

Original-Operating manual

- USA -

kranzle

High-pressure cleaners

quadro 700 170 bar/250) psi TST



kranzle quadro

P: 170 Bar Q: 13 l/min

CE

T max: 60° C

220 V 1 ~ 60 Hz 23 Amp IP 55 I.Kl.: F 1700 m

I.Kl.: F 1700 rpm P1: 5,5 kW P2: 3,8 kW

Serial-No.: BA-30097045

I. Kränzle GmbH Elpke 97

D - 33605 Bielefeld

Reprint only allowed with the authorization of Krānzle
As date of 04/18/2013

■ Made

inGermany

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







Technical data

Technical data	quadro 700 TST	
Operating pressure, steplessly adjustable	30 - 170 bar	
Perm. overpressure	190 bar	
Water output at 0 bar at nominal pressure	15 l/min 13 l/min	
Nozzle size (Flat jet) (Turbokiller)	2504 045	
Volume Water tank	161	
Max, inlet water temperature	max. 60 °C	
Direct suction height (*2)	2,5 m	
Hose drum	yes	
High pressure hose	20 m	
Electrical ratings	230 V/60 Hz 23 A	
Motor speed adjustm.	1700 U/min	
Connect. wattage inp. output.	P1: 5,5 kW P2: 3,8 kW	
Weight (incl. accessories with empty water tank	89 kg	
Dimensions including handle L x W x H in mm	770 x 570 x 990	
Sound level acc. to 45 635 (rel. to working place)	89 dB (A)	
with Turbokiller Guaranteed sound level L _{wa}	91 dB (A) 91 dB (A)	
Vibrations at lance	2,2 m/s²	
Recoil at lance	ap. 20 N	

Min. water quantity to be supplied to the high pressure cleaner!
(2-8 bar admission pressure)

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 for the first time.

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

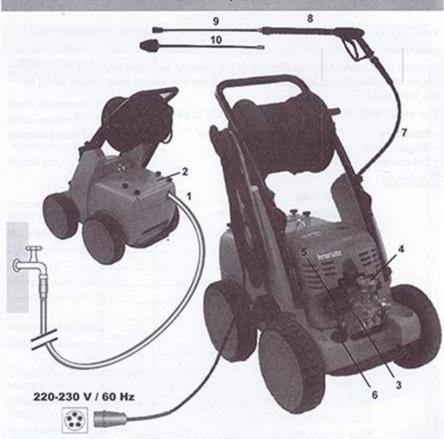
- facades	- vehicles of all types	- barrels and containers
- flagstones	- containers	- channels
- terraces	- machines etc.	

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Direct suction is possible through by-passing of water tank! (see page 5)

Description



Construction

The KRÄNZLE quadro 700 TST high pressure cleaners are mobile machines with hose drum and 20m industrial hose. The schematic 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 Turbokiller
- 10 Interchangeable lance with flat jet nozzle and nozzle protection

Description

Water system

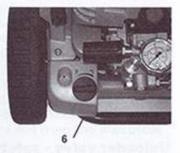
The water must be lead to the high pressure cleaner under pressure (2-8 bar ad-mission pressure). A float valve regulates the water inlet. Then, the water is sucked by the high pressure pump from the water tank and supplied to the lance under the set pressure. The high pressure jet is formed by the nozzle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





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.

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

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



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 fuse on the mains side.

KRÄNZLE quadro = 220-230 Volt / 60 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 4 mm². Plug connections must be of a spray-proof design and may not be located on a wet floor.

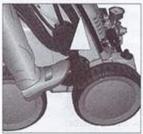
CAUTION!

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

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

Description

Brake







Brake not applied

Brief operating instructions

- 1. Connect high pressure hose with spray gun.
- 2. Connect to suitable water supply.
- 3. Connect current (400 Volt three-phase current)
- 4. Switch on machine and start cleaning.
- 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. Turbokiller

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

2. Spray gun Starlet with insulated grip and screw connection

3. KRÄNZLE - High pressure cleaners quadro 700 TST with hose drum



4. Operating instructions



5. High pressure hose, 20 m NW 8 on hose drum

6. Crank for hose drum



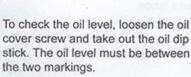
7. Water inlet part (filter is already installed)



How to assemble and furnish your high pressure cleaner



Remove the screw from the drive shaft of the hose drum. Unpack the crank and insert it onto the hexagon head. Tighten the crank again with the screw.



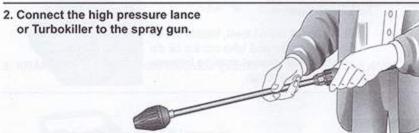


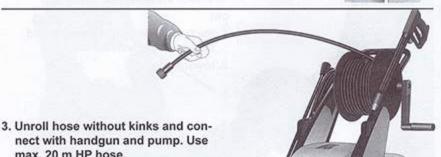


Preparation for use

- 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 state must be between the two markings on the oil measuring rod.









4. Connection of high pressure hose from device to lance

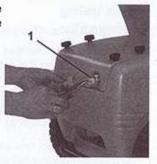
max. 20 m HP hose.

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





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 directly to the pump.

Make sure that the water is clean. Use the Kränzle suction hose with suction filter. (Order N°. 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, 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. instructions concerning safety clothing) and the water protection regulations!

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.
- Remove the water hose and spray gun.
- Pull the plug from the socket.
- 7. Winter: store the pump in rooms above 0°C.
- 8. Clean the water filter.

Safety notes

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.

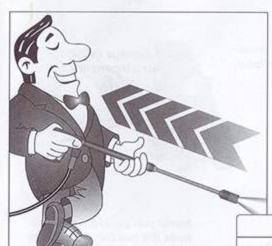
Completely drain the device

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.

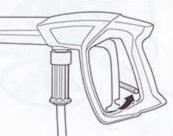
- Fill the device with antifreeze agent

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.



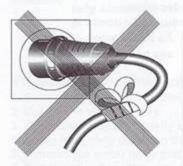
As to the recoil see notice on page 2!



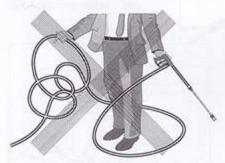
This is prohibited!



Never direct the water jet at people or animals!

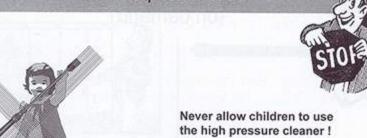


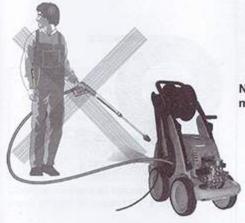
Do not damage the power cord or repair it incorrectly!



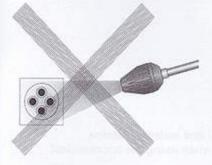
Never pull the high pressure hose if it has formed kinks or "nooses"! Never pull the hose over sharp edges!

This is prohibited!





Never direct the water jet at the machine itself!



Never direct the water jet at a power socket!

Additional accessories for ...

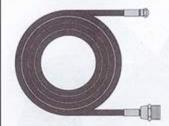
(on demand)



Rotary scrubbing brush Order No. 41.050 1



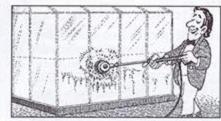
Drain and pipe cleaning hose 10 m - Order No. 41.058.1 15 m - Order No. 41.058





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

... further combination possibilities



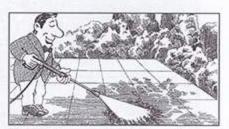
Car cleaning, glass, caravan, boat etc.: rotary washing brush with 40 cm extension and ST 30 nipple M22 x 1.5



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

Small repairs ...

The nozzle is blocked!

No water but the gauge shows full pressure!

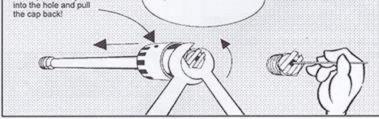
















do it yourself!

Nozzle dirty or sticky!

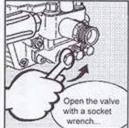
- Pressure gauge does not show full pressure
- The high-pressure hose vibrates

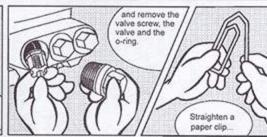
- Water comes out in spurts.
- If you do not use the high-pressure cleaner for some time the valves can stick

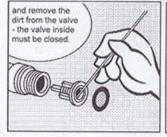




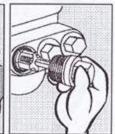


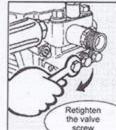
















Complete Assembly

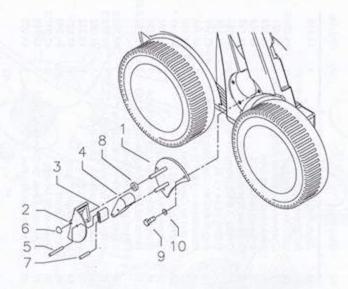
quadro 700 TST

Description	Oty.	OrdNo	oN.	Description	O.	Qty. OrdNo
Schubbügel	+-	42.601	24	Elastic-Stop-Mutter M8	4	41,410
Sterngriffmutter M8	4	42.619	25	Netzanschlußkabel 8 m (H07RNF 3x4mm²)	nm²)	
Stopfen	2	42.613	26	Schlauchtrommel kpl.	***	41.259 6
Vasserkasten	-	42.603	27	Chemiesaugschlauch (Gewebe) mit Filter	ter 1	42.621
anzenablage	-	42.604	28	Gewebeschlauch 0,4m		42.622
Kabelaufwicklung unten	-	42.611	29	Schlauchklemme 9 - 9	2	44.054
Zugentlastung	-	43,431	30	Gehäuse Waschmittelventil	***	44.145
Blechschraube 3,5 x 12	2	40.290	31	O-Ring 5 x 1,5 (Viton)	1	44.150
Kunststoffschraube 5,0 x 25	9	41,414	32	O-Ring 28,24 x 2,62	-	44.149
Scheibe 21 DIN125	12	40.207	33	Regulierkolben Chemieventil	-	44.147
Schraube M8x50 DIN912	2	42.620	34	Edelstahlfeder 1,8 x 15 x 15		44.148
Scheibe 8,4 DIN125	2	50,186	35	Deckel für Chemieventil		44.146
Kabelaufwicklung oben	-	42.612	36	Blechschraube 3,5 x 16	0	44.161
Summipuffer 25 x 25	4	44.227	37	Blechschraube 3,5 x 19	2	44.162
Rad	4	44.017	38	Drehgriff Chemieventil mit Blendkappe		44.151
Splint 5x28 DIN94	4	42.614	39	Lanze mit Flachstrahldüse für 700 TST	**	12.392 2-2504
Radkappe	4	44.018		Please specify nozzle size:		
Frontplatte quadro 700 TST			40	Starlett -Pistole mit Verlängerung	**	12.320 2
anzenhalter	2	42.610	41.1	Turbo-Killer 045 bei quadro 700 TST	-	41.0723
Blechschraube 3,5x16 DIN7981	4	44.161	42	Hochdruckschlauch 20 m NW8	**	41.083
Fahrgestell		42.602	43	O-Ring 13 x 2,6	2	13.272
Scheibe 8,4 DIN9021	4	41,409	44	Verbindungsschlauch	-	42.625
			45	Scheibe 8mm für Rad	4	44.246
			46	Gewindestift M6x55	4	42.617.2
			47	Rückschlagventil für Chemiesaugschl.	+	44.240
			48	Chemieventil Kol. Pos. 30-37		44 052

Spare parts list KRÄNZLE quadro 700 TST Complete Assembly

		118
2 20 20 20 20 20 20 20 20 20 20 20 20 20		
	9-8	
3-9		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

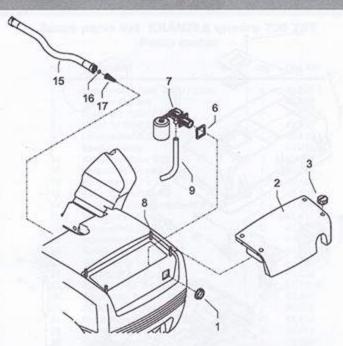
Brake



Spare parts list KRÄNZLE quadro 700 TST Brake

No	Description	Qty.	OrdNo
1	Grundplatte	1	42.615
2	Bremspedal	1	44.022
3	Bremshebel	1	44.023
4	Bremsklotz	1	44.024
5	Stift 6 x 50	1	44.035
6	Starlock-kappe 8 mm	1	44.165
7	Stift 6 x 40	1	44.035 1
8	Distanzring	2	42.626
9	Sechskantschraube M6x16	3	50,173
10	Unterlegscheibe DIN125-6,3	3	50.189

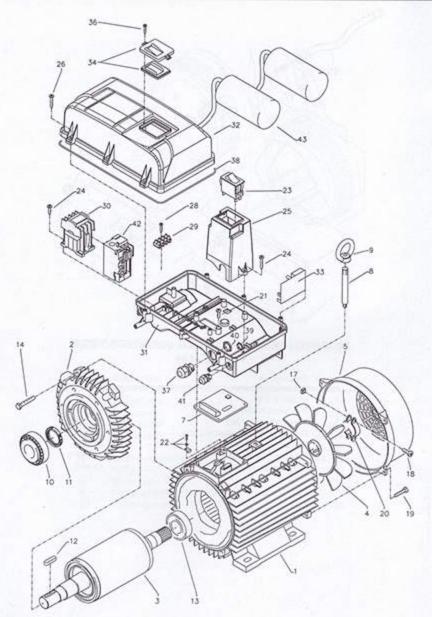
Water inlet



Spare parts list KRÄNZLE quadro 700 TST Water inlet

No	Description	Qty.	OrdNo
1	Mutter R3/4*	- 1	46.258
2	Revisionsdeckel	1	42.605
3	Sterngriffmutter M8	4	42.619
6	Dichtung für Schwimmerventil	1	46.261
7	Schwimmerventil	1	46.250
8	Gewindestift M6x40	4	42.617 1
9	Einströmschlauch	1	42.640

Pump motor

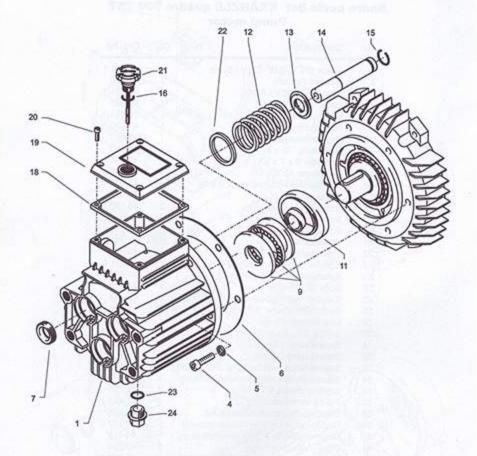


quadro 700 TST

Spare parts list KRÄNZLE quadro 700 TST Pump motor

No	Description	Qty.	OrdNo
1	Stator 112 3,8kW 220V / 60Hz	1	40.541 1
2	A-Lager Flansch	1	40.530
3	Rotor 112 (220V / 60Hz)	1	40.531 1
4	Lüfterrad für BG 112	1	40.532
5	Lüfterhaube BG 112	1	40.533
7	Flachdichtung	1	43,030
10	Kegelrollenlager 31306	1	40.103
11	Oldichtung 35 x 47 x 7	1	40.080
12	Paßfeder 8 x 7 x 32	1	40.104
13	Kugellager 6206 - 2Z	1	40.538
14	Innensechskantschraube M 6 x 30	4	43.037
17	Vierkantmutter M 5	2	41.416
18	Schraube M 5 x 14	2	40,536
19	Schraube M 4 x 12	4	41.489
20	Schelle für Lüfterrad 112	2	40,535
21	Schraube M 4 x 12	4	41.489
22	Erdungsschraube kpl.	1	43.038
23	Schalter 14,5 A Amazonas	1	41.111 6
24	Kunststoffschraube 4,0 x 16	6	43.417
25	Bock für Schalter	1	42.608
26	Kunststoffschraube 5,0 x 25	6	41,414
28	Kuststoffschraube 3,5 x 20	2	43,415
29	Lüsterklemme 5-pol.	1	43.326 1
30	Schütz C30 für 3x 230V / 50/60Hz	1	44,400 2
31	Schaltkasten Unterteil	1	42.606
32	Schaltkasten Deckel	1	42.607
33	Steuerplatine Abschaltverz. 230V / 50Hz	1	42.504
34	Klemmrahmen mit Schalterabdichtung	1	43.453
36	Blechschraube 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	Oberstromauslöser 193-EEEB 5,4- 27 A	1	44,401 0
43	Kondensator 60 µF	2	41,148

Transmission unit

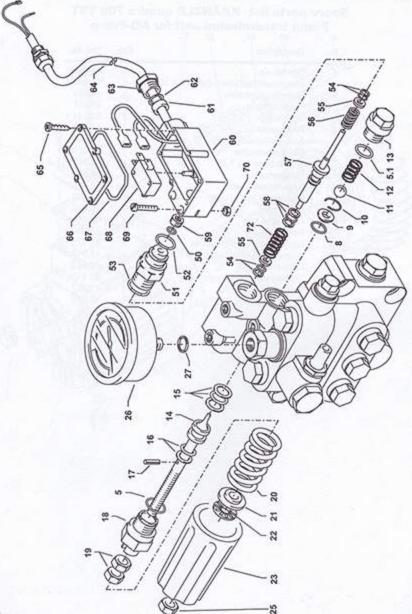


quadro 700 TST

Spare parts list KRÄNZLE quadro 700 TST Pump transmission unit for AQ-Pump

No	Description	Qty.	OrdNo
1	Ölgehäuse	-1	40,501
4	Innensechskantschraube M 8 x 30	6	41.036 1
5	Sicherungsscheibe	6	40.054
6	Flachdichtung	1	40.511
7	Öldichtung 20 x 30 x 7	3	40.044 1
8	Wellenscheibe	1	40.043
9	Axial-Rollenkäfig	1	40.040
10	Gehäusescheibe	1	40.039
11.1	Swash plate AQ 7,0°	1	40.042 1-7.0
12	Plungerfeder	3	40.506
13	Federdruckscheibe	3	40.510
14	Plunger 20 mm (lang)	3	40,505
15	Sprengring	3	40.048
16	O-Ring 14 x 2	1	43.445
18	Flachdichtung	- 1	41.0193
19	Deckel flach für Ölgehäuse	1	41,023 1
20	Innensechskantschraube M 5 x 12	4	41.019 4
21	Ölmessstab AQ	1	40.463
22	Stützscheibe für Plungerfeder	3	40.513
23	O-Ring 13,94 x 2,62	1	42.167
24	Ölablassstopfen R 3/8"	1	42.019

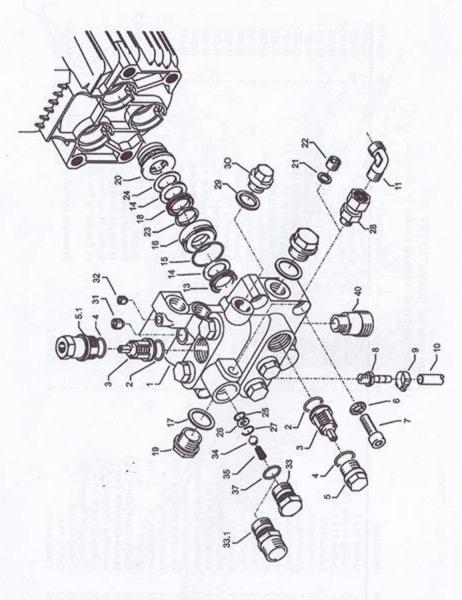
Unloader valve and pressure switch



quadro 700 TST

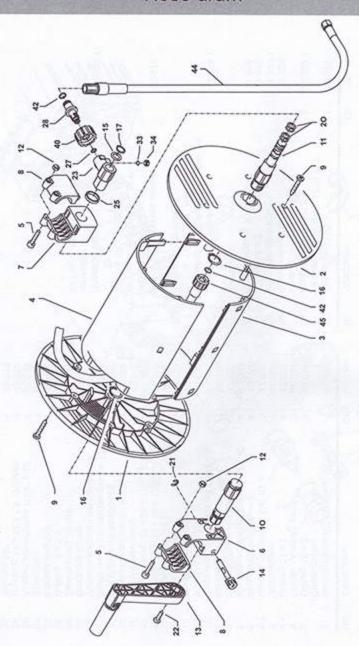
Spare parts list quadro 700 TST Unloader valve and pressure switch

9	Description	Oby.	OrdNo	o _N	Description	O.	OrdNo
	O-Ring 16 x 2	-	13,150	55	Stützscheibe	2	15.015 1
5.1	O-Ring 13.94 x 2.62		42 167	26	Edelstahlfeder	-	15.016
	O-Ring 11 x 1 44		12.256	25	Steuerstößel	-	15.0102
	Edelstahlsitz		14 118	58	Parbaks 7 mm	-	15.013
	Sicherungsring		13.147	- 69	Stopfen M 10 x 1 (durchgebohrt)	-	13,385 1
	Edelstahkugel		13 148	09	Gehäuse Elektroschalter	-	15.007
	Edelstahlfeder		14 119	61	Gummimanschette PG 9	-	15.020
m	Verschlussschraube		14 113	62	Scheibe PG 9	-	15.021
4	Steuerkolben		14 134	63	Verschraubung PG 9	-	15.022
un.	Parbaks 16 mm		13 159	64	PVC-Kabel 2x 1,0 mm²	-	42.505
9	Parbaks 8 mm		14 123	65	Blechschraube 2,8 x 16	9	15.024
	Spanstiff		14 148	99	Deckel Elektroschalter	-	15.008
	Kolbenführung spezial		42 105	67	O-Ring 44 x 2,5	+	15.023
	Kontermutter M 8 x 1	2	14 144	89	Mikroschafter	-	44.262
	Ventilfeder rot bei ouadro 800		14 125 1	69	Zylinderschraube M 4 x 20	2	15.025
20.1	Ventilfeder schwarz		14 125	20	Sechskant - Mutter M 4	8	15.026
	bei quadro 1000 und 1200			72	Druckfeder 1 x 8,6 x 30	+	40.520
	Federdruckscheibe	,	14.126				
	Nadellager	-	14,146		Repair kits:		
23	Handrad		14.147				
	Elastic-Stop-Mutter M 8 x 1	-	14.152		Repair kit		15.009 3
	Manometer 0-400 Bar		15.039.4		Pressure switch		
	Aluminium-Dichtring	2	13.275		1x Pos. 51, 1x Pos. 52, 1x Pos. 53,		
	O-Ring 3,3 x 2,4	-	12.136		3x Pos. 54, 1x Pos. 55, 1x Pos. 56,		
51	Führungsteil Steuerstößel		15.009 1		1x Pos. 57, 1x Pos. 58, 1x Pos. 59		
52	O-Ring 13 x 2.6	-	15.017				
	O-Ring 14 x 2	-	43,445		Pressure switch compl. No. 54 - 70	70	41,300 5
	Parbaks 4 mm	2	12.136.2				



Spare parts list KRÄNZLE quadro 700 TST Valve housing for integrated AC aumon

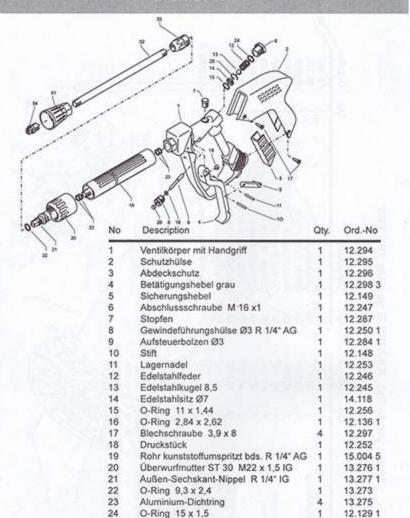
	Description	O.	Oty. OrdNo	No	Description	Oty.	OrdNc
	Ventilgehäuse AQ mit integr. UL und Druckschalter	+	40.503 5	33	Ausgangsteil	-	40.522
2	O-Ring 18 x 2	9	40.016	33.1	Ausgangsteil M22x1.5	-	40.522
n	Einlaß- / Auslaß- Ventil	9	42.024		für quadro 1000, 1200 TS		
4	O-Ring 21 x 2	9	42.025	34	Edelstahlkugel Ø10	*	12 122
2	Ventilstopfen	10	42.026	35	Buckechladeder K*	*	44 490
5.1	Ventilstopfen mit R 1/4" IG	-	42.026 2	9.6	Nuccessing Series And Control of the	- •	49 440
8	Sicherungsring	4	40.032	200	White the state of		45.44
7	Innensechskantschraube M 12 x 45	v	40.504	40	Wassereingang Kara AG	-	41.016
60	Schlauchnippel R3/8" x 6	*	42.634		Repair kits:		
6	Schlauchschelle 7 - 10	-	44.054				
9	Chemiesaugschlauch mit Filter	-	42.621		Repair kit for sleeves		40.065
=	Winkel 12L x 12L	-	42.630		consisting of: 3x Pos. 13; 6x Pos. 14;		
13	Gewebemanschette	60	40.023		3x Pos. 15: 3x Pos. 16: 3x Pos. 18:		
14	Backring 20 mm	9	40.025		3x Pos 20: 3x Pos 23		
15	O-Ring 31,42 x 2,62	0	40.508				
16	Leckagering 20 x 36 x 13,3	67	40.509		Repair kit for cleaves without		40 517
17	Cu-Dichtring 21 x 28 x 1,5	2	42.039		hands and a consisting of		10.0
130	Gummimanschette	0	40.512		bridge parts correspond or.		
19	Verschlussschraube R 1/2*	2	42.032		3X POS. 13; 0X POS. 14; 3X POS. 13;		
20	Distanzring mit Abstützung	0	40,507		3X POS. 18; 3X POS. 23		
21	Aluminium-Dichtring bei quadro TS	2	13.275		1		Strong Strong
22	Verschlussstopfen bei quadro TS	-	13,181		Repair kit valves		40.062
23	Druckring 20 mm	en	40.021		consisting of:		
24	Zwischenring 20 mm	62	40.516		6x Pos. 2; 6x Pos. 3; 6x Pos. 4		
25	O-Ring 11 x 1,5		12,256				
26	Edelstahlsitz Ø 7		14,118				
27	Sprengring	-	13.147				
28	Ausgangsteil Pumpe R1/4" x 12		44.215				
29	Dichtring 17 x 22 x 1,5 (Kupfer)	-	40.019				
30	Stopfen 3/8"	-	40.018				
33	Dichtstopfen M 10 x 1		43.043				
32	Dichtstopfen M8 x 1	2	13,158				



Spare parts list KRÄNZLE quadro 700 TST Hose drum

o _N	Description	O.	OrdNo	No	Description	Oth.	OrdNo
-	Seitenschale Schlauchführung	-	40.302	23	Drehgelenk	-	40,167
	Seitenschale Wasserführung		40.301	25	Distanzring		40,316
	Trommel Unterteil	-	40.304	27	O-Ring 6,86 x 1,78	-	40.585
_	Trommel Oberteil		40.303	28	Anschlussstück	-	40,308
	Innensechskantschraube M 4 x 25	4	40.313	33	O-Ring 6 x 1,5	-	13.386
	Lagerklotz mit Bremse	-	40.306	8	Stopfen M 10 x 1	-	13,385
	Lagerklotz links	-	40.305	40	Oberwurfmutter	+	13.276.2
-	Klemmstück	2	40.307	42	O-Ring 9,3 x 2,4	4	13.273
	Kunststoffschraube 5,0 x 20	12	43.018	44	Verbindungsschlauch	-	42.624
0	Antriebswelle		40.310	45	Hochdruckschlauch NW 8 20 m		41.083
-	Welle Wasserführung	-	40.311		Money alesses comed widthout hone		44 250 6
2	Elastic-Stop-Mutter M 4	4	40.111		nose arum compi. widiout nose		41.633
69	Handkurbel klappbar	-	40.320.0				
4	Verriegelungsbolzen		40.312				
15	Scheibe MS 16 x 24 x 2		40.181				
16	Wellensicherungsring 22 mm	2	40.117				
1	Wellensicherungsring 16 mm		40.182				
20	Parbaks 16 mm	2	13,159				
21	Sicherungsscheibe 6 DIN6799		40.315				
20	Schraube M.S. 40	*	10000				

Starlet II



25

26

51

52

53

54

Sicherungsring

Gleitschuh Ø3

Düsenschutz

Rohr 600 mm; bds. R1/4"

Rep.-Satz "Starlet II"

8, 9, 13-16, 24-26

bestehend aus je 1x Position:

ST 30 Nippel M 22 x 1,5 / R1/4" m. ISK

Flachstrahldüse 2504 (bei quadro 800)

Starlet-Pistole mit Verlängerung

Flachstrahldüse 2505 (bei quadro 1000) 1

Flachstrahldüse 2507 (bei quadro 1200) 1

12.258

26.002

13.370

D2504

D2505

D2507

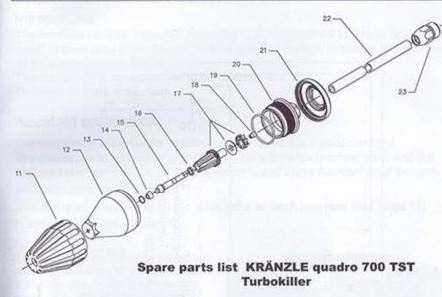
12.299

12.320 2

12,289 1

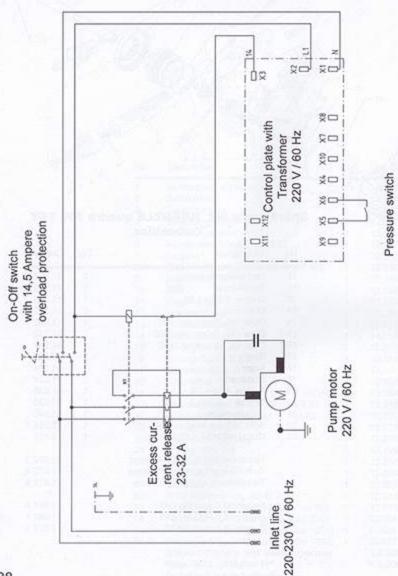
12.385 2

Turbokiller



No	Description	Qty.	OrdNo
11	Sprühkörperschutz	1	41.528
12	Sprühkörper	1	41.529
13	O-Ring 6,88 x 1,68	1	41.521
14	Düsensitz	1	41.522
15	Düse 045 für quadro 800	1	41.532 1
15.1	Düse 055 für quadro 1000	.1	41.532
15.2	Düse 08 für quadro 1200	1	41.537
16	Ring	1	41.533
17	Rotor	1	41.534
18	Stabilisator	1	41.524
19	O-Ring 41 x 1,78	1	41.538
20	Deckel	1	41.539
21	Deckelschutz	1	41.540
22	Rohr 500 mm lang; bds. R1/4*	1	12.385 1
23	Nippel M22x1,5 x R1/4" IG	1	13.370
	Turbokiller 045 compl. with lance		41.072 3
	Turbokiller 055 compl. with lance		41.072 4
	Turbokiller 08 compl. with lance		41.072 8
	Repair Kit Turbokiller 045		41.097 6
	Repair Kit Turbokiller 055		41.097 1
	Repair Kit Turbokiller 08		41.0973

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 pages 16 and 17)

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

Oil change:

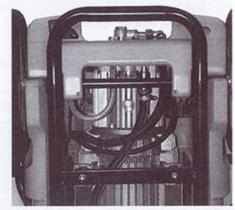
The first oil change should be carried out after approximately 50 operating hours, then every year or after 1000 operating hours. If the oil turns grey or white, you must certainly change the oil of your high pressure pump.

Open the oil discharge screw at the bottom of the device over a collection resevoir.

Put the machine into a horizontal position to drain the oil. The oil is to be caught in the reservoir and disposed of in an approved manner.

New Oil: 1,01-

Motor oil: 10/W60 SAE halfsynthetic oil



Inspection report

for KRÄNZLE - High Pressure Cleaners

The high pressure cleaner must be inspected
by an expert every 12 months.

Appliance No.:	Type of appliance:		

The following must be checked:

1. Safety features

- a) Manometer
- b) Safety valve (pressure control)
- c) Operating pressure
- d) Cut out pressure (max. 10% above operating pressure)
- e) Low pressure with closed gun

2. General condition

- a) High pressure hose
- b) Cable, plug, switch (VDE)
- c) Spray gun, spray accessories.
- d) Motor
- e) Oil level

The information in the operating instructions are a part of the inspection

Result of inspection:	Date of inspection:	Faults rectified, Stamp and signature

Excerpt from the Guidelines for Liquid Spray Equipment (ZH 1/46) by the Central Office of the Professional Trade Association.

Inspection:

Liquid spray equipment should be inspected for safe operation by a qualified person whenever necessary, but no less than every 12 months. The maker's or supplier's instructions must be followed. The inspection intervals may be extended if the equipment is not in active use.

The results of inspections must be recorded in writing and presented to the respective authorities on demand. There is no set form for these records.

Notes

Warranty

Guarantee

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

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

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

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

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





1. Kränzle GmbH Elpke 97 . 33605 Bielefeld

EC declaration of conformity

We hereby declare, that the high-pressure models:

Kränzle quadro 700 TST

(techn. documentation available from):

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

Nominal flow:

K quadro 700 TST: 780 I/h

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

Machine guideline 2006/42/EEC Specification for electromagnetic compatibility 2004/108/EEC Outdoor noise directive 2005/88/EC.

Art. 13, High-pressure water jet machines Appendix 3, part B, chapter 27

Sound power level measured:

89 dB (A)

quaranteed: 91 dB (A)

Applied conformity evaluation procedures: annex V, noise directive 2005/88/EC

Applied specifications and standards:

EN 60 335-2-79 / A2:2007 EN 55 014-1 / 2006

EN 55014-2/ A2:2008

EN 61 000-3-2 :2006

EN 61 000-3-3:2008

Bielefeld, den 24.01.12

Kränzle Josef (Managing Director)