

GB

High Pressure Cleaners



K 115 K 125 K 135 K 155



DIN EN ISO 9001





made in

Germany

Operating manual
Read and conform
safety instructions
before use



Dear Customer

We would like to congratulate you on your new high pressure cleaner with integrated undercarriage and integrated hose drum 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 for the first time.

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

- facades

- vehicles of all types

- barrels and containers

- flagstones

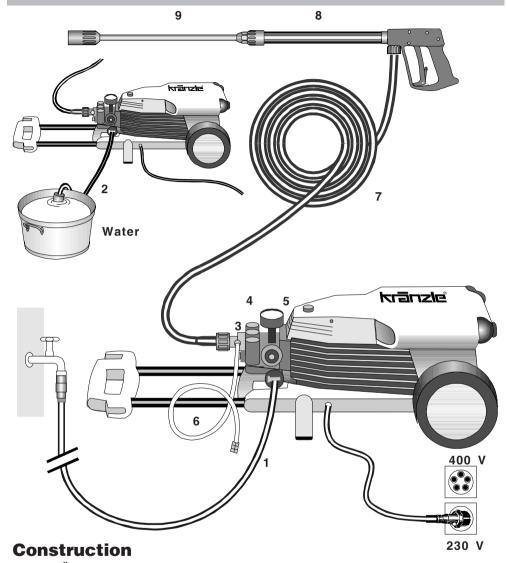
- sheds

- machines etc.

- teri	races	- chai	nnels

- terraces	- cnanneis					
Technical specifications	Kränzle 115	Kränzle 125	Kränzle 135	Kränzle 155		
Operating pressure, steplessly adjust.	10 - 115 bar	10 - 125 bar	10 - 135 bar	10 - 155 bar		
Perm. overpressure	130 bar	140 bar	150 bar	170 bar		
*Water output	at1400 rpm 10,3 l/min	at 1400 rpm 10,5 l/min	at1400 rpm 11,0 l/min	at 1400 rpm 12 l/min		
Hot water input	max. 60 °C	max. 60 °C	max. 60 °C	max. 60 °C		
Suction height	2,5 m	2,5 m	2,5 m	2,5 m		
High pressure hose	10 m	10 m	10 m	10 m		
Electrical ratings	230 V ; 50 Hz ; 11 A	230 V ; 50 Hz ; 12,5 A	230 V ; 50 Hz ; 13,5 A	400 V ; 50 Hz ; 6,7 A		
Connect. wattage input output	P1: 2,6 kW P2: 1,9 kW	P1: 2,9 kW P2: 2,2 kW	P1: 3,3 kW P2: 2,4 kW	P1: 4,1 kW P2: 3,1 kW		
Weight	32 kg	32 kg	32 kg	32 kg		
Dim. with mounted handle in mm	350 x 330 x 900	350 x 330 x 900	350 x 330 x 900	350 x 330 x 900		
Sound level acc.to 45635 with dirtkiller Guaranteed sound	78 dB (A) 82 dB (A)	78 dB (A) 82 dB (A)	78 dB (A) 82 dB (A)	78dB (A) 82 dB (A)		
level L _{wa}	89 dB (A)	89 dB (A)	91 dB (A)	91 dB (A)		
Recoil at lance	ca. 20 N	ca. 22 N	ca. 25 N	ca. 27 N		
Vibrations at lance	2,0 m/s²	2,0 m/s²	2,0 m/s²	2,1 m/s²		
OrdNo	41.204	41.200	41.201	41.202		
with dirtkiller	41.204 1	41.200 1	41.201 1	41.202 1		

Permissible tolerance for figures ± 5 % in acc. with VDMA uniform sheet 24411 Min. water quantity to be supplied to the high pressure cleaner! (1 - 8 bar admission pressure) (see page 7)



The KRÄNZLE 115 + 125 + 135 + 155 - high pressure cleaners are mobile machines. The design can be seen from the diagram.

Item

- 1 Water inlet connection with filter
- 2 Suction hose with filter (special accessory) Order no. 15 038 3
- 3 High pressure pump
- 4 Press. gauge with glycerin filling
- 5 Unloader valve safety valve
- 6 High pressure injector for cleaning agents
- 7 High pressure hose
- 8 Spray gun
- 9 Interch. lance with regulator nozzle

Water and Cleaning 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.



Cleaning and caring agents can be mixed with the water by a high pressure injector.

Environmental, refuse disposal and water protection regulations must be observed!

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 ressumes 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 p 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

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!

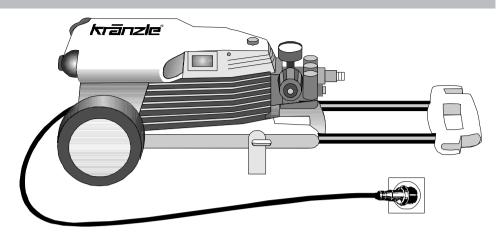


Never use liquid containing solvents such as paint thinners, petrol, oil or similar liquid matter. Pay attention to the instructions of the manufacturers of the cleaning agents. The seals in the machine are not resistant to solvents. The spray of solvents is inflammable, explosive and poisonous.

CAUTION!



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



Electrical connection

The machine is supplied with an electrical power cord 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 115, 125, and 135 - 230 Volt 50 Hz KRÄNZLE 155 - 400 Volt 50 Hz (phase-sequence not significant)

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 mm². 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 mm²)

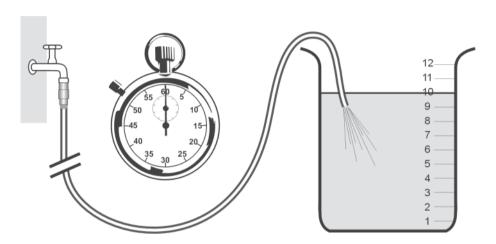
CAUTION!

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.

Water connection:

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



Test:

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

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)

Brief operating instructions

are fitted to the machine. Numbers 1-6.

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

- 1. Connect the high pressure hose with spray gun and machine.
- 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 (KRÄNZLE 115, 125 + 135 230 Volt A.C., KRÄNZLE 155 400 Volt three-phase current).
- 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 pressure hoses).
 - -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.



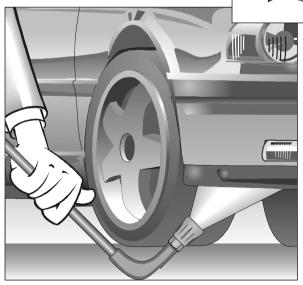
If replacement parts are required, only such parts that are authorized by the manufacturer and which bear the markings required by the appropriate regulations may be used. The high pressure hose and spray device must be connected in a pressure-tight manner. The high pressure hose may not be driven over, 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. 41075, that there is a certain amount of torque in the recoil.

(K115: 22 Nm K125: 24 Nm K135: 26 Nm K155: 27 Nm)

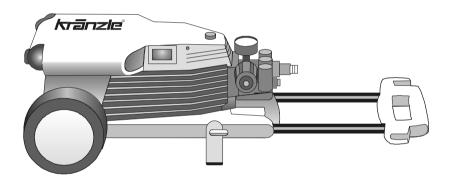
This is what you've purchased:



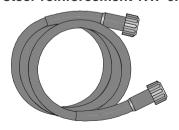
1. Spray lance with regulator and high pressure nozzle, flat spray 25045



- 2. Spray gun with insulated pistol grip and screw connection
- 3. KRÄNZLE High pressure cleaners 115, 125, 135 or 155



4. High pressure hose 10 m with steel reinforcement NW 6.



5. Operating instructions



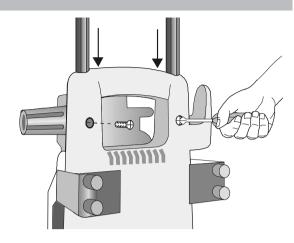
6. Water inlet components

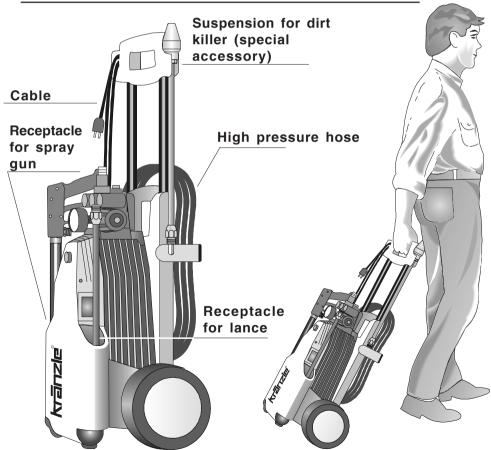


Filter already mounted

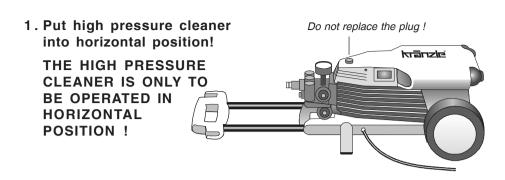
How to assemble and furnish your high pressure cleaner

Put high Pressure cleaner into upright position. Insert handle from above and fasten with 2 screws from underneath.



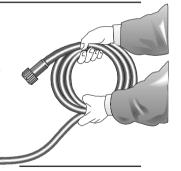


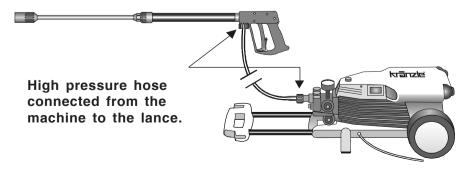
Preparation for use





3. Unwind the high pressure hose without leaving kinks or "nooses" and connect it to the spray gun and pump. When using extension hoses, use max. 20 m high pressure hose, or 2 x 10 m with hose connectors.





Preparation for use

4. The machine can be connected to a pressurised water line with cold or 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.

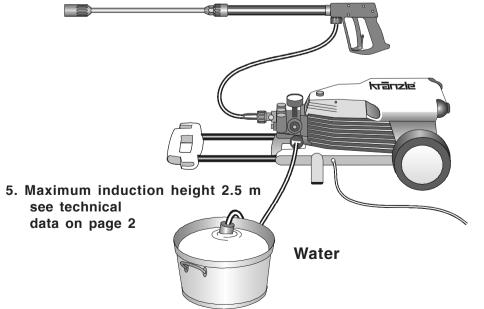
Please make sure that the filter 1 is clean before using your high pressure cleaner.

CAUTION!



When running your high pressure cleaner with hot water of 60° raised temperatures occur.

Do not touch the pump without safety gloves!



Preparation for use

Adjusting the pressure

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

When using cleansing agents:

Unwind HP-hose completely. Place chemical filter no. 5 in the reservoir with the cleansing agent. Turn on Vario-Jet No.4 to to enable the injector to induct the cleansing agent. By turning back the Vario-Jet nozzle, the supply of

chemical is automatically cut off. Allow the cleansing agent to take effect and then remove with high pressure spray.



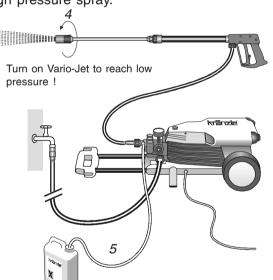
A mixing ratio of 3-5% is achieved when the Vario-Jet is fully turned on. pH value neutral 7-9



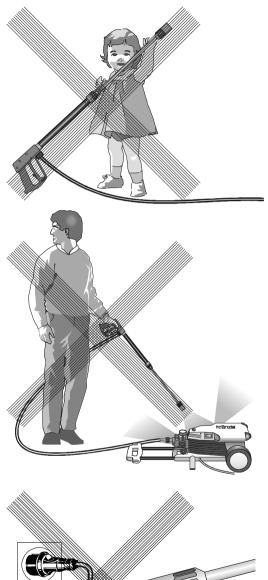
Note that you must always comply with the instructions provided by the manufacturer of the cleansing agent (e.g. instructions concerning safety clothing) and the water protection regulations!

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.

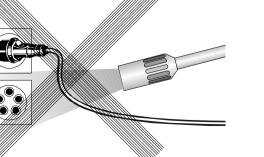


This is prohibited!



Never allow children to use the high pressure cleaner!

Never direct the water jet at the machine itself!



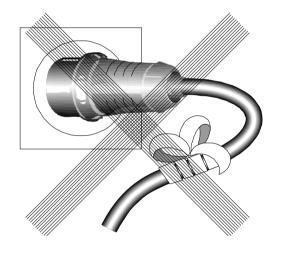
Never direct the water jet at a power socket!

This is prohibited!

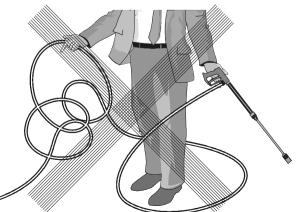




Never direct the water jet at people or animals!

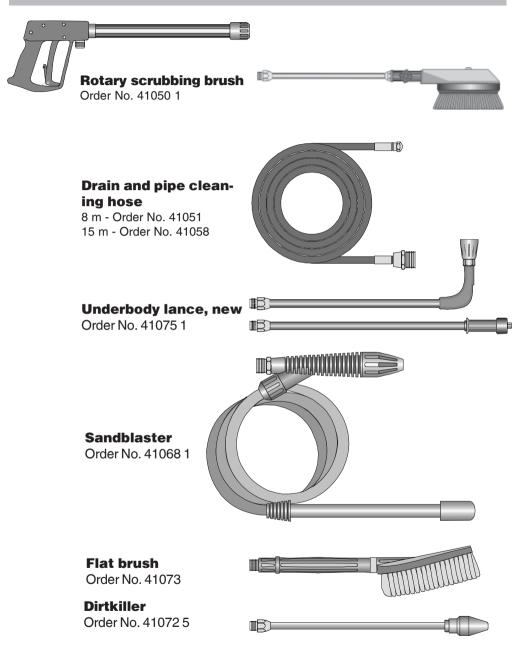


Do not damage the power cord or repair it incorrectly!



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

Additional KRÄNZLE-accessories for ...

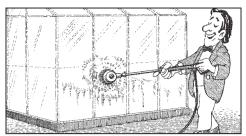




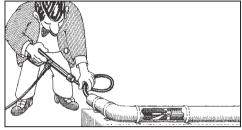
Environmental, refuse disposal and water protection regulations must be observed when using the accessories!

... for further combination possibilities

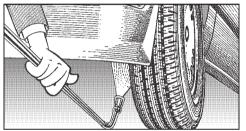




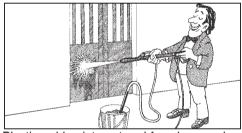
Car cleaning, glass, caravan, boat etc. rotary washing brush with 40 cm extension and ST 30 nipple M 22 x 1,5



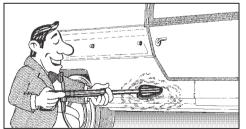
Cleaning pipes, channels and drains: pipe cleaning hose with KN nozzle and ST 30 nipple M 22 x 1,5



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)



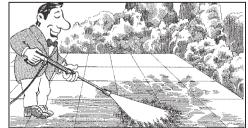
Blasting old paint, rust and facades: sandblasting injector with suction lance, 3 m PVC hose and ST 30 nipple.



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



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



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

Small repairs - Do it yourself!

You only get a weak flow of water or no water at all!

• The pressure gauge shows a 10% higher pressure than the working pres

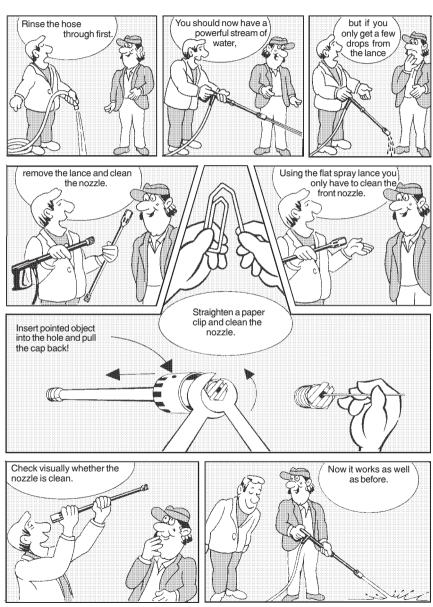


Small repairs -

The nozzle is blocked!

● No water but the gauge shows full pressure!





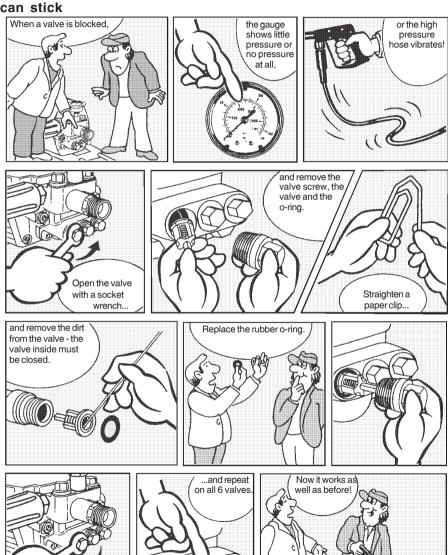
- Do it yourself!

Nozzle dirty or sticky!

- Pressure gauge does not show full pressure.
- Water comes out in spurts.

Retighten the valve screw

- The high-pressure hose vibrates.
- If you do not use the high-pressure cleaner for some time the valves can stick

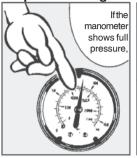


Small repairs - Do it yourself!

Stopping leaks from hose or gun

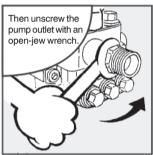
• After closing the gun the manometer shows full pressure!

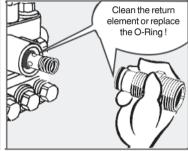
• The pressure regulator switches on and off contunuously!

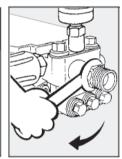


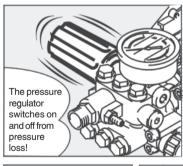


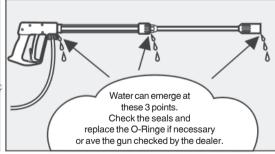


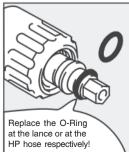








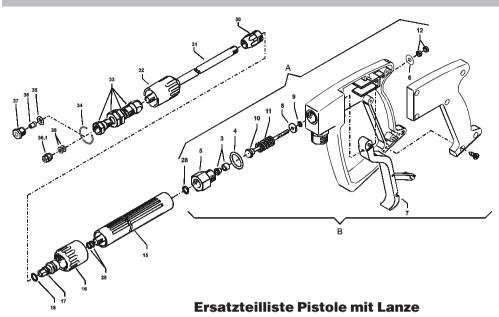






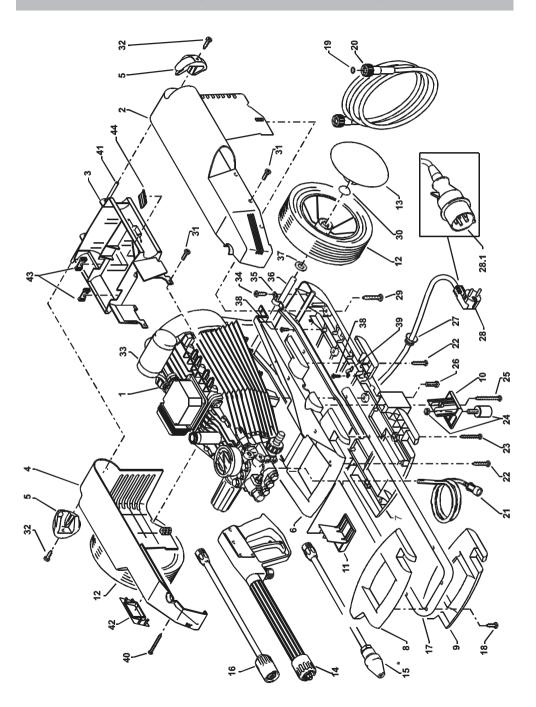


Trigger gun with lance



No Description	Qty.	OrdNo
5 Rohranschlussteil R1/4"	1	12.125
incl. Pos. 3, 4, 21		
6 Scheibe 5,3 DIN9021	1	50.152
7 Abzug-Hebel kpl.	1	12.144 1
12 Mutter M4	2	12.138
15 Rohr kunststoffumspritzt bds. R 1/4" AG	3 1	15.004 2
16 Überwurfmutter ST 30 M22 x 1,5 IG	1	13.276 1
17 Außen-Sechskant-Nippel R 1/4" IG	1	13.277 1
18 O-Ring 9,3 x 2,4	1	13.273
28 Aluminium Dichtring	6	13.275 1
30 ST 30-Nippel M 22 x 1,5 AG / M 12 x 1	1	13.363
31 Rohr 400 lang, bds. M12 x1	1	41.527
32 Kunststoff-Hülse	1	13.202
33 Regeldüse ohne Hülse	1	43.439
34 Sprengring	1	43.441
35 O-Ring 6,0 x 3,0	1	14.121
36 HD-Düse MX20042	1	MX20042
36.1 HD-Düse M20030	1	M20030
37 Düsenhalter	1	26.004
A RepKit Pos: 3, 4, 5, 6, 8, 9, 10, 11, 12; 28		12.158
B Griff komplett		12.164
Midi-Gun		12.160
Lance compl. with regulator nozzle	042	12.700-MX

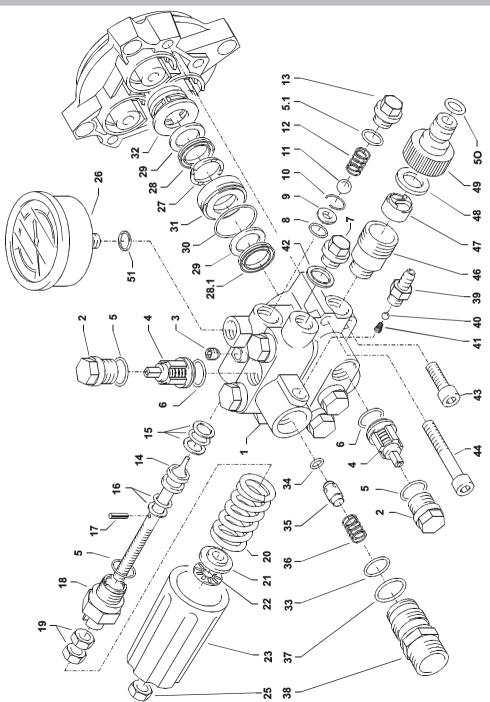
Complete assembly



Spare parts list KRÄNZLE 115 / 125 / 135 / 155 Complete assembly

No	Description	Qty.	OrdNo	No	Description	Qty.	OrdNo
1	Motor WECHSELSTROM für K 115	1	43.448	18	Kunststoffschraube 3,5 x 20	5	43.415
1	Motor WECHSELSTROM für K 125	1	43.400	19	O-Ring 9,3 x 2,4	2	13.273
1	Motor WECHSELSTROM für K 135	1	43.302	20	HD-Schlauch NW 6 10 m 210 bar	1	43.416
1	Motor DREHSTROM für K 155	1	43.327	21	Chemikaliensaugschlauch mit Filter	1	15.038
	Motoren jeweils komplett mit Ölgehäuse	е		22	Kunststoffschraube 4,0 x 16	5	43.417
	und Lüfterrad ohne Schalter			23	Kunststoffschraube 5,0 x 30	2	43.418
2	Gehäusehälfte rechts	1	43.402	24	Gummidämpfer	4	43.419
3	Halterung Kondensator	1	43.403	25	Kunststoffschraube 4,0 x 60	2	43.420
4	Gehäusehälfte links K 115	1	43.404 1	26	Schraube M 6 x 12	4	43.421
4.1	Gehäusehälfte links K 125	1	43.404 2	27	Knickschutztülle	1	43.422
4.2	Gehäusehälfte links K 135	1	43.404 3	28	Kabel mit Stecker (Wechselstrom)		
4.3	Gehäusehälfte links K 155	1	43.404 4		für Kränzle 115 / 125 / 135	1	41.092
5	Gummidämpfer	2	43.405	28.1	Kabel mit Stecker (Drehstrom)		
6	Unterschale 1	1	43.406		für Kränzle 155	1	41.092 1
7	Unterschale 2 K 115	1	43.407 1	29	Kunststoffschraube 6,0 x 30	2	43.423
7.1	Unterschale 2 K 125	1	43.407 2	30	Starlock-Kappe Durchmesser 12	2	43.424
7.2	Unterschale 2 K 135	1	43.407 3	31	Schraube M 5 x 10	8	43.021
7.3	Unterschale 2 K 155	1	43.407 4	32	Kunststoffschraube	2	43.425
8	Handgriff Schale 1	1	43.408	33	Schaumstoffrohr für Kondensator	1	41.418
9	Handgriff Schale 2	1	43.409	34	Kunststoffschraube 5,0 x 14	4	43.426
10	Schlauchhalter R (rechts)	1	43.410	35	Haltebügel	2	43.427
11	Schlauchhalter L (links)	1	43.411	36	Bodenblech mit Motorachse	1	43.428
12	Rad	2	43.412	37	Kuststoffscheibe 12,5 mm	2	43.429
13	Radkappe	2	43.413	38	Kunststoffschraube 3,5 x 8	8	43.430
14	PICO-Pistole mit Verlängerung	1	41.053 1	39	Kabelklemme	2	43.431
15	Schmutzkiller 045 mit Lanze	1	41.072 5	40	Kunststoffschraube 5,0 x 80	2	43.432
16	Regeldüse mit HD-Düse 20042 und Lanze	e 1	12.700-MX20042	41	Kunststoffschraube 5,0 x 120	1	43.309
17	Rohr für Handgriff	1	43.414	42	Schalterblende	1	43.433
	-			43	Kabelführung	2	43.061
				44	Kabelauflage	1	43.062

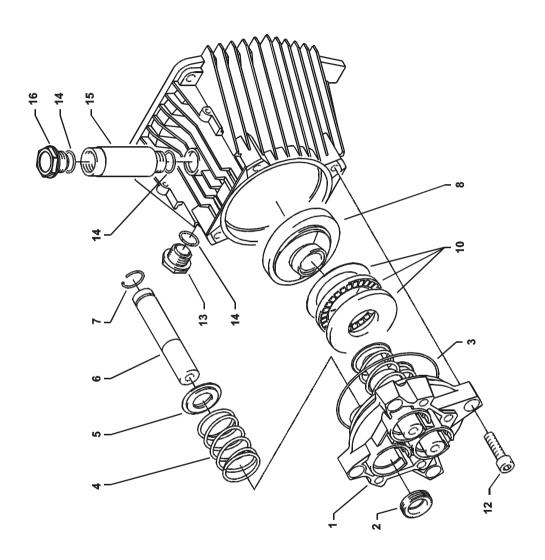
Valve housing 18 mm



Spare parts list KRÄNZLE 115 / 125 / 135 / 155 Valve housing APG for plunger diameter 18 mm

No	Description	Qty.	OrdNo	No	Description	Qty.	OrdNo
1	Ventilgehäuse	1	43.435	32	Zwischenring 18 mm	3	41.015 2
2	Ventilstopfen	6	41.714	33	O-Ring 15 x 1,5	1	42.104
3	Dichtstopfen M 10 x 1	1	43.043	34	O-Ring 6 x 3	1	14.121
4	Ventile (grün) für APG-Pumpe	6	41.715 1	35	Rückschlagkörper	1	14.122
5	O-Ring 16 x 2	7	13.150	36	Rückschlagfeder	1	14.120
5.1	O-Ring 13,94 x 2,62	1	42.167	37	O-Ring 18 x 2	1	43.446
6	O-Ring 15 x 2	6	41.716	38	Ausgangsstück Injektor ST30 M22x1,5	1	43.447
7	Dichtstopfen R1/4" mit Bund	1	42.103	39	Saugzapfen Schlauchanschluss	1	13.236
8	O-Ring 11 x 1,44	1	12.256	40	Edelstahlkugel 5,5 mm	1	13.238
9	Edelstahlsitz	1	14.118	41	Edelstahlfeder	1	13.239
10	Sicherungsring	1	13.147	42	Kupferring	1	42.104
11	Edelstahlkugel 8,5 mm	1	13.148	43	Innensechskantschraube M8x30	2	41.036 1
12	Edelstahlfeder	1	14.119	44	Innensechskantschraube M8x55	2	41.017 1
13	Verschlussschraube	1	14.113	46	Sauganschluss	1	41.016
14	Steuerkolben	1	14.134	47	Wasserfilter	1	41.046 2
15	Parbaks 16 mm	1	13.159	48	Gummi Dichtring	1	41.047 1
16	Parbaks 8 mm	1	14.123	49	Steckkupplung	1	41.047 2
17	Spannstift	1	14.148	50	O-Ring	1	41.047 3
18	Kolbenführung spezial	1	42.105	51	Aluminium-Dichtring	2	13.275
19	Mutter M8x1	2	14.144				
20	Ventilfeder schwarz	1	14.125		Repkit valves for APG-pump		41.748 1
21	Federdruckscheibe	1	14.126		consisting of: 6x Pos. 4; 6x Pos. 5; 6x P	os. 6	
22	Nadellager	1	14.146		Repkit sleeves 18 mm		41.049 1
23	Handrad	1	14.147		consisting of: 3x Pos. 27; 3x Pos. 28;		41.049 1
25	Elastic-Stop-Mutter	1	14.152		, ,		
26	Manometer 0-250 bar	1	15.039		3x Pos. 28.1; 6x Pos. 29; 3x Pos. 30		
27	Druckring	3	41.018		Valve housing compl.		43.442
28	Manschette 18 x 26 x 4/2	3	41.013		with integr. ULH		
28.1	Gewebernanschette 18 x 26 x 4/2	3	41.013 1		with intogr. OLI I		
29	Backring 18 x 26	6	41.014		Guide piston compl. with handwhee	el	43.444
30	O-Ring 28,3 x 1,78	3	40.026				
31	Leckagering 18 mm	3	41.066				

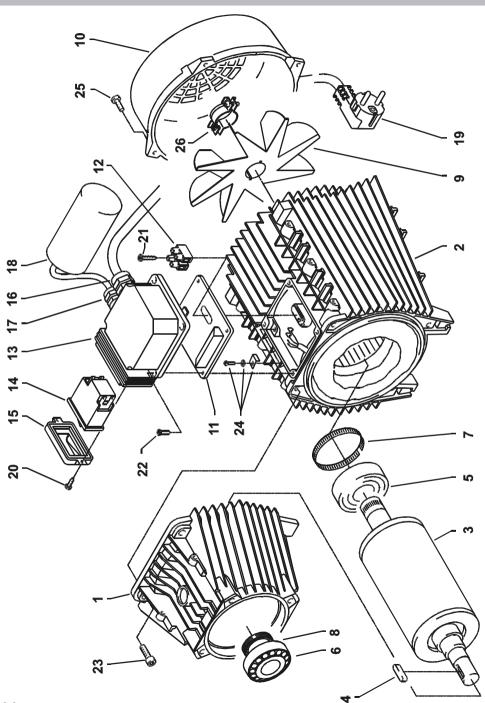
Transmission unit 18 mm



Spare parts list KRÄNZLE 115 / 125 / 135 / 155 Transmission unit for plunger diameter 18 mm

No	Description	Qty.	OrdNo
1	Gehäuseplatte für 18 mm Plunger	1	41.020 2
2	Öldichtung 18 x 28 x 7	3	41.031
3	O-Ring Viton 88 x 2	1	41.021 1
4	Plungerfeder	3	41.033
5	Federdruckscheibe 18 mm	3	41.034
6	Plunger 18 mm	3	41.032 1
7	Sprengring 18 mm	3	41.035
8	Taumelscheibe 11,0°		
	bei Kränzle 115 Wechselstrom	1	46.542-11,0
8	Taumelscheibe 11,5°		
	bei Kränzle 125 Wechselstrom	1	46.542-11,5
8	Taumelscheibe 12,0°		
	bei Kränzle 135 Wechselstrom	1	46.542-12,0
8	Taumelscheibe 13,0°		
	bei Kränzle 155 Drehstrom	1	46.542-13,0
	bitte Taumelwinkel jeweils mit angeben		
10	Axial-Rollenlager 3-teilig	1	46.543
12	Innensechskantschraube M 8 x 30	4	41.036 1
13	Ölschauglas	1	42.018 1
14	O-Ring 14x2	3	43.445
15	Öleinfüll-Stutzen	1	43.438
16	Öl-Verschlussschraube Messing	1	43.437 1

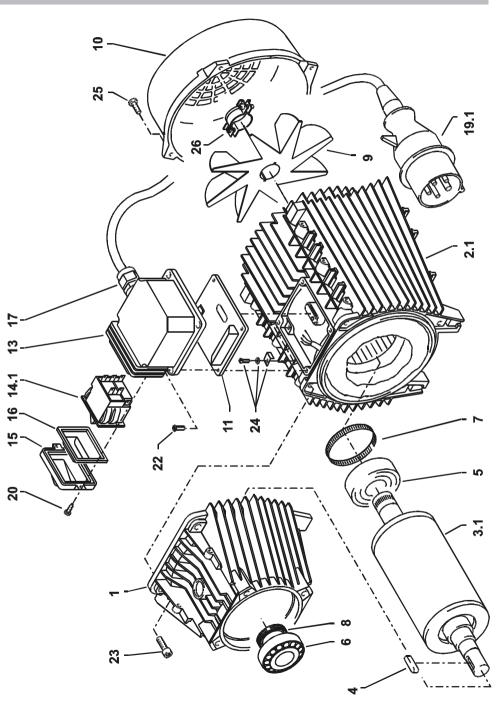
A. C. motor



Spare parts list KRÄNZLE 115, 125, 135 A. C. motor

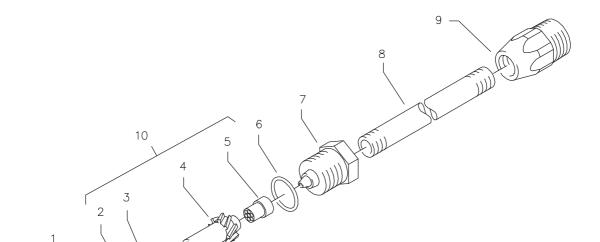
No	Description	Qty.	OrdNo
1	Ölgehäuse für AP	1	43.314
2	Motorgehäuse mit Stator Wechselstrom		
	für Kränzle 115 / 125	1	43.400 9
2	Motorgehäuse mit Stator Wechselstrom		
	für Kränzle 135	1	43.315
3	Rotor mit Motorwelle	1	43.316
4	Passfeder 6 x 6 x 20	1	41.483 1
5	Rillenkugellager 6205 - 2Z	1	43.317
6	Kegelrollenlager 31304	1	40.472
7	Toleranzhülse	1	43.330 1
8	Öldichtung 25 x 35 x 7	1	41.024
9	Lüfterrad BG 90	1	43.319
10	Lüfterhaube BG 90	1	43.320
11	Flachdichtung	1	43.030
12	Lüsterklemme 2-polig	1	43.031
13	Schaltergehäuse BG 90	1	43.321
14	Schalter mit 13,5 A Überstromauslöser	1	41.110 2
15	Klemmrahmen mit Schalterabdichtung	1	41.1105
16	Kabelverschraubung PG 11	1	41.419
17	Kabelverschraubung PG 9 (3-teilig)	1	43.034
18	Kondensator 70 µF	1	43.322
19	Kabel mit Stecker	1	41.092
20	Blechschraube 3,5 x 9,5	2	41.088
21	Blechschraube 2,9 x 16	1	43.036
22	Schraube M 4 x 12	4	41.489
23	Innensechskantschraube M 6 x 30	4	43.037
24	Erdungsschraube kmpl.	1	43.038
25	Schraube M 4 x 12	2	41.489
26	Schelle für Lüfterrad mit Schrauben	1	43.454

Three-phase current motor



Spare parts list KRÄNZLE 155 Three-phase current motor

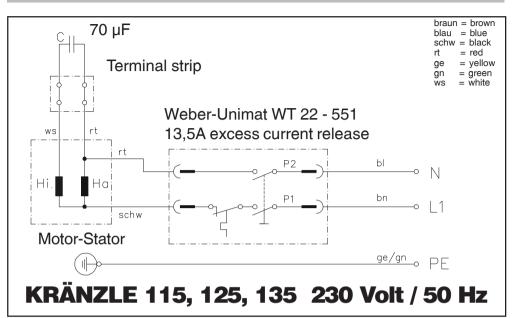
No	Description	Qty.	OrdNo
1	Ölgehäuse für AP	1	43.314
2	Motorgehäuse mit Stator Drehstrom	1	43.324
3	Rotor mit Motorwelle	1	43.316
4	Passfeder 6 x 6 x 20	1	41.483 1
5	Rillenkugellager 6205 - 2Z	1	43.317
6	Kegelrollenlager 31304	1	40.472
7	Toleranzhülse	1	43.330 1
8	Öldichtung 25 x 35 x 7	1	41.024
9	Lüfterrad BG 90	1	43.319
10	Lüfterhaube BG 90	1	43.320
11	Flachdichtung	1	43.030
13	Schaltergehäuse BG 90 Drehstrom	1	43.452
14	Schalter (Amazonas) 8 A	1	43.450
15	Klemmrahmen mit Schalterabdichtung	1	43.453
17	Kabelverschraubung PG 13,5	1	40.539
19	Kabel mit Stecker Drehstrom	1	41.0921
20	Blechschraube 3,5 x 9,5	2	41.088
22	Schraube M 4 x 12	4	41.489
23	Innensechskantschraube M 6 x 30	4	43.037
24	Erdungsschraube kpl.	1	43.038
25	Schraube M 4 x 12	2	41.489
26	Schelle für Lüfterrad mit Schrauben	1	43.454

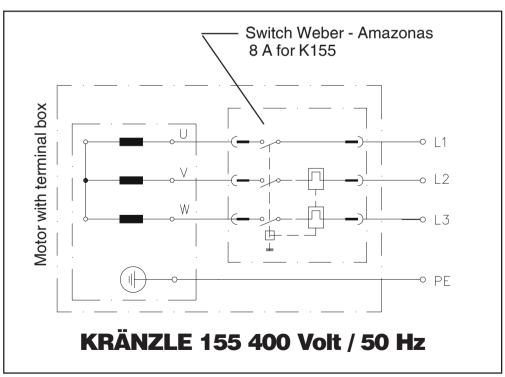


Spare parts list KRÄNZLE 115, 125, 135 155 Dirtkiller with lance (special accessory)

No	Description	Qty.	OrdNo
1	Sprühkörper	1	41.520
2	O-Ring 6,88 x 1,68	1	41.521
3	Düsensitz	1	41.522
4	Düse 045	1	41.523
5	Stabilisator	1	41.524
6	O-Ring	1	40.016 1
7	Sprühstopfen	1	41.526
8	Rohr 400 mm 2x M 12 x 1	1	41.527
9	ST 30-Nippel M 22 x 1,5 / M 12 x 1 IS	SK 1	13.363
	RepKit Dirtkiller 045 consisting of: 1x 2; 3; 4; 5		41.097
	Dirtkiller 045 with Lance		41.072 5

Wiring diagram





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 guarateed. 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)

Check the oil level at the oil sight glass prior to each use. (Ensure horizontal position!)

Oil change:

The oil of your high pressure pump should be changed after approx. 40 hours of operation, or no later than when it takes on a grey or whitish colour. To change the oil, remove the two combination screws on the base-plate at the bottom, take off the base-plate and pull out the oil drainage hose. Put the hose over a container and take off the closure cap. Put the pump into horizontal position to drain off the oil. The oil must be caught in a container and disposed of in a responsible, legal manner.

New oil: 0.3 I - Motor oil: W 15/40

Warranty

This warranty covers material and/or workmanship related defects only and does not extend to ordinary wear.

Machine must be operated according to enclosed operating instructions which are part of present warranty conditions.

All products sold directly to private customers are warrantied for a period of 24 months, whereas the warranty period for industrial purchases is limited to 12 months.

In case of any warranty claims, please have your HP cleaner together with accessories and your purchase document ready and contact your nearest dealer or authorized service point which can also be looked up in the internet at www.kraenzle.com .

Warranty is void in case of attempts to modify any of the safety devices or in the event of exceeding temperature or rpm limits - this also applies to undervoltage, low water and/or polluted water. Gauge, nozzle, valves, sealing gaskets, high pressure hose and spray equipment are considered wear parts and do not fall under this warranty.



Hochdruckreiniger High-pressure-cleaners Nettoyeurs à Haute Pression



I. Kränzle GmbH Elpke 97, 33605 Bielefeld



EC declaration of conformity

We hereby declare,

that the high-pressure models:

Kränzle 115 - 155

(techn. documentation available from):

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

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

Machine guideline 89/392/EEC Low voltage guideline 73/23 EEC Specification for electromagnetic

compatibility 89/336 EEC

Outdoor noise directive 2000/14/EC. Art. 13, High-pressure water jet machines

Appendix 3, part B, chapter 27

Sound power level

measured: quaranteed:

K115-125: 87 dB (A); K135-155: 89 dB (A)

K115-125: 89 dB (A); K135-155: 91 dB (A)

Applied specifications and

standards:

EN 60 335-2-79 / A1:2004 EN 55 014-1 / A2:2002

EN 61 000-3-2 / A14:2000 EN 61 000-3-3 / A1:2001

Bielefeld, den 08.09.05

Droitsch (Managing Director)

Notes

Notes