

High Pressure Cleaners



quadro 599 TST
150 bar / 2175 psi

quadro 799 TST
180 bar / 2600 psi

*Operating manual
Read and conform
safety instructions
before use*

Technical data

Technical data	quadro 599 TST	quadro 799 TST
Operating pressure, steplessly adjust.	10 - 150 bar	10 - 180 bar
max. permissible overpressure	165 bar	200 bar
Water output ^{(*)1}		
at 0 bar	10,0 l/min	14,0 l/min
at nominal pressure	9,5 l/min	13,5 l/min
Nozzle size		
(Flat jet)	25035	25045
(Dirt killer)	035	045
Volume		
Water tank	10 l	10 l
max. inlet water temp. to water tank	max. 60 °C	max. 60 °C
max. temp. for direct suction ^{(*)2}	60 °C	60 °C
Direct suction height	2,5 m	2,5 m
Hose drum	yes	yes
High pressure hose	20 m	20 m
Electrical ratings	230 V/50 Hz, 14 A	400 V/50 Hz, 8,5 A
Motor speed adjust.	1400 rpm	1400 rpm
Connect.wattage Inp.	P1: 3,2 kW	P1: 5,5 kW
Output	P2: 2,3 kW	P2: 4,0 kW
Weight (incl. access. with empty water tank)	60 kg	60 kg
Dimensions incl. handle L x W x H in mm	780 x 395 x 870	780 x 395 x 870
Sound level acc. to DIN 45 635 (reg. working place) with dirtkiller	88 dB (A)	88 dB
Guaranteed sound level L_{WA}	90 dB (A)	90 dB
Vibrations at lance	88 dB (A)	88 dB (A)
Recoil at lance	2,0 m/s ²	2,0 m/s ²
	approx. 20 N	approx. 20 N
Order n°	40.431	40.432

Permissible tolerance for figures ± 5 % in acc. with VDMA uniform sheet 24411

^{(*)1} Min. water quantity to be supplied to the high pressure cleaner! (2 - 8 bar admission pressure)

^{(*)2} Direct suction is possible through by-passing of water tank! (see page 5)

Description

Dear customer

We would like to congratulate you on your new high pressure cleaner with integrated water tank 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
- flagstones
- terraces
- vehicles of all types
- stables
- machines etc.
- barrels and containers
- channels

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Description



quadro 599
230V/50Hz



quadro 799
400V/50Hz



Connection principle

The KRÄNZLE quadro 599 TST and 799 TST - high pressure cleaners are mobile machines with hose drum and 20m industrial hose.

The connection principle can be seen from the illustration.

Components

- 1 Water inlet connection with filter
- 2 Cover for water tank
- 3 High pressure pump
- 4 Press. gauge with glycerin filling
- 5 Unloader valve - safety valve

- 6 Detergent valve
- 7 High pressure hose
- 8 Spray gun
- 9 Interchangeable lance with flat jet nozzle and nozzle protection
- 10 Interchangeable lance with dirtkiller

Description

Water system

The water must be lead to the high pressure cleaner under pressure (2 – 8 bar admission pressure). A float valve regulates the water inlet. Then, the water is sucked by the high pressure pump from the water tank and supplied to the lance under the set pressure. The high pressure jet is formed by the nozzle at the end of the lance.

Detergent and caring system

The high pressure pump can also suck a detergent/caring agent and mix it with the high pressure jet. The additive is sucked through the pump and brought in with the set pressure.

Insert the detergent hose into the detergent container and open the detergent valve (6). The detergent must have the ph-value 7-9 neutral.

The detergent discharges with the water at the high pressure nozzle.



Only open the dosing valve, if the chemistry sieve is placed in a liquid. Sucked air leads to destruction of the pump seals !!!

The rules concerning the environment, refuse and ground water protection must be complied with!

Lance with spray gun

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

When the lever is squeezed, the spray gun opens. The liquid is then pumped to the nozzle. The spray pressure increases and quickly reaches the selected operating pressure. For the deairing of the system open and close the gun quickly a few times. When the trigger is released, the trigger gun closes and any further spraying of liquid from the lance is stopped and the pressure gauge must show 0 bar.

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 spray gun is opened, the unloader valve - safety valve closes and the pump resumes spraying from the lance with the selected operating pressure.



The spray 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.

Description

High pressure hose and spraying 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 spraying device must be connected in a pressure-tight manner.

The high pressure hose may not be driven over, pulled excessively or twisted. Hose lines are wear parts. Guarantee is accepted only for manufacturing errors, not for external damages.

High pressure hose lines and spraying equipment must not be repaired, but replaced by a new hose or spraying equipment.

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.



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.



Take care that all screw connections are pressure-tight. A leakage of gun, high-pressure hose or hose drum has to be repaired at once. Leakages lead to an increased wear and to the destruction of the delayed motor cut-out.

Operator's task:



Prior to each usage of this liquid spraying device, the operator is obliged to check if all safety relevant parts are in perfect working condition. (e.g. safety valves, high-pressure hose, cables and connections, spraying devices, etc.)

Description



Delayed motor cut-out

Frequent, work-necessitated switching on and off of motors on machines of this size puts a heavy load on the power network and causes increased wear on internal electrical parts. Therefore the motor of the new KRANZLE device only switches off 30 seconds after closing the gun and then goes to stand still. By opening the gun, the device is started again.

Safety cut-out

If the device is accidentally not turned off after use or the pistol is not used for 20 minutes, the device automatically goes into the safety state via deactivating. By operating the main switch again, the device is activated again.



Replacements and inspection work should only be performed by qualified persons when the machine is disconnected from the power supply, i.e. the plug pulled out 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. The device must not stand in the spray area of the high pressure jet.

CAUTION !



Never suck in 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

quadro 599

230V/50Hz



quadro 799

400V/50Hz



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 quadro 599 TST = 230 Volt / 50 Hz

KRÄNZLE quadro 799 TST = 400 Volt / 50 Hz (phase-sequence not significant)

When using an extension cable, this must have a grounded 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.

CAUTION !

The use of extension cables which are too long may lead to malfunctions and start up difficulty. If the extension cable is longer than 10m it must have a min. cross section of 2.5mm².

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

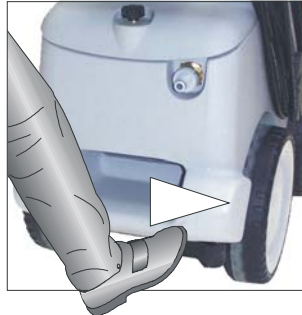
Description



Brake



Brake not applied



Brake applied

Brief operating instructions:

1. Connect high pressure hose with spray gun.
2. Connect to suitable water supply.
3. Connect current
(quadro 599: 230V/50Hz AC;
quadro 799: 400V/50Hz three-phase current).
4. Switch on machine and start cleaning.
5. After having completed the cleaning process, put main switch in zero position and by opening the gun, reduce the pressure in the high pressure hose.

Then, the high pressure hose can be rolled up.

- Only use clean water ! Protect from frost !

CAUTION !

Please pay attention to the regulations of your waterworks company.

Because of the water tank, the device can be connected to any drinking water line without worries.

This is what you've purchased:



1. Dirtkiller

Lance with nozzle protection and high pressure nozzle
Flat jet 25°



2. Spray gun PICO with insulated handle and screw connection

3. KRÄNZLE - High pressure cleaners quadro 599 TST and quadro 799 TST with hose drum and 20 m HP hose NW 6 with steel reinforcement



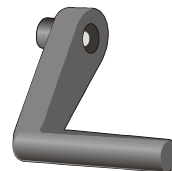
4. Operating manual



5. HP hose 20 m NW 6 with hose drum

6. Collapsible crank for hose drum (already installed)

7. Plug-in connection of water inlet parts and filter (already installed)



Preparation for use



To control the high pressure cleaner put

1. the foot against the tilt bases and
2. then pull the device towards you.

1. Check oil level.

There are two possibilities for checking the oil level of the pump:

- a) Oil must be visible in the viewing window
- b) The oil level must be between the two markings on the oil dip stick.

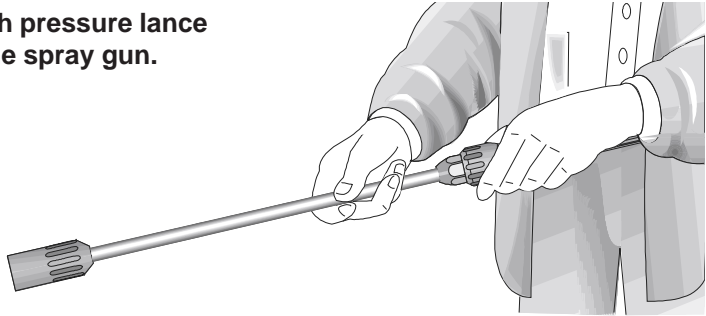


To check the oil level, loosen the oil cover screw and take out the oil dip stick. The oil level must be between the two markings.

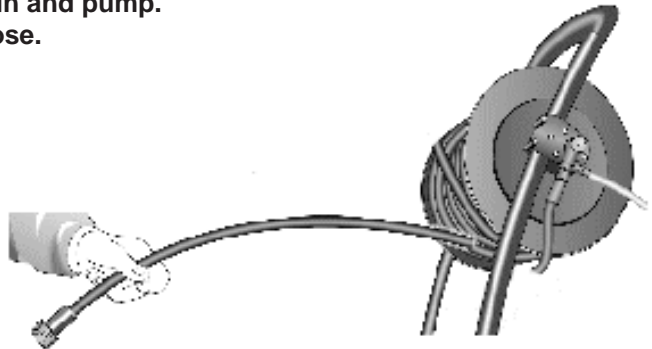


Preparation for use

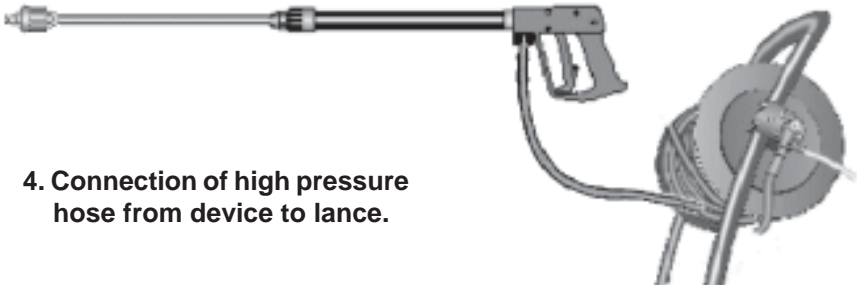
2. Connect the high pressure lance or dirtkiller to the spray gun.



3. Unroll hose without kinks and connect with handgun and pump. Use max. 20 m HP hose.



4. Connection of high pressure hose from device to lance.

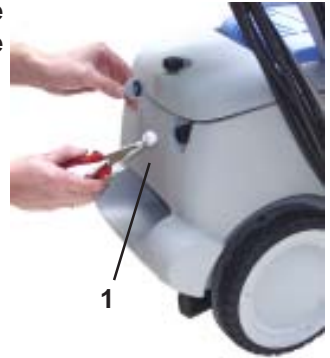


Preparation for use

5. The machine must be connected to the water line with cold water or up to 60° C warm water (see page 2).

The hose cross section must be at least 3/4" = 16 mm (free passage). Filter 1 must always be clean.

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



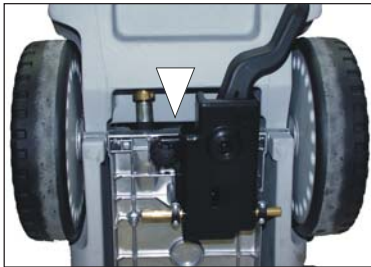
CAUTION !



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

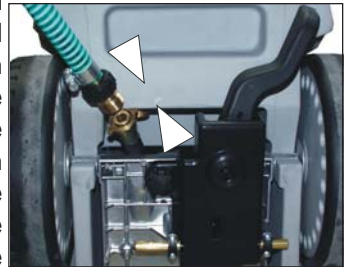
Do not touch the pump without safety gloves!

External suction



Undercarriage

If water is to be sucked from an external container for the high pressure cleaner, the connection hose between the high pressure pump and the water tank must be screwed off and the suction hose must be connected via a double



Undercarriage

le nipple 3/4" (Order no.: 46.004) to the connection hose.

Make sure that the water is clean. Use the Kränzle suction hose with suction filter. (Order no. 15.038 3)

Maximum suction height 2.5 m, maximum water temperature for direct suction: 60°C

(see technical data on page 2)

To shut down the pump

When using detergents

Put chemistry sieve number 5 into the detergent container. Open the detergent valve (6), then the detergent is sucked in. When closing the detergent valve, the chemistry supply is automatically closed. Allow detergent to act and then wash off. (see page 5).

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



Only open the valve, if the chemistry sieve is in a liquid. Sucked in air leads to the destruction of the pump seals !!!
Damages to the pump caused by sucked in air are not covered by the guarantee.



To shut down the pump:

1. Switch off the machine. Device switch to „0“ position.
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. Pull the plug from the socket.
7. Winter: store the pump in rooms above 0°C.
8. Clean the water filter.

Frost protection

Normally after operation, there is still some water in the device. Thus, you must take special measures to protect the device from frost.

- Completely drain the device

For this purpose, separate the device from the water supply. Then, turn on the main switch and open the gun. Now, the pump presses the remaining water from the water tank and the pump. However, do not allow the device to operate without water for longer than one minute.

- Fill the device with antifreeze agent

If the device is not operated for longer periods, especially over the winter, you should pump an antifreeze agent through the device. For this purpose, fill the antifreeze agent into the water box and turn on the device. Wait with opened gun, until the agent comes from the nozzle.

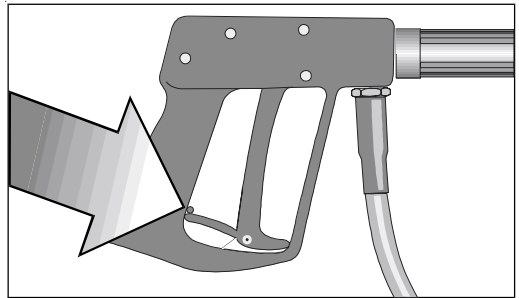
However, the best way to protect the device from frost is to store it at a frost-free location.

Safety notes



**As to the recoil -
see notice on page 2!**

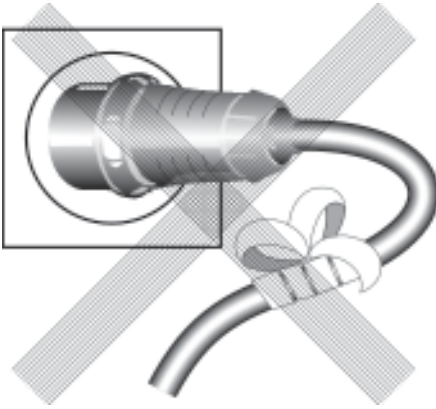
**Apply the safety catch on the
spray gun after each use, in
order to prevent uninten-
tional spraying!**



This is prohibited !



Never direct the water jet at people or animals !



Do not damage the power cable or repair it incorrectly!



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

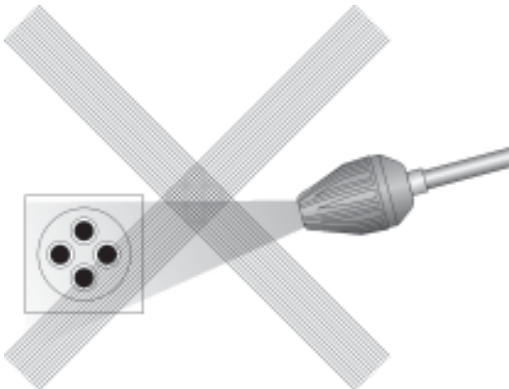
This is prohibited !



Never allow children to use the high pressure cleaner !



Never direct the water jet at the machine itself !



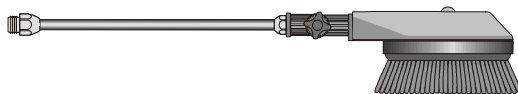
Never direct the water jet at a power socket !

Additional accessories for ... (on demand)



Rotary scrubbing brush

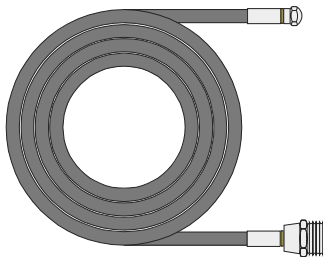
Order No. 41.050 1



Drain and pipe cleaning hose

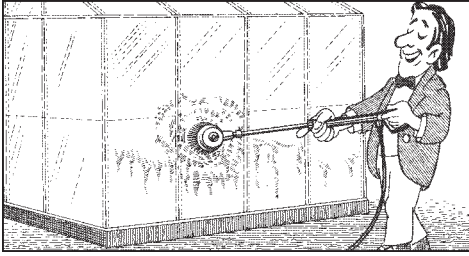
10 m - Order No. 41.058.1

15 m - Order No. 41.058

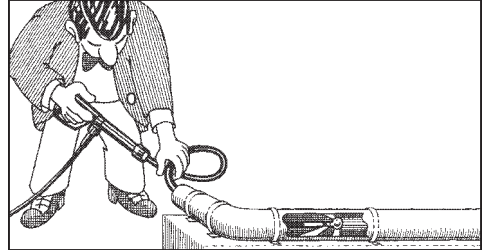


Environmental, refuse disposal and water protection regulations must be observed when using the accessories!

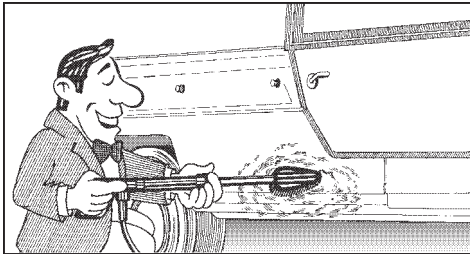
... further combination possibilities



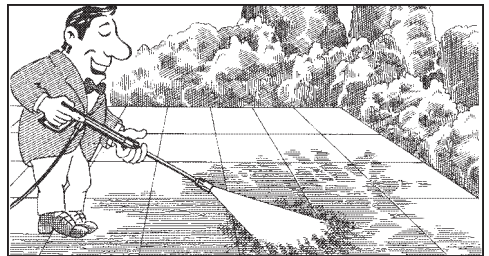
Car cleaning, glass, caravan, boat etc.:
rotary washing brush with 40 cm extension
and ST 30 nipple M22 x 1.5



Cleaning pipes, channels and drains: pipe
cleaning hose with KN nozzle and ST 30
nipple M22 x 1.5



Cleaning cars and all smooth surfaces:
brush with ST 30 nipple M22 x 1.5

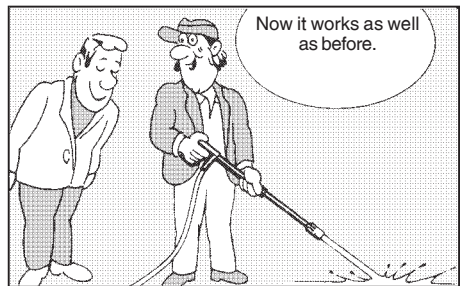
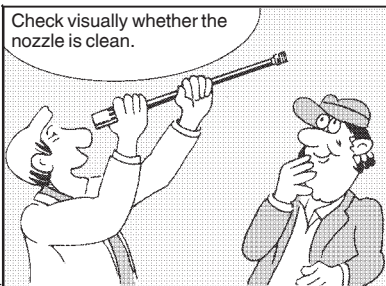
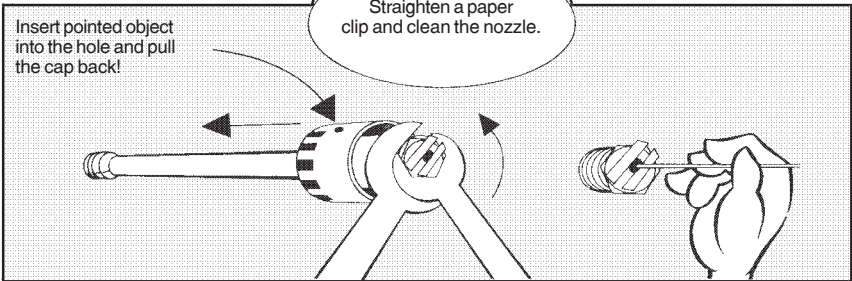
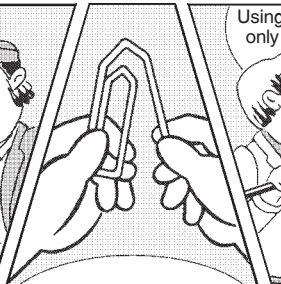
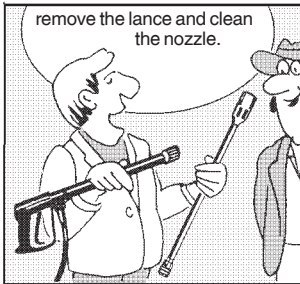
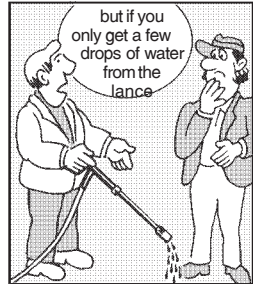
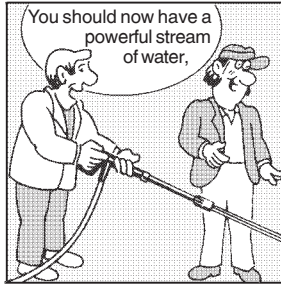
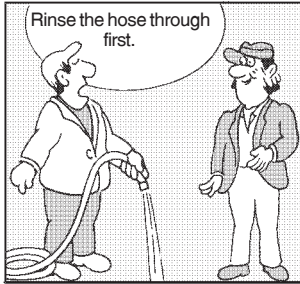


Rotary point sprayer for extreme soiling:
Turbokiller with 40 cm extension and ST
30 nipple M22 x 1.5



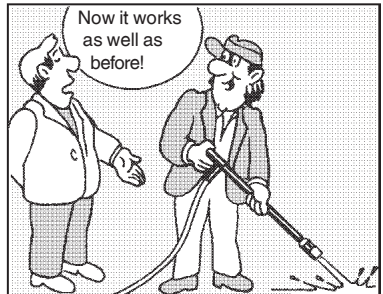
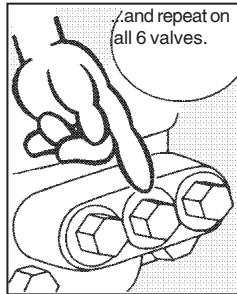
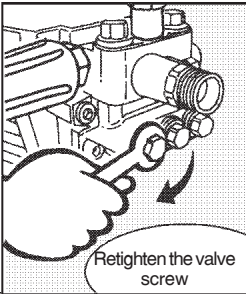
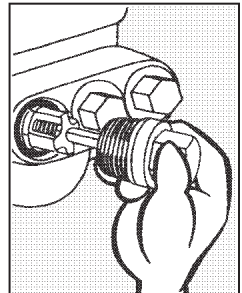
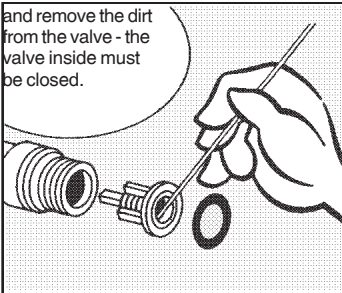
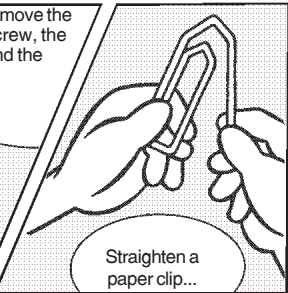
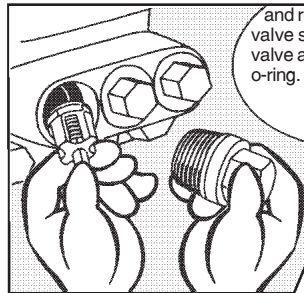
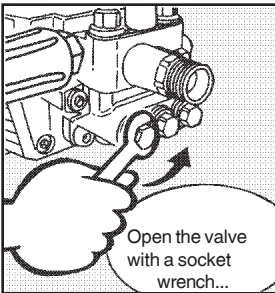
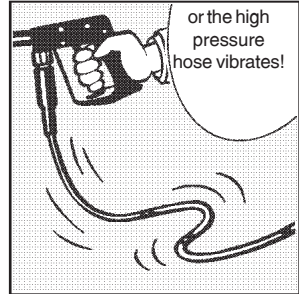
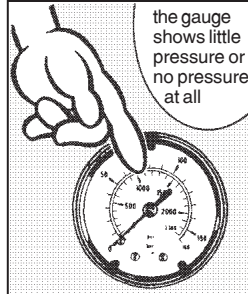
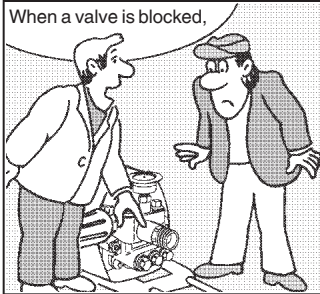
The nozzle is blocked!

● No water but the gauge shows full pressure !



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

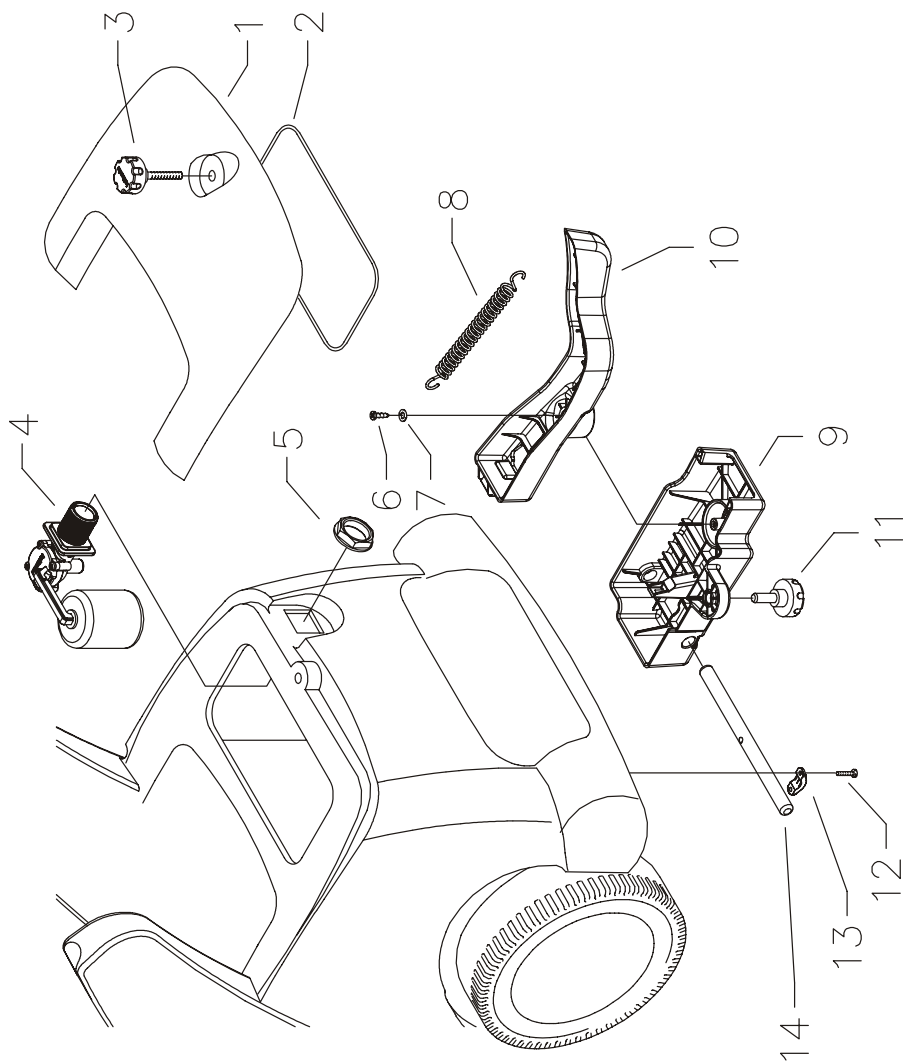


quadro 599 TST - 799 TST

Spare parts list KRÄNZLE quadro 599 TST - 799 TST Complete assembly

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1.1	Motor-pump without electricity for quadro 599 TST	1	46.085 1	24	Elastic-Stop-Mutter M8	4	41.410
1.2	for quadro 799 TST	1	46.085 2	25	Power cable 5,75m	1	41.092
1.3	Motor-pump with electricity for quadro 599 TST	1	46.086 1	25.1	Alternating current (quadro 599 TST)	1	44.036
1.2	for quadro 799 TST	1	46.086 2	26	Power cable 8m	1	
2	Schubbügel	1	46.033	26	Three-phase current (quadro 799 TST)	1	46.081
3	Schraube M6x35 DIN6912	8	46.024	27	Schlauchtrommel kpl.	1	42.621
4	Scheibe 6,4 DIN125	4	50.189	28	Chemiesaugschlauch (Gewebe) mit Filter	1	42.622
5	Wasserkasten	1	46.026	29	Gewebeschnlauch 0,4m	2	44.054
6	Lanzenablage	1	46.028	30	Schlauchklemme 9 - 9	1	44.145
7	Kabelaufwicklung unten	1	42.611	31	Gehäuse Waschmittelventil	1	44.150
8	Zugentlastung	1	43.431	32	O-Ring 5 x 1,5 (Viton)	1	44.149
9	Blechschrabe 3,5 x 12	2	40.290	33	O-Ring 28,24 x 2,62	1	44.147
10	Kunststoffschrabe 5,0 x 30	2	41.412	34	Regulierkolben Chemieventil	1	44.148
11	Lanzenständer	1	46.021	35	Edelstahlfeder 1,8 x 15 x 15	1	44.146
12	Rohrstopfen dm25	1	46.022	36	Deckel für Chemieventil	1	44.161
13	Scheibe 8,4 DIN125	4	50.186	37	Blechschrabe 3,5 x 16	3	44.162
14	Kabelaufwicklung oben	1	42.612	38	Blechschrabe 3,5 x 19	2	44.161
15	Gummipuffer 30 x 20	4	46.023	39.1	Drehgriff Chemieventil mit Blendkappe	1	44.151
16	Rad d250	4	46.010	39.2	Lance with flat jet nozzle for 599 TST	1	12.392-25035
17	Federstecker	4	40.115 1		Lance with flat jet nozzle for 799 TST	1	12.392-25045
18	Radkappe	4	46.011		please specify nozzle size		
19.1	Frontplatte quadro 599 TST	1	46.014 1	40	MIDI -gun with extension	1	12.160
19.2	Frontplatte quadro 799 TST	1	46.014 2	41.1	Dirtkiller 035 for quadro 599 TST	1	46.150
20	Lanzenhalter	2	42.610	41.2	Dirtkiller 045 for quadro 799 TST	1	46.150 1
21	Blechschrabe 3,5x16 DIN7981	5	44.161	42	Hochdruckschlauch 20 m NW6	1	43.416 1
22	Fahrgestell	1	46.001	43	O-Ring 13 x 2,6	2	13.272
				44	Verbindungs-schlauch	1	46.032
				47	Rückschlagventil für Chemiesaugschl.	1	44.240
				48	Chem. valve compl. items 30-37	1	44.052

Water inlet and brake

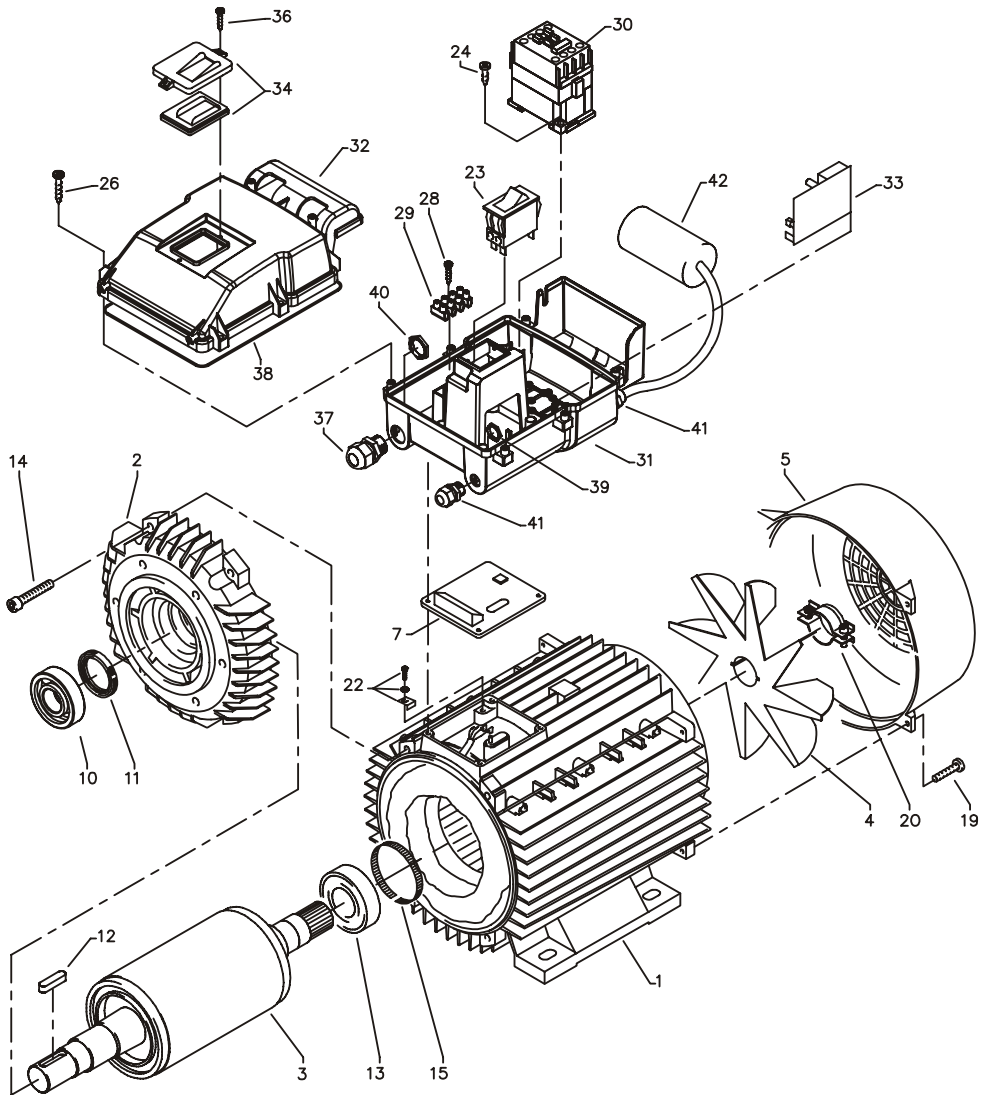


quadro 599 TST - 799 TST

Spare parts list KRÄNZLE quadro 599 TST - 799 TST
Water inlet and brake

No	Description	Qty.	Ord.-No
1	Revisionsdeckel	1	46.027
2	Dichtung für Revisionsdeckel	1	46.030
3	Sterngriffschraube M6	1	46.031
4	Schwimmerventil	1	46.250
5	Mutter R3/4"	1	46.258
6	Kunststoffschraube 5x14	1	43.426
7	Scheibe 5,3 DIN9021	1	50.152
8	Zugfeder	1	46.020
9	Deckel Bremse	1	46.016
10	Hebel Bremse	1	46.017
11	Sternschraube M8	1	50.168
12	Innensechskantschraube M4x10	4	46.002
13	Schelle	2	43.431
14	Bolzen für Bremse	1	46.018
	Brake compl. consisting of items 6-14		46.080

Pump motor

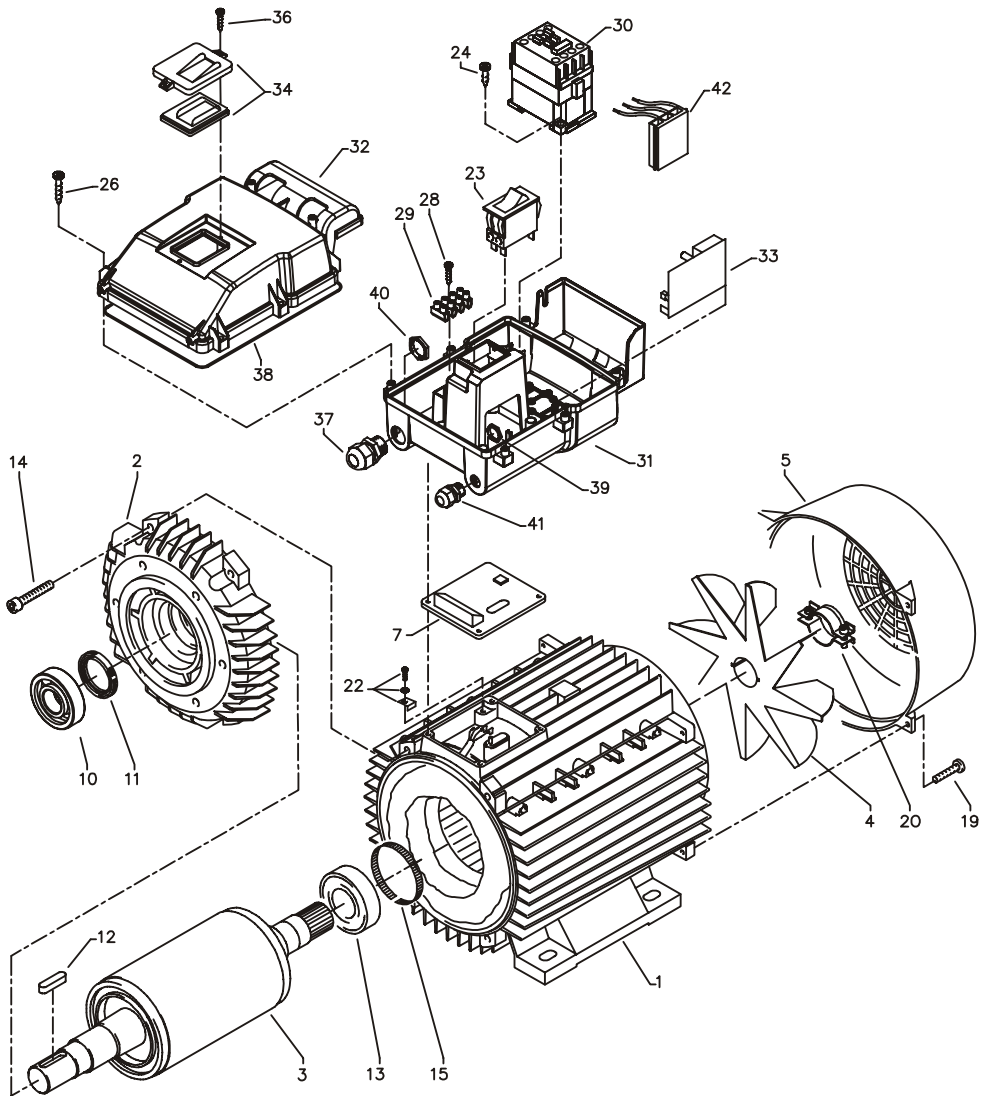


quadro 599 TST

Spare parts list KRÄNZLE quadro 599 TST Pump motor

No	Description	Qty.	Ord.-No
1	Stator BG100 2,3kW 230V / 50Hz	1	40.720
2	A-Lager Flansch	1	40.700
3	Rotor BG100 230V / 50Hz	1	40.703 1
4	Lüfterrad BG100	1	40.702
5	Lüfterhaube BG100	1	40.701
7	Flachdichtung	1	43.030
10	Schräggugellager 7306	1	40.704
11	Öldichtung 35 x 47 x 7	1	40.080
12	Passfeder 8 x 7 x 28	1	40.459
13	Kugellager 6206 - 2Z	1	40.538
14	Innensechskantschraube M 6 x 30	4	43.037
15	Toleranzhülse	1	40.544 1
19	Schraube M 4 x 12	4	41.489
20	Schelle für Lüfterrad BG100-112	1	40.535
22	Erdungsschraube kpl.	1	43.038
23	Schalter 14,5 A Amazonas	1	41.111 6
24	Kunststoffschraube 4,0 x 16	4	43.417
26	Kunststoffschraube 5,0 x 25	6	41.414
28	Kunststoffschraube 3,5 x 20	2	43.415
29	Lüsterklemme 5-pol.	1	43.326 1
30	Schütz 230V 50/60 Hz	1	46.005
31	Schaltkasten Unterteil	1	46.012
32	Schaltkasten Deckel	1	46.013
33	Steuerplatine Abschaltverz. 230V / 50Hz	1	42.504
34	Klemmrahmen mit Schalterabdichtung	1	43.453
36	Blechschrabe 3,5 x 16	2	44.161
37	PG 16-Verschraubung	1	41.419 1
38	Dichtung für Schaltkastendeckel	1	42.525
39	Gegenmutter für PG9-Verschraubung	2	41.087 1
40	Gegenmutter für PG16-Verschraubung	1	44.119
41	PG 9 - Verschraubung	2	43.034
42	Kondensator 60µF	1	41.148
	Switch box compl. items 23 - 42		46.082
	Motor compl. without switch items 1 - 22		24.085

Pump motor

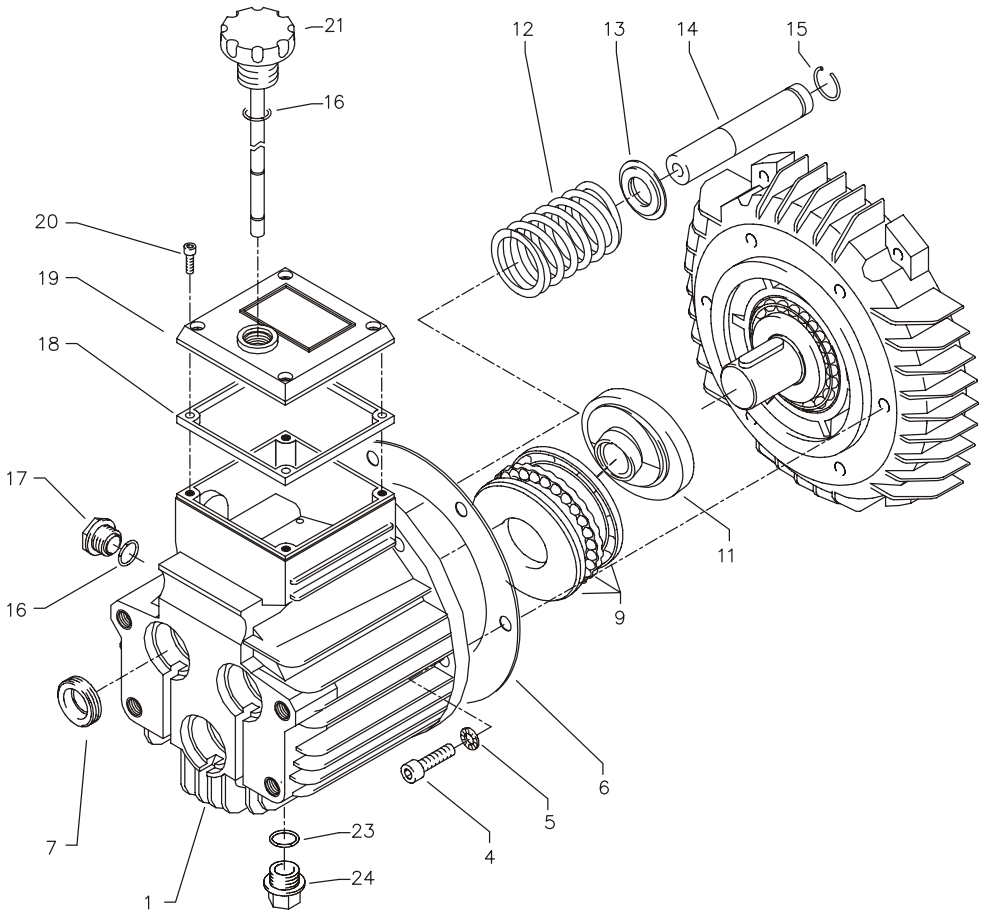


quadro 799 TST

Spare parts list KRÄNZLE quadro 799 TST Pump motor

No	Description	Qty.	Ord.-No
1	Stator 100 4,0kW 400V / 50Hz	1	40.710
2	A-Lager Flansch	1	40.700
3	Rotor 100 400V / 50Hz	1	40.703
4	Lüfterrad BG100	1	40.702
5	Lüfterhaube BG 100	1	40.701
7	Flachdichtung	1	43.030
10	Schräggugellager 7306	1	40.704
11	Öldichtung 35 x 47 x 7	1	40.080
12	Paßfeder 8 x 7 x 28	1	40.459
13	Kugellager 6206 - 2Z	1	40.538
14	Innensechskantschraube M 6 x 30	4	43.037
15	Toleranzhülse	1	40.544 1
19	Schraube M 4 x 12	4	41.489
20	Schelle für Lüfterrad BG100-112	1	40.535
22	Erdungsschraube kpl.	1	43.038
23	Schalter 14,5 A Amazonas	1	41.111 6
24	Kunststoffschraube 4,0 x 16	4	43.417
26	Kunststoffschraube 5,0 x 25	6	41.414
28	Kunststoffschraube 3,5 x 20	2	43.415
29	Lüsterklemme 5-pol.	1	43.326 1
30	Schütz 100-C12KN10 3x400V 50/60 Hz	1	46.005 1
31	Schaltkasten Unterteil	1	46.012
32	Schaltkasten Deckel	1	46.013
33	Steuerplatine Abschaltverz.	1	42.503
34	Klemmrahmen mit Schalterabdichtung	1	43.453
36	Blechschrabe 3,5 x 16	2	44.161
37	PG 16-Verschraubung	1	41.419 1
38	Dichtung für Schaltkastendeckel	1	42.525
39	Gegenmutter für PG9-Verschraubung	1	41.087 1
40	Gegenmutter für PG16-Verschraubung	1	44.119
41	PG 9 - Verschraubung	1	43.034
42	Überstromauslöser 3-polig 8,5A	1	46.040
	Switch box compl. items 23 - 42		46.083
	Motor compl. without switch items 1 - 22		24.080

Transmission unit

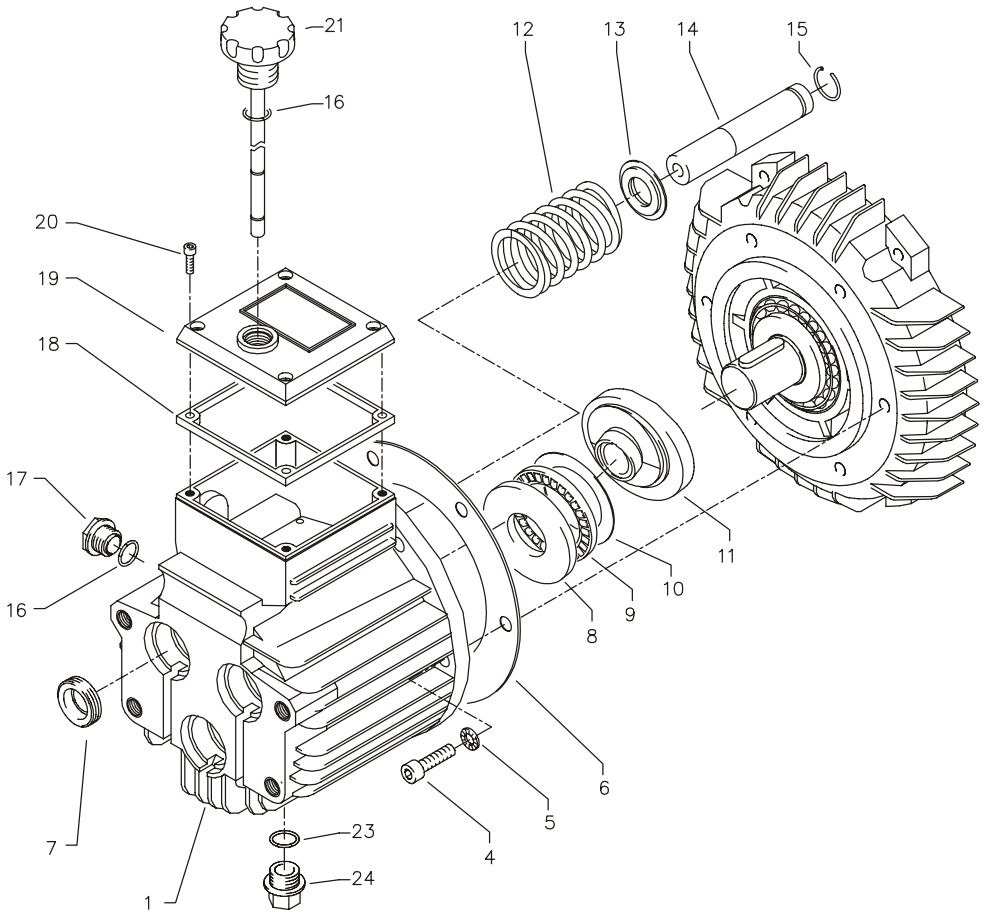


quadro 599 TST

Spare parts list **KRÄNZLE quadro 599 TST** Pump transmission unit for **AM-pump**

PNo	Description	Qty.	Ord.-No
1	Ölgehäuse mit Öldichtungen	1	40.452
4	Innensechskantschraube M 8 x 25	6	40.053
5	Sicherungsscheibe	6	40.054
6	Flachdichtung	1	40.511
7	Öldichtung 18 x 28 x 7	3	41.031
9	Axial-Rillenkugellager AM	1	40.462
11	Taumelscheibe 8,0° quadro 599	1	40.460-8,0
12	Plungerfeder	3	40.453
13	Federdruckscheibe	3	40.454
14	Plunger 18mm (AM-Pumpe)	3	40.455
15	Sprengring	3	41.035
16	O-Ring 14 x 2	2	43.445
17	Verschlußschraube M 18 x 1,5	1	41.011
18	Flachdichtung	1	41.019 3
19	Deckel	1	40.518
20	Innensechskantschraube M 5 x 12	4	41.019 4
21	Ölmeßstab (AM-Pumpe)	1	40.461
23	O-Ring	1	43.445
24	Verschlußstopfen R 3/8"	1	40.051
	Transmission unit AM compl. with ball bearing for quadro 599 consisting of: Items 1-24		46.087 1-8,0

Transmission unit

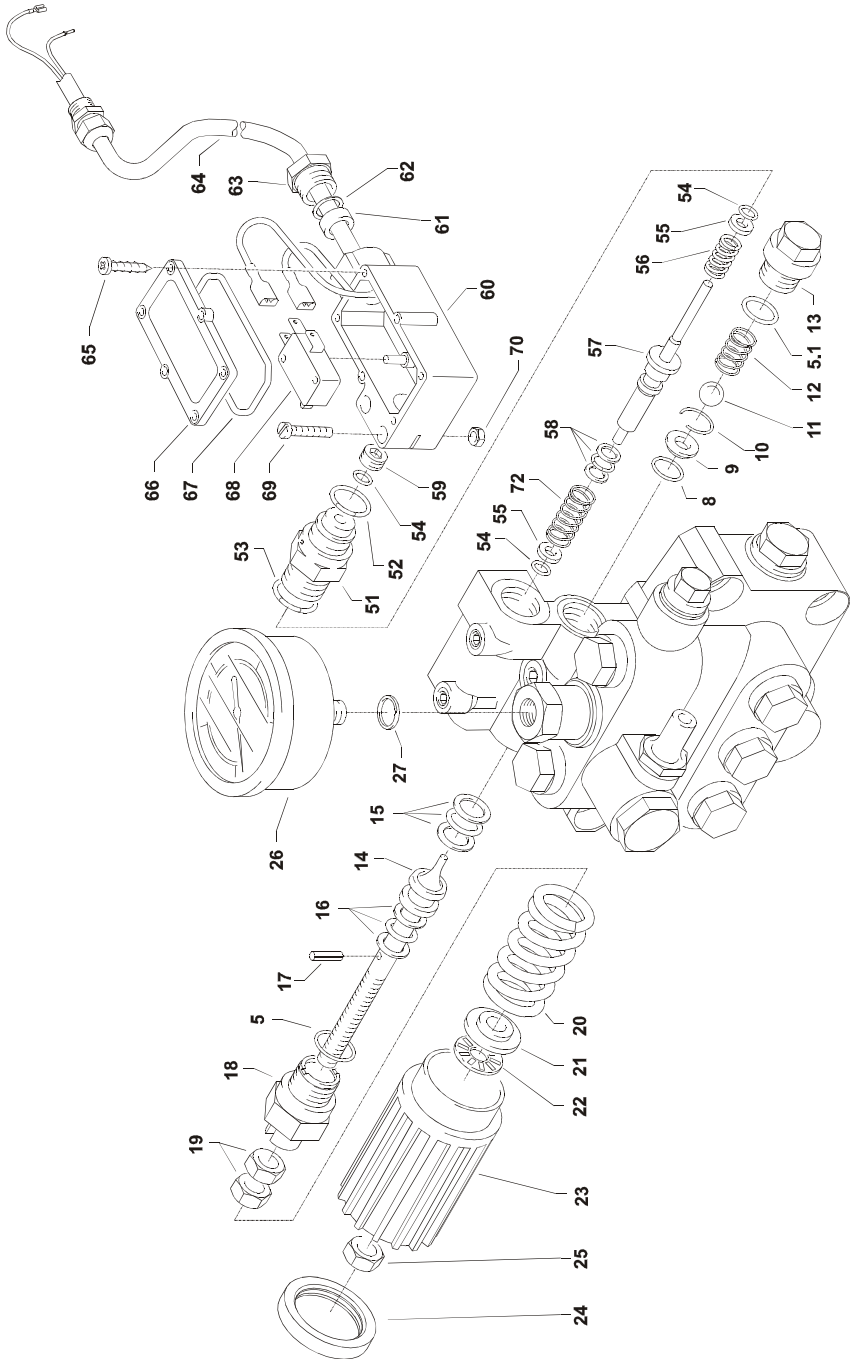


quadro 799 TST

Spare parts list **KRÄNZLE quadro 799 TST** Pump transmission unit for **AM-pump**

No	Description	Qty.	Ord.-No
1	Ölgehäuse mit Öldichtungen	1	40.452
4	Innensechskantschraube M 8 x 25	6	40.053
5	Sicherungsscheibe	6	40.054
6	Flachdichtung	1	40.511
7	Öldichtung 18 x 28 x 7	3	41.031
8	Wellenscheibe	1	40.043
9	Axial-Rollenkäfig	1	40.040
10	AS-Scheibe	1	40.041
11	Taumelscheibe 8,0° quadro 599	1	40.460-8,0
11.1	Taumelscheibe 10,75° quadro 799	1	40.460-10,75
12	Plungerfeder	3	40.453
13	Federdruckscheibe	3	40.454
14	Plunger 18mm (AM-Pumpe)	3	40.455
15	Sprengring	3	41.035
16	O-Ring 14 x 2	2	43.445
17	Verschlußschraube M 18 x 1,5	1	41.011
18	Flachdichtung	1	41.019 3
19	Deckel	1	41.023 1
20	Innensechskantschraube M 5 x 12	4	41.019 4
21	Ölmeßstab (AM-Pumpe)	1	40.461
23	O-Ring	1	43.445
24	Verschlußstopfen R 3/8"	1	40.051
	Transmission unit AM compl. with roller bearing for quadro 799 consisting of: Items 1-24		46.087 2-10,75

Unloader valve and pressure switch

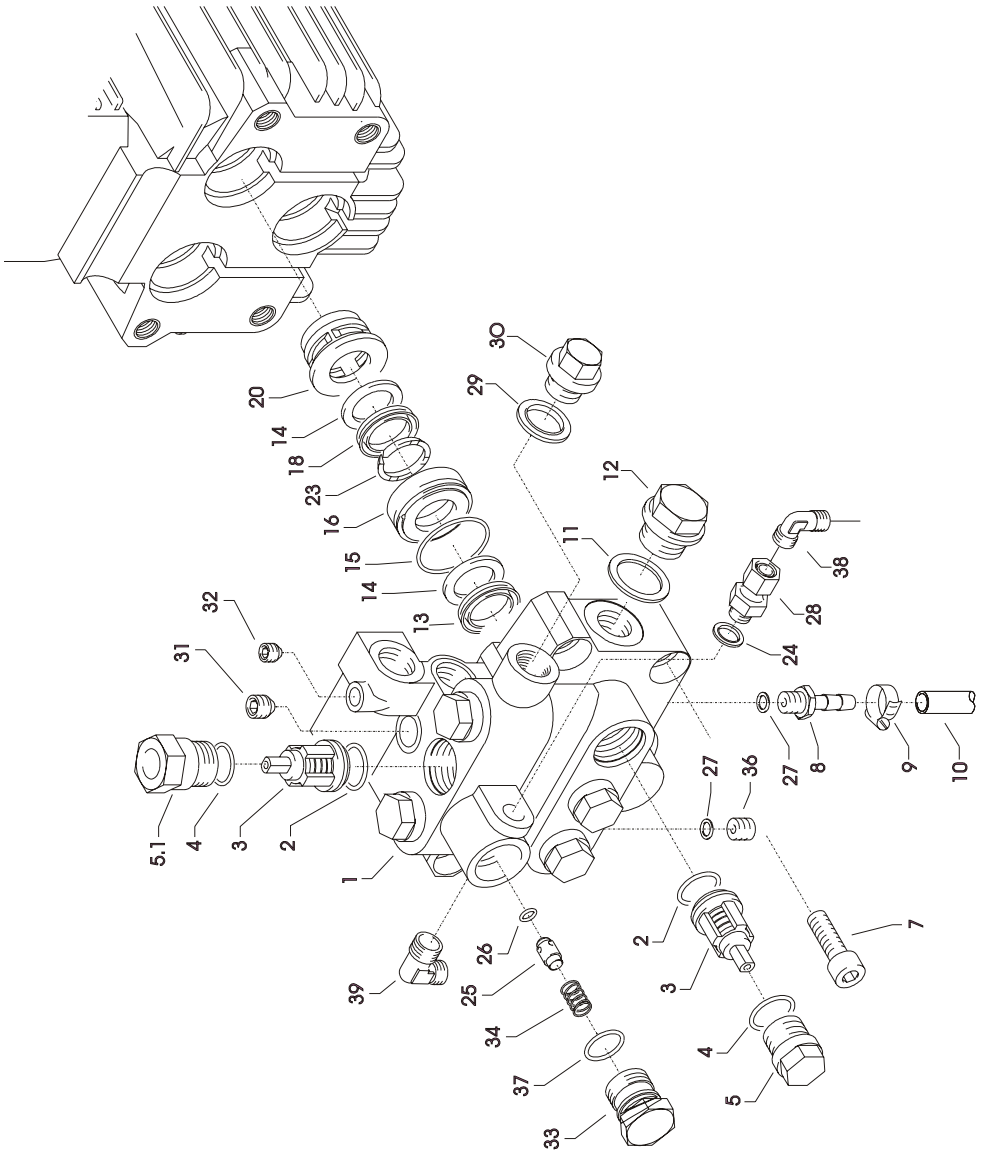


quadro 599 TST - 799 TST

Spare parts list KRÄNZLE quadro 599 TST - 799 TST Unloader valve and pressure switch

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
5	O-Ring 16 x 2	1	13.150	55	Stützscheibe	2	15.015 1
5.1	O-Ring 13,94 x 2,62	1	42.167	56	Edelstahlfeder	1	15.016
8	O-Ring 11 x 1,44	1	12.256	57	Steuerstößel	1	15.010 2
9	Edelstahlsitz	1	14.118	58	Parbaks	1	15.013
10	Sicherungsring	1	13.147	59	Stopfen M 10 x 1 (durchgebohrt)	1	13.385 1
11	Edelstahlkugel	1	13.148	60	Gehäuse Elektroschalter	1	15.007
12	Edelstahlfeder	1	14.119	61	Gummimanschette PG 9	1	15.020
13	Verschlusssschraube	1	14.113	62	Scheibe PG 9	1	15.021
14	Steuerkolben	1	14.134	63	Verschraubung PG 9	1	15.022
15	Parbaks 16 mm	1	13.159	64	PVC-Kabel 2x 1,0 mm ²	1	42.505
16	Parbaks 8 mm	1	14.123	65	Blechschrube 2,8 x 16	6	15.024
17	Spannstift	1	14.148	66	Deckel Elektroschalter	1	15.008
18	Kolbenführung spezial	1	42.105	67	O-Ring 44 x 2,5	1	15.023
19	Kontermutter M 8 x 1	2	14.144	68	Mikroschalter	1	15.018
20	Ventilfeder schwarz	1	14.125	69	Zylinderschraube M 4 x 20	2	15.025
21	Federdruckscheibe	1	14.126	70	Sechskant - Mutter M 4	2	15.026
22	Nadellager	1	14.146	72	Druckfeder 1 x 8,6 x 30	1	40.520
23	Handrad AM-Pumpe	1	40.457		Steuerkolben kpl. mit Handrad		40.490
24	Kappe Handrad AM-Pumpe	1	40.458		Pos. 5, 14-25		
25	Elastic-Stop-Mutter M 8 x 1	1	14.152		Rep.-Satz Druckschaltermechanik		15.009 3
26	Manometer 0-250 Bar	1	15.039		1x Pos. 51, 1x Pos. 52, 1x Pos. 53,		
27	Aluminium-Dichtung	2	13.275		3x Pos. 54, 1x Pos. 55, 1x Pos. 56,		
51	Führungsteil Steuerstößel	1	15.009 1		1x Pos. 57, 1x Pos. 58, 1x Pos. 59		
52	O-Ring 12,3 x 2,4	1	15.017				
53	O-Ring 14 x 2	1	43.445				
54	O-Ring 3,3 x 2,4	3	12.136		Druckschalter kpl. Pos. 54 - 70		41.300 5

Valve housing



quadro 599 TST - 799 TST

Spare parts list KRÄNZLE quadro 599 TST - 799 TST
Valve housing for integrated AM-pump

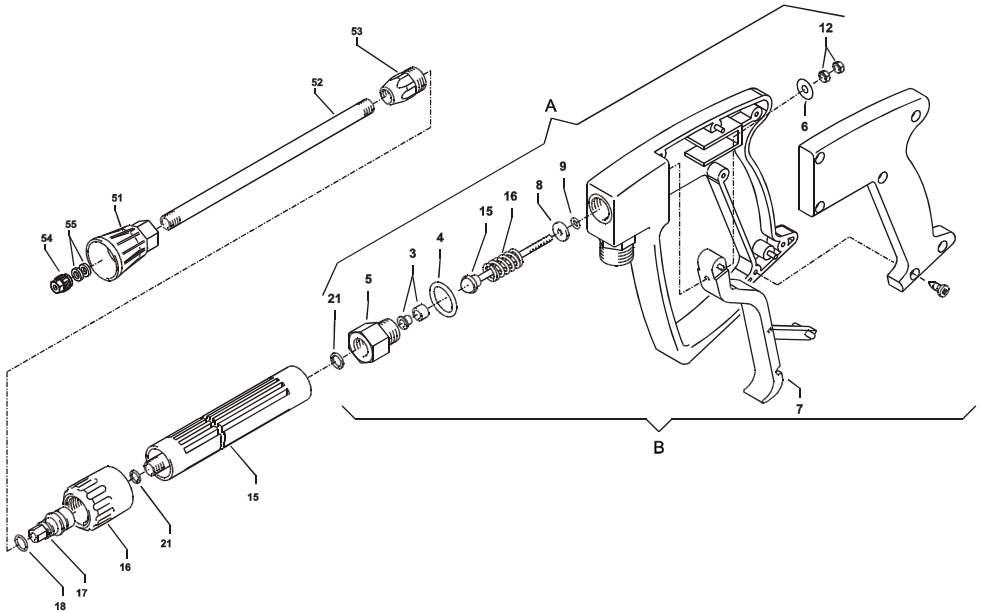
No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Ventilgehäuse AM-Pumpe	1	40.451	27	Aluminium-Dichtring	4	13.275
2	O-Ring 15 x 2	6	41.716	28	Ausgangsteil Pumpe R1/4" x 12	1	46.039
3	Ventile (grün)	6	41.715 1	29	Kupferring	1	42.104
4	O-Ring 16 x 2	6	13.150	30	Dichtstopfen R1/4" mit Bund	1	42.103
5	Ventilstopfen	5	41.714	31	Dichtstopfen M10 x 1	1	43.043
5.1	Ventilstopfen mit R1/4" IG	1	42.026 1	32	Dichtstopfen M 8 x 1	2	13.158
7	Innensechskantschraube M10 x 35	4	42.509 1	33	Ausgangsteil	1	42.161
8	Schlauchnippel R1/4" x 8	1	46.038	34	Rückschlagfeder	1	14.120
9	Schlauchschele 7 - 10	1	44.054	36	Stopfen R1/4"	1	13.387
10	Chemiesaugschlauch mit Filter	1	46.038 1	37	O-Ring 18 x 2	1	43.446
11	Dichtring	1	40.019	38	Ermetowinkel 12L x 12L	1	42.630
12	Stopfen 3/8"	1	40.018	39	Ermetowinkel R3/8" x 12L	1	44.092
13	Manschette 18 x 26 x 4/2	3	41.013		Ventilgehäuse kpl. ohne Manometer		46.084
14	Backring 18 mm	6	41.014		bestehend aus: Pos. 1 - 8; Pos. 11 - 39		
15	O-Ring	3	40.026		Reperatur - Sätze:		
16	Leckagering 18 mm	3	41.066		Rep.-Satz Manschetten 18 mm		41.049 1
18	Gewebemanschette 18 x 26 x 5,5/3	3	41.013 1		bestehend aus je 3x Pos. 13; 6x Pos. 14;		
20	Zwischenring 18 mm	3	41.015 2		3x Pos. 15; 3x Pos. 23; 3x Pos. 18		
23	Druckring	3	41.018		Rep.-Satz Ventile für APG-Pumpe		41.748 1
24	Usit Ring	1	12.387		bestehend aus je 6x Pos. 2; 6x Pos. 3;		
25	Rückschlagkörper	!	14.122		6x Pos. 4		
26	O-Ring 6 x 3	1	14.121				

quadro 599 TST - 799 TST

Spare parts list KRÄNZLE quadro 599 TST - 799 TST Hose drum

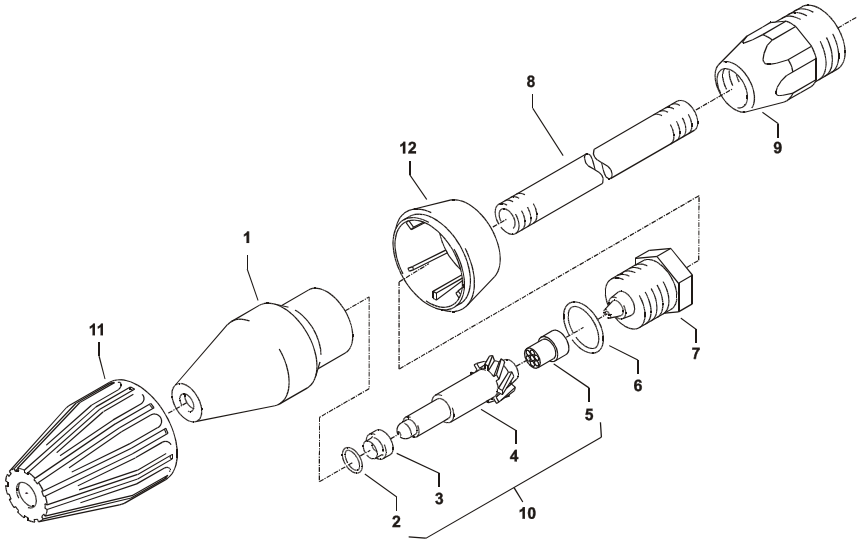
No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Seitenschale	2	46.201	23	Drehgelenk	1	40.167
3	Trommelteil	2	46.202	25	Distanzring	1	40.316
5	Innensechskantschraube M 4 x 25	4	40.313	27	O-Ring 6,86 x 1,78	1	40.585
6	Lagerklotz mit Bremse	1	40.306 1	28	Anschlussstück	1	40.308
7	Lagerklotz links	1	40.305 1	33	O-Ring 6 x 1,5	1	13.386
8	Klemmstück	2	40.307 1	34	Stopfen M 10 x 1	1	13.385
9	Kunststoffschraube 5,0 x 20	12	43.018	40	Überwurfmutter	1	13.276 2
10	Antriebswelle	1	46.204	42	O-Ring 9,3 x 2,4	4	13.273
11	Welle Wasserführung	1	46.203	44	Verbindungsschlauch	1	46.037
12	Elastic-Stop-Mutter M 4	4	40.111	45	Hochdruckschlauch NW6 20 m	1	43.416 1
13	Handkurbel	1	40.320 0				
14	Verriegelungsbolzen	1	40.312				
15	Scheibe MS 16 x 24 x 2	1	40.181				
16	Wellensicherungsring 22 mm	2	40.117				
17	Wellensicherungsring 16 mm	1	40.182				
20	Parbaks 16 mm	2	13.159				
21	Sicherungsscheibe 6 DIN6799	1	40.315				
22	Schraube M 5 x 10	1	43.021				
					Hose drum compl. without hose consisting of items 1 - 42		46.081

MIDI-gun and lance



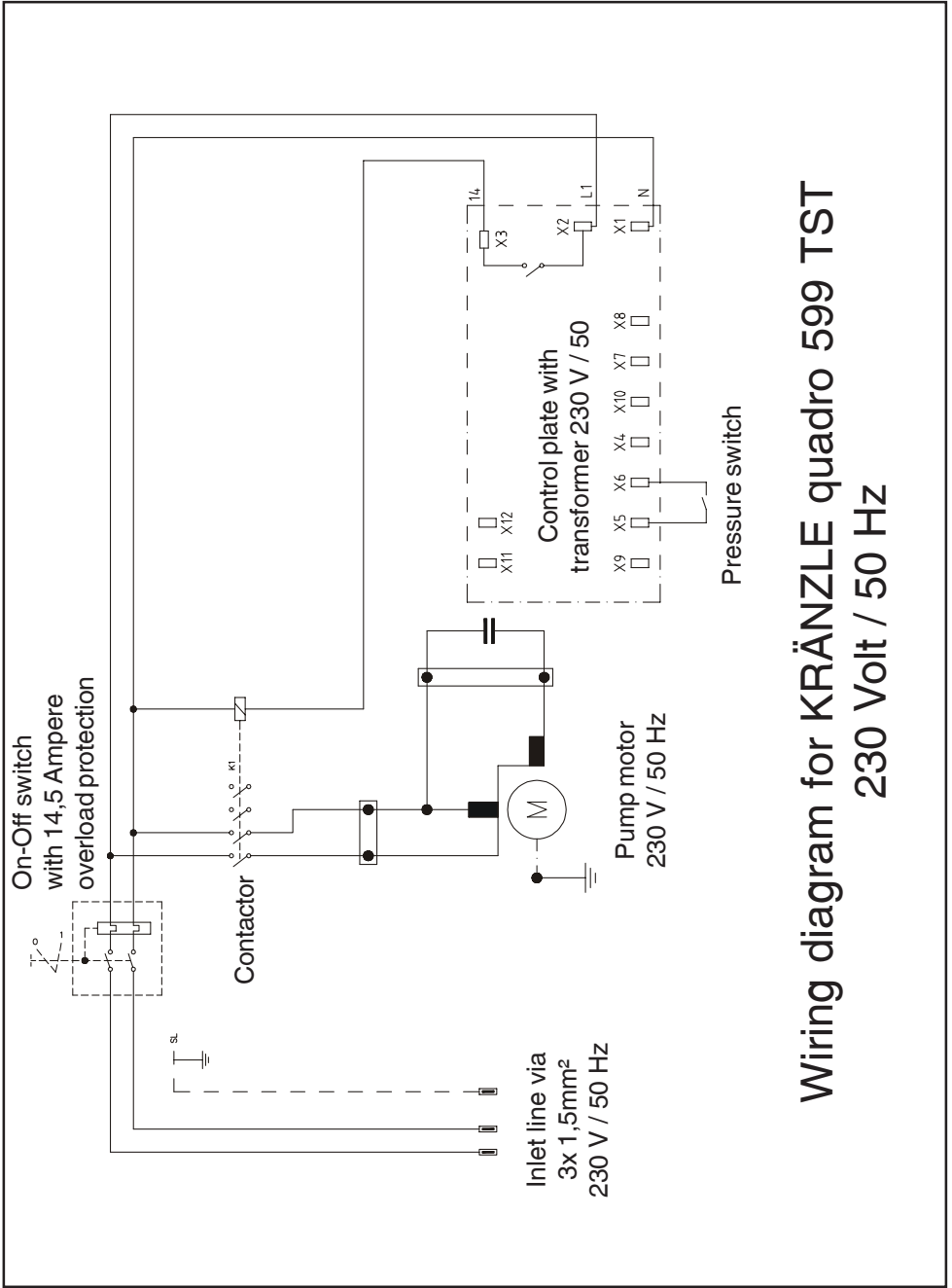
No	Description	Qty.	Ord.-No
5	Rohranschlußteil R1/4" incl. Pos. 3, 4, 21	1	12.125
6	Scheibe 5,3 DIN9021	1	50.152
7	Abzug-Hebel kpl.	1	12.144 1
15	Rohr kunststoffumspritzt bds. R 1/4" AG	1	15.004 2
16	Überwurfmutter ST 30 M22 x 1,5 IG	1	13.276 1
17	Außen-Sechskant-Nippel R 1/4" IG	1	13.277 1
18	O-Ring 9,3 x 2,4	1	13.273
28	Aluminium Dichtring	6	13.275
51	Düsenschutz weiß (bei quadro 599)	1	26.002 2
51.1	Düsenschutz gelb (bei quadro 799)	1	26.002 3
52	Rohr 600 mm; bds. R1/4"	1	12.385 2
53	ST 30 Nippel M 22 x 1,5 / R1/4" m. ISK	1	13.370
54	Flachstrahldüse 20035 (bei quadro 599)	1	M20035
54.1	Flachstrahldüse 20045 (bei quadro 799)	1	M20045
55	Aluminium-Dichtring 8,3x11,3x2	2	13.275 1
A	Rep.-Kit Pos: 3, 4, 5, 8, 9, 12, 15, 16; 21		12.158
B	Griff komplett		12.164
	Midi-Pistole mit Verlängerung		12.160
	Lanze kpl. mit HD-Düse 20035		12.392-M20035
	Lanze kpl. mit HD-Düse 20045		12.392-M20045

Dirtkiller

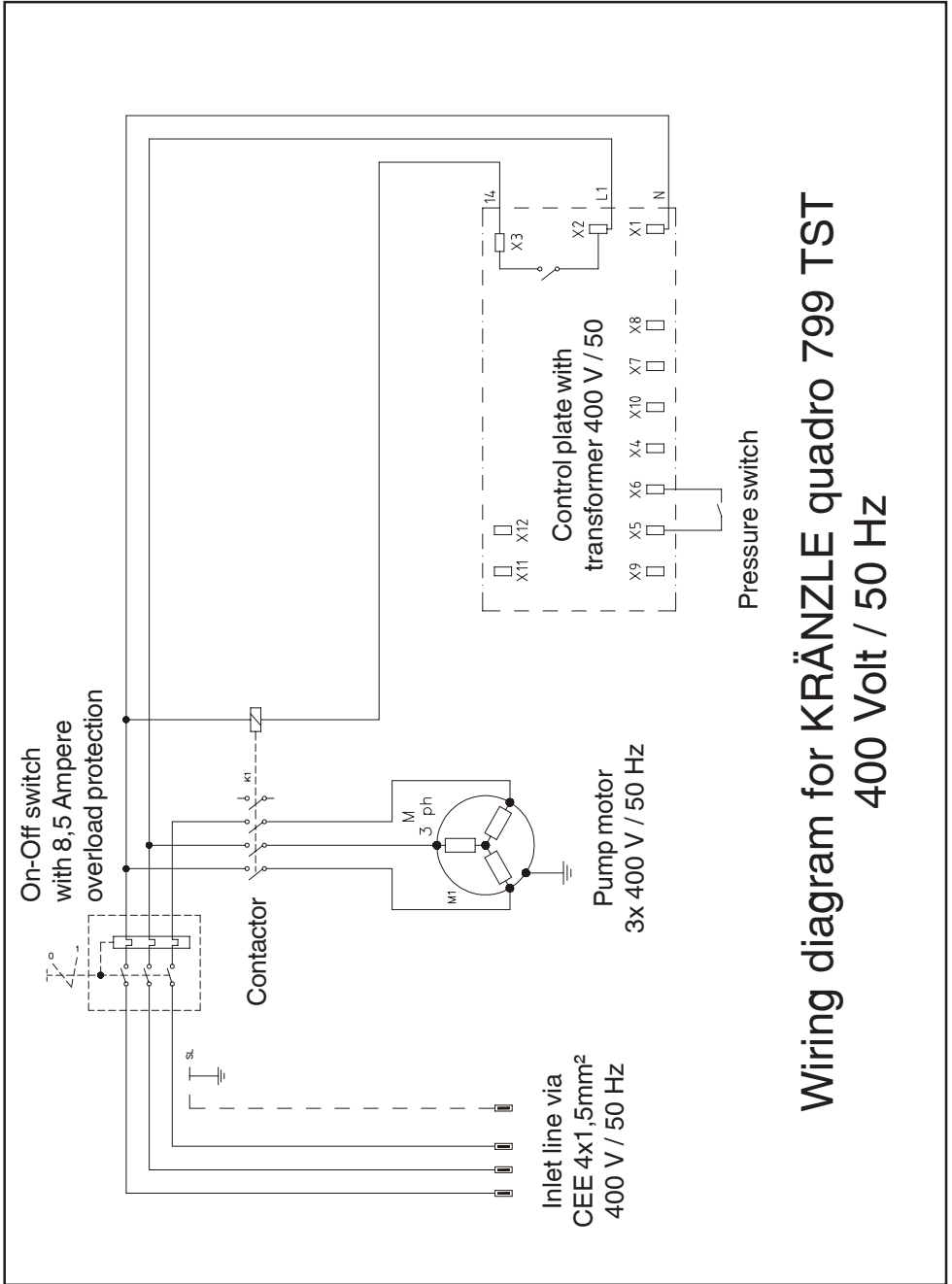


No	Description	Qty.	Ord.-No
1	Sprühkörper	1	41.520
2	O-Ring 6,88 x 1,68	1	41.521
3	Düsensitz	1	41.522
4	Nozzle 035 (quadro 599)	1	41.523 1
4.1	Nozzle 045 (quadro 799)	1	41.523
5	Stabilisator	1	41.524
6	O-Ring	1	40.016 1
7	Sprühstopfen R1/4" IG	1	41.526 1
8	Rohr 500 mm lang; bds. R1/4"	1	12.385 1
9	Nippel M22x1,5 x R1/4" IG	1	13.370
11	Kappe vorn für Schmutzkiller	1	41.528 1
12	Rear cap for Dirtkiller 035	1	41.540 4
12.1	Rear cap for Dirtkiller 045	1	41.540 2
	Rep.-kit Dirtkiller 035		41.097 0
	Rep.-kit Dirtkiller 045		41.097
	consisting of 1x 2; 3; 4; 5 each		
	Dirtkiller 035 with lance 500mm		46.150
	Dirtkiller 045 with lance 500mm		46.150 1

Wiring diagram



Wiring diagram



**Wiring diagram for KRÄNZLE quadro 799 TST
400 Volt / 50 Hz**

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. (see pages 46-47)

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 pages 15 - 17).

**Check the oil level at the oil dip stick prior to each use (see also page 11).
(Ensure horizontal position!)**

Oil change:

The first oil change should be carried out after approximately 50 operating hours, then every year or after 1000 operating hours. If the oil turns grey or white, you must change the oil of your high pressure pump in any case. Open the oil discharge screw at the bottom of the device over a collection reservoir. Ensure a horizontal position to drain the oil completely. The oil is to be caught in the reservoir and disposed of in an approved manner.

New oil: 0,8 l

Motor oil: Castrol 10 W-60 SAE
halfsynthetic oil



Oil discharge screw

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 warranted 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.

Inspection report for HP cleaners

Professionally used high pressure cleaners must be inspected by an expert every 12 months!

Inspection report on annually carried out Labour Safety Inspection (UVV) according to the Guidelines for Liquid Spray Equipment. (This inspection sheet serves as proof for the completion of the retest and must be kept carefully!)

Owner: _____ Type: **quadro 599/799** Built: _____

Address: _____ Serial no.: _____

Rep.-order-no.: _____

Scope of inspection:	ok		repair- ed
	yes	no	
Type plate (on hand)			
Operating manual (on hand)			
Protective covering, -device			
Pressure line (tightness)			
Pressure gauge (function)			
Float valve (tightness)			
Spraying device (marking)			
HP-hose/ connector (damage, marking)			
Safety valve opens at 10% / 20% exceeding of operating pressure			
Power cable (Damage)			
Power plug (damage)			
Protective conductor (connected)			
On/Off-switch			
Used chemicals			
Allowed chemicals			

Inspection data:	determ. value	set value
High-pressure nozzle		
Operating pressurebar		
Cutting-off pressure.....bar		
Conductor resist. not exceeded / value:		
Insulation		
Leakage current:		
Gun locked		

Inspection result (tick):

- The appliance was checked by an expert according to the Guidelines for Liquid Spray Equipment, the defects found have been rectified so that the Labour Safety can be confirmed.

- The appliance was checked by an expert according to the Guidelines for Liquid Spray Equipment. The Labour Safety cannot be confirmed unless the defects found are rectified by repair or replacement of the faulty parts.

The next retest according to the Guidelines for Liquid Spray Equipment has to be carried out by:

Month: _____ Year: _____

Place, Date: _____

Signature: _____

Inspection report for HP cleaners

Professionally used high pressure cleaners must be inspected by an expert every 12 months!

Inspection report on annually carried out Labour Safety Inspection (UVV) according to the Guidelines for Liquid Spray Equipment. (This inspection sheet serves as proof for the completion of the retest and must be kept carefully!)

Owner: _____ Type: **quadro 599/799** Built: _____

Address: _____ Serial no.: _____

Rep.-order-no.: _____

Scope of inspection:	ok		repair- ed
	yes	no	
Type plate (on hand)			
Operating manual (on hand)			
Protective covering, -device			
Pressure line (tightness)			
Pressure gauge (function)			
Float valve (tightness)			
Spraying device (marking)			
HP-hose/ connector (damage, marking)			
Safety valve opens at 10% / 20% exceeding of operating pressure			
Power cable (Damage)			
Power plug (damage)			
Protective conductor (connected)			
On/Off-switch			
Used chemicals			
Allowed chemicals			

Inspection data:	determ. value	set value
High-pressure nozzle		
Operating pressurebar		
Cutting-off pressure.....bar		
Conductor resist. not exceeded / value:		
Insulation		
Leakage current:		
Gun locked		

Inspection result (tick):

- The appliance was checked by an expert according to the Guidelines for Liquid Spray Equipment, the defects found have been rectified so that the Labour Safety can be confirmed.

- The appliance was checked by an expert according to the Guidelines for Liquid Spray Equipment. The Labour Safety cannot be confirmed unless the defects found are rectified by repair or replacement of the faulty parts.

The next retest according to the Guidelines for Liquid Spray Equipment has to be carried out by:

Month: _____ Year: _____

Place, Date: _____

Signature: _____

