

kranzle

Original-Operating manual
High-pressure cleaners

kranzle

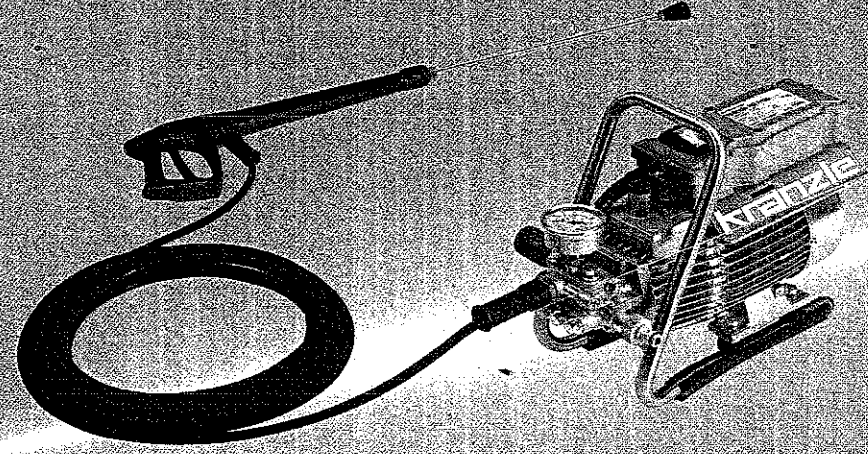
HD 7/122
HD 10/122
60 Hz

www.kraenzle.com



HD 7/122

P:	120 Bar	
P max:	135 Bar	
Q:	7 l/min	06-13
T max:	60° C	
220-230 Volt	60 Hz	7,5 A
1700 rpm	I. Kl.: F	IP 55
P1: 1600 W	P2: 1,0 KW	S1
Serial-No.:	kranzle	
FY-01471503	Made in Germany	



Reprint only allowed with the authorization of **kranzle**
As date of 2013/06/03

Order No. 30.800.1-Korea

Read and conform safety instructions before use!
Keep instructions in a safe place for later use and
pass them on to any future user.

- KOR -



Description

Dear customer

We would like to congratulate you on your new high pressure cleaner and to thank you for the purchase.

To ease your introduction to the use of the cleaner, we have provided the following pages of explanations, tips and hints, which we ask you to read before using it for the first time.

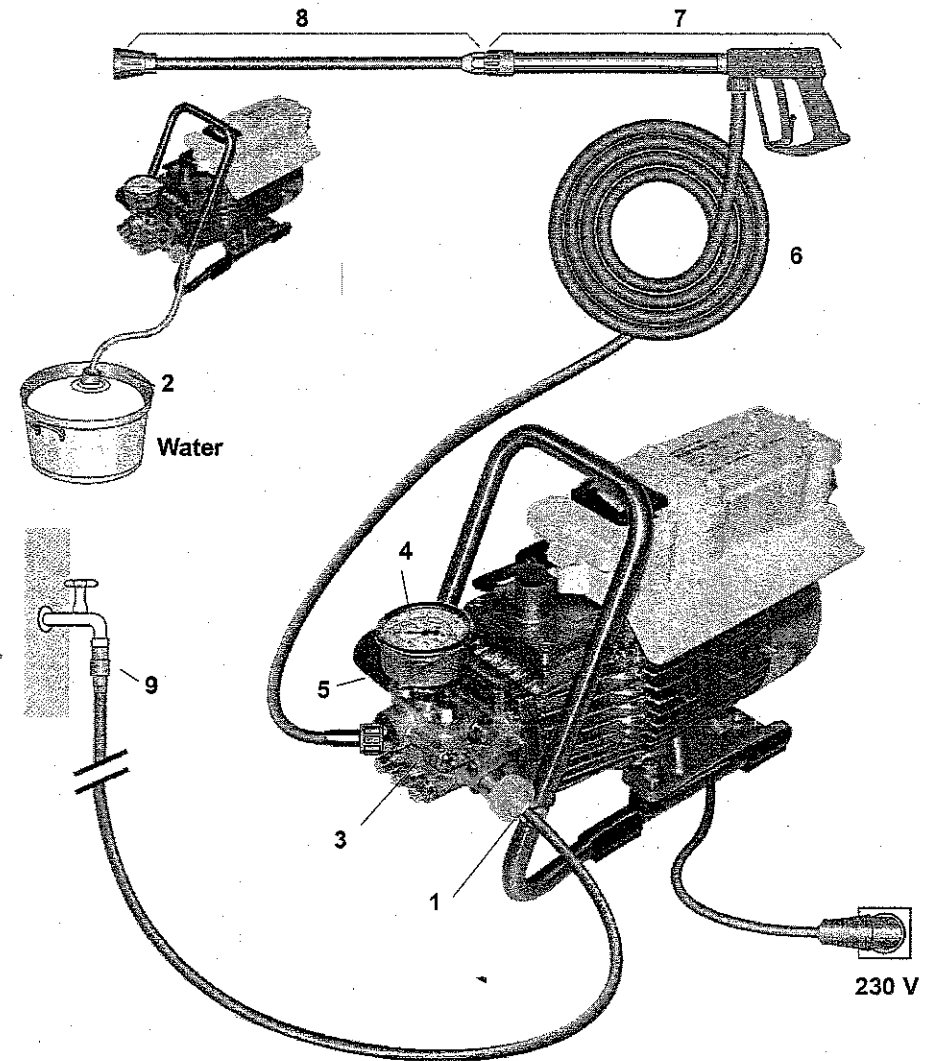
The equipment will assist you professionally in all cleaning tasks, e.g.:

- | | | |
|---------------|-----------------|-----------|
| - facades | all types | old paint |
| - flagstones | - containers | |
| - terraces | - machines etc. | |
| - vehicles of | - removing of | |

Technical data	Kränzle HD 7/122
Operating pressure, steplessly adjustable	10 - 120 bar
Nozzle size	028
Perm. overpressure	135 bar
* Water output	at 1400 rpm 7 l/min
Hot water input (1-8 bar)	max. 60 °C
Suction height	1.0 m
High pressure hose	10 m
Electrical ratings	230V ; 60 Hz ; 7,5 A
Connect. wattage input	P1: 1.6 kW
output	P2: 1.0 kW
Weight	18,5 kg
Dimensions in mm	300 x 330 x 800
Sound level acc.to DIN 45 635	71 dB (A)
with dirtkiller	84 dB (A)
Sound level LWA	84 dB (A)
Recoil at lance	ca. 27 N
Vibrations at lance	1.9 m/s ²

* Muß dem Gerät mindestens zugeführt werden (Siehe Seite 7)
Zulässige Abweichung der Zahlenwerte ± 5 % nach VDMA Einheitsblatt 24411

Description



Connection principle

The KRÄNZLE HD7/122 - high pressure cleaners are mobile machines. The design can be seen from the diagram.

Components

- | | |
|---|---|
| 1 Water inlet connection with filter | 5 Unloader valve - safety valve |
| 2 Suction hose with filter (special accessory) Order no. 15.038 3 | 6 High pressure hose |
| 3 High pressure pump | 7 Spray gun |
| 4 Press. gauge with glycerin filling | 8 Interchangeable lance with high pressure nozzle |
| | 9 Nonreturn valve (see page 8) |

Description

Water- and cleaning/detergent system

Water can be connected at mains pressure to the high pressure pump or it can be sucked directly from a storage tank. The water is then forced under pressure by the high pressure pump to the lance. The high pressure jet is formed by the nozzle at the end of the lance.

Lance with trigger gun

The machine can only be operated when the safety trigger is squeezed. When the lever is squeezed, the spray gun opens. The liquid is then pumped to the nozzle. The spray pressure increases and quickly reaches the selected operating pressure.

When the trigger is released, the trigger gun closes and any further spraying of liquid from the lance is stopped.

The increase in pressure when the trigger gun is closed causes the unloader valve-safety valve to open. The pump remains switched on and continues to pump liquid through the pump at reduced pressure. When the trigger gun is opened, the unloader valve - safety valve closes and the pump resumes pressure spraying from the lance.



The trigger gun is a safety device. Repairs should only be performed by qualified persons. Should replacement parts be required, use only components authorized by the manufacturer.

Unloader valve - safety valve

The unloader valve - safety valve protects the machine from a build up of excess pressure, and is designed not to permit an excess pressure to be selected for operation. The limit nut on the handle is sealed with a spray coating. *(see page 22: "Stopping leaks from the hose or gun".)

The operating pressure and spray rate can be steplessly adjusted by turning the handle.



Replacements, repairs, new adjustments and sealing should only be performed by qualified persons.

Description



Motor protection switch

The motor is protected from overload by a motor protection switch, which automatically cuts out the motor in the event of overload. However should the switch trip frequently, the cause of the malfunction should be located and rectified (see page 6).



Replacements and inspection work should only be performed by qualified persons **when the machine is disconnected from the power supply, i.e. pull out the plug from the electrical socket.**

Setting up

Location



Neither set up and operate the machine in rooms where there is a risk of fire or explosion nor put it into puddles. Do not use the machine under water.

CAUTION !



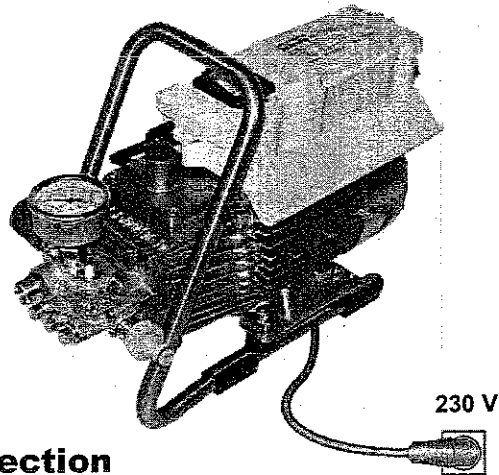
Never use liquid containing solvents such as paint thinners, petrol, oil or similar liquid matter. **Pay attention to the instructions of the manufacturers of the cleaning agents.** The seals in the machine are not resistant to solvents. The spray of solvents is inflammable, explosive and poisonous.

CAUTION !



When running your high pressure cleaner with hot water of 60° C raised temperatures occur. **Do not touch the machine without safety gloves!**

Description



Electrical connection

The machine is supplied with an electrical power cable with plug. The mains plug must be fitted to a standard grounded socket with a **30mA** residual current operated device. The socket must be protected with a **16A** delay action fuse on the mains side.



KRÄNZLE HD 7/122 230 Volt / 60 Hz

When using an extension cable, this must have an earthed lead which is properly connected to the socket. The conductors in the extension cable must have a minimum cross section of 1.5 mm^2 . Plug connections must be of a spray-proof design, and may not be located on a wet floor.
(with extension cables of more than 10 m - 2.5 mm^2)

CAUTION !

The use of extension cables which are too long may lead to malfunctions and start up difficulty.

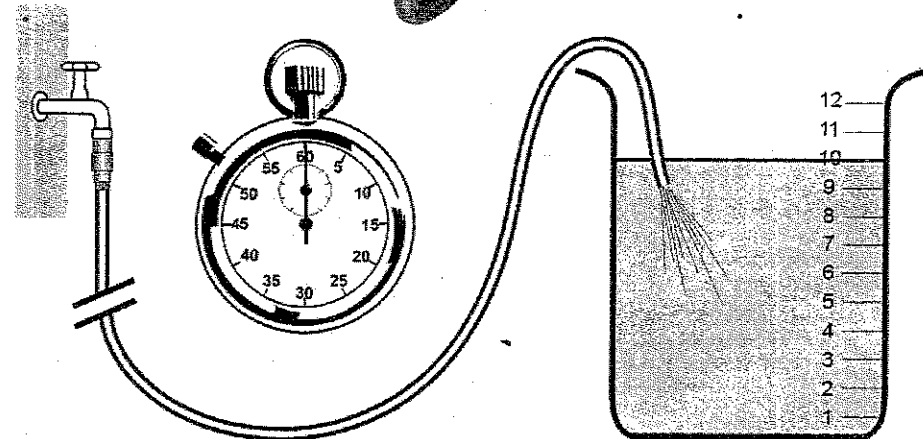
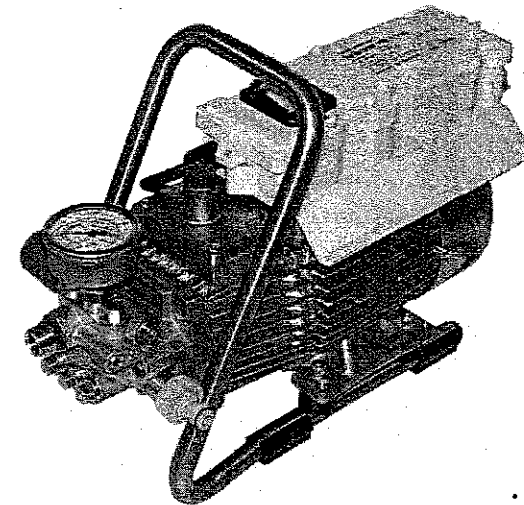
When using a cable drum, always keep the cable wound as far as possible.

Description



Water connection:

Please check that the high pressure cleaner has available the quantity of water specified on page 2 (techn. specifications) (Litres per minute).



Test:

Allow the water to run through the supply hose into a bucket for 1 minute.

The received quantity of water must be at least the quantity given on page 2 !!!



Lack of water causes fast wear on seals (no warranty)

Description



Brief operating instructions

When operating your high pressure cleaner
pay attention that it is in a horizontal position.

1. Connect the high pressure hose with the spray gun.
 2. Connect to suitable water supply.
 3. Flush the air from the pump (open and close the spray gun several times)
 4. Make the electrical connection
 5. Switch on the machine with opened spray gun and commence cleaning.
 6. After completing the work, completely empty the pump (switch the motor on for approximately 20 seconds without the suction and spray gun).
- Only use clean water ! Protect from frost !

CAUTION !

Please pay attention to the regulations of your waterworks company. In accordance with EN 61 770, the machine may not be directly connected to the public drinking water supply lines.

A brief connection however is permissible according to DVGW (German Association for Gas and Water Affairs) if a tube ventilator with check valve (Kränzle Order-No. 41.016 4) is built into the water supply.

Also indirect connection to the public drinking water supply lines is permissible by way of free emission in accordance with EN 61 770; e.g. by using a reservoir with a float valve.

Direct connection to a non-drinking water supply line is permissible.

High pressure hose and spray device

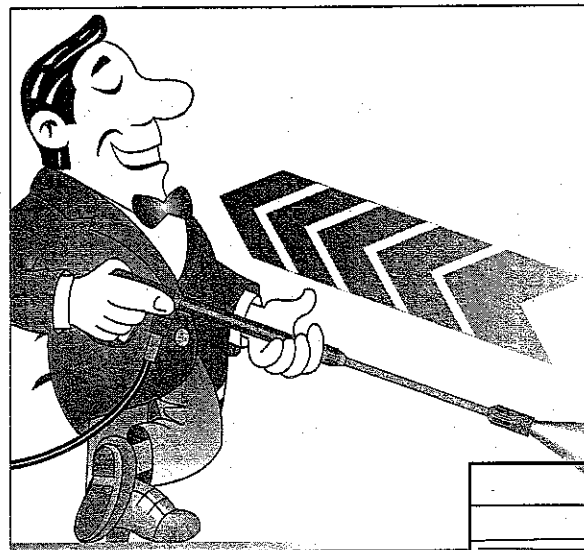
The high pressure hose and spraying device supplied with the machine are made of high grade material, they are also optimized for the machine and marked as required by the appropriate regulations.

- Hose length max. 20 m.

If replacement parts are required, only such parts that are authorized by the manufacturer and which bear the markings required by the appropriate regulations may be used. The high pressure hose and spray device must be connected in a pressure-tight manner (no leak). The high pressure hose may not be driven over, pulled excessively, or twisted. The hose may under no circumstances be pulled over sharp edges, since otherwise the guarantee is automatically void.

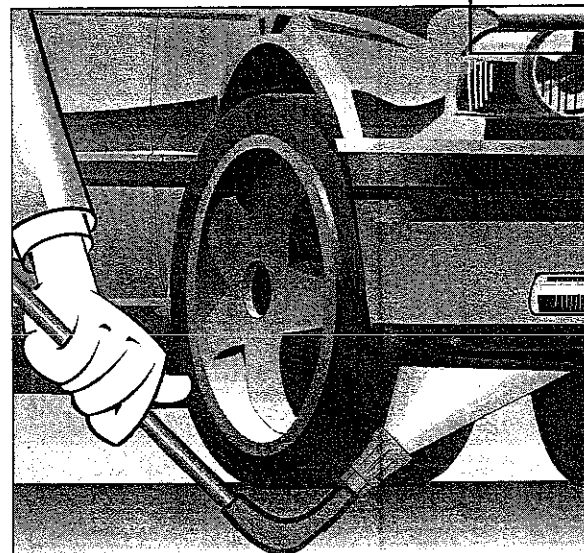
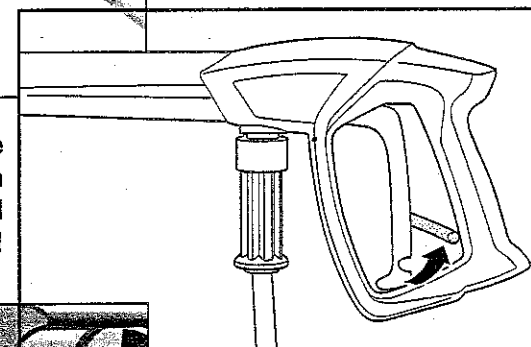


Safety notes



As to the recoil -
see notice on page 2!

Apply the safety catch on the
spray gun after each use, in
order to prevent unintentional
spraying!

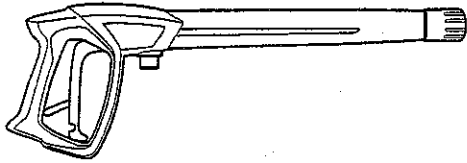


Always aim the underbody lance. Note when using an angled underbody lance, like for example lance no. 41.075 1, that there is a certain amount of torque in the recoil.
(Amount of torque 26 Nm)

This is what you've purchased:

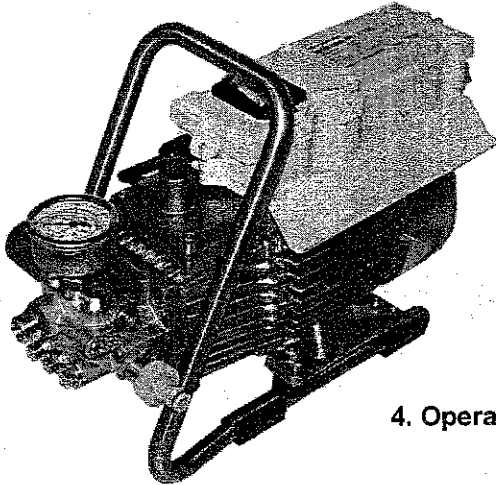


1. Spray lance with high pressure nozzle

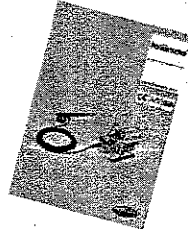


2. Spray gun with insulated pistol grip and screw connection

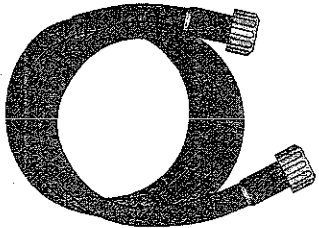
3. KRÄNZLE - High pressure cleaners HD7/122



4. Operating instructions



4. Steel braided high pressure hose 10 m, NW 6



5. Water inlet components

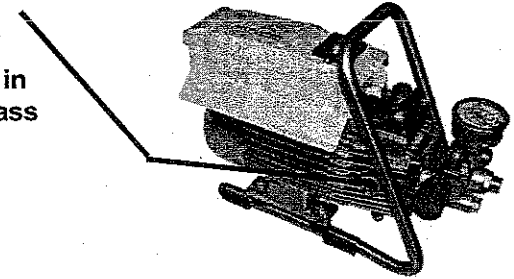


is already installed

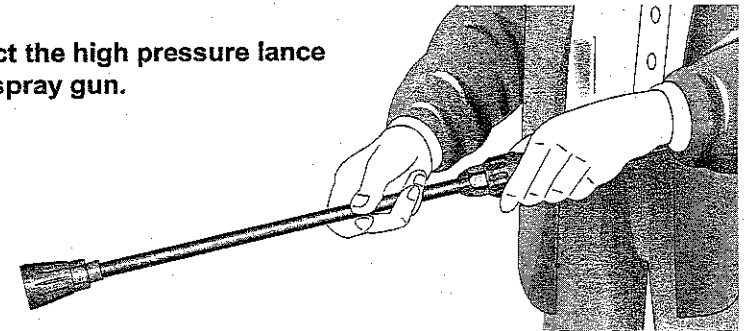
Preparation for use

1. Check oil level

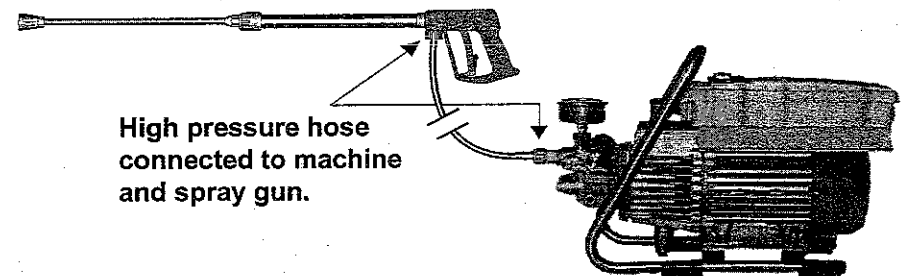
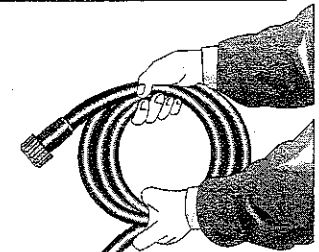
Oil has to be visible in the oil-level sight glass



2. Connect the high pressure lance to the spray gun.

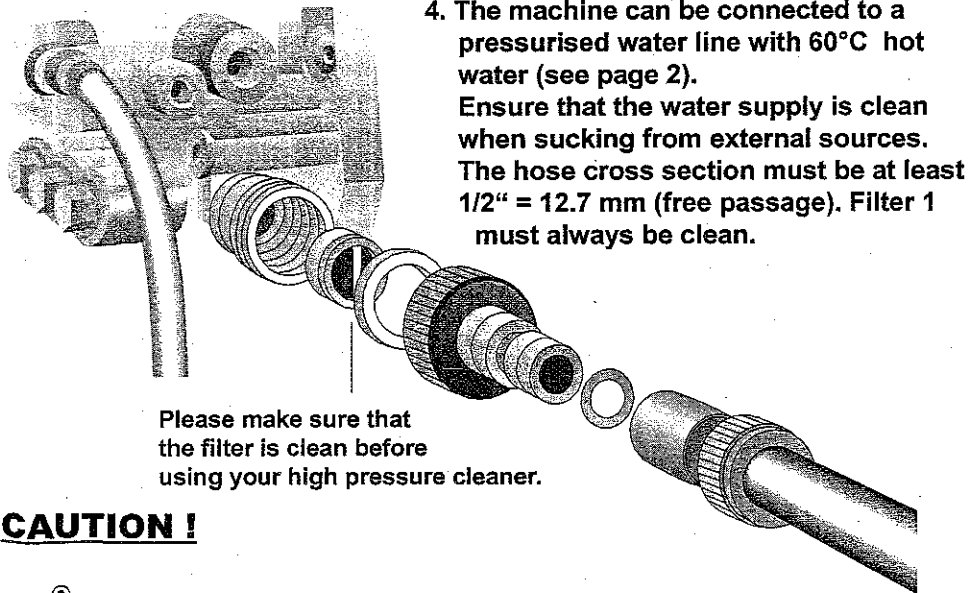


3. Unroll hose without kinks and connect with handgun and pump. Max. extension 20 m-HP hose or 2 x 10 m with hose connections.



High pressure hose connected to machine and spray gun.

Preparation for use



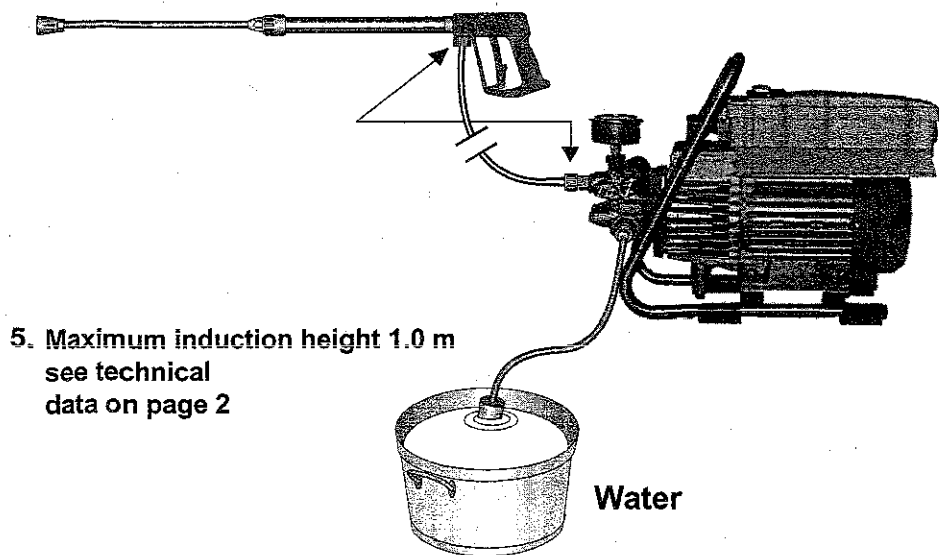
4. The machine can be connected to a pressurised water line with 60°C hot water (see page 2). Ensure that the water supply is clean when sucking from external sources. The hose cross section must be at least 1/2" = 12.7 mm (free passage). Filter 1 must always be clean.

Please make sure that the filter is clean before using your high pressure cleaner.

CAUTION !



When running your high pressure cleaner with hot water of 60° C raised temperatures occur. Do not touch the pump without safety gloves!

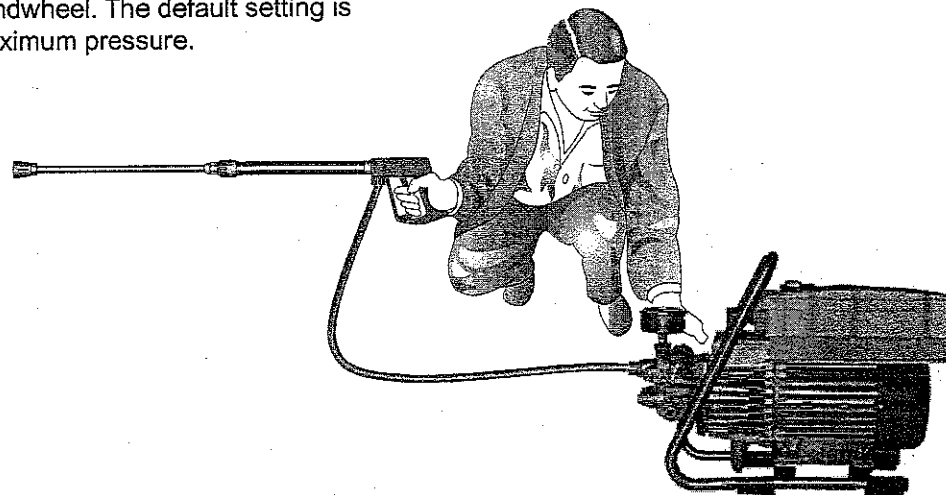


5. Maximum induction height 1.0 m
see technical data on page 2

Preparation for use

Adjusting the pressure

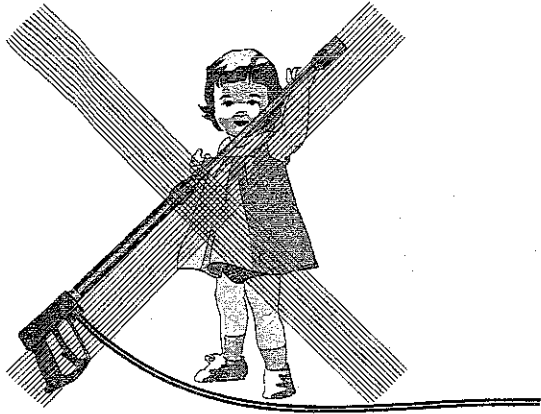
This is accomplished by turning the handwheel. The default setting is maximum pressure.



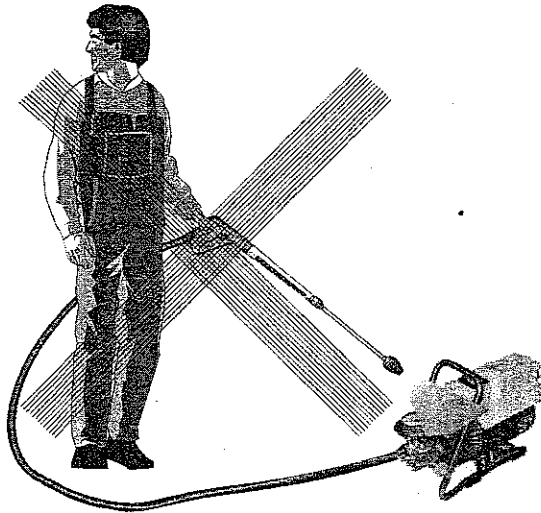
To shut down the pump:

1. Switch off the machine.
2. Cut off the water supply.
3. Open the spray gun briefly until the pressure is released.
4. Apply the safety catch on the spray gun.
5. Remove the water hose and spray gun.
6. Drain the pump: switch on the motor for approx. 20 seconds.
7. Pull the plug from the socket.
8. Winter: store the pump in rooms above 0°C.
9. Clean the water filter.

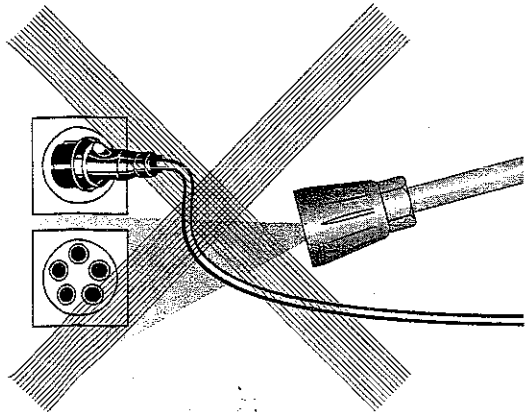
This is prohibited !



Never allow children to use the high pressure cleaner !

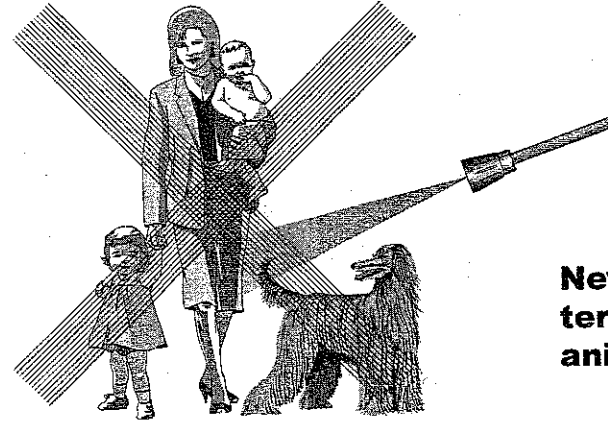


Never direct the water jet at the machine itself !

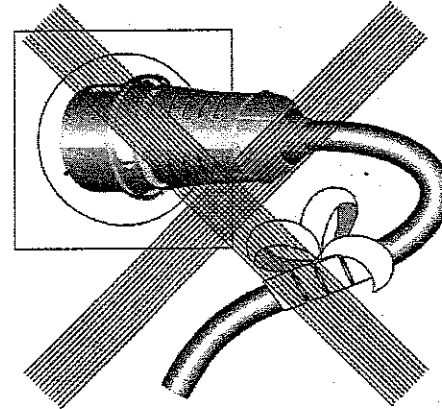


Never direct the water jet at a power socket !

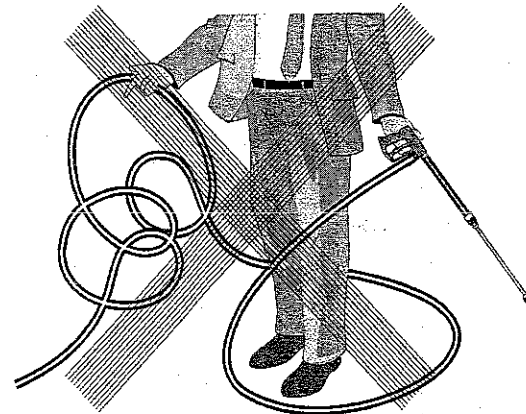
This is prohibited !



Never direct the water jet at people or animals !

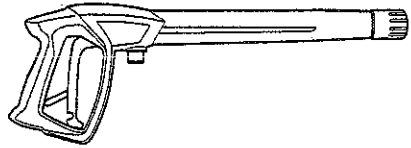


**Do not damage the power cable or repair it incorrectly !
(Replace defective or damaged cables immediately !
Never work with a defective appliance !)**



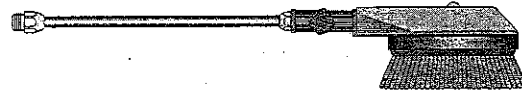
**Never pull the high pressure hose if it has formed kinks or "nooses"!
Never pull the hose over sharp edges !**

Additional KRÄNZLE-accessories for ...



Rotary scrubbing brush

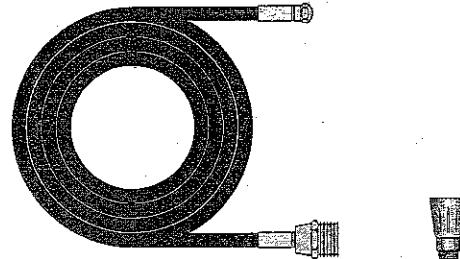
Order No. 41.050 1



Drain and pipe cleaning hose

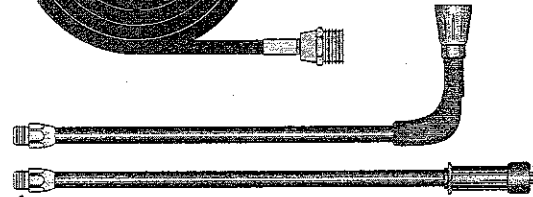
10 m - Order No. 41.058 1

15 m - Order No. 41.058



Underbody lance

Order No. 41.075



Flat brush

Order No. 41.073



Dirtkiller 03 (HD 7/122)

Order No. 41.570-03

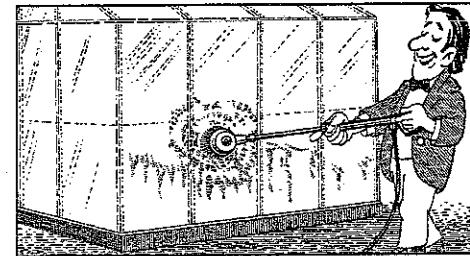
Dirtkiller 042 (HD 10/122)

Order No. 41.570-042

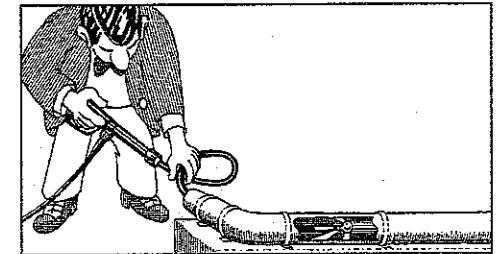


Environmental, refuse disposal and water protection regulations must be observed when using the accessories!

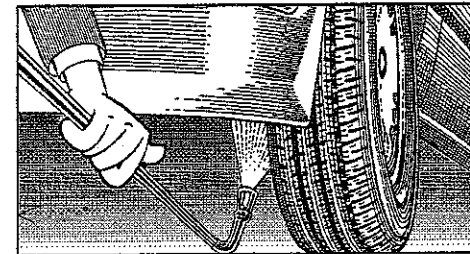
... for further combination possibilities



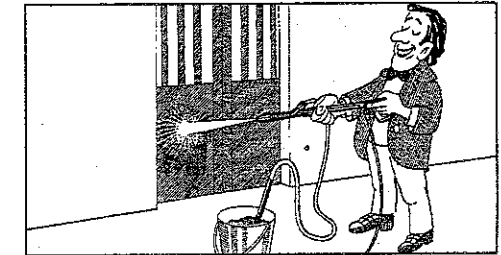
Car cleaning, glass, caravan, boat etc.
rotary washing brush with 40 cm extension and ST 30 nipple M 22 x 1.5



Cleaning pipes, channels and drains:
pipe cleaning hose with KN nozzle and ST 30 nipple M 22 x 1.5



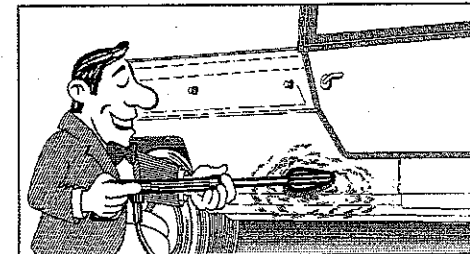
Underbody cleaning of cars, trailers and equipment: lance 90 cm with high pressure nozzle and ST 30 nipple M 22 x 1.5.
The lance must be aimed when spraying. (See page 9)



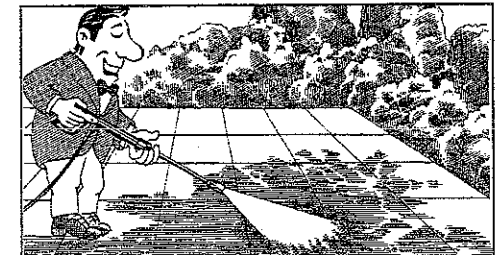
Blasting old paint, rust and facades: sandblasting injector with suction lance, 3 m PVC hose and ST 30 nipple.



When sandblasting you must wear protection clothes! Pay attention to the instructions of the manufacturer of the abrasive!



Cleaning cars and all smooth surfaces:
brush with ST 30 nipple.

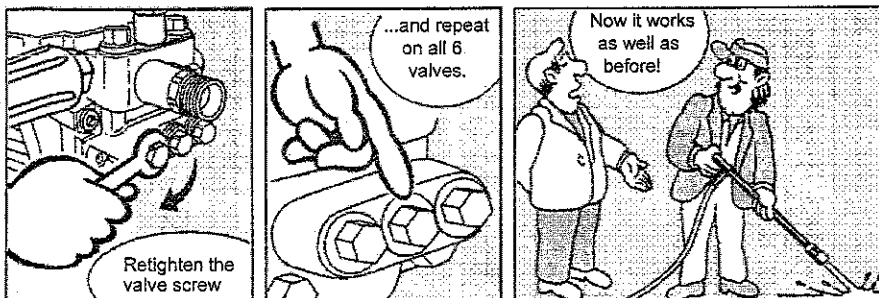
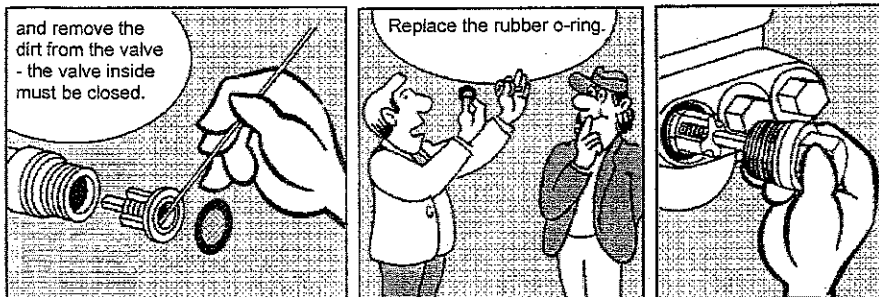
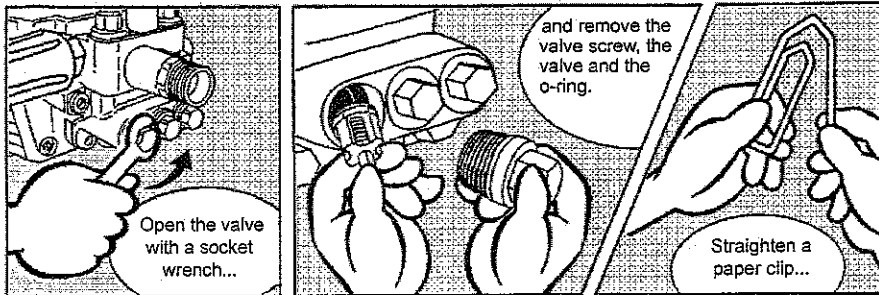
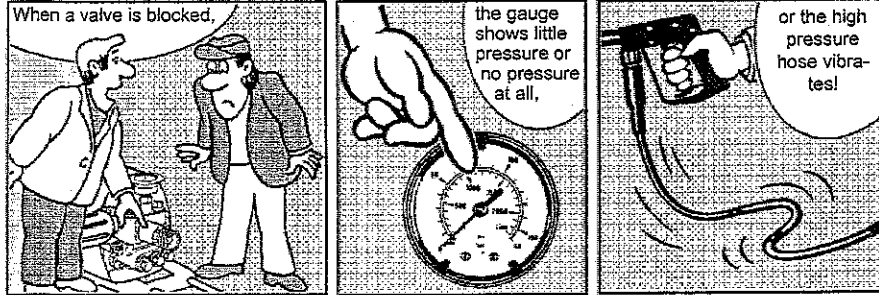


Rotary point sprayer for extreme soiling.
Dirtkiller with 40 cm extension and ST 30 nipple.

Small repairs -

Nozzle dirty or sticky!

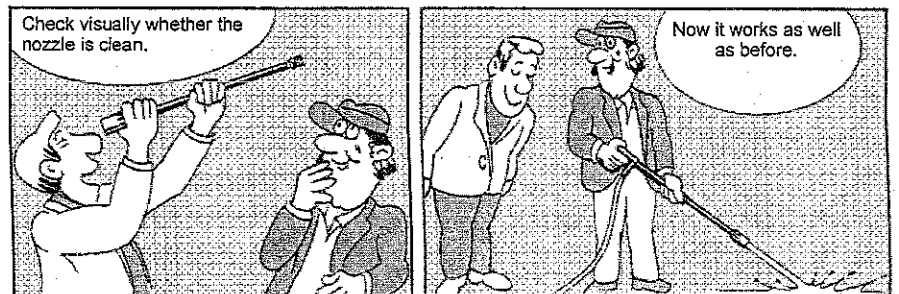
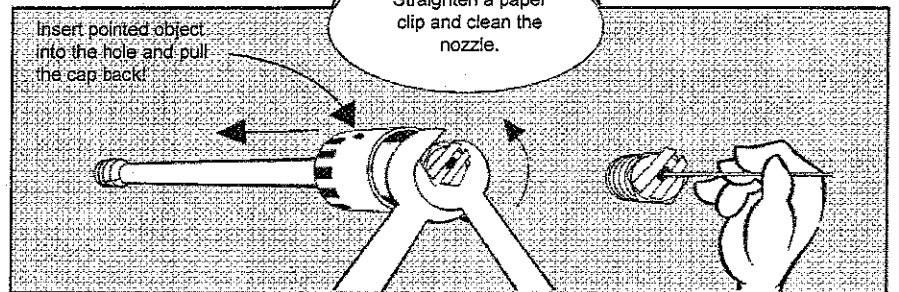
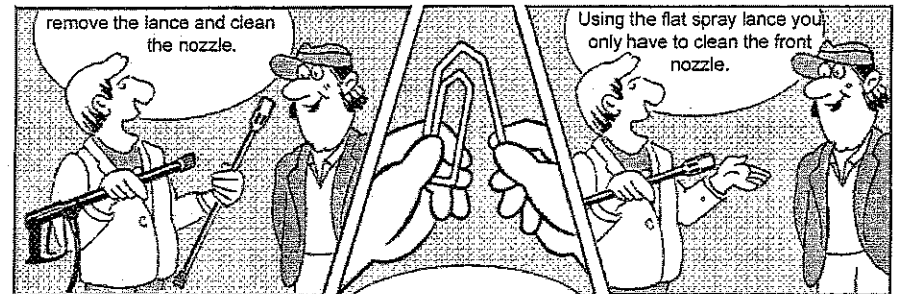
- Pressure gauge does not show full pressure.
- Water comes out in spurts.
- If you do not use the high-pressure cleaner for some time the valves can stick
- The high-pressure hose vibrates.



- Do it yourself!

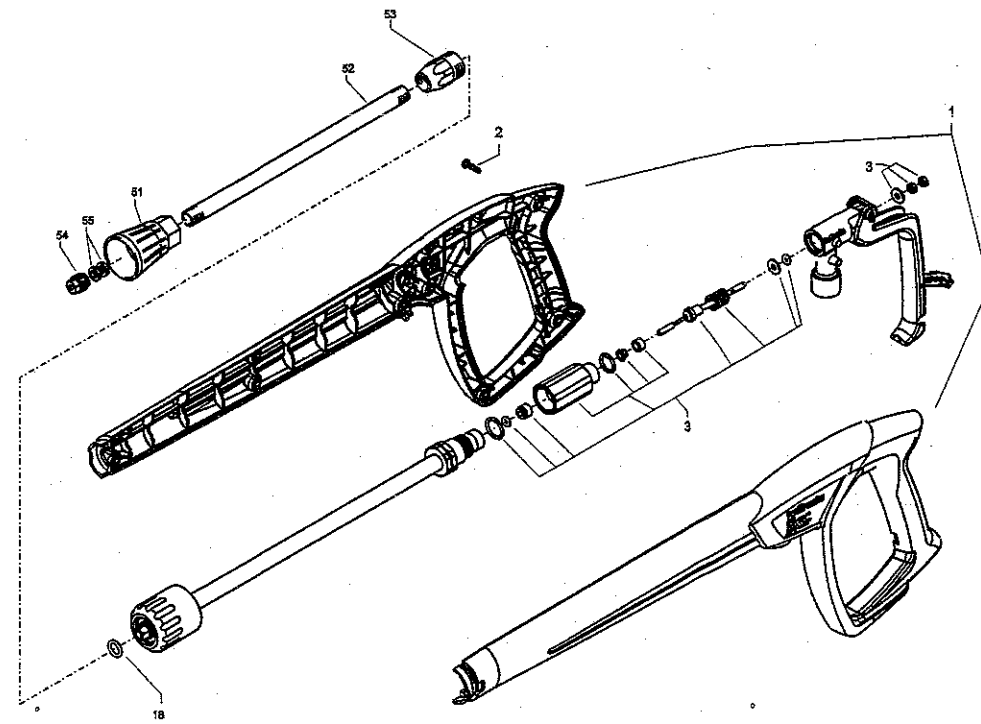
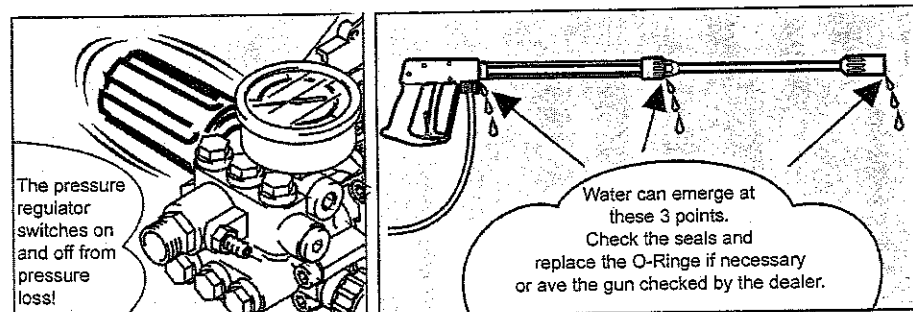
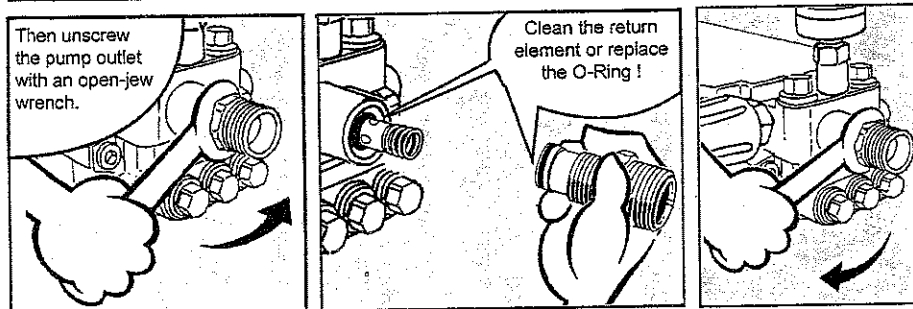
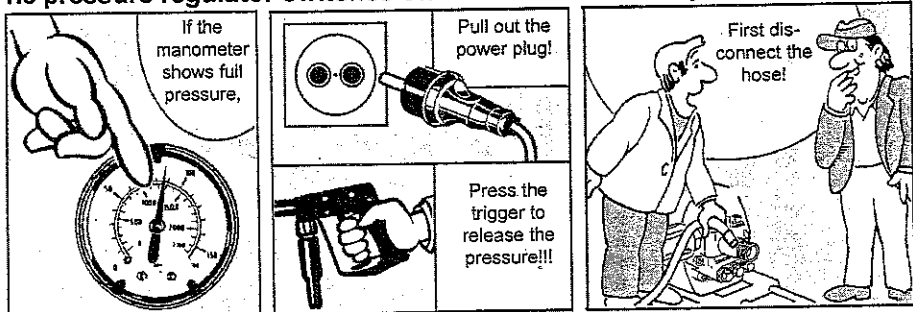
The nozzle is blocked!

- No water but the gauge shows full pressure !



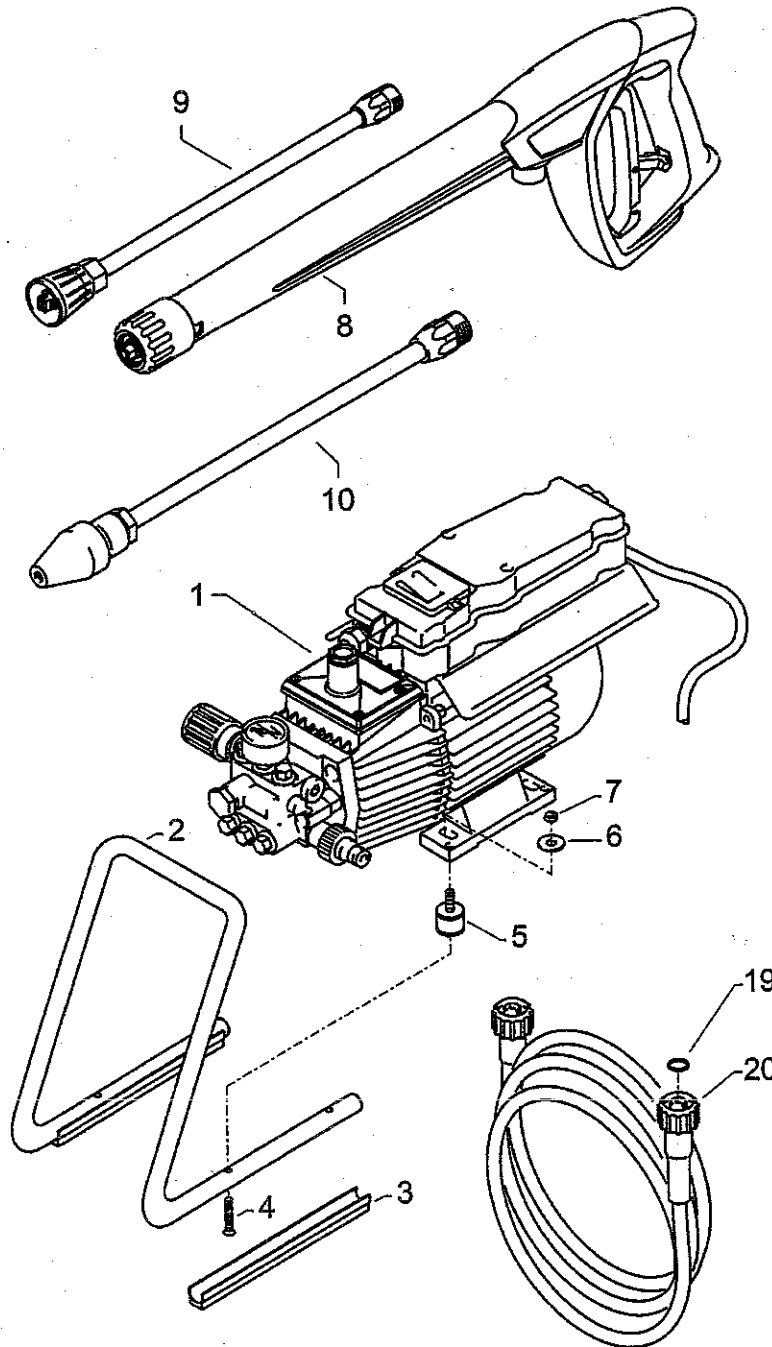
Stopping leaks from hose or gun

- After closing the gun the manometer shows full pressure!
- The pressure regulator switches on and off continuously!



No	Description	Qty.	Ord.-No
1	Pistolschale re+li	1	12.450
2	Schraube 3,5 x 14	10	44.525
3	Reparatursatz M2000		12.454
18	O-Ring 9,3 x 2,4	1	13.273
51	Düsenschutz M12x1	1	26.002 1
52	Rohr 500 mm; bds. M12x1	1	41.527 1
53	ST 30 Nippel M 22 x 1,5 / R1/4" m. ISK	1	13.363
54	Flachstrahldüse 028 (bei HD 7/122)	1	M20028
54.1	Flachstrahldüse 042 (bei HD 10/122)	1	M20042
55	Aluminium-Dichtring	2	13.275
M2000-Pistole kpl.			12.480
Lance compl. with HP-nozzle 028			12.393-M20028

Complete assembly



HD 7/122 / HD 10/122

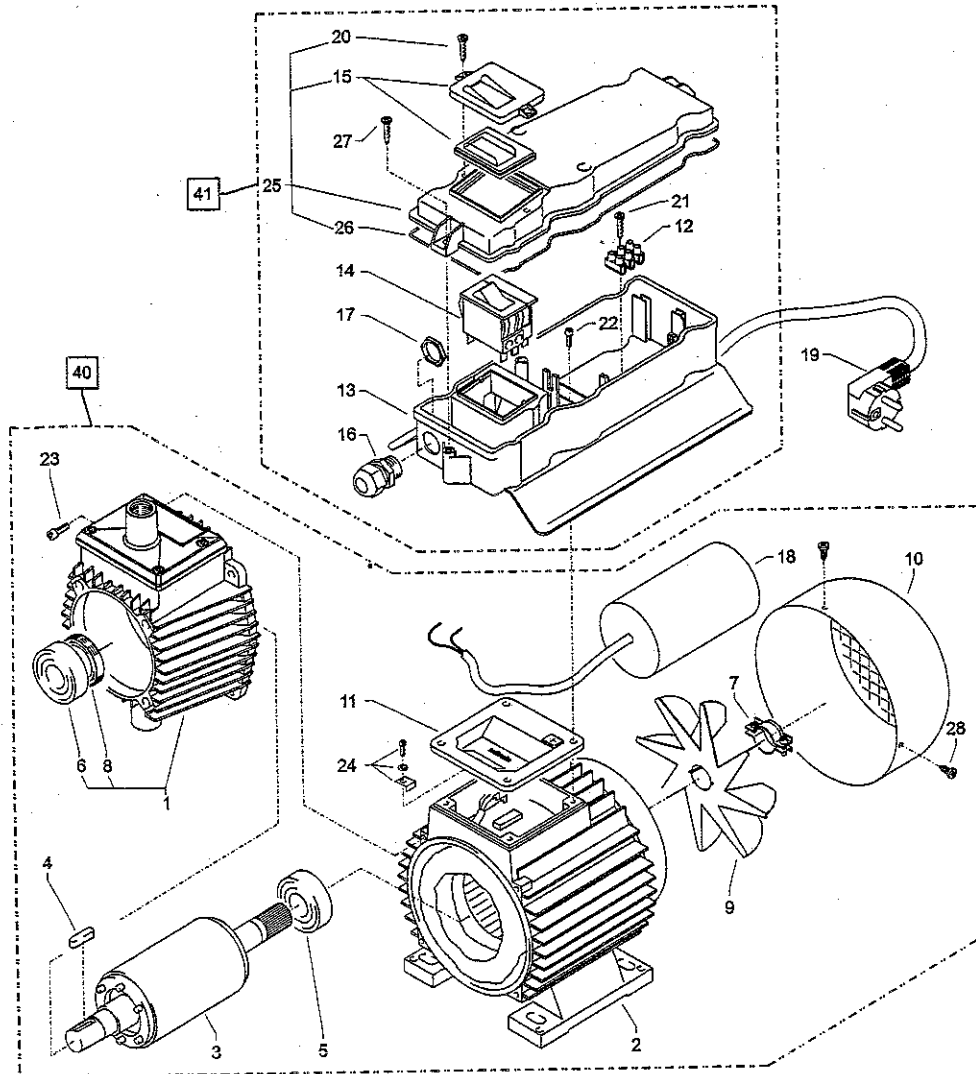
Spare parts list KRÄNZLE HD 7/122 / HD 10/122 Complete assembly

No	Description	Qty.	Ord.-No
2	Tragbügel	1	44.581
3	Gummiprofileiste	2	41.098 1
4	Senkschraube M6x20	1	43.473 1
5	Gummipuffer 30 x 20	4	46.023 1
6	Scheibe 8,4	4	41.409
7	Mutter DIN985 M8	4	41.410
8	M2000-Pistole kpl.		12.480
9	Lanze mit Flachstrahldüse 028 (HD 7/122)		12.393-M20028
9.1	Lanze mit Flachstrahldüse 042 (HD 10/122)		12.393-M20042
10	Schmutzkiller 028 kpl. mit Lanze (HD 7/122)		41.570-028
10.1	Schmutzkiller 042 kpl. mit Lanze (HD 10/122)		41.570-042
19	O-Ring 9,3 x 2,4	2	13.273
20	HD-Schlauch NW 6 10 m 210 bar	1	43.416

Motor

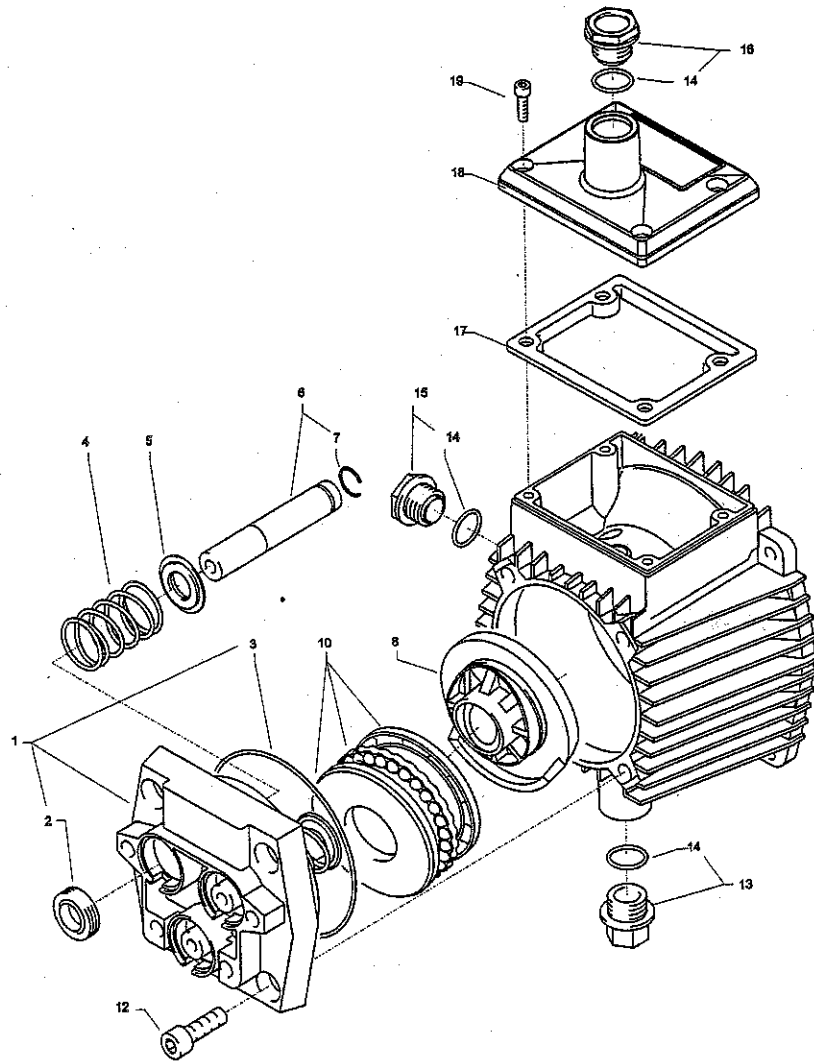
KRÄNZLE HD 7/122 / HD 10/122

Spare parts list KRÄNZLE HD 7/122 / HD 10/122 Motor



No	Description	Qty.	Ord.-No
1	Ölgehäuse mit Dichtung, Deckel Öldichtung, Schulterlager	1	44.501
2	Stator 60Hz (HD 7/122)	1	23.001 1
3	Motorwelle mit Rotor (HD 7/122)	1	43.104
4	Passfeder 6 x 6 x 20	1	41.483 1
5	Motor-Lager B-Seite Z-Lager	1	43.025
6	Motor-Lager A-Seite Schulterl.	1	43.026
7	Schelle für Lüfterrad	1	44.534 1
8	Öldichtung 25 x 35 x 7	1	41.024
9	Lüfterrad	1	44.534
10	Lüfterhaube	1	41.497
11	Flachdichtung	1	44.513
12	Lüsterklemme 3-pol.	1	43.031 2
13	Schaltkasten	1	44.508 5
14	Schalter 8,5 A (HD 7/122)	1	43.329
15	Klemmrahmen mit Schalterabdichtung	1	43.453
16	Kabelverschraubung PG 11 mit Knicks.	1	41.091
17	Gegenmutter PG 11	1	44.521
18	Kondensator 40 µF	1	43.035
19	Netzkabel für 230V / 50/60Hz	1	41.092
20	Blechschrabe 3,5 x 9,5	2	41.088
21	Blechschrabe 2,9 x 16	1	43.036
22	Innensechskantschr. M 5 x 12	4	40.134
23	Innensechskantschr. M 5 x 30	4	42.130
24	Erdungsschraube kpl.	1	43.038
25	Deckel für Schaltkasten	1	44.512
26	Dichtung für Deckel	1	44.522
27	Kunststoffschrabe 5,0 x 20	4	43.018
28	Blechschrabe 3,9 x 9,5	3	41.636

Transmission

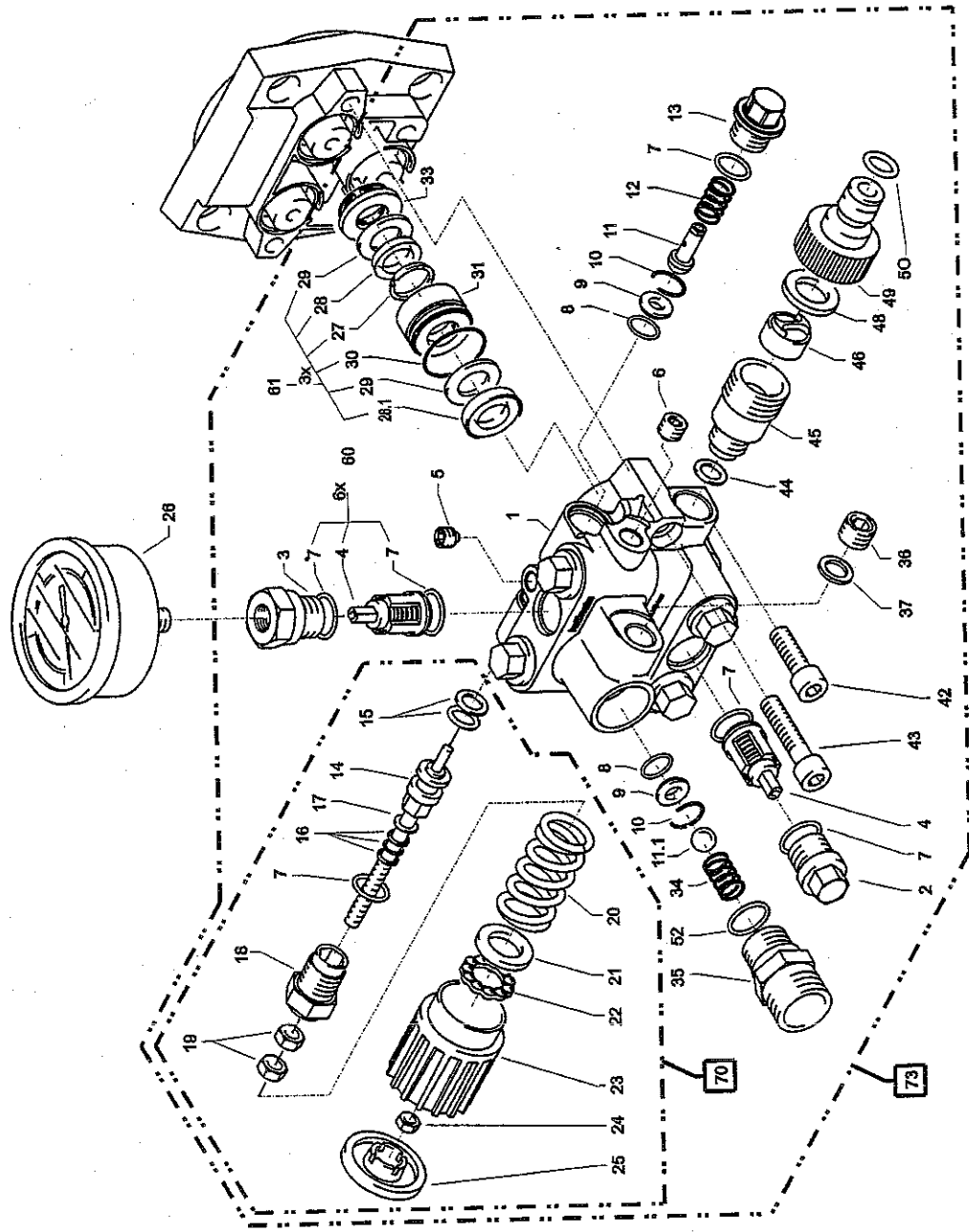


KRÄNZLE HD 7/122 / HD 10/122

Spare parts list KRÄNZLE HD 7/122 / HD 10/122 Transmission

No	Description	Qty.	Ord.-No
1	Gehäuseplatte	1	43.003
2	Öldichtung 14 x 24 x 7	3	41.631
3	O-Ring 83 x 2	1	43.039
4	Plungerfeder	3	43.040
5	Federdruckscheibe 14 mm	3	43.041
6	Plunger 14 mm AZ-L	3	49.021
7	Sprengring 14 mm	3	41.635
8	Taumscheibe 10,25° (HD 7/122)	1	41.028-10,25
10	Axial-Rillenkugellager 3-teilig	1	43.486
12	Innensechskantschraube M 8 x 25	4	40.053
13	Ölablassstopfen M18x1,5 mit Magnet	1	48.020
14	O-Ring 12 x 2	3	15.005 1
15	Ölschauglas	1	42.018 1
16	Ölverschlussschraube rot	1	43.437
17	Dichtung Öldeckel	1	44.501 1
18	Deckel Ölgehäuse	1	44.501 2
19	Innensechskantschraube M 5 x 12	4	41.019 4

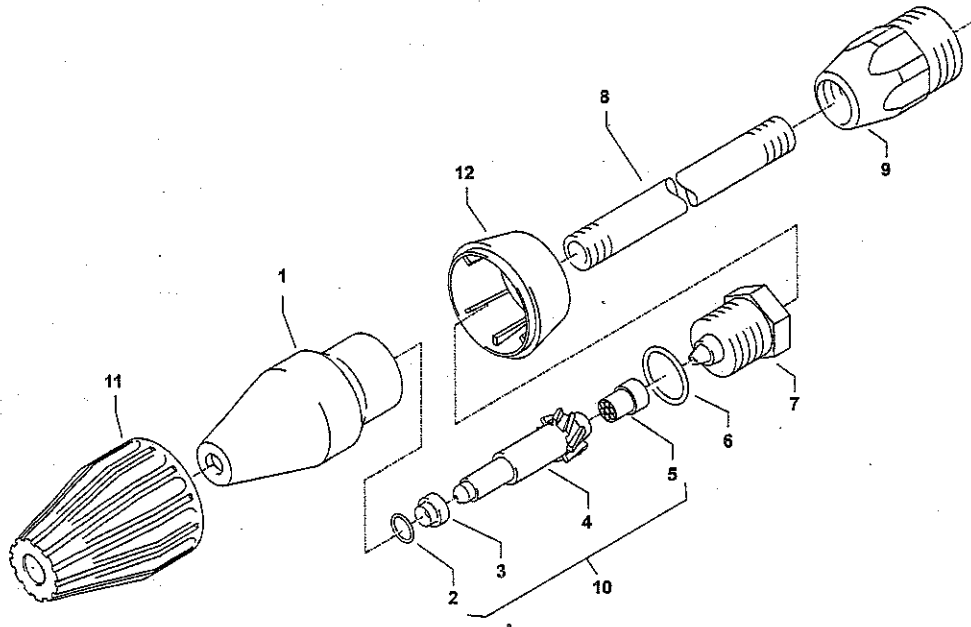
Valve housing



Spare parts list KRÄNZLE HD 7/122 / HD 10/122 Valve housing

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Ventilgehäuse	1	49.020 1	30	O-Ring 24 x 2	3	49.024
2	Ventilstopfen	5	41.011	31	Leckagering	3	49.022
3	Ventilstopfen mit R1/4" IG	1	41.011 1	33	Zwischenring mit Abstützung	3	43.055
4	Ventile (rot) (HD 10/120)	6	41.612	34	Rückschlagfeder	1	14.120 1
4.1	Ventile (grün) (HD 7/120)	6	41.612 1	35	Ausgangsteil für Kugelrückschlagv.	1	44.583
5	Dichtstopfen M 8 x 1	1	13.158	36	Verschlusstopfen	1	13.181
6	Dichtstopfen M 10 x 1	1	13.043	37	Aluminium-Dichttring	2	13.275
7	O-Ring 12 x 2	14	15.005 1	42	Innensechskantschr. M 8 x 25 - A2	2	40.053
8	O-Ring 11 x 1,5	2	12.256	43	Innensechskantschr. M 8 x 45 - A2	2	41.017
9	Edelstahlsitz	2	14.118	44	Dichtring Kupfer	1	14.149
10	Sicherungsring	2	13.147	45	Sauganschluss	1	41.016
11	Anlaufentlastungsventil	1	49.040	46	Wasserfilter	1	41.046 2
11.1	Edelstahlkugel 10,0 mm	1	12.122	48	Gummi Dichttring	1	41.047 1
12	Edelstahlfeder	1	14.119	49	Steckkupplung	1	41.047 2
13	Verschlussschraube	1	14.113	50	O-Ring	1	41.047 3
14	Steuerkolben 6 mm für AZ mit Dichtungen	1	44.532	52	O-Ring 18 x 2	1	43.446
15	Parbaks für Kolben 14 mm	1	14.123 1	60	Rep.-Satz Ventile (rot) (HD 10/122)	1	41.648
16	Parbaks für Spindel 6 mm	1	14.123 2	60.1	Rep.-Satz Ventile (grün) (HD 7/122)	1	41.648 1
17	MS-Scheibe	1	43.045	61	Reparatur-Satz Manschetten	1	49.053
18	Kolbenführung 6 mm	1	14.130 1	70	Steuerkolben kpl. m. Handrad	1	44.532 1
19	Mutter M 6	2	14.127 1	73	Ventilgehäuse (HD 10/122) kpl.	1	44.590 1
20	Feder schwarz für AZ-Pumpe	1	43.046	73.1	Ventilgehäuse (HD 7/122) kpl.	1	44.590 2
21	Federdruckscheibe	1	43.047				
22	Kugellager	1	43.048				
23	Handrad M 6 für AZ-Pumpe	1	43.049				
24	Mutter M 6 mit SW 8	1	43.010				
25	Kappe für Handrad AZ-Pumpe	1	43.050				
26	Manometer	1	15.039				
27	Stützring	3	41.618				
28	Manschette 14 x 24 x 5/2,5	3	41.613				
28.1	Gewebe-Manschette 14 x 24 x 5/2,5	3	41.613 1				
29	Backing 14 x 24	6	41.614				

Dirtkiller (special accessory)

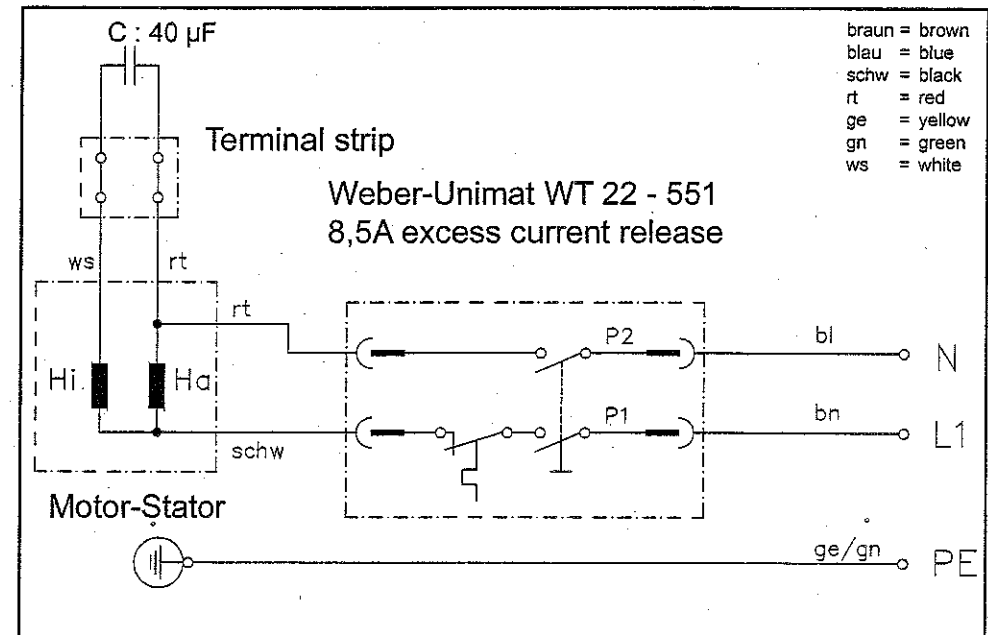


Spare parts list Dirtkiller

No	Description	Qty.	Ord.-No
1	Sprühkörper	1	41.520
2	O-Ring 6,88 x 1,68	1	41.521
3	Düsensitz	1	41.522
4	Düse 028 (HD 7/122)	1	41.523-028
4.1	Düse 042 (HD 10/122)	1	41.523-042
5	Stabilisator	1	41.524
6	O-Ring	1	40.016 1
7	Sprühstopfen	1	41.526
8	Rohr 500 mm 2x M 12 x 1	1	41.527 1
9	ST 30-Nippel M 22 x 1,5 / M 12 x 1 ISK	1	13.363
11	Kappe vorn für Schmutzkiller	1	41.528 1
12	Kappe hinten für Schmutzkiller 028 (HD 7/122)	1	41.542 3
12.1	Kappe hinten für Schmutzkiller 042 (HD 10/122)	1	41.540 2
10	Rep.-Satz Schmutzkiller 028 bestehend aus je 1x 2; 3; 4; 5		41.096 4
10.1	Rep.-Satz Schmutzkiller 042 bestehend aus je 1x 2; 3; 4; 5		41.096 5
	Schmutzkiller 028 kpl. mit Lanze		41.570-028
	Schmutzkiller 042 kpl. mit Lanze		41.570-042

Wiring diagram / Warranty

Wiring diagram for KRÄNZLE HD 7/122



Guarantee

The guarantee is only valid for material and manufacturing errors. Wearing does not fall within this guarantee.

The instructions in our operating manual must be complied with. The operating instructions form part of the guarantee. The Guarantee is void if other parts are used than genuine Kränzle accessory parts or genuine Kränzle spare parts.

For high-pressure cleaners sold to the user the guarantee period is 24 month.

For high-pressure cleaners sold for industrial use the guarantee period is 12 month. In the case of a guarantee please contact your dealer or authorized seller delivering accessories and your purchase receipt. You can find them in the internet under www.kraenzle.com.

The guarantee is also void if the machine is used with exceeding the temperature and speed limits, a voltage below the required rating, with less than the required amount of water or with dirty water. Pressure gauge, nozzle, valves, sleeves, high pressure hose and spray equipment are wear parts and are not covered by the warranty.

