Ein- Ausschalter komplett	41.409.70.15
06	Zugentlastung	41.409.70.16
07	Netzleitung	41.409.70.17
08	Dichtung	41.409.70.18
09	Kugellager	41.409.70.19
10	Pendelscheibe	41.409.70.20



**Ersatzteilliste -C-  
Pumpe komplett**

HT 2020-F

Art.-Nr.: 41.409.74

I.-Nr.: 91017

<b>Pos.</b>	<b>Bezeichnung</b>	<b>Ersatzteil-Nr.</b>
01	Inbusschraube	41.409.70.21
02	Pumpengehäuseoberteil	41.409.70.22
03	Ventilplatte	41.409.70.23
04	Ventil	41.409.70.24
05	Ventilfeder	41.409.70.25
06	Anschlußgehäuse	41.409.70.26
07	Ansaugfilter	41.405.00.54
08	Pumpengehäuse	41.409.70.27
09	Schraube	41.401.00.80
10	Scheibe	41.409.70.28
11	Hülse	41.409.70.29
12	Pumpengehäusedeckel	41.409.70.30
13	Kolbenfeder	41.409.70.31
14	Kolbenendstück	41.409.70.32
15	Lageraufnahme	41.409.70.33
16	Lager	41.409.70.34
17	Lageraufnahme	41.409.70.35
21	Dichtungssatz	41.409.70.36
22	Kolbensatz	41.409.70.37
23	Ventilsatz	41.409.70.38
24	Schlauchanschlußnippel	41.405.00.64

**® WARRANTY CERTIFICATE**

The guarantee period begins on the sales date and is valid for 1 year.

Responsibility is assumed for faulty construction or material or functional defects.

Any necessary replacement parts and necessary repair work are free of charge.

We do not assume responsibility for consequential damage. Your statutory rights are not affected.

Your customer service partner

Service UK:

® Product Partnership Solutions Ltd  
8&9 Westwood Court  
Clayhill Industrial Estate  
Neston  
South Wirral  
Ch64 3TT  
Tel: 0151 336 8246  
Fax: 0151 336 3233

Technical specification subject to change

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