# High Pressure Cleaners

K 115K 125K 135K 155K 185

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

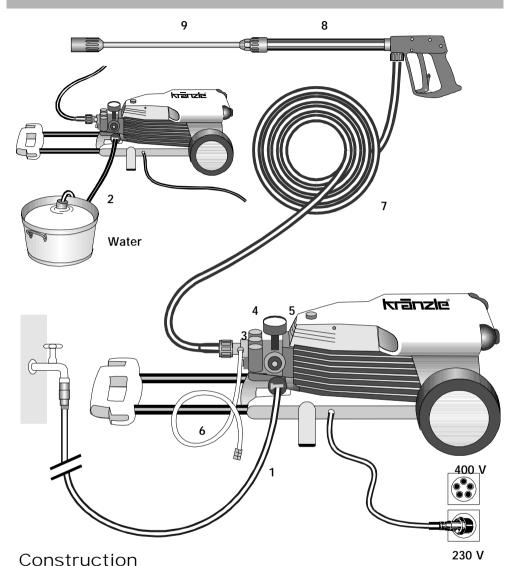
- vehicles of all types
- barrels and containers

- flagstones
- sheds

- machines etc.

<ul> <li>terraces</li> </ul>	- channels

with dirtkiller	41.204 1	41.200 1	41.201 1	41.202 1	41.203 1
OrdNo	41.204	41.200	41.201	41.202	41.203
	ZZ IVIII		ed lenght of lance	, -	20,014111
Torque	22 Nm	24 Nm	26 Nm	24.3 Nm	28,8 Nm
Recoil at lance	approx. 20 Nm	approx. 22 Nm	approx. 25 Nm	approx. 27 Nm	approx. 32 Nm
Sound level acc.to 45635 with dirtkiller	86 dB 88 dB	87 dB 84 dB	89 dB 84 dB	88 dB 90 dB	93 dB 93 dB
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	350 x 330 x 900
Weight	22 kg	24 kg	26 kg	26 kg	28 kg
input output	P1: 2,3 kW P2: 1,8 kW	P1: 2,8 kW P2: 2,0 kW	P1: 3,1 kW P2: 2,3 kW	P1: 3,3 kW P2: 2,6 kW	P1: 4,6 kW P2: 4,0 kW
Electrical ratings Connect. wattage	230 V ; 50 Hz ; 10 A	230 V ; 50 Hz ; 12 A	230 V ; 50 Hz ; 13,5 A	400 V ; 50 Hz ; 6,3 A	400 V ; 50 Hz ; 8,7 A
High pressure hose	10 m	10 m	10 m	10 m	10 m
Suction height	2,5 m	2,5 m	2,5 m	2,5 m	1 m
Hot water input	max. 70 °C	max. 70 °C	max. 70 °C	max. 70 °C	max. 60 °C
Water output	at 1400 rpm 10,3 l/min	at 1400 rpm 10,5 l/min	at 1400 rpm 11,0 l/min	at 1400 rpm 12 l/min	at 2800 rpm 14 l/min
Perm. overpressure	130 bar	140 bar	150 bar	170 bar	200 bar
Operating pressure, steplessly adjust.	10 - 115 bar	10 - 125 bar	10 - 135 bar	10 - 155 bar	10 - 185 bar
Technical specifications	Kränzle 115	Kränzle 125	Kränzle 135	Kränzle 155	Kränzle 185



The KRÄNZLE 115 + 125 + 135 + 155 + 185 - 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!

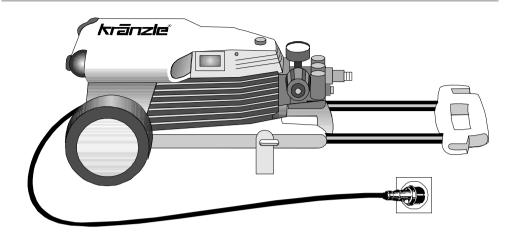


Never use liquid containing solvents such as paint thinners, petrol, oil or similar liquid matter. Pay attention to the instructions of the manufacturers of the cleaning agents. The seals in the machine are not resistant to solvents. The spray of solvents is inflammable, explosive and poisonous.

## CAUTION!



When running your high pressure cleaner with hot water of 70° C raised temperatures occur. **Do not touch the machine** without safety gloves!



#### **Flectrical 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 and 185 - 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 mm<sup>2</sup>. 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<sup>2</sup>)

## 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.

## 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 and 185 400 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 DIN 1988, 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 DIN 1988, part 4; 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. (See also notice on page 2)

# This is what you've purchased:

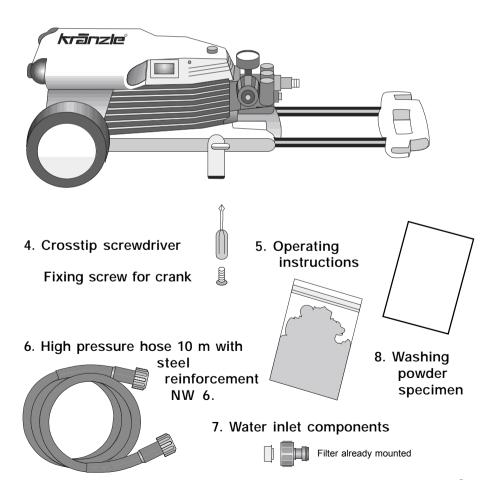


 Spray lance with regulator and high pressure nozzle, flat spray 25045



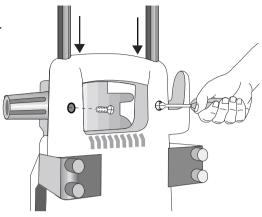
2. Spray gun with insulated pistol grip and screw connection

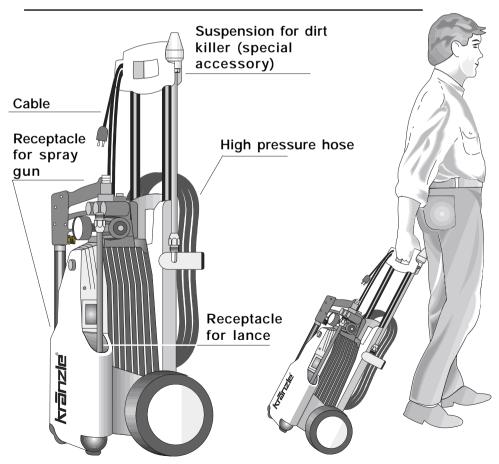
3. KRÄNZLE - High pressure cleaners 115, 125, 135, 155 or 185



## 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.

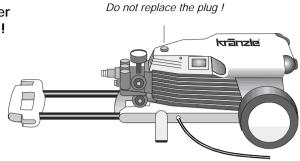


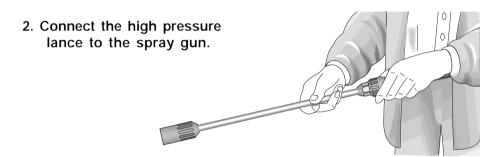


# Preparation for use

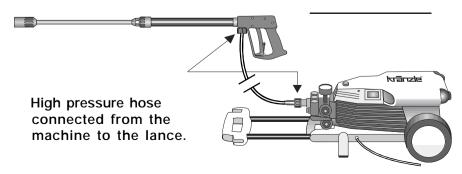
1. Put high pressure cleaner into horizontal position!

THE HIGH PRESSURE CLEANER IS ONLY TO BE OPERATED IN HORIZONTAL POSITION!





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 70°C hot water (K 185 T up to 60°) (see page 2). Ensure that the water supply is

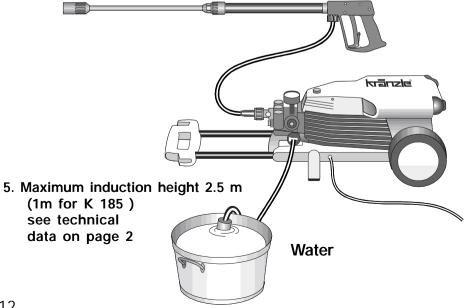
clean when sucking from external sources. The hose cross section must be at least 1/2" = 12.7 mm(free passage). Filter 1 must always be clean.

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° or 70°C raised temperatures occur. Do not touch the pump without safety gloves!



# Preparation for use

## Adjusting the pressure

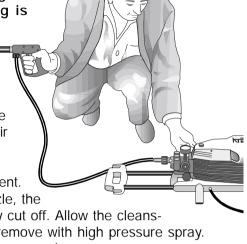
This is accomplished by turning the handwheel. The default setting is maximum pressure.

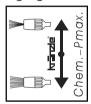
# When using cleansing agents:

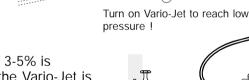
Unwind HP-hose completely. Place chemical filter no. 5 in the reservoir with the cleansing agent. Turn on Vario-Jet No.4 to to enable the injector to induct the cleansing agent.

By turning back the Vario-Jet nozzle, the supply of chemical is automatically cut off. Allow the cleans-

ing 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.

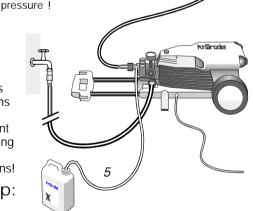
Note that you must always



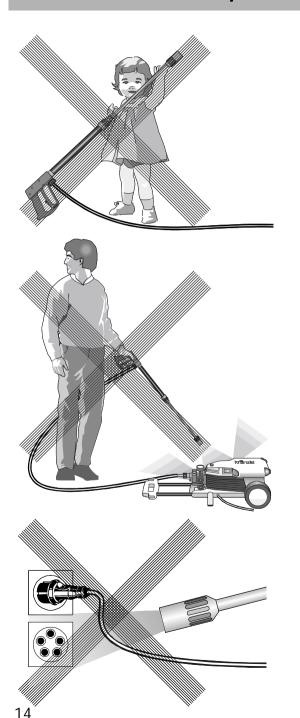
Note that you must always comply with the instructions provided by the manufacturer of the cleansing agent (e.g. instructions concerning safety clothing) and the water protection regulations!

## 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!

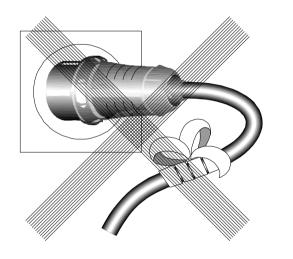
Never direct the water jet at a power socket!

# This is prohibited!

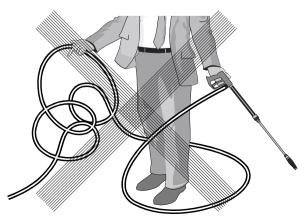




Never direct the water jet at people or animals!

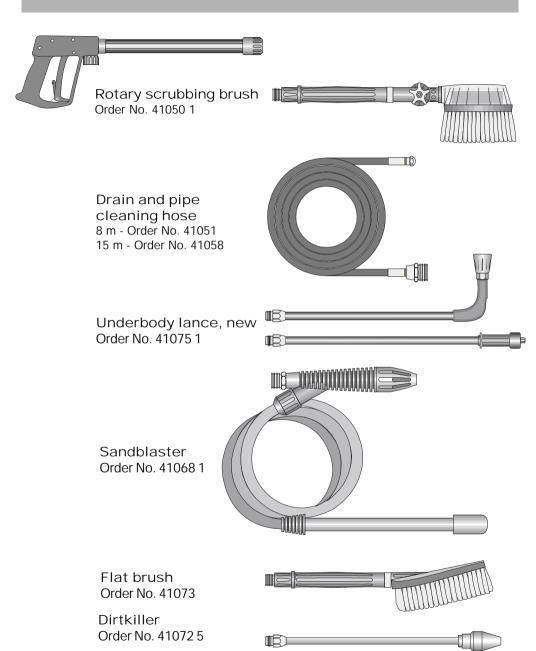


Do not damage the power cord or repair it incorrectly!



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

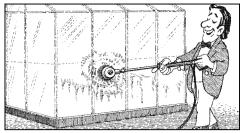
# Additional KRÄNZLE-accessories for ...





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

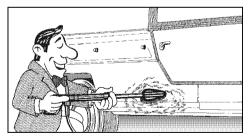
## ... for further combination possibilities



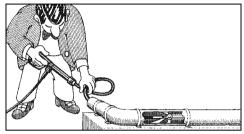
Car cleaning, glass, caravan, boat etc. rotary washing brush with 40 cm extension and ST 30 nipple M 22 x 1,5



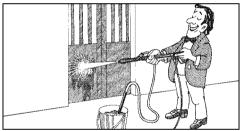
Underbody cleaning of cars, trailers and equipment: lance 90 cm with high pressure nozzle and ST 30 nipple M 22 x 1,5. The lance must be aimed when spraying.



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



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



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!



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

17

# Small repairs -

# 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



# - Do it yourself!

# The nozzle is blocked!

• No water but the gauge shows full pressure!



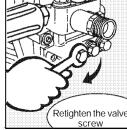


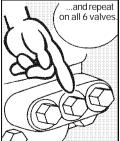
# Small repairs - Do it yourself!

# Nozzle dirty or sticky! • Pressure gauge does not show full pressure.

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

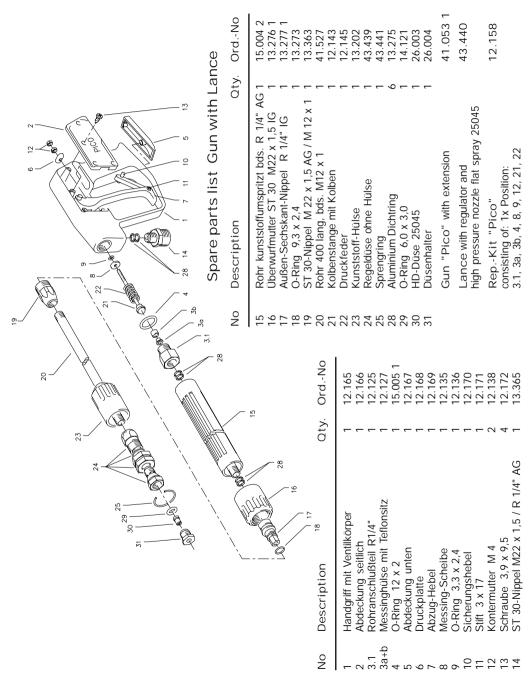




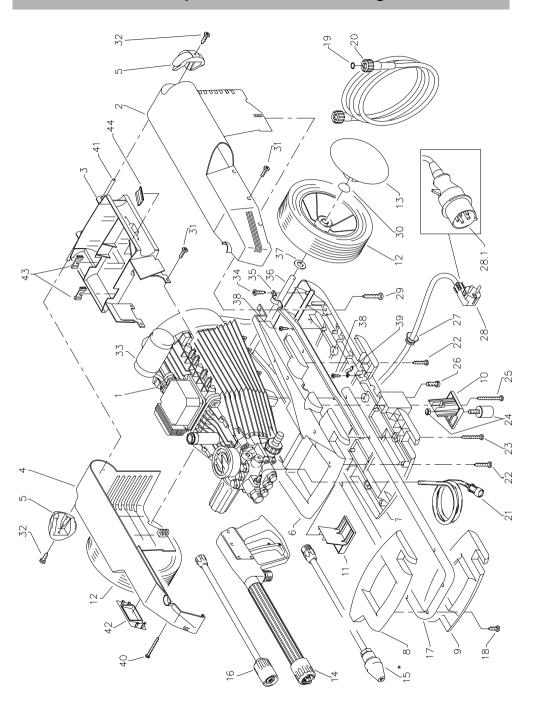




# Trigger gun with lance



# Complete assembly

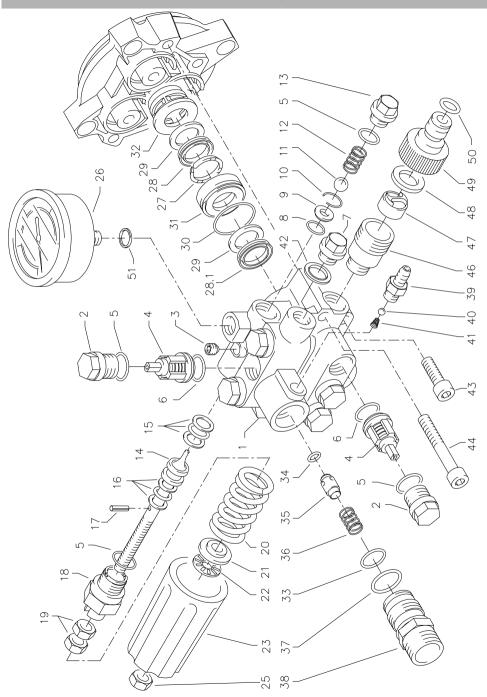


# KRÄNZLE 115 / 125 / 135 / 155 / 185

# Spare parts list KRÄNZLE 115/125/135/155/185 Complete assembly

			•		•		
No	Description	Oty.	OrdNo	No	Description	Oty.	OrdNo
_	Motor WECHSELSTROM für K 115	<u> </u>	43.448	22	Kunststoffschraube 4.0 x 16	2	43.417
<b>—</b>	Motor WECHSELSTROM für K 125	_	43.400	23		7	43.418
_	Motor WECHSELSTROM für K 135	_	43.302	24	Gummidämpfer	4	43.419
<b>-</b>	Motor DREHSTROM für K 155	<b>—</b>	43.327	25	Kunststoffschraube 4,0 x 60	2	43.420
<b>(</b>	Motor DREHSTROM für K 185	<b>—</b>	43.401	26	Schraube M 6 x 12	4	43.421
	Motoren jeweils komplett mit Ölgehäuse	a)		27	Knickschutztülle	<b>~</b>	43.422
	und Lüfterrad ohne Schalter			28	Kabel mit Stecker (Wechselstrom)		
2	Gehäusehälfte rechts	<b>—</b>	43.402		für Kränzle 115 / 125 / 135	<b>-</b>	41.092
3	Halterung Kondensator	_	43.403	28.1	Kabel mit Stecker (Drehstrom)		
4	Gehäusehälfte links K 115	_	43.404 1		für Kränzle 155 / 185	<b>-</b>	41.092 1
4.1	Gehäusehälfte links K 125	<b>—</b>	43.404 2	29	Kunststoffschraube 6,0 x 30	2	43.423
4.2	Gehäusehälfte links K 135	_	43.404 3	30	Starlock-Kappe Durchmesser 12	2	43.424
4.3	Gehäusehälfte links K 155	_	43.404 4	31	Schraube M 5 x 10	∞	43.021
4.4	Gehäusehälfte links K 185	<del>-</del>	43.404 5	32	Kunststoffschraube	7	43.425
2	Gummidämpfer	7	43.405	33	Schaumstoffrohr für Kondensator	_	41.418
9	Unterschale 1	_	43.406	34	Kunststoffschraube 5,0 x 14	4	43.426
7	Unterschale 2	<del>-</del>	43.407	32	Haltebügel	7	43.427
∞	Handgriff Schale 1	_	43.408	36	Bodenblech mit Motorachse	_	43.428
6	Handgriff Schale 2	_	43.409	37	Kuststoffscheibe 12,5 mm	2	43.429
10	Schlauchhalter R (rechts)	_	43.410	38	Kunststoffschraube 3,5 x 8	∞	43.430
1	Schlauchhalter L (links)	_	43.411	39	Kabelklemme	7	43.431
12	Rad	7	43.412	40	Kunststoffschraube 5,0 x 80	7	43.432
13	Radkappe	7	43.413	41	Kunststoffschraube 5,0 x 120	_	43.309
14	PICO-Pistole mit Verlängerung	<b>—</b>	41.053 1	42	Schalterblende	<b>(</b>	43.433
15	Schmutzkiller 045 mit Lanze	_	41.072 5	43	Kabelführung	2	43.061
16	Regeldüse mit HD-Düse 25045 und Lanze	_	43.440	44	Kabelauflage	_	43.062
17	Rohr für Handgriff	<del>-</del>	43.414				
18	Kunststoffschraube 3,5 x 20	2	43.415				
19	O-Ring 9,3 x 2,4	7	13.273				
ر کر کر	HD-Schlauch NW 6 10 m 210 bar	_	43.416				
کر 21	Chemikaliensaugschlauch mit Filter	<b>—</b>	15.038				

# Valve housing 18 mm

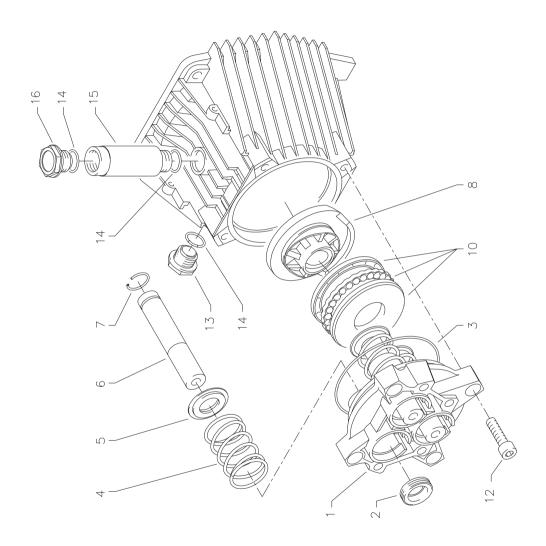


# KRÄNZLE 115 / 125 / 135 / 155

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

OrdNo	152	04	21	22	20	.46	.47	36	38	39	04	136 1	17.1	116	146 1	147 1	41.047 2	41.047 3	75		41.7481		11 070 1	- ^ +			43.465	)		43.444
	41.015	42.104	14.121	14.122	14.120	43.446	43.447	13.236	13.238	13.239	42.104	41.036	41.017	41.016	41.046	41.047	41.0	41.0	13.275		41		7	<u>-</u>			43,			43.
Oty.	8	_	_	_	_	_	5	_	_	_	_	7	7	_	_	_	_	_	7			os. 6								<u>(1)</u>
Description	Zwischenring 18 mm	O-Ring 15 x 1,5	O-Ring 6 x 3	Rückschlagkörper	Rückschlagfeder	0-Ring 18 x 2	Ausgangsstück Injektor ST30 M22x1,5	Saugzapfen Schlauchanschluß	Edelstahlkugel 5,5 mm	Edelstahlfeder	Kupferring	Innensechskantschraube M 8 x 30	Innensechskantschraube M 8 x 55	Sauganschluß	Wasserfilter	Gummi Dichtring	Steckkupplung	O-Ring	Aluminium-Dichtring		Repkit valves for APG-pump	consisting of: 6x Pos. 4; 6x Pos. 5; 6x Pos.	Don Vitelooves 18 mm	nep:-kit sieeves 10 iiiiii	consisting of: 3x Pos. 27; 3x Pos. 28;	3x Pos. 28.1; 6x Pos. 29; 3x Pos. 30	Valve housing compl.	with integr UI H		Guide piston compl. with handwheel
No	32	33	34	35	36	37	38	39	40	41	42	43	44	46	47	48	46	20	51											
OrdNo	43.435	41.714	43.043	41.715 1	13.150	41.716	42.103	12.256	14.118	13.147	13.148	14.119	14.113	14.134	13.159	14.123	14.148	42.105	14.144	14.125	14.126	14.146	14.147	14.152	15.039	41.018	41.013	41.013 1	41.014	40.026 41.066
Oty.	-	9	· -	9	∞	9	, —	<del>-</del>	<u></u>	_	<del>-</del>	· -	<del>-</del>	· -	_	<del>-</del>	· -	, –	7	· -	·	·	<del>.</del> ,	_	<del>-</del>	r m	ო (	n ·	9	m m
Description	Ventilgehäuse	Ventilstopfen	Dichtstopfen M 10 x 1	Ventile (grün) für APG-Pumpe	0-Ring 16 x 2	O-Ring 15 x 2	Dichtstopfen R1/4" mit Bund	O-Ring 11 x 1,44	Edelstahlsitz	Sicherungsring	Edelstahlkugel 8,5 mm	Edelstahlfeder	Verschlußschraube	Steuerkolben	Parbaks 16 mm	Parbaks 8 mm	Spannstift	Kolbenführung spezial	Mutter M8x1	Ventilfeder schwarz	Federdruckscheibe	Nadellager	Handrad	Elastic-Stop-Mutter	Manomter 0-250 bar	Druckring		Gewebemanschette 18 x 26 x 4/2	Backring 18 x 26	O-Ring 28,3 x 1,78 Leckagering 18 mm
No	_	2	3	4	2	9	7	∞	6	10	1	12	13	14	15	16	17	18	19	20	21	22	23	25	26	27	28	28.1	56	30 31

# Transmission unit 18 mm

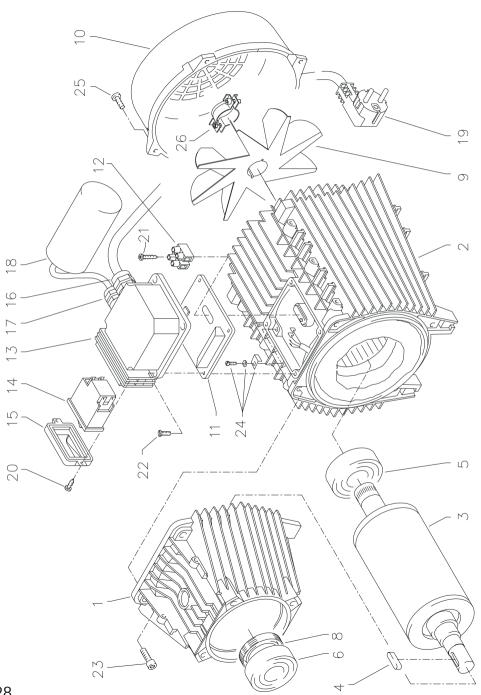


# KRÄNZLE 115 / 125 / 135 / 155

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

No	Description	Oty.	OrdNo
L 0	Gehäuseplatte für 18 mm Plunger	L c	41.0202
7 %	Oldicitatig 18×28×7 O-Ring Viton 88×2	ი ←	41.0211
4	Plungerfeder	က	41.033
2	Federdruckscheibe 18 mm	3	41.034
9	Plunger 18 mm	3	41.0321
7	Sprengring 18 mm	3	41.035
∞	Taumelscheibe 11,0°		
	bie Kränzle 115 Wechselstrom	_	41.028-11,0
∞	Taumelscheibe 11,5°		
	bie Kränzle 125 Wechselstrom	_	41.028-11,5
∞	Taumelscheibe 12,0°		
	bie Kränzle 135 Wechselstrom	_	41.028-12,0
∞	Taumelscheibe 13,0°		
	bie Kränzle 155 Drehstrom	_	41.028-13,0
	bitte Taumelwinkel jeweils mit angeben		
10	Axial-Rillenkugellager 3-teilig	_	43.486
12	Innensechskantschraube M 8 x 30	4	41.0361
13	Ölschauglas	<b>—</b>	42.0181
14	0-Ring 14 x 2	3	43.445
15	Öleinfüll-Stutzen	_	43.438
16	ÖI-Verschlußschraube Messing	_	43.4371

# A. C. motor



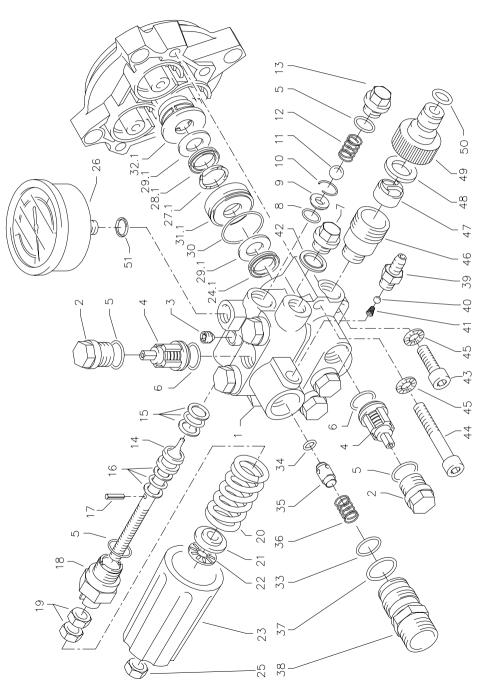
28

# KRÄNZLE 115, 125, 135

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

No	Description	Oty.	OrdNo
← c	Ölgehäuse für AP	_	43.314
7	Motol genause mit statol Wechselstrom für Kränzle 115 / 125	<b>—</b>	43.4009
7	Motorgehäuse mit Stator Wechselstrom	-	42 21E
co	Rotor mit Motorwelle Wechselstrom	-	5.5
	fü Kränzle 115 / 125 / 135	_	43.316
4	Paßfeder 6 x 6 x 20	_	41.4831
2	Motor-Lager B-Seite 6205 - 2Z	<del>-</del>	43.317
9	Motor-Lager A-Seite Schulterlager 7304 BEP	<b>-</b>	41.027
ω	Öldichtung 25 x 35 x 7	_	41.024
6	Lüfterrad BG 90	_	43.319
10	Lüfterhaube BG 90	_	43.320
7	Flachdichtung	<del>-</del>	43.030
12	Lüsterklemme 2-polig	<b>-</b>	43.031
13	Schaltergehäuse BG 90	<b>-</b>	43.321
14	Schalter mit 13,5 A Überstromauslöser	_	41.1102
15	Klemmrahmen mit Schalterabdichtung	_	41.1105
16	Kabelverschraubung PG 11	<del>-</del>	41.419
17	Kabelverschraubung PG 9 (3-teilig)	<del>-</del>	43.034
18	Kondensator 70 µF	<del>-</del>	43.322
19	Kabel mit Stecker	_	41.092
20	Blechschraube 3,5 x 9,5	7	41.088
21	Blechschraube 2,9 x 16	<del>-</del>	43.036
22	Schraube M 4 x 12	4	41.489
23	Innensechskantschraube M 6 x 30	4	43.037
24	Erdungsschraube kmpl.	_	43.038
22	Schraube M 4 x 12	7	41.489
56	Schelle für Lüfterrad mit Schrauben	_	43.454

# Valve housing 14 mm

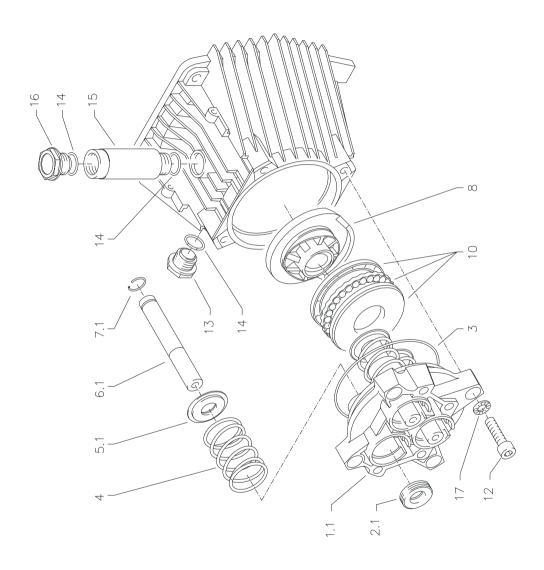


# KRÄNZLE 185

# Spare parts list KRÄNZLE 185 Valve housing APG for plunger diameter 14 mm

				)				
-	No	Description	Oty.	OrdNo	No	Description	Oty. C	OrdNo
•	_	Ventilgehäuse APG mit integr. UL			32.1	Zwischenring 14 mm	3 41.	41.6152
		für 14 mm Plunger-Durchmesser	_	43.436	33	O-Ring 15 x 1,5	1 42.	42.104
. 1	~	Ventilstopfen	9	41.714	34	O-Ring 6 x 3	1 14.	14.121
.,	3	Dichtstopfen M 10 x 1	_	43.043	35	Rückschlagkörper	1 14.	14.122
7	<del>-</del>	Ventile (rot) für APG-Pumpe	9	41.715	36	Rückschlagfeder	1 14.	14.120
	10	O-Ring 16 x 2	∞	13.150	37	0-Ring 18 x 2	1 43.	43.446
~	2	O-Ring 15 x 2	9	41.716	38	Ausgangsst. Injektor ST30 M22x1,5	1 43.	43.447
	7	Dichtstopfen R1/4" mit Bund	_	42.103	36	Saugzapfen Schlauchanschluß	1 13.	13.236
~	~	O-Ring 11 x 1,44	_	12.256	40	Edelstahlkugel 5,5 mm	1 13.	13.238
•	6	Edelstahlsitz	_	14.118	41	Edelstahlfeder	1 13.	13.239
•	10	Sicherungsring	_	13.147	42	Kupferring	1 43.	43.455
•	1	Edelstahlkugel 8,5 mm	_	13.148	43	Innensechskantschraube M8 x 30	2 41.	41.036 1
•	12	Edelstahlfeder	_	14.119	44	Innensechskantschraube M8 x 55	2 41.	41.0171
•	13	Verschlußschraube	_	14.113	45	Sicherungsring	4 40.	40.054
•	14	Steuerkolben	_	14.134	46	Sauganschluß	1 41.	41.016
•	15	Parbaks 16 mm	_	13.159	47	Wasserfilter	1 41.	41.0461
•	16	Parbaks 8 mm	_	14.123	48	Gummi Dichtring	1 41.	41.0471
•	17	Spannstift	_	14.148	46	Steckkupplung	1 41.	41.047 2
•	18	Kolbenführung spezial	_	42.105	20	O-Ring	1 41.	41.0473
•	19	Mutter M8x1	7	14.144	51	Aluminium-Dichtring	2 13.	13.275
. 1	50	Ventilfeder schwarz	_	14.125			7	7
. 1	21	Federdruckscheibe	_	14.126		RepKit valves for APG-purify		41./46
. •	22	Nadellager	_	14.146		CONSISTEND OF OX POS. 4; OX POS. 5; OX POS.	o S	
. •	23	Handrad	_	14.147		Repkit sleeves 14 mm	41	41.6491
. •	24.1	Manschette Gewebe 14 x 24 x 5/2.5	3	41.6131		consisting of: 3x Pos. 24.1;		
. •	25	Elastic-Stop-Mutter	_	14.152		3x Pos. 27.1; 3x Pos. 28.1; 6x Pos. 29.1;		
	26	Manomter 0-250 bar	_	15.039		3x Pos. 30; 3x Pos. 31.1		
. •	27.1	Druckring	3	41.618			,	0
	28.1	Manschette Perbunan 14 x 24 x 5/2.5	დ ∙	41.613		valve nousing compi. with integr 111 H	չ Հ	43.408
31	29.1	Backring 14 x 24	9	41.614				
.,.,	30 31.1	O-Ring 28,3 x 1,78 Leckagering 18 mm	ကက	40.026 41.666		Guide piston compl. with handwheel	43	43.444
		,						

# Transmission unit 14 mm

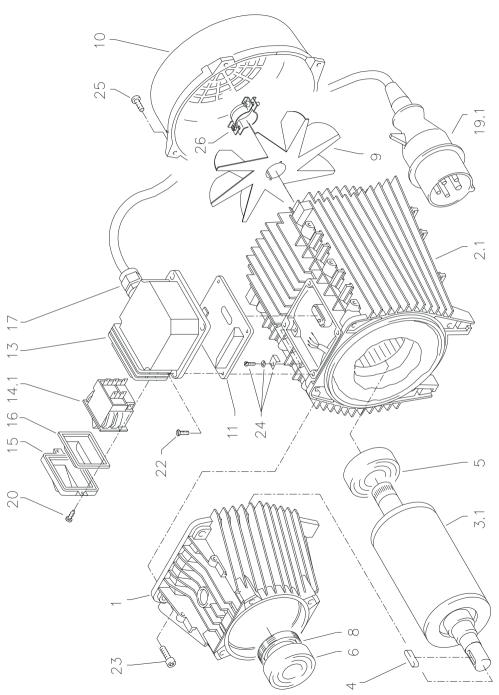


# KRÄNZLE 185

Spare parts list KRÄNZLE 185 Transmision unit for plunger diameter 14 mm

No	Description	Qty.	OrdNo
_	Gehäuseplatte für 14 mm Plunger	_	41.0204
2	Öldichtung 14 x 24 x 7	3	41.631
3	O-Ring Viton 88 x 2	<b>~</b>	41.0211
4	Plungerfeder	3	41.033
2	Federdruckscheibe 14 mm	3	41.634
9	Plunger 14 mm	က	41.632
7	Sprengring 14 mm	3	41.635
∞	Taumelscheibe 12,5°		
	bie Kränzle 185 Drehstrom	<b>-</b>	41.028-12,5
	bitte Taumelwinkel mit angeben		
10	Axial-Rillenkugellager 3-teilig	_	43.486
12	Innensechskantschraube M8 x 30	4	41.0361
13	Ölschauglas	_	42.0181
14	O-Ring 14 x 2	3	43.445
15	Öleinfüll-Stutzen	<b>—</b>	43.438
16	ÖI-Verschlußschraube Messing	_	43.4371
17	Sicherungsring	4	40.054

# Three-phase current motor

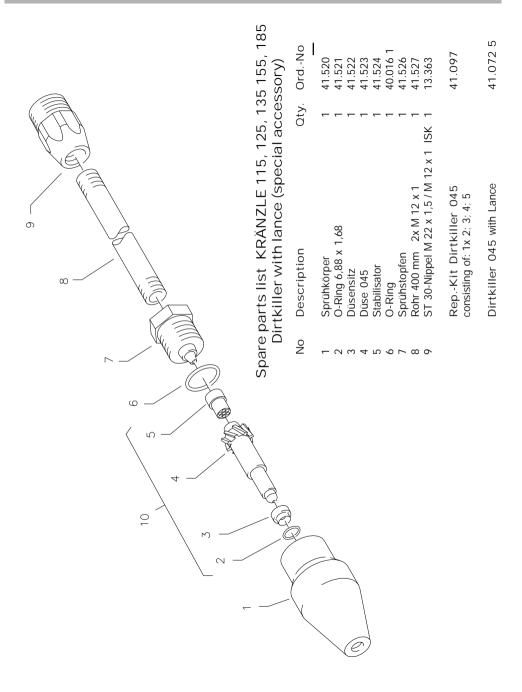


# KRÄNZLE 155 / 185

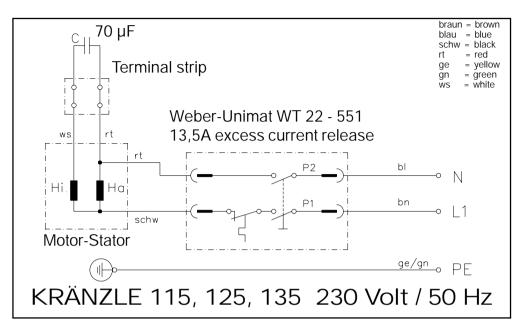
Spare parts list Three-phase current motor for KRÄNZLE 155 / 185

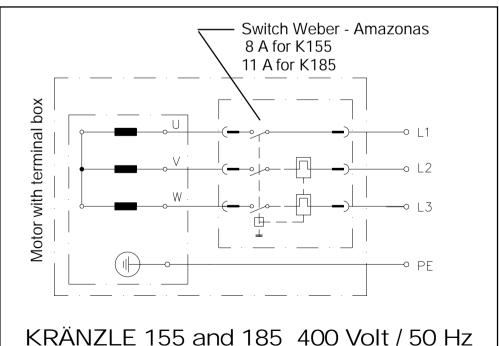
No	Description	Oty.	OrdNo
<u> </u>	Ölgehäuse für AP	_	43.314
7	Motorgehäuse mit Stator Drehstrom	_	43.324
	für Kränzle 155		
2.1	Motorgehäuse mit Stator Drehstrom	_	43.4019
	für Kränzle 185		
33	Rotor mit Motorwelle	_	43.325
	für Kränzle 155		
3.1	Rotor mit Motorwelle	<del>-</del>	43.4018
	für Kränzle 185		
4	Paßfeder 6 x 6 x 20	_	41.4831
2	Motor-Lager B-Seite 6205 - 2Z	_	43.317
9	Motor-Lager A-Seite Schulterlager 7304 BEP	<b>-</b>	41.027
∞	Öldichtung 25 x 35 x 7	<b>-</b>	41.024
6	Lüfterrad BG 90	_	43.319
10	Lüfterhaube BG 90	_	43.320
=	Flachdichtung	<del>-</del>	43.030
13	Schaltergehäuse BG 90 Drehstrom	<del>-</del>	43.452
14	Schalter (Amazonas) 8 A für K 155	<del>-</del>	43.450
14.1	Schalter (Amazonas) 11 A für K 185	_	43.451
15	Klemmrahmen mit Schalterabdichtung	<del>-</del>	43.453
17	Kabelverschraubung PG 13,5	<del>-</del>	40.539
19	Kabel mit Stecker Drehstrom	<b>-</b>	41.0921
20	Blechschraube 3,5 x 9,5	7	41.088
22	Schraube M 4 x 12	4	41.489
23	Innensechskantschraube M 6 x 30	4	43.037
24	Erdungsschraube kmpl.	<del>-</del>	43.038
25	Schraube M 4 x 12	7	41.489
26	Shelle für Lüfterrad mit Schrauben	<b>-</b>	43.454

## Dirtkiller



# 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

## Guarantee

The guarantee period is 24 months according to VDMA.

The guarantee is void if changes are made to the safety devices or if the machine is used at excess temperatures or speeds. The guarantee is also void if the machine is used with a voltage below the required rating, with less than the required amount of water, with dirty water and **external** damage to the pressure gauge, nozzle, high pressure hose and spray device.

This guarantee is not applicable for spare parts.

Our operating instructions must be complied with.



## Hochdruckreiniger High-pressure-cleaners

Nettoveurs à Haute Pression

I. Kränzle GmbH Elpke 97, 33605 Bielefeld

EC declaration of conformity as defined by machinery directive 89/392/EEC Annex II A and the EC low-voltage directive 73/23 EEC and the FC-FWV directive 89/336

Herewith we declare that

K 115 - K 185

complies with the following provisions applying to it

91/368 EEC Ann. I Nr. 1 79/113 EEC 81/1051 EEC

**Applied** harmonized standards in particular

EN 292 T 1 and T 2 EN 60 204 T 1 FN 50 082-2

EN 61 000 3-2 3-3

Applied national technical standards and specifications in particular

**DIN VDE 0700 Part 265** 

Notified body 1) within the meaning of Annex VII

TÜV Hannover

engaged for 2)

- safe keeping of the file as defined by Annex VI
- verification of correct application of harmonized standards and certification of adequacy of the file as defined by Annex VI
- EC type-examination (EC type-examination certificate No. ...)

Bielefeld, 10.10.97

Droitsch (Superintendent)

