

Operating manual

High-pressure cleaners

kärnzle®

K1622

www.kraenzle.com



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

- GB -



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.

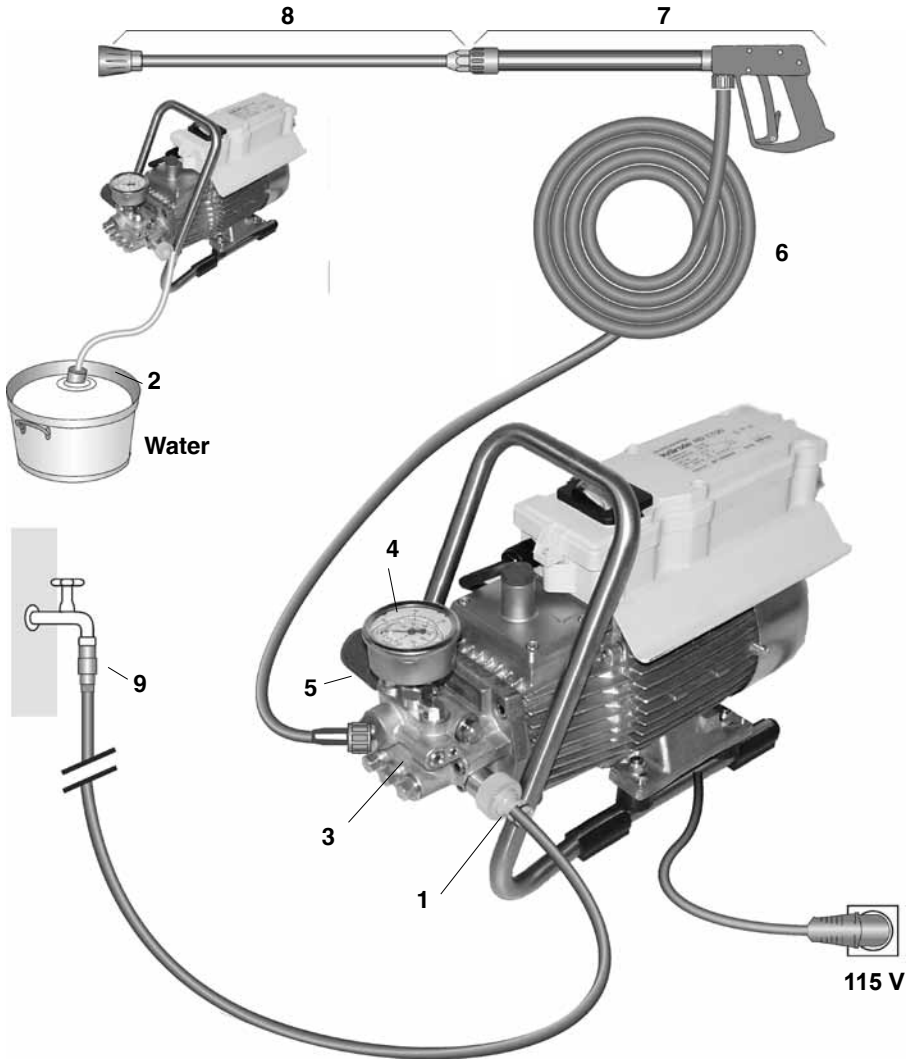
The equipment will assist you professionally in all cleaning tasks, e.g.:

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

Technical data	Kränzle K 1622
Operating pressure, steplessly adjustable	150 - 1600 psi
Nozzle size	20 028
Perm. overpressure	1800 psi
* Water output	at 1700 rpm 1,7 GPM
Hot water input (1-8 bar)	max. 140 °F
Suction height	1.0 m
High pressure hose	10 m
Electrical ratings	115 V ; 60 Hz ; 14 A
Connect. wattage input output	P1: 1.6 kW P2: 1.5 HP
Weight	18,5 kg
Dimensions in mm	300 x 330 x 800
Sound level acc.to DIN 45 635	71 dB (A)
Sound level L_{WA}	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 $\pm 5 \%$ nach VDMA Einheitsblatt 24411

Description



Connection principle

The KRÄNZLE K 1622 - 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

Lance with trigger gun

The machine can only be operated when the safety trigger is squeezed. 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.



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.

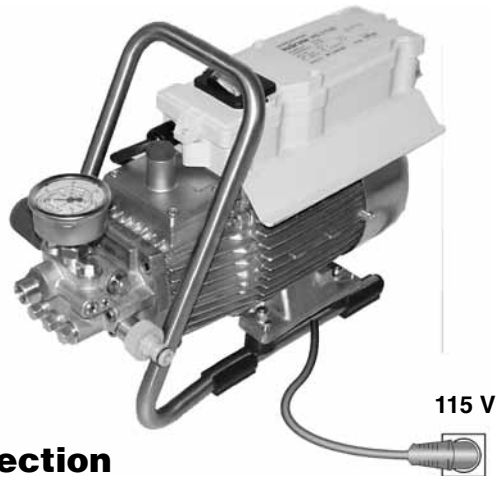
CAUTION !



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 **15A** delay action fuse on the mains side.



KRÄNZLE K 1622 115 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 14 AWG. 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 - 12 AWG)

CAUTION !

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

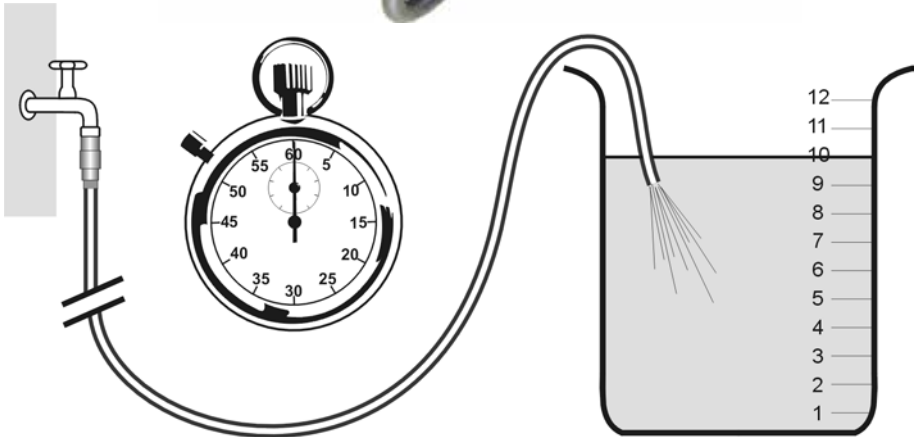
When using a cable drum, always keep the cable wound as far as possible.

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

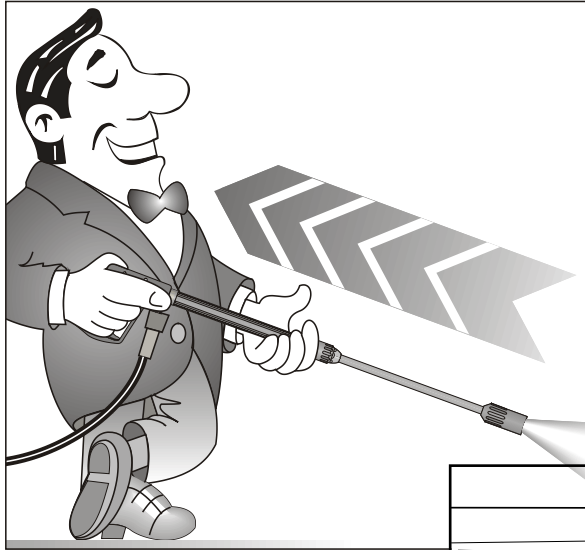
The high pressure hose and spraying device supplied with the machine are made of high grade material, they are also optimized for the machine and marked as required by the appropriate regulations.

- Hose length max. 20 m.



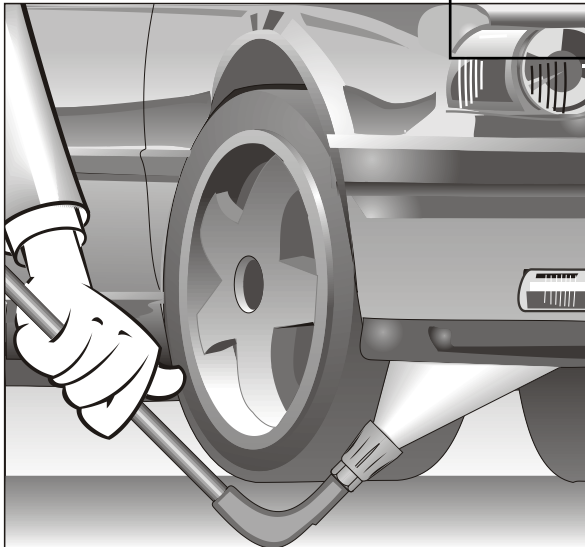
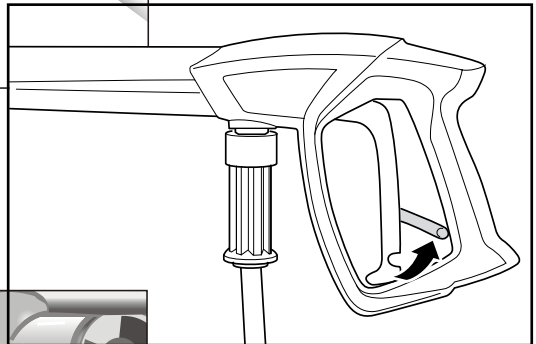
If replacement parts are required, only such parts that are authorized by the manufacturer and which bear the markings required by the appropriate regulations may be used. The high pressure hose and spray device must be connected in a pressure-tight manner (no leak). The high pressure hose may not be 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!**

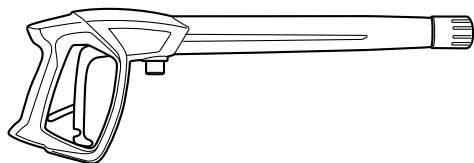


**Always aim the underbody
lance. Note when using an
angled underbody lance,
like for example lance no.
41.075 1, that there is a
certain amount of torque in
the recoil.
(Amount of torque 26 Nm)**

This is what you've purchased:



1. Spray lance with high pressure nozzle



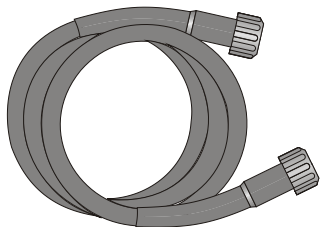
2. Spray gun with insulated pistol grip and screw connection

3. KRÄNZLE - High pressure cleaners K 1622



5. Operating instructions

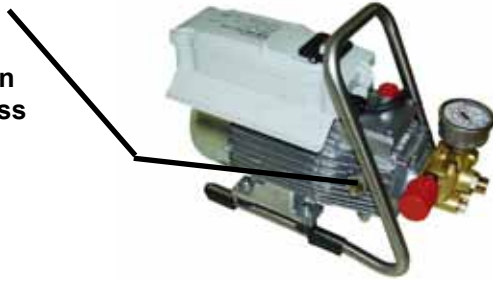
4. Steel braided high pressure hose
10 m, NW 6



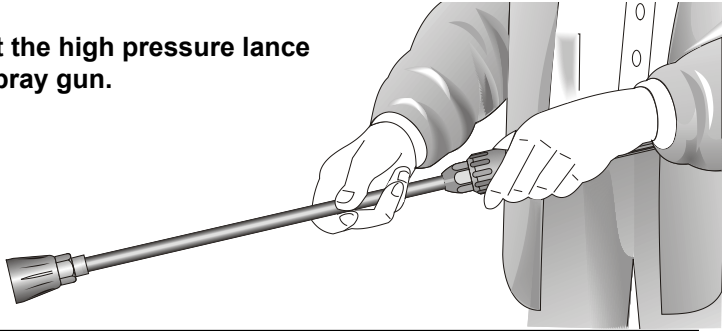
Preparation for use

1. Check oil level

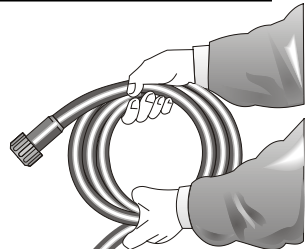
Oil has to be visible in the oil-level sight glass



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



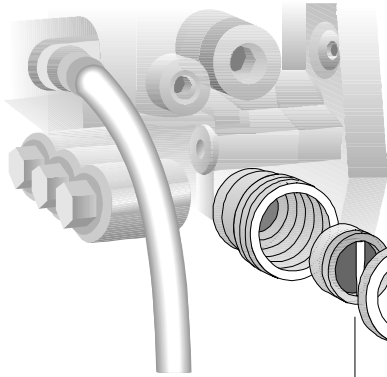
3. Unroll hose without kinks and connect with handgun and pump. Max. extension 20 m-HP hose or 2x 10 m with hose connections.



High pressure hose connected to machine and spray gun.



Preparation for use



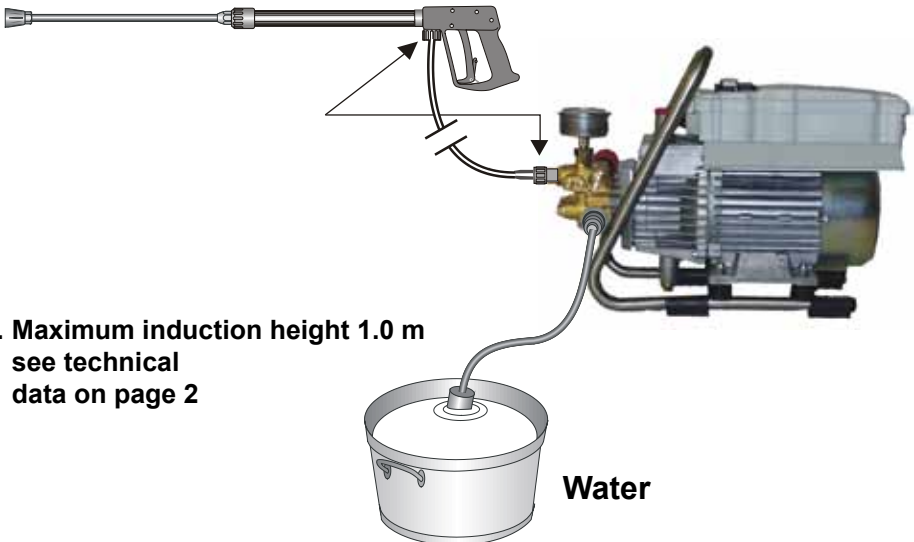
Sieb 1
vor jeder
Inbetriebnahme auf
Sauberkeit prüfen!

4. Die Maschine kann wahlweise an die Druckwasserleitung mit kaltem oder bis 60 °C heißem Wasser angeschlossen werden. (Siehe Seite 2)
Beim Außenansaugen auf sauberes Wasser achten. Der Schlauchquerschnitt muß mindestens 1/2" = 12,7mm sein (freier Durchgang). Sieb Nr. 1 muß immer sauber sein.

CAUTION !



When running your high pressure cleaner with hot water of 140 °F raised temperatures occur.
Do not touch the pump without safety gloves!

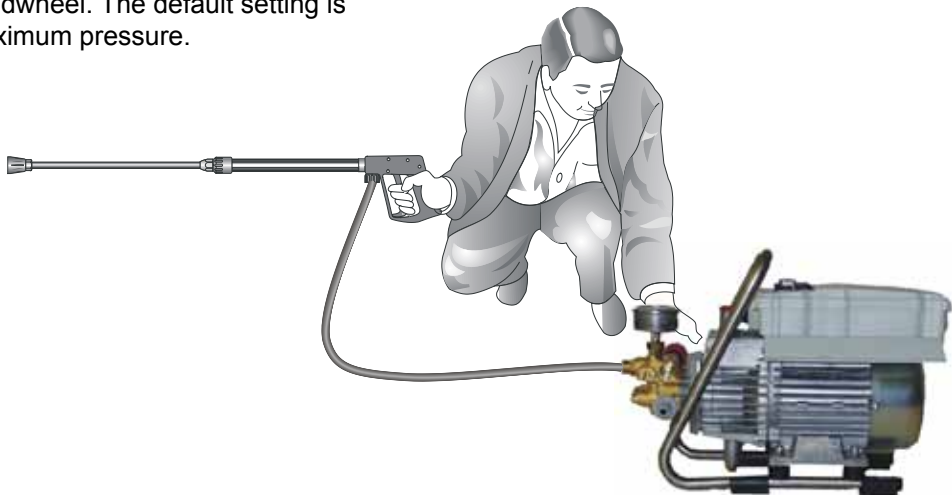


5. Maximum induction height 1.0 m
see technical
data on page 2

Preparation for use

Adjusting the pressure

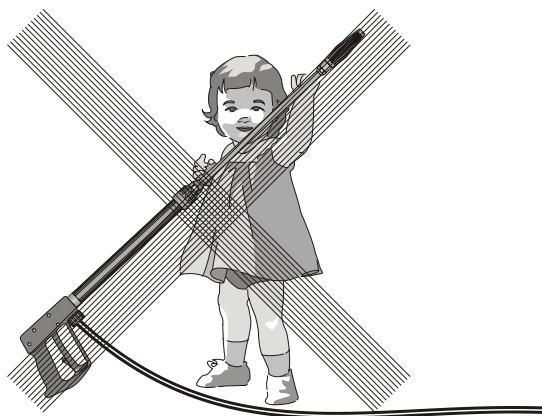
This is accomplished by turning the handwheel. The default setting is maximum pressure.



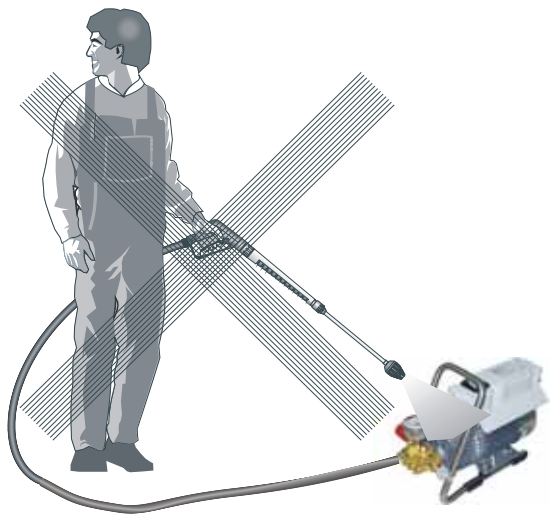
To shut down the pump:

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.

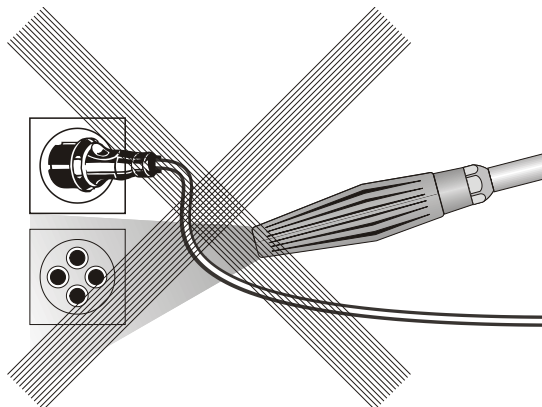
This is prohibited !



Never allow children to use the high pressure cleaner !

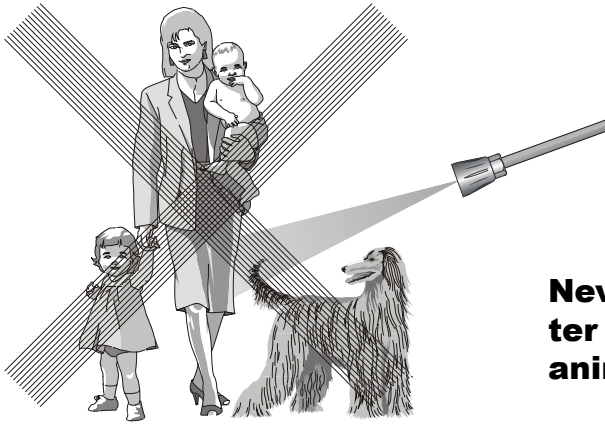


Never direct the water jet at the machine itself !

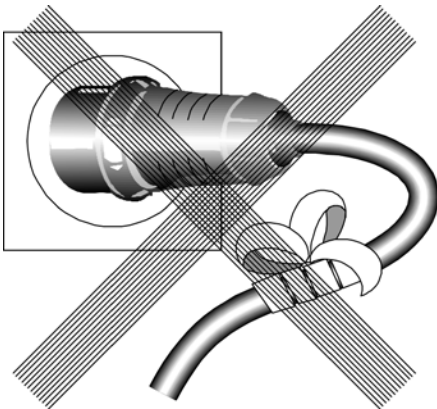


Never direct the water jet at a power socket !

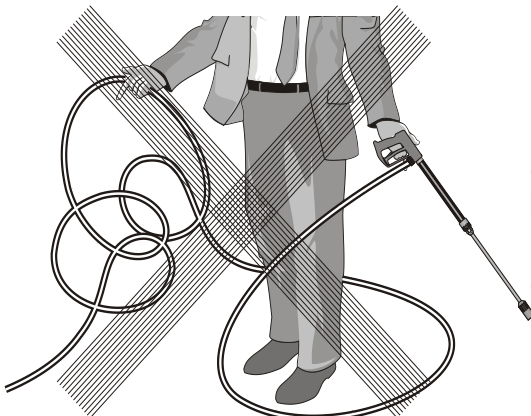
This is prohibited !



Never direct the water jet at people or animals !

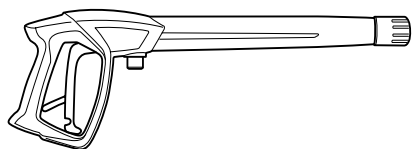


**Do not damage the power cable or repair it incorrectly !
(Replace defective or damaged cables immediately !
Never work with a defective appliance !)**



**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

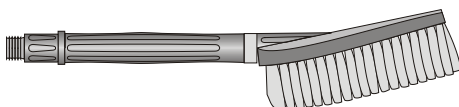
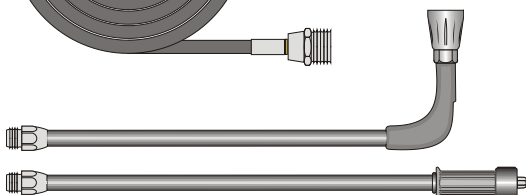
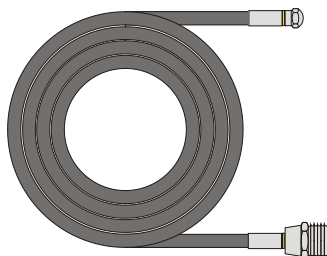
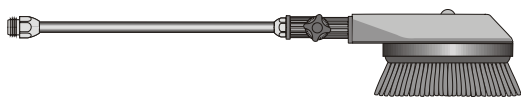
Order No. 41.075

Flat brush

Order No. 41.073

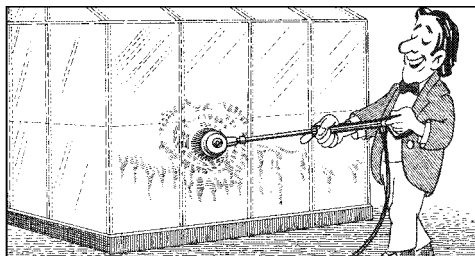
Dirtkiller 028

Order No. 41.570-028

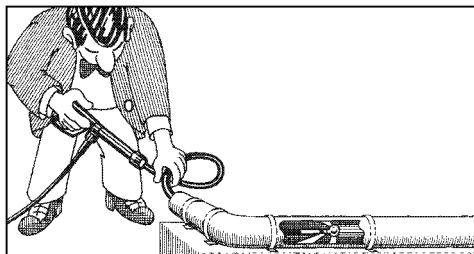


Environmental, refuse disposal and water protection regulations must be observed when using the accessories!

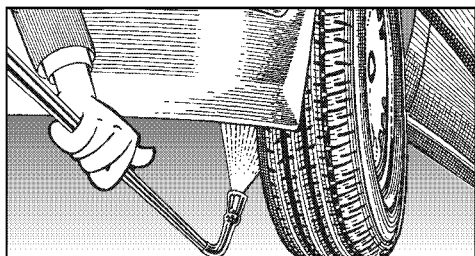
... for further combination possibilities



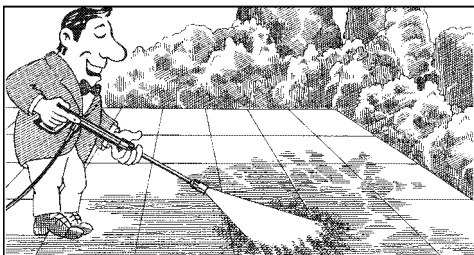
Car cleaning, glass, caravan, boat etc.
rotary washing brush with 40 cm extension and ST 30 nipple M 22 x 1.5



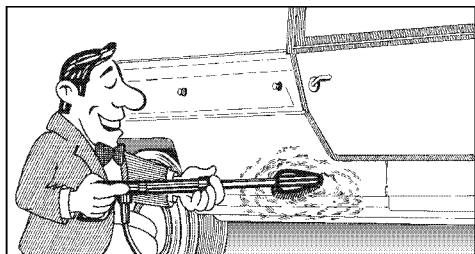
Cleaning pipes, channels and drains:
pipe cleaning hose with KN nozzle
and ST 30 nipple M 22 x 1.<<<<<5



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)



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

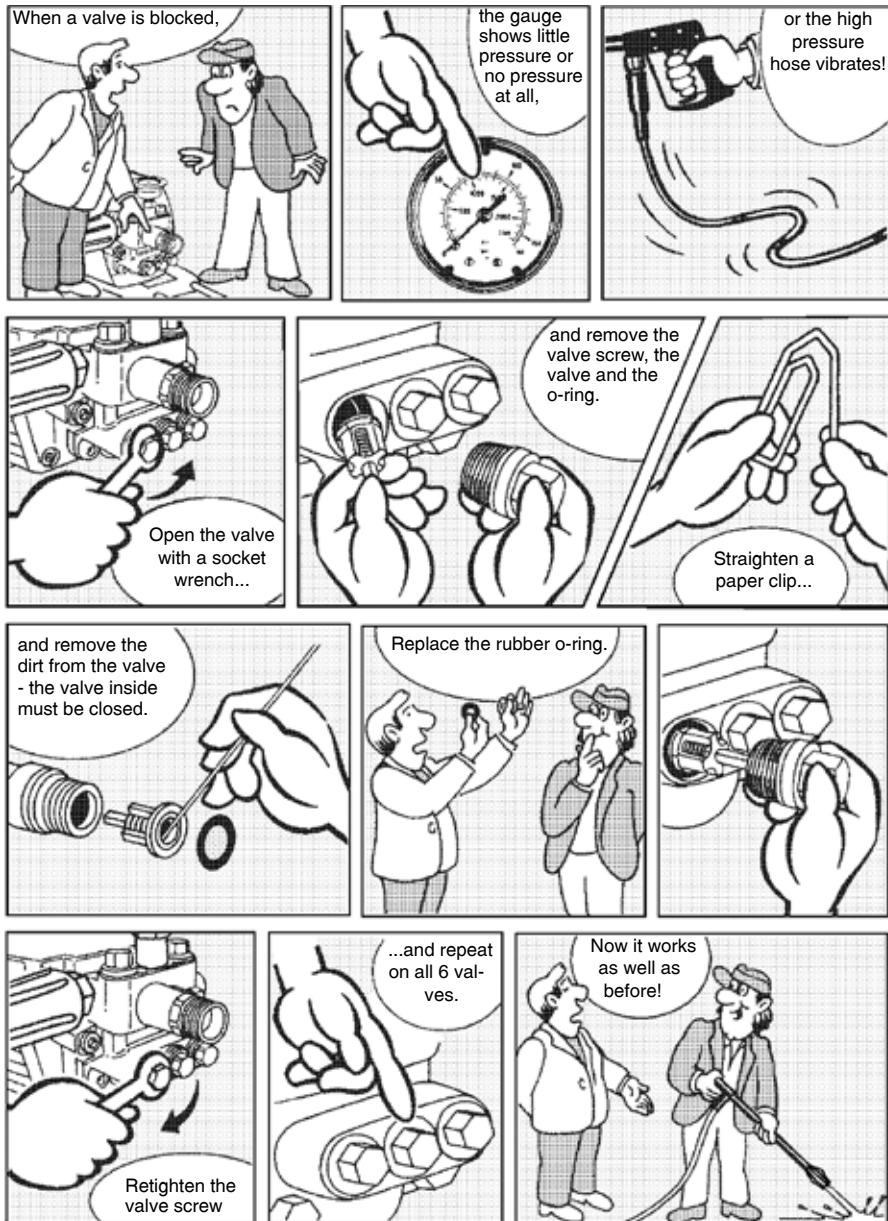


Cleaning cars and all smooth surfaces:
brush with ST 30 nipple.

Small repairs -

Nozzle dirty or sticky!

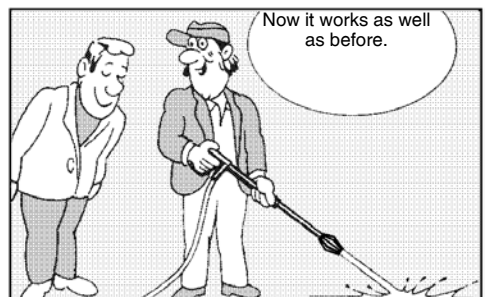
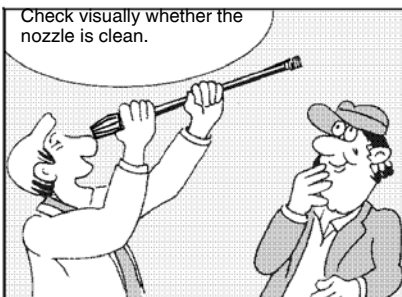
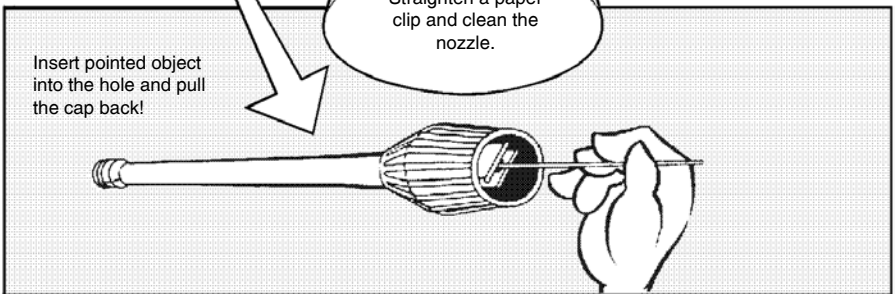
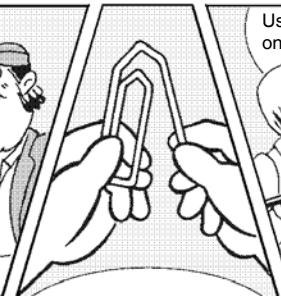
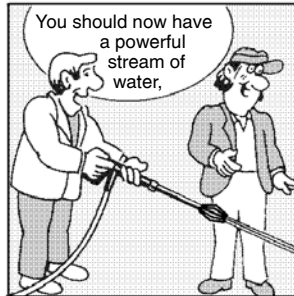
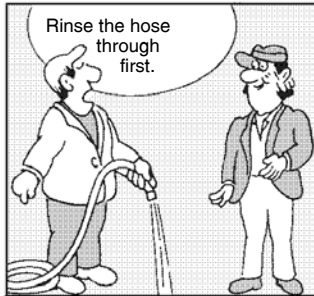
- Pressure gauge does not show full pressure.
- Water comes out in spurts.
- If you do not use the high-pressure cleaner for some time the valves can stick
- The high-pressure hose vibrates.



- Do it yourself!

The nozzle is blocked!

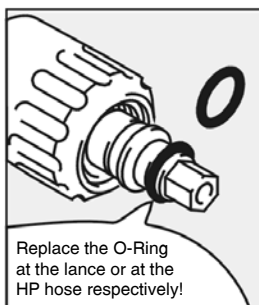
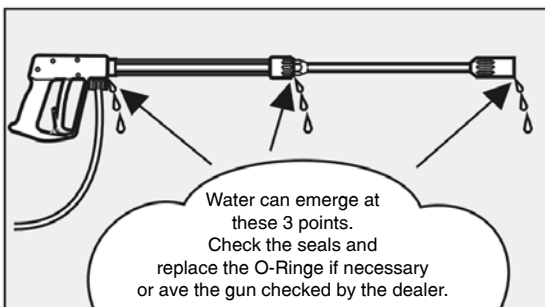
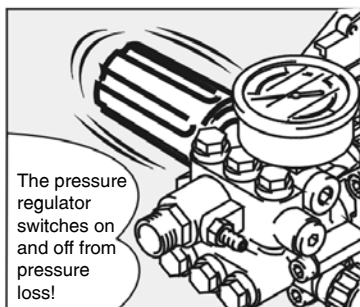
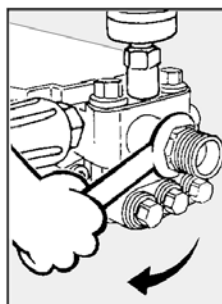
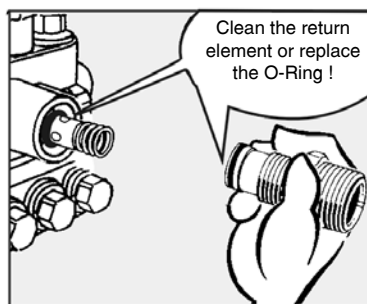
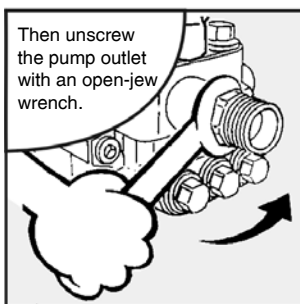
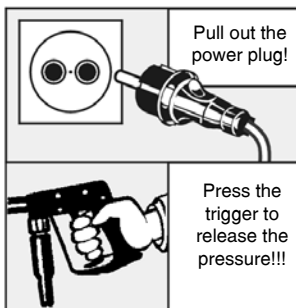
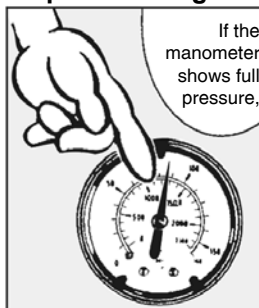
● No water but the gauge shows full pressure !



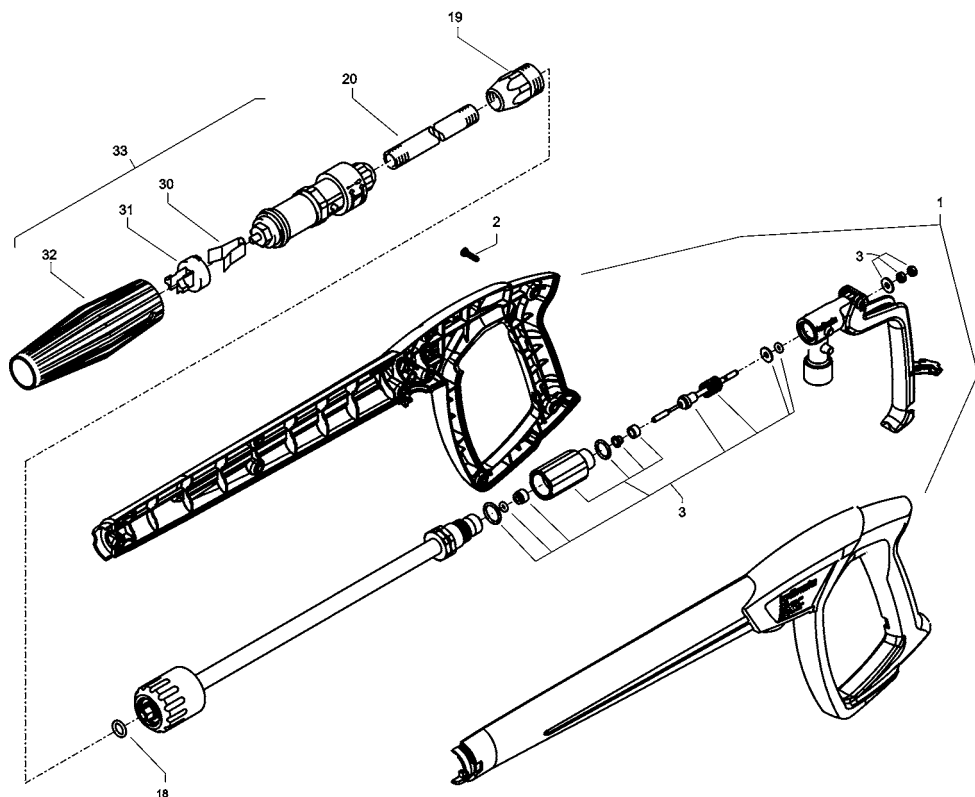
Small repairs - Do it yourself!

Stopping leaks from hose or gun

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

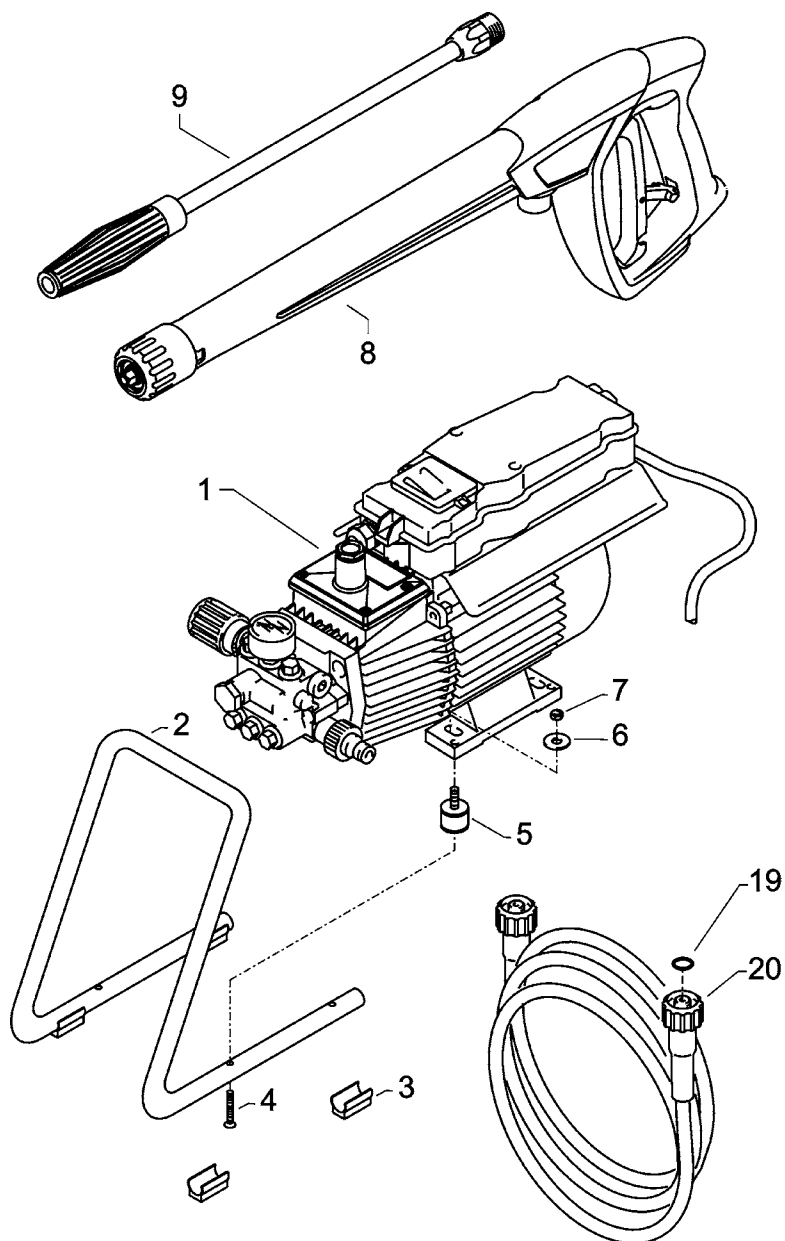


Gun with lance



No	Descriptio	Qty.	Ord.-No
1	Pistolenschale 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
19	ST 30-Nippel M 22 x 1,5	1	13.363
20	Rohr 500 lang, bds. M12 x 1	1	41.527 1
21	Aluminium Dichtring	6	13.275 1
30	Klemmstück	1	41.155 2
31	Halterung für Klemmstück	1	41.155 4
32	Kunststoffhülle	1	41.155 1
33	Vario-Jet 028	1	41.156 6-028
M2000-Pistole			12.480
Vario-Jet-Lanze 028			41.156 8-028

Complete assembly

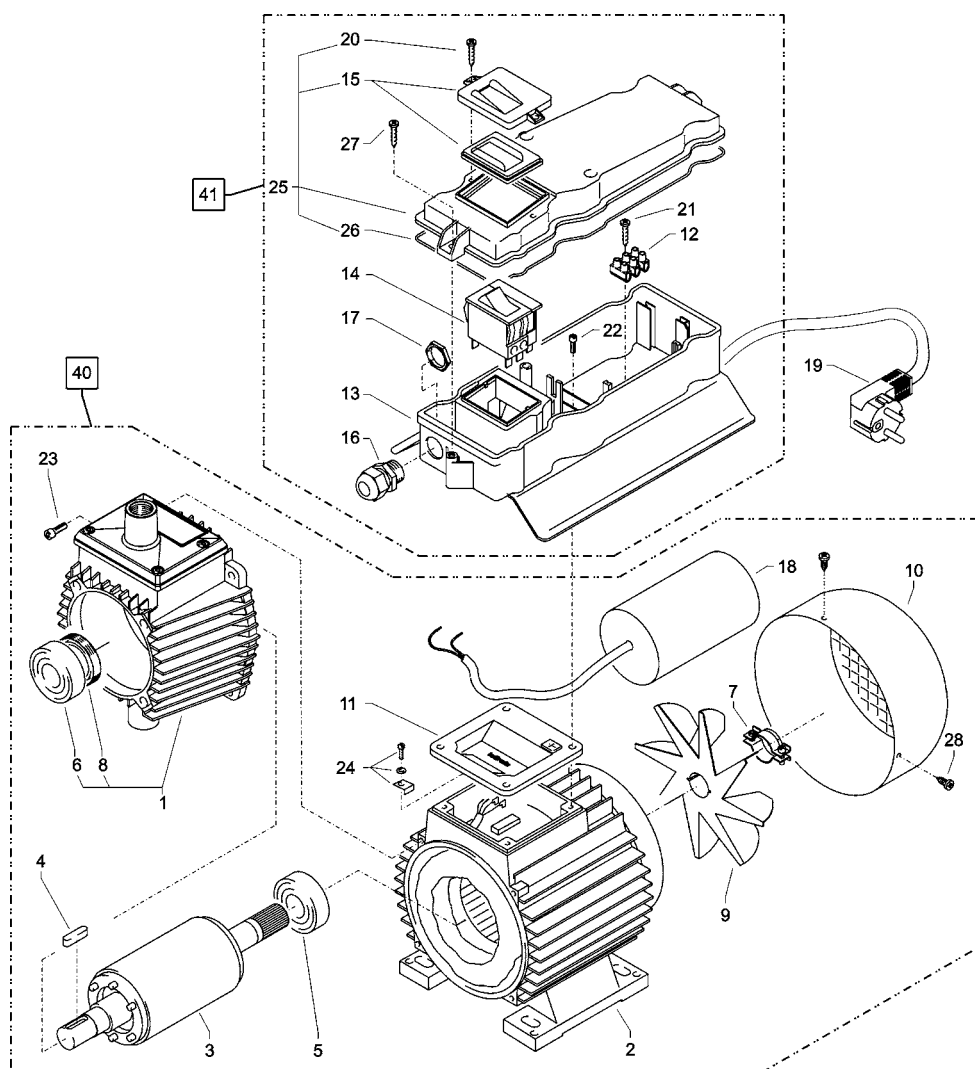


KRÄNZLE 1622

Spare parts list KRÄNZLE 1622 Complete assembly

No	Description	Qty.	Ord.-No
2	Tragbügel	1	44.581
3	Gummiprofilfuß	4	44.582
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	1	12.480
9	Vario-Jet-Lanze 028	1	41.156 8-028
10	Dirtkiller 03 cpl. with lance		41.073 8
19	O-Ring 9,3 x 2,4	2	13.273
20	HD-Schlauch NW 6 10 m 210 bar	1	43.416

Motor

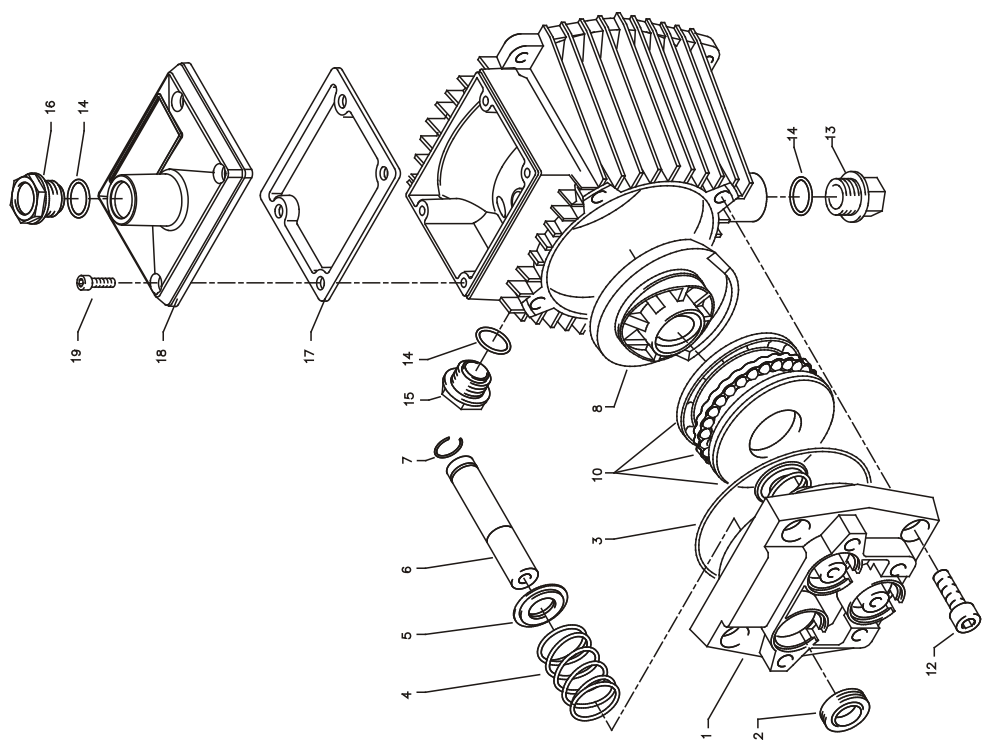


KRÄNZLE 1622

Spare parts list KRÄNZLE 1622 Motor

No	Description	Qty.	Ord.-No
1	Ölgehäuse mit Dichtung und Deckel	1	44.501
2	Stator	1	23.002 2
3	Motorwelle mit Rotor	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 2-pol.	1	43.031
13	Schaltkasten	1	44.508
14	Schalter 14,5 A	1	43.458
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 70 µF	1	43.322
19	Netzkabel	1	43.512
20	Blechschaube 3,5 x 9,5	2	41.088
21	Blechschaube 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	Kunststoffschraube 5,0 x 25	4	41.414
28	Blechschaube 3,9 x 9,5	3	41.636
29	Toleranzhülse	1	43.063 1

Transmission

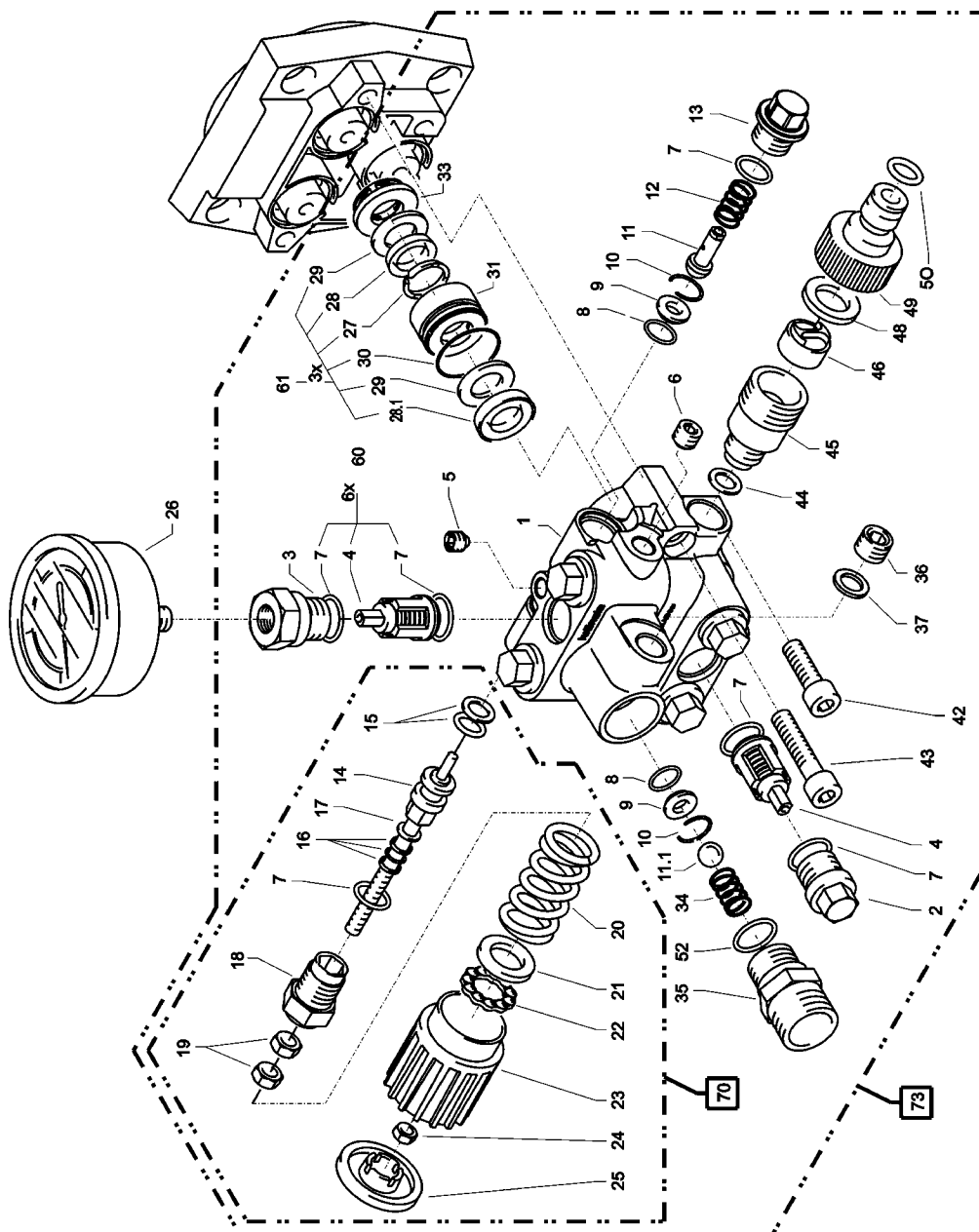


KRÄNZLE 1622

Spare parts list KRÄNZLE 1622 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	3	43.005
7	Sprengring 14 mm	3	41.635
8	Swash plate 9,75°	1	41.028-9,75
	please specify swash plate angle		
10	Axial-Rillenkugellager 3-teilig	1	43.486
12	Innensechskantschraube M 8 x 25	4	40.053
13	Verschlußschraube M 18 x 1,5	1	41.011
14	O-Ring 12 x 2	3	15.005 1
15	Ölschauglas	1	42.018 1
16	Överschlußschraube 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

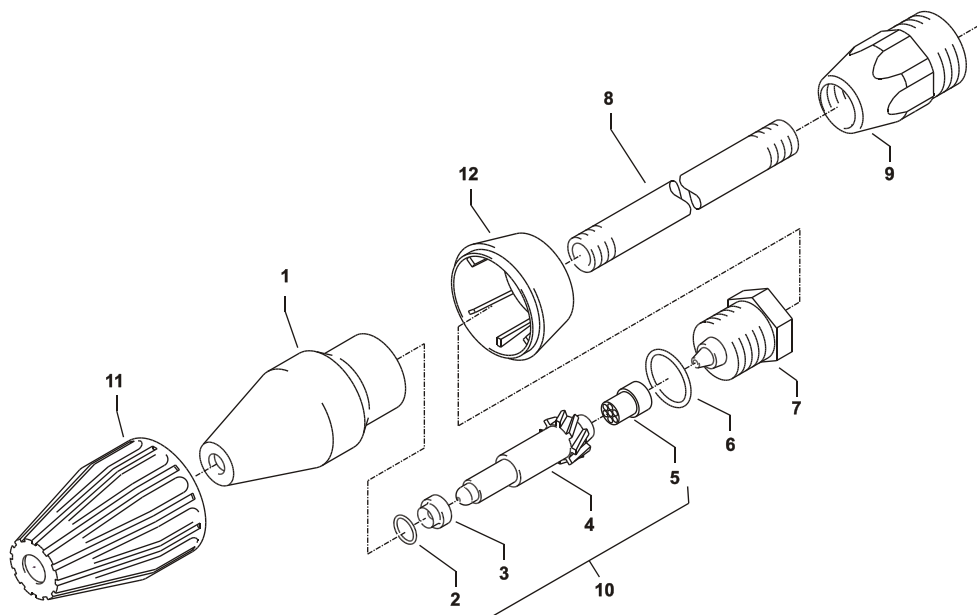
Valve housing



Spare parts list KRÄNZLE 1622 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 (grün)	6	41.612 1	34	Rückschlagfeder	1	14.120 1
5	Dichtstopfen M 8 x 1	1	13.158	35	Ausgangsteil für Kugelrückschlagv.	1	44.583
6	Dichtstopfen M 10 x 1	1	43.043	36	Verschlusstopfen	1	13.181
7	O-Ring 12 x 2	14	15.005 1	37	Aluminium-Dichtring	2	13.275
8	O-Ring 11 x 1,5	2	12.256	42	Innensechskantschr. M 8 x 25 - A2	2	40.053
9	Edelstahlsitz	2	14.118	43	Innensechskantschr. M 8 x 45 - A2	2	41.017
10	Sicherungsring	2	13.147	44	Dichtring Kupfer	1	14.149
11	Anlaufentlastungsventil	1	49.040	45	Sauganschluss	1	41.016
11.1	Edelstahlkugel 10,0 mm	1	12.122	46	Wasserfilter	1	41.046 2
12	Edelstahlfeder	1	14.119	48	Gummi Dichtring	1	41.047 1
13	Verschlussschraube	1	14.113	49	Steckkupplung	1	41.047 2
14	Steuerkolben 6 mm für AZ mit Dichtungen	1	44.532	50	O-Ring	1	41.047 3
15	Parbaks für Kolben 14 mm	1	14.123 1	52	O-Ring 18 x 2	1	43.446
16	Parbaks für Spindel 6 mm	1	14.123 2				
17	MS-Scheibe	1	43.045				
18	Kolbenführung 6 mm	1	14.130 1				
19	Mutter M 6	2	14.127 1				
20	Feder schwarz für AZ-Pumpe	1	43.046				
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				
				60	Rep.-Satz Ventile (grün)		41.648 1
				61	Reparatur-Satz Manschetten		49.053
				70	Steuerkolben kpl. m. Handrad		44.532 1
				73	Ventilgehäuse kpl.		44.590 2

Dirtkiller (special accessory)

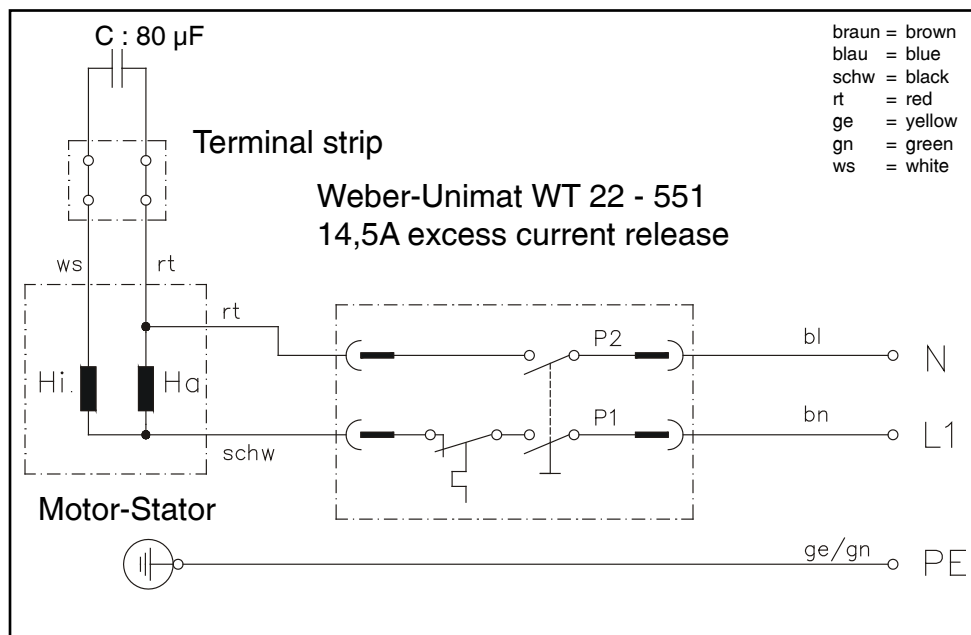


Spare parts list Dirtkiller

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	1	41.523-028
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	Front cap for Dirtkiller	1	41.528 1
12	Rear cap for Dirtkiller 028	1	41.542 3
Rep.-kit Dirtkiller 028			41.096 4
consisting of: 1x 2; 3; 4; 5			
Dirtkiller 028 compl. with lance			41.570-028

Wiring diagram / Warranty

Wiring diagram for KRÄNZLE K 1622



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.

General rules

Inspections

The machine must be inspected according to the “Guidelines for Liquid Spray Devices” at least once every 12 months by a qualified person, to ensure that continued safe operation is guaranteed. The results of the inspection are to be recorded in writing. This may be done in any form.

Accident prevention

The machine is designed for accidents to be impossible if used correctly. The operator is to be notified of the risk of injury from hot machine parts and the high pressure water jet. The “Guidelines for Liquid Spray Devices” must be complied with. (see page 14 and 15)

Oil change:

Check the oil level at the oil sight glass prior to each use. (Ensure horizontal position!) The oil level should be at the middle of the sight glass. With high atmospheric humidity and temperature fluctuation there may be condensation (oil has a greyish colour); Then the oil must be changed.

First oil change after approx 50 hours of operation. Thereafter, no more oil change is required for the lifetime of the equipment. If it becomes necessary during repairs, or because the oil has a greyish colour to perform an oil change, then the oil sight glass should be opened and the oil emptied into a container. The oil must be caught in a container and disposed of in a responsible, legal manner.

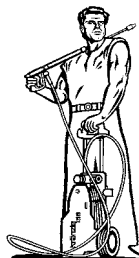
New oil: 0.25 l - Motor oil: W 15/40

Oil leak

In the event of an oil leak contact customer service (dealer) immediately. (damage to environment or transmission)



I. Kränzle GmbH
Elpke 97
33605 Bielefeld



EC declaration of conformity

We hereby declare,
that the high-pressure models:

(techn. documentation available from):

Nominal flow

comply with the following guidelines and specifications and their amendments for high-pressure cleaners:

Sound power level measured:
quaranteed:

Applied conformity evaluation procedures

Applied specifications and standards:

Kränzle K 1622

Manfred Bauer, Fa. Josef Kränzle
Rudolf-Diesel-Str. 20, 89257 Illertissen

K 1622: 420 l/h:

Machine guideline 2006/42/EEC
Specification for electromagnetic
compatibility 2004/108/EEC
Outdoor noise directive 2005/88/EC,
 Art. 13, High-pressure water jet machi-
 nes Appendix 3, part B, chapter 27

81 dB (A)
84 dB (A)

Annex V, noise directive 2005/88/EC

EN 60 335-2-79 :2009
EN 55 014-1 :2006
EN 61 000-3-2 :2006
EN 61 000-3-3 :2008

Bielefeld, 2012/03/18

Example 1st

Kränzle Josef
(Managing Director)

Notes

Notes

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As date of 18.03.2013

