



GB

High Pressure Cleaners



B 170 T
B 200 T
B 230 T
B 240 T
B 270 T



made
in
Germany



Operating manual
Read and conform
safety instructions
before use



Description

Dear customer

We would like to congratulate you on your new mobile high pressure cleaner and to thank you for the purchase.

To ease your introduction to the use of the cleaner, we have provided the following pages of explanations, tips and hints, which we ask you to read before using 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**
- **channels**
- **terraces**
- **machines etc.**
- **Streets etc.**

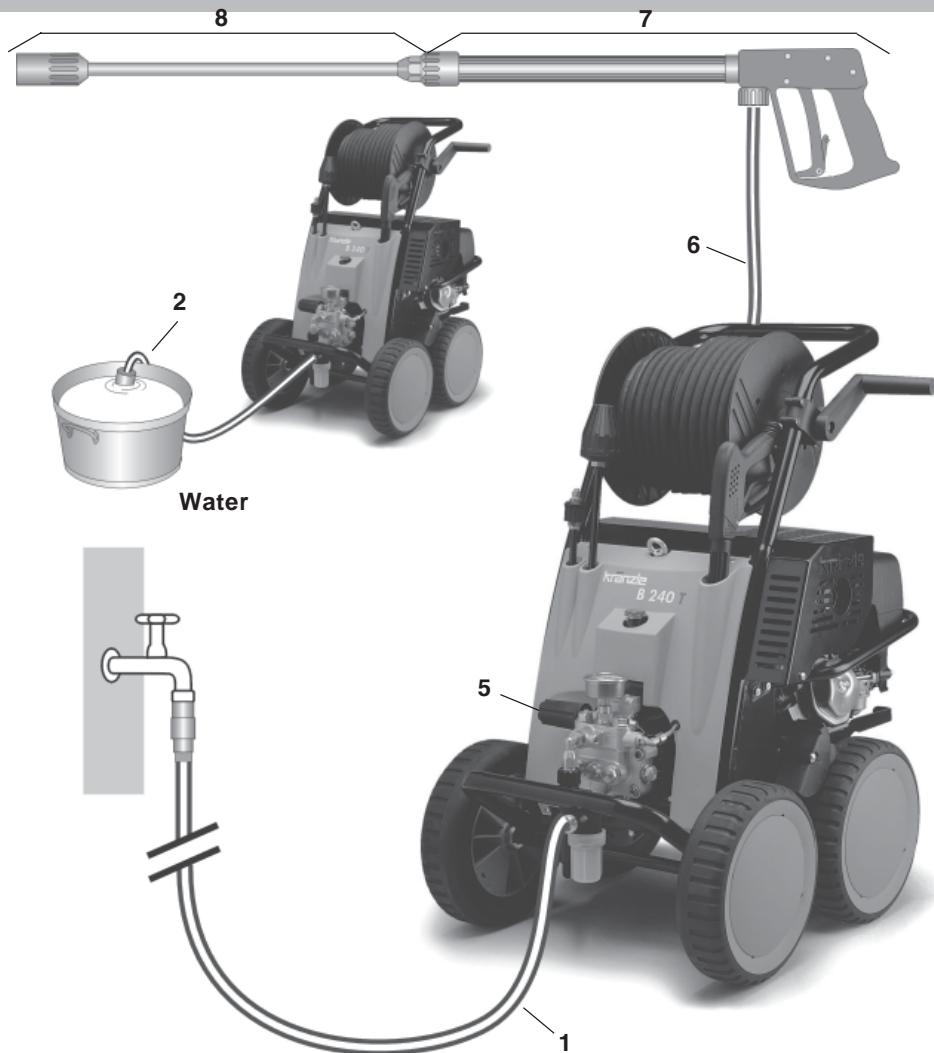
Technical data	B 170 T	B 200 T	B 240 T	B 270 T	B 230 T Spec. appliance
Operating pressure, steplessly adjustable	10 - 150 bar	10 - 165 bar	10 - 220 bar	10 - 250 bar	10 - 200 bar
Perm. overpressure	165 bar	180 bar	240 bar	270 bar	230 bar
Water output at 1800 rpm ^{(*)1}	13 l/min	12 l/min	16 l/min	16 l/min	20 l/min
Hot water input	70 °C	70 °C	70 °C	70 °C	50 °C
Suction height	2,5 m				
High pressure hose with hose drum	20 m				
Combustion motor Honda	GX 160 LX2	GX 200 LX2	GX 340 LX2	GX 390 LX2	GX 390 LX2
Weight	58 kg	58 kg	83kg	83 kg	83 kg
SoundlevelGuaranteed sound level L _{WA}	103 dB (A)				
Recoil at lance	appr. 32 Nm	appr. 27 Nm	appr. 38 Nm	appr. 42 Nm	appr. 42 Nm
Torque	29 Nm	24,3 Nm	33 Nm	36 Nm	36 Nm
(Assumed length of lance: 0,9 m)					
Order n°:	41 190 1	41 191 1	41 192 1*	41 193 1*	41 194 1*

with speed control *

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

^{(*)1} **Minimum quantity of water to be led to the equipment!**

Description



Construction

The KRÄNZLE B170 T + B200 T + B230 T+ B240 T + B270 T - 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 hose
- 7 Spray gun
- 8 Interchangeable lance with high pressure nozzle

Description

Water and Cleaning / Pflegemittel 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.

Detergent and caring agents can be added through a high pressure injector (special accessory). Up to max 20m HP hose length.



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

(Information to be obtained from environmental dept, town works, etc.)

Lance with trigger gun

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

When the lever is squeezed, the spray gun opens. The liquid is then pumped to the nozzle. The spray pressure increases and quickly reaches the selected operating pressure.

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

The increase in pressure when the trigger gun is closed causes the unloader valve-safety valve to open. The pump remains switched on and continues to pump liquid through the pump at reduced pressure. When the trigger gun is opened, the unloader valve - safety valve closes and the pump resumes pressure spraying from the lance



The trigger gun is a safety device. Repairs should only be performed by qualified persons. Should replacement parts be required, use only components authorized by the manufacturer.

Unloader valve - safety valve

The unloader valve - safety valve protects the machine from a build up of excess pressure, and is designed not to permit an excess pressure to be selected for operation. The limit nut on the handle is sealed with a spray coating.

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

For the motor follow the Honda operating manual only.



Motor-safety: (see Honda operating manual)

Honda motors are safe and reliable if they are operated correctly. Read the operating manual carefully before using the motor and try to understand the contents of the manual completely.

Not following this advice could lead to injuries or damage of the equipment.

To avoid a possible fire hazard and to ensure the necessary ventilation the motor has to be operated at a distance of at least 1 m from buildings and objects. Inflammable objects have to be kept away from the surrounding area of the motor.



Children and pets have to be kept away from the motor, as there is a danger of suffering burns from hot motor parts and to be injured by equipment driven by the motor.

Get to know the motor and especially learn how to switch it off quickly. Do not allow persons to operate the motor who are not familiar with it.

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.

Do NOT !! tilt or turn round the high-pressure cleaner during transport or operation for longer than 1 minute!

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 !



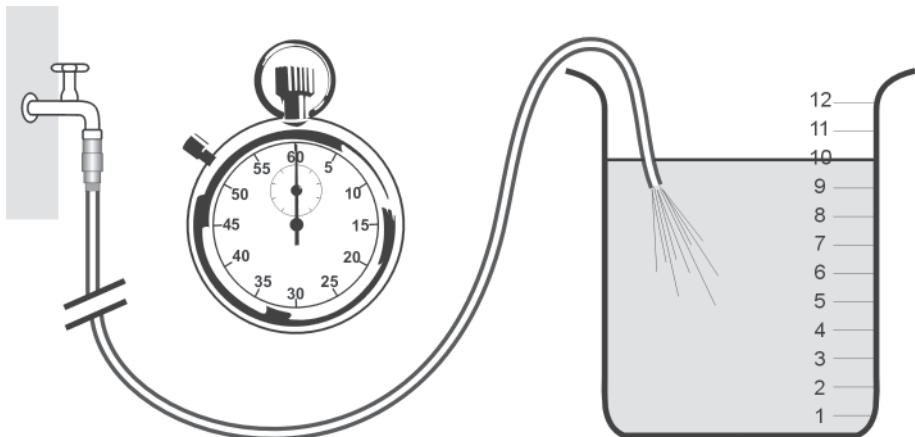
When running your high pressure cleaner with hot water of 70° C (with B230 T 50°) raised temperatures occur.

Do not touch the machine without safety gloves.

Description

Water connection:

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



Test:

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

The received quantity of water must be at least the quantity given on page 2 !!!



Lack of water causes fast wear on seals (no warranty)

Brake

The high-pressure cleaner is fitted with a brake that prevents the machine from rolling away on uneven ground.

Always apply the brakes firmly when working with the machine !!!

Description



Brief operating instructions

- 1. Connect the high pressure hose with spray gun and machine.**
 - 2. Connect the suitable water supply.**
 - 3. Flush the air from the pump (open and close the spray gun several times).**
 - 4. Switch on the motor while the spray gun is open and commence cleaning.**
 - 5. After completing the work, completely empty the pump (switch the motor on for approximately 20 seconds without the suction and pressure hose).**
- Only use clean water ! Protect from frost !**
- Do NOT !! tilt or turn round the high-pressure cleaner during transport

CAUTION !

Please pay attention to the regulations of your waterworks company.

In accordance with EN 61 770, the machine may not be directly connected to the public drinking water supply lines.

A brief connection however is permissible according to DVGW (German Association for Gas and Water Affairs) if a tube ventilator with check valve (KRÄNZLE Order-No. 41.016 4) is built into the water supply.

Also indirect connection to the public drinking water supply lines is permissible by way of free emission in accordance with EN 61 770; e.g. by using a reservoir with a float valve.

Direct connection to a non-drinking water supply line is permissible.

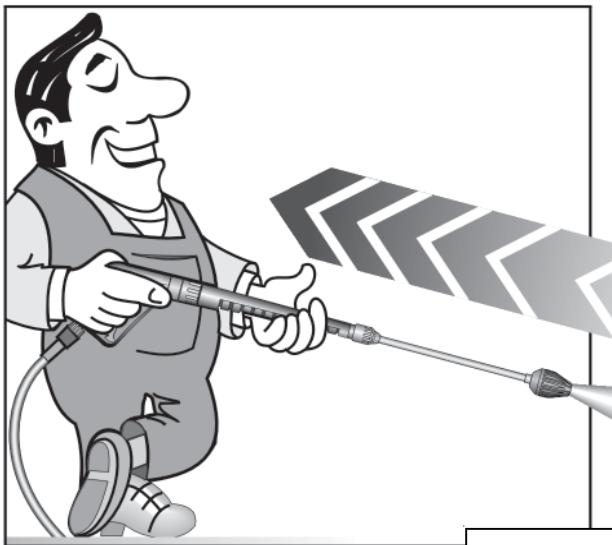
High pressure hose and spray device

The high pressure hose and spray 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.



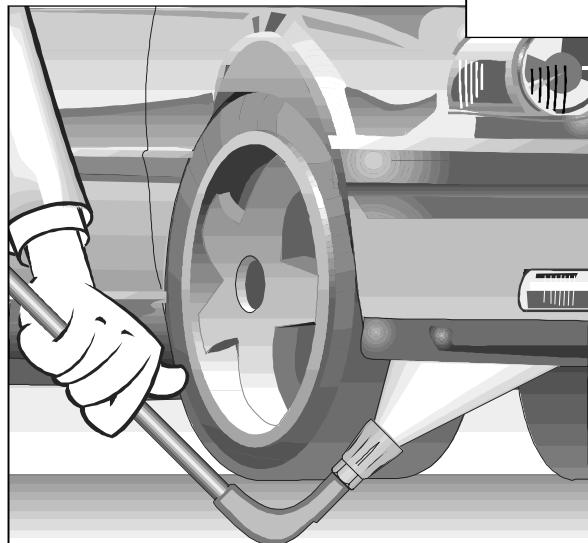
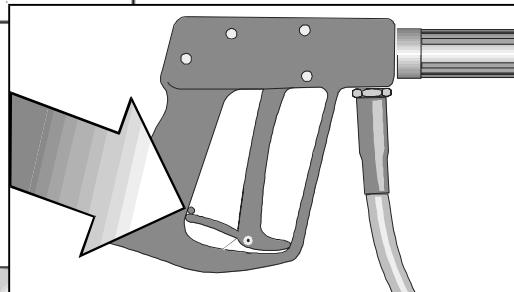
If replacement parts are required, only such parts that are authorized by the manufacturer and which bear the markings required by the appropriate regulations may be used. The high pressure hose and spray device must be connected in a pressure-tight manner. The high pressure hose may not be driven over, 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 uninten-
tional 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:

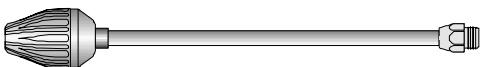
1. Spray gun with insulated pistol grip and screw connection



2. Spray lance with high pressure nozzle, flat spray



3. Turbokiller



4. KRÄNZLE - high-pressure cleaners

B 170 T

B 200 T

B 240 T

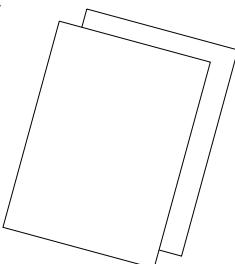
B 270 T

B 230 T

incl. hose drum with 20 m HP-hose



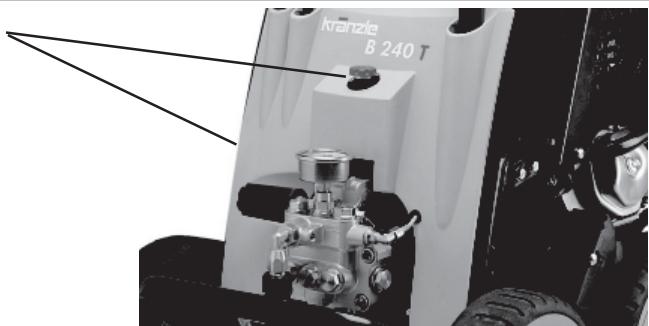
5. Operation manual pump
Operation manual motor



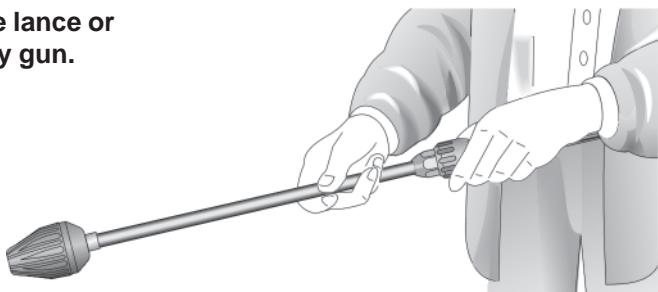
6. Water filter

Preparation for use

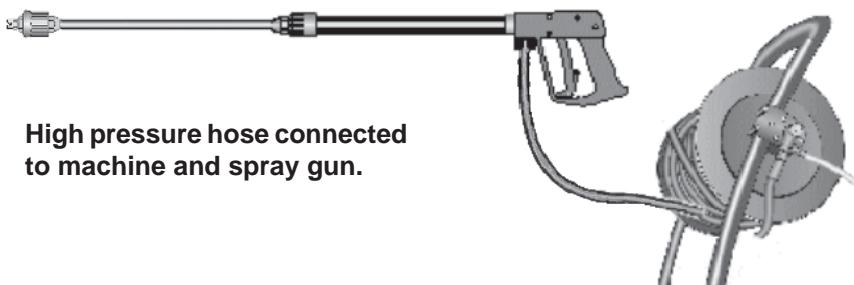
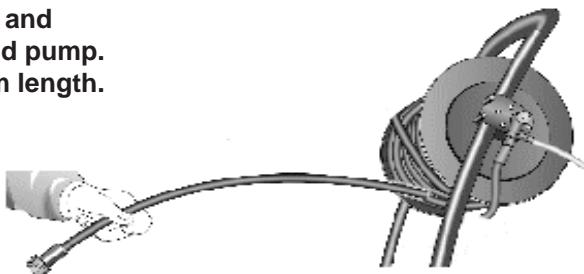
- 1. Check oil level
(Pump and motor)**



- 2. Connect high pressure lance or
Turbokiller to the spray gun.**



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



**High pressure hose connected
to machine and spray gun.**

Preparation for use

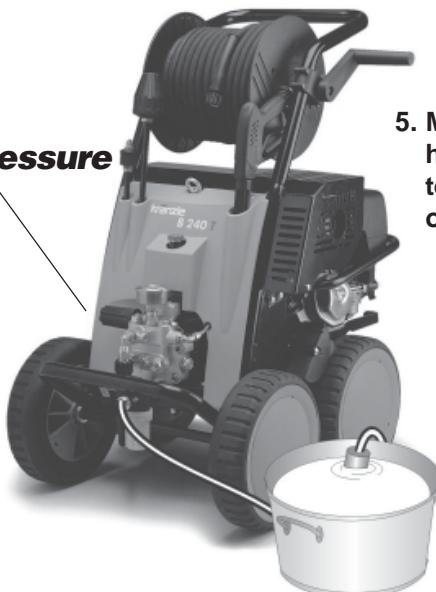


4. The machine can be connected to a pressurised water line with cold or up to 70 °C hot water (see page 2). Ensure that the water supply is clean when sucking from external sources. The hose cross section must be at least 1/2" = 12.7 mm (free passage). Filter must always be clean.

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

Adjusting the pressure

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



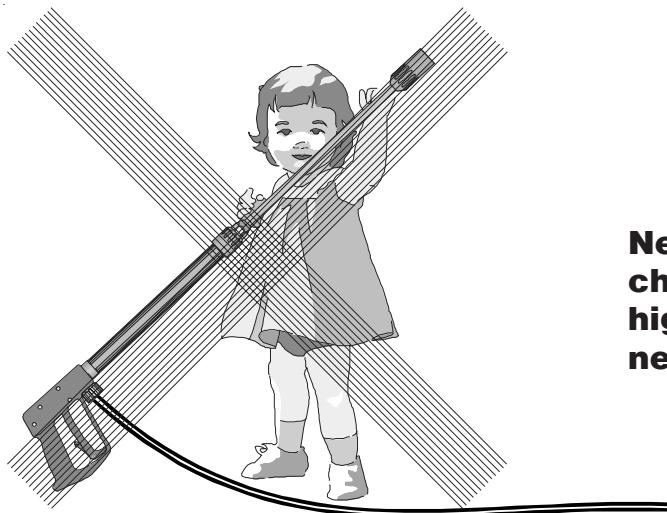
5. Maximum induction height 2.5 m - see technical data on page 2.

Water

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 high pressure hose
6. Drain the pump: switch on the motor for approx. 20 seconds
7. Winter: store the pump in rooms above 0° C
8. Clean the water filter

This is prohibited !

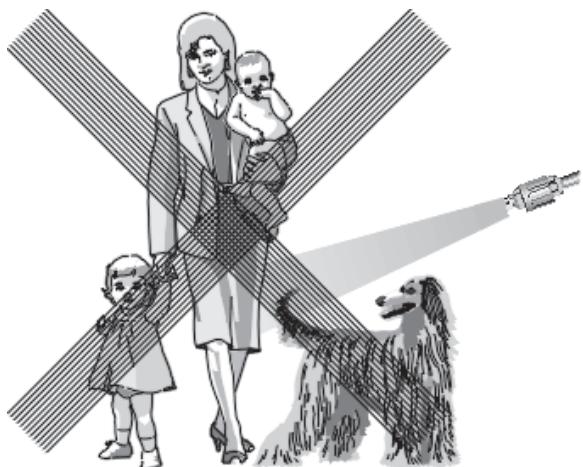


**Never allow
children to use the
high pressure clea-
ner !**

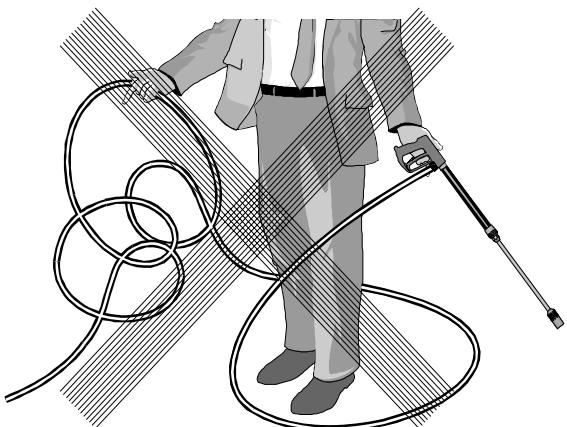


**Never direct the water jet at the
machine itself !**

This is prohibited !



**Never direct the
water jet at people
or animals !**



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

Additional KRÄNZLE-accessories for ...



Rotary scrubbing brush

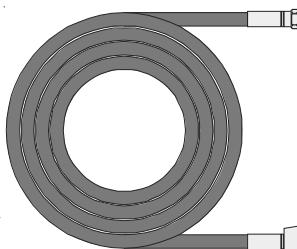
Order No. 41.050 1



**Drain and pipe cleaning
hose**

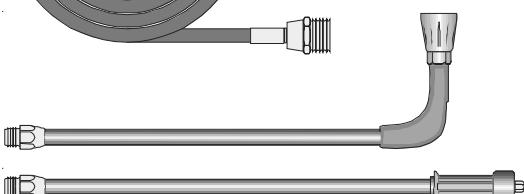
8 m - Order No. 41.051

15 m - Order No. 41.058



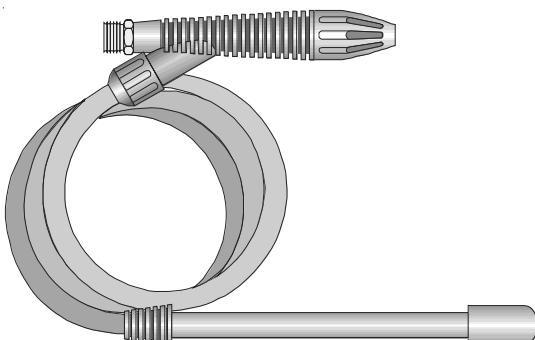
Underbody lance

Order No. 41.075



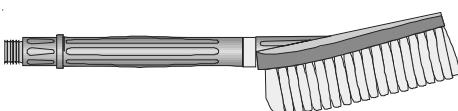
Sandblaster

Order No. 41.068 1



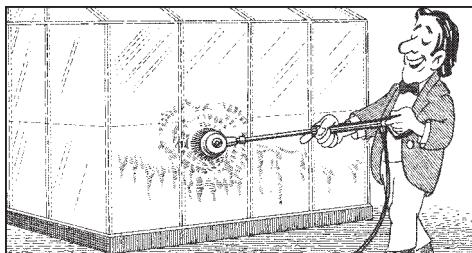
Flat brush

Order No. 41.073

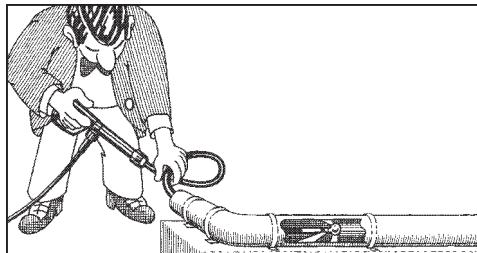


**Environmental, refuse disposal and water
protection regulations must be observed when
using the accessories!**

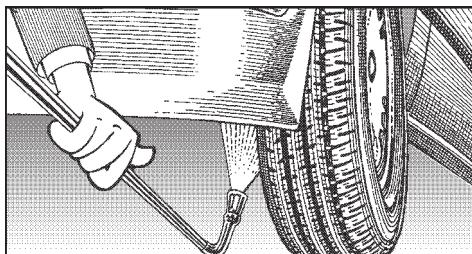
... further combination possibilities



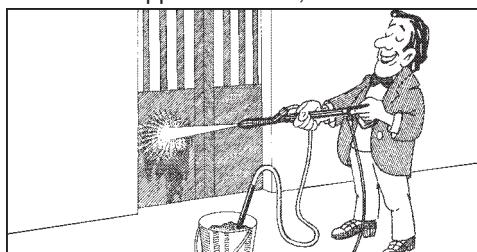
Car cleaning, glass, caravan, boat etc.
rotary washing brush with 40 cm extension and ST 30 nipple M 22 x 1,5



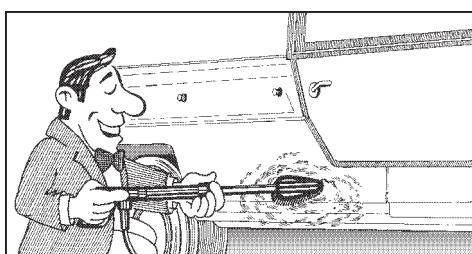
Cleaning pipes, channels and drains:
pipe cleaning hose with KN nozzle
and ST 30 nipple M 22 x 1,5



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

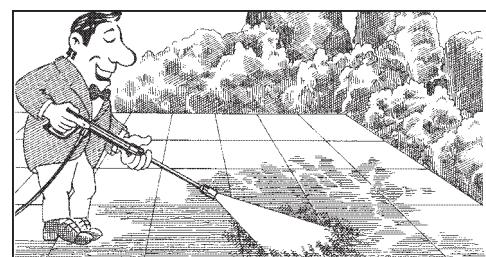


Blasting old paint, rust and facades: sandblasting injector with suction lance, 3 m PVC hose and ST 30 nipple.



Cleaning cars and all smooth surfaces :
brush with ST 30 nipple M 22 x 1,5.

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



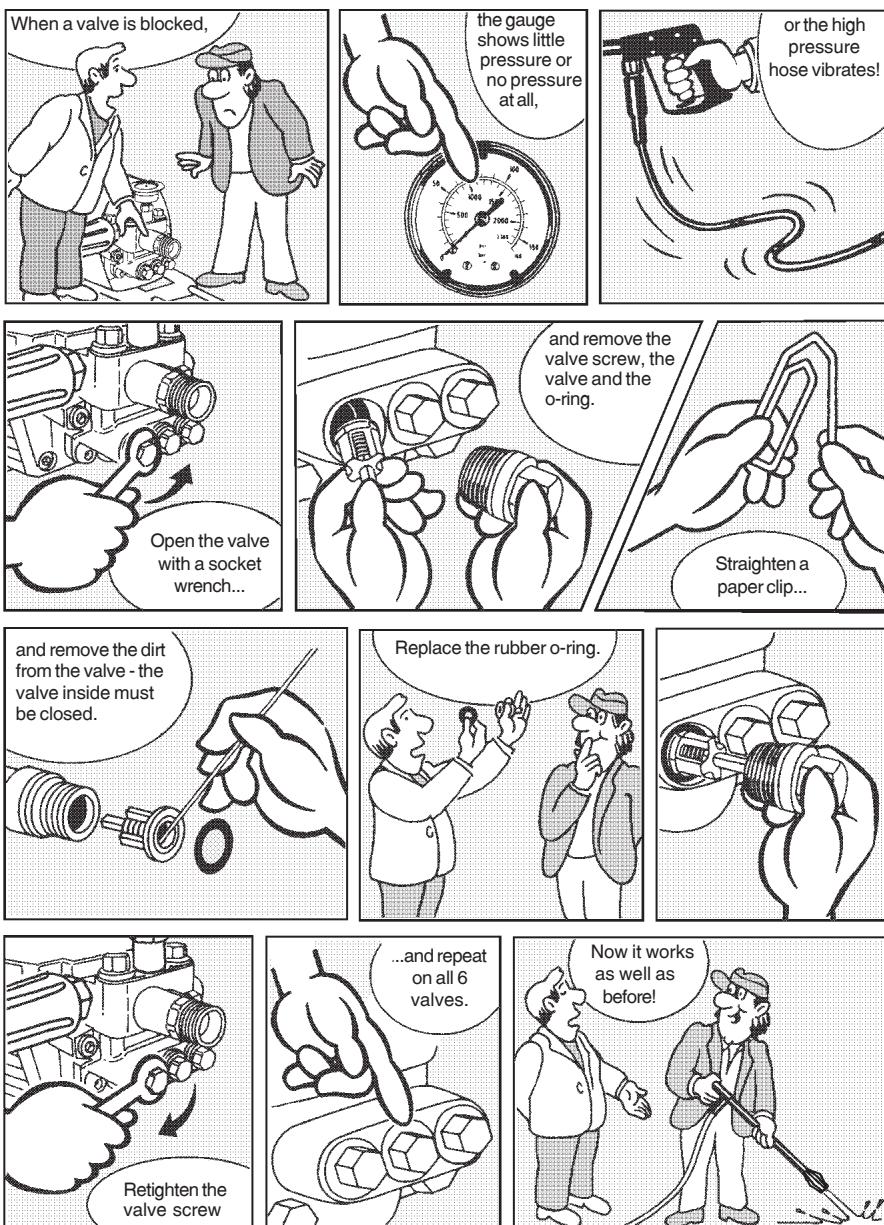
Rotary point sprayer for extreme soiling.
Dirtkiller with 40 cm extension and ST 30 nipple M 22 x 1,5.

Small repairs -

Nozzle dirty or sticky!

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

- The high-pressure hose vibrates.



- Do it yourself!

The nozzle is blocked!

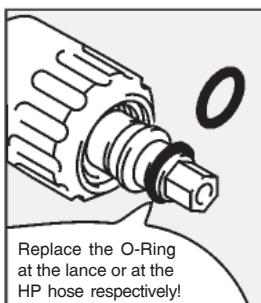
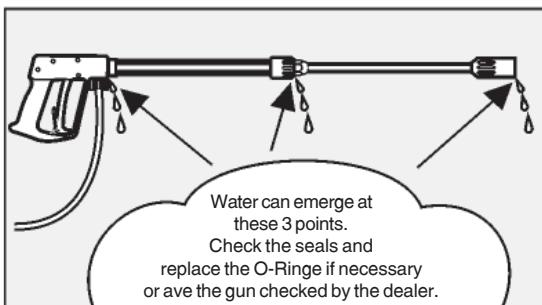
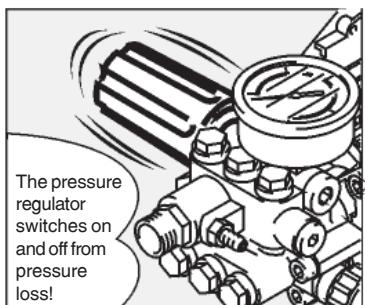
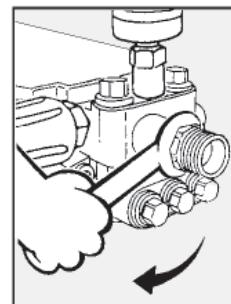
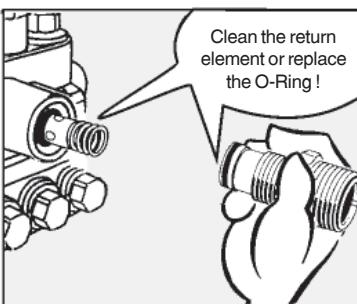
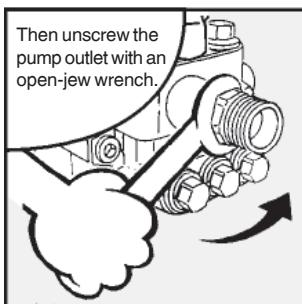
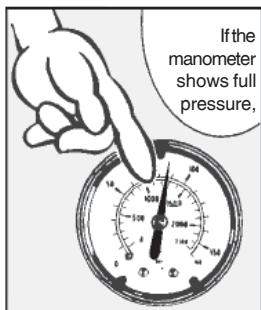
- No water but the gauge shows full pressure !



Small repairs - Do it yourself!

Stopping leaks from hose or gun

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



General rules

Inspections:

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

Accident prevention

The machine is designed for accidents to be impossible if used correctly. The operator is to be notified of the risk of injury from hot machine parts and the high pressure water jet. The "Guidelines for Liquid Spray Devices" must be complied with. (see page 12 and 13)

Check the oil level at the oil sight glass prior to each use.

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

Oil change for high-pressure pump B170 T / B200 T

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

New oil: 0,7 l - Motor oil W 15/40

Oil change for high-pressure pump B230 T / B240 T / B270 T

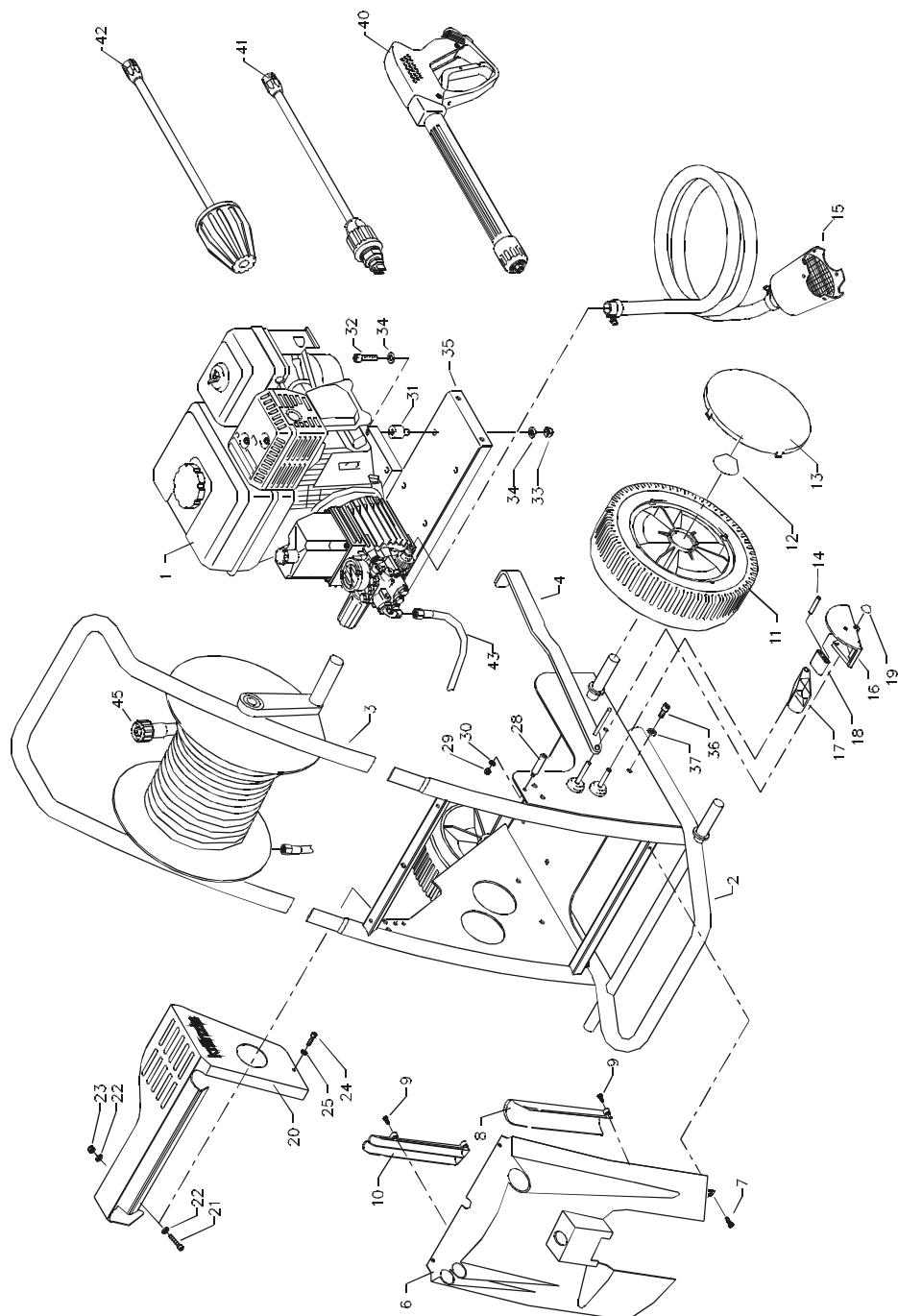
The oil of your high pressure pump should be changed after approx. 40 hours of operation, or no later than when it takes an a grey or whitish colour. Open the oilplug over a container and drain off all the oil. The oil must be caught in a container and disposed of in a responsible, legal manner.

New oil: 1,0 l - Castrol Formula RS

Oil leak

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

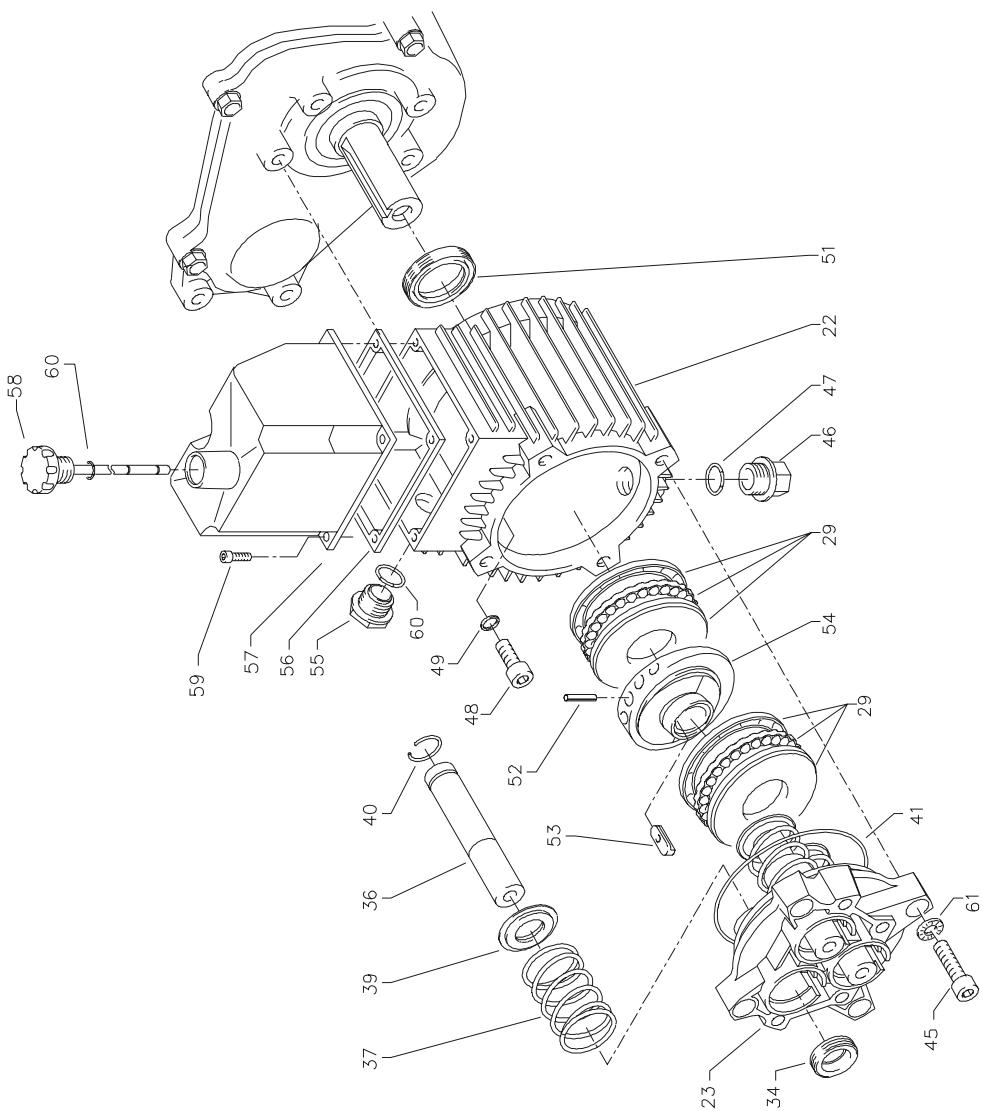
Complete assembly



Spare parts list Kränzle B170 T / B200 T Complete assembly

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Motor Honda GX 160 LX2 für B170 T	1	24.027	28	Distanzhülse	1	40.237
	Motor Honda GX 200 LX2 für B200 T	1	24.027.2	29	Elastic - Stop Mutter M 6	1	14.152.1
2	Wagen	1	40.230	30	Scheibe 6,4	1	50.189
3	Schubbügel	1	40.245	31	Gummipuffer 40 x 30	4	40.220.1
4	Bremshebel	1	40.246	32	Schraube M 8 x 30	4	40.221
6	Frontplatte B170 T	1	40.231.1	33	Elastic - Stop Mutter M 8	4	41.410
	Frontplatte B200 T	1	40.231.2	34	Scheibe 8,4 DIN 125	8	50.186
7	Blechschaube 4,8 x 12	4	44.112	35	Zwischenplatte	1	40.239
8	Köcher groß	1	40.232	36	Schraube M 8 DIN 933	4	40.140
9	Kunststoffschraube 5 x 14	7	43.426	37	Federring A8 DIN 127	4	44.222
10	Köcher klein	1	40.233	40	PICO Gun with extension	1	41.053.1
11	Rad	4	44.017	41	Lance with reg. nozzle 25055 for B170 T	1	41.033.2-055
12	Achsklemmring 20 mm	4	40.142		Lance with reg. nozzle 25045 for B200 T	1	41.033.2-045
13	Radkappe	4	44.018		Please specify nozzle size		
14	Stift 6 x 40	1	44.035.1	42	Turbokiller 055 for B170 T	1	41.072.4
15	Saugschauch 3 m mit Saugfilter	1	15.038.3		Turbokiller 045 for B200 T	1	41.072.3
16	Bremspedal	1	44.022	43	Hochdruckschlauch 1m / DN 8	1	41.265
17	Bremsklotz	1	44.024	44	Hochdruckschlauch NW8 20m	1	41.083
18	Bremshebel	1	44.023	45	Hose drum complete with 1m HP hose, but without 20m HP hose	1	41.259.1
19	Starlockkappe 8 mm	1	44.165				
20	Abdeckung B170 T / B200 T	1	40.234				
21	Innensechskantschraube M 4 x 30	3	40.236				
22	Scheibe	6	43.472				
23	Elastic - Stop Mutter M 4	3	40.111				
24	Schraube M 6 x 12	1	43.421				
25	Federring A 6	1	44.222.1				

Transmission unit

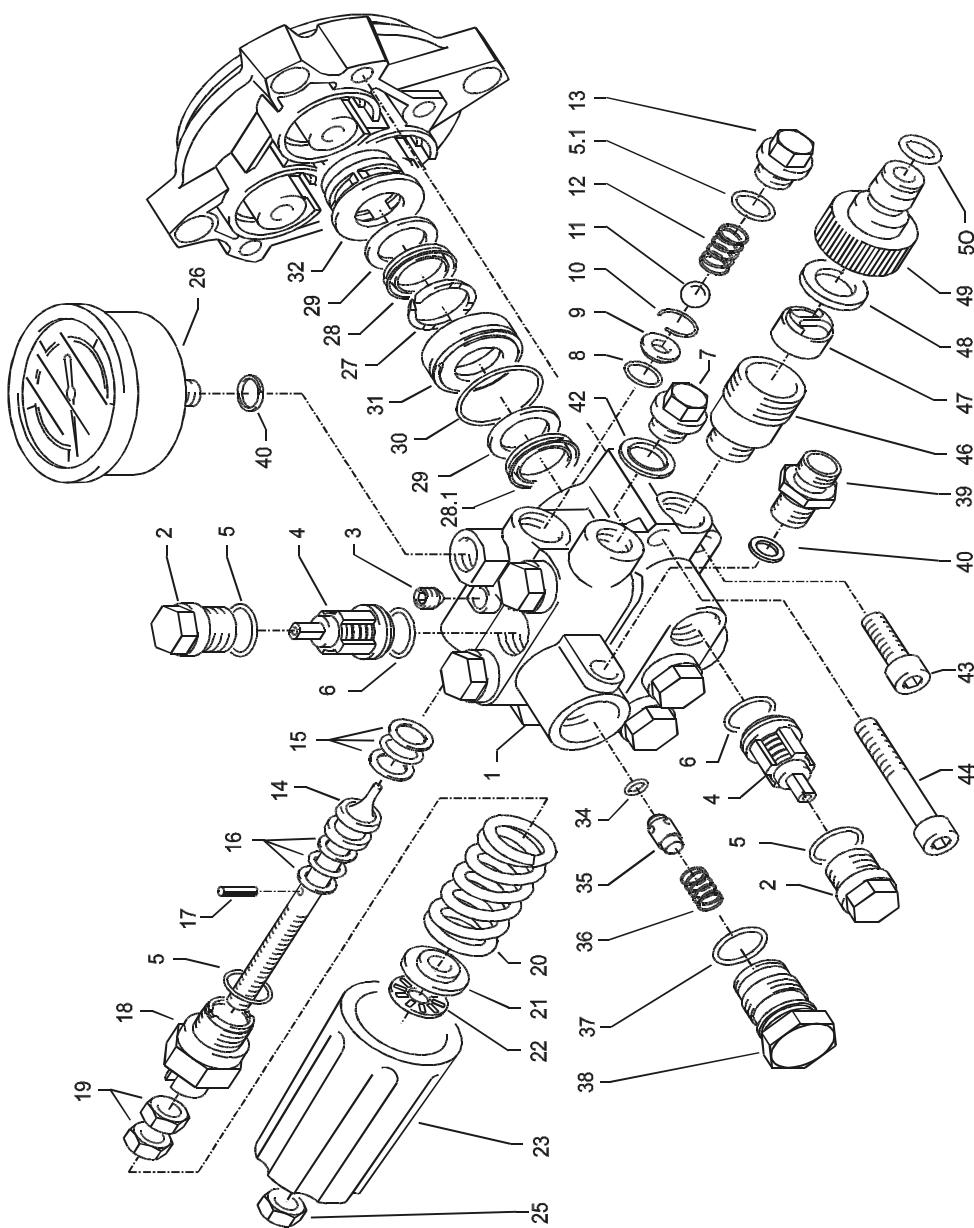


KRÄNZLE B170 T / B200 T

Spare parts list Kränzle B170 T / B200 T Transmission

No	Description	Qty.	Ord.-No
22	Getriebehäuse	1	41.481 1
23	Gehäuseplatte 18 mm	1	41.020 2
10	Axial-Rillenkugellager 3-teilig	2	43.486
34	Öldichtung 18 x 28 x 7	3	41.031
36	Plunger 18 mm	3	41.032 1
37	Plungerfeder	3	41.033
39	Federdruckscheibe 18 mm	3	41.034
40	Sprengring 18 mm	3	41.035
41	O-Ring Viton 88 x 2	1	41.021 1
45	Innensechskantschraube M 8 x 30	4	41.036 1
46	Ölablaßschraube M 18 x 1,5	1	41.011
47	O-Ring 12 x 2	1	15.005 1
48	Innensechskantschraube M 8 x 20	4	41.480
49	Kupferdichtring	4	41.500
51	Weißendichtring 25 x 35 x 5	1	41.019 5
52	Spannstift	1	14.148
53	Stufenkeil	1	41.183
54	swash plate 11,5° please specify swash plate angle	1	41.028 6-11,5
55	Ölschauglas M 18 x 1,5	1	42.018 1
56	Flachdichtung	1	41.019 3
57	Deckel	1	40.518
58	Ölmeßstab	1	42.520 1
59	Innensechskantschraube M 5 x 12	4	41.019 4
60	O-Ring 14 x 2	2	43.445

Valve housing



Spare parts list Kränzle B170 T / B200 T Valve housing APG for 18 mm plunger diameter

No	Description	Qty. Ord.-No	No	Description	Qty. Ord.-No		
1	Ventilgehäuse	1	43.435	31	Leckagering 18 mm	3	41.066
2	Ventilstopfen	6	41.714	32	Zwischenring 18 mm	3	41.015
3	Dichtstopfen M 10 x 1	1	43.043	33	O-Ring 15 x 1,5	1	42.104
4	Ventile (grün) für APG-Pumpe	6	41.715	34	O-Ring 6 x 3	1	14.121
5	O-Ring 16 x 2	7	13.150	35	Rückschlagkörper	1	14.122
5.1	O-Ring 13,94 x 2,62	1	42.167	36	Rückschlagfeder	1	14.120
6	O-Ring 15 x 2	6	41.716	37	O-Ring 18 x 2	1	43.446
7	Dichtstopfen R1/4" mit Bund	1	42.103	38	Ausgangsstück R3/8" IG	1	40.248
8	O-Ring 11 x 1,44	1	12.256	39	Verschraubung Ermeto R1/4" x 8	1	41.042
9	Edelstahlsitz	1	14.118	40	Aluminium - Dichtring	4	13.275
10	Sicherungsring	1	13.147	42	Kupferring	1	42.104
11	Edelstahlkugel 8,5 mm	1	13.148	43	Innensechskantschraube M 8 x 30	2	41.036
12	Edelstahlfeder	1	14.119	44	Innensechskantschraube M 8 x 55	2	41.017
13	Verschlusschraube	1	14.113	46	Sauganschluss	1	41.016
14	Steuerkolben	1	14.134	47	Wasserfilter	1	41.046
15	Parbaks 16 mm	1	13.159	48	Gummi Dichtring	1	41.047
16	Parbaks 8 mm	1	14.123	49	Steckkupplung	1	41.047
17	Spannstift	1	14.148	50	O-Ring	1	41.047
18	Kolbenführung spezial	1	42.105				
19	Mutter M 8 x 1	2	14.144				
20	Ventilfeder schwarz	1	14.125				
21	Federdruckscheibe	1	14.126				
22	Nadellager	1	14.146				
23	Handrad	1	14.147				
25	Elastic-Stop-Mutter	1	14.152				
26	Manometer 0-250 bar	1	15.039				
27	Druckring	3	41.018				
28	Manschette 18 x 26 x 4/2	3	41.013				
28.1	Gewebemanschette 18 x 26 x 4/2	3	41.013				
29	Backring 18 x 26	6	41.014				
30	O-Ring 28,3 x 1,78	3	40.026				

Rep.-Satz Ventile für APG-Pumpe 41.748 1

bestehend aus je 6x Pos. 4; 6x Pos. 5; 6x Pos. 6

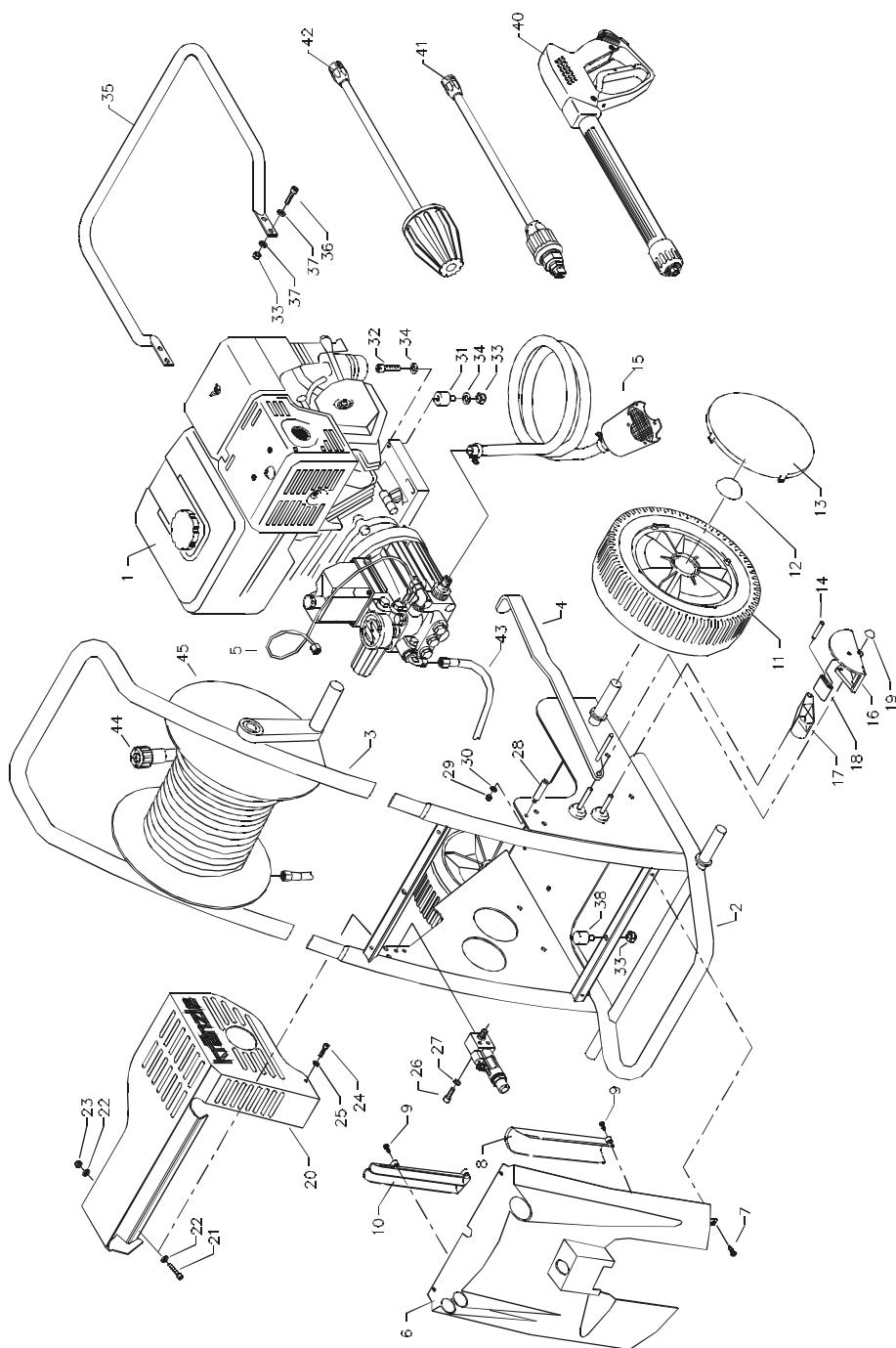
Rep.-Satz Manschetten 18 mm 41.049 1

bestehend aus je 3x Pos. 27; 3x Pos. 28;
3x Pos. 28.1; 6x Pos. 29; 6x Pos. 30

Steuerkolben kpl. mit Handrad 43.444

Ventilgehäuse kpl. mit Handrad 40.249

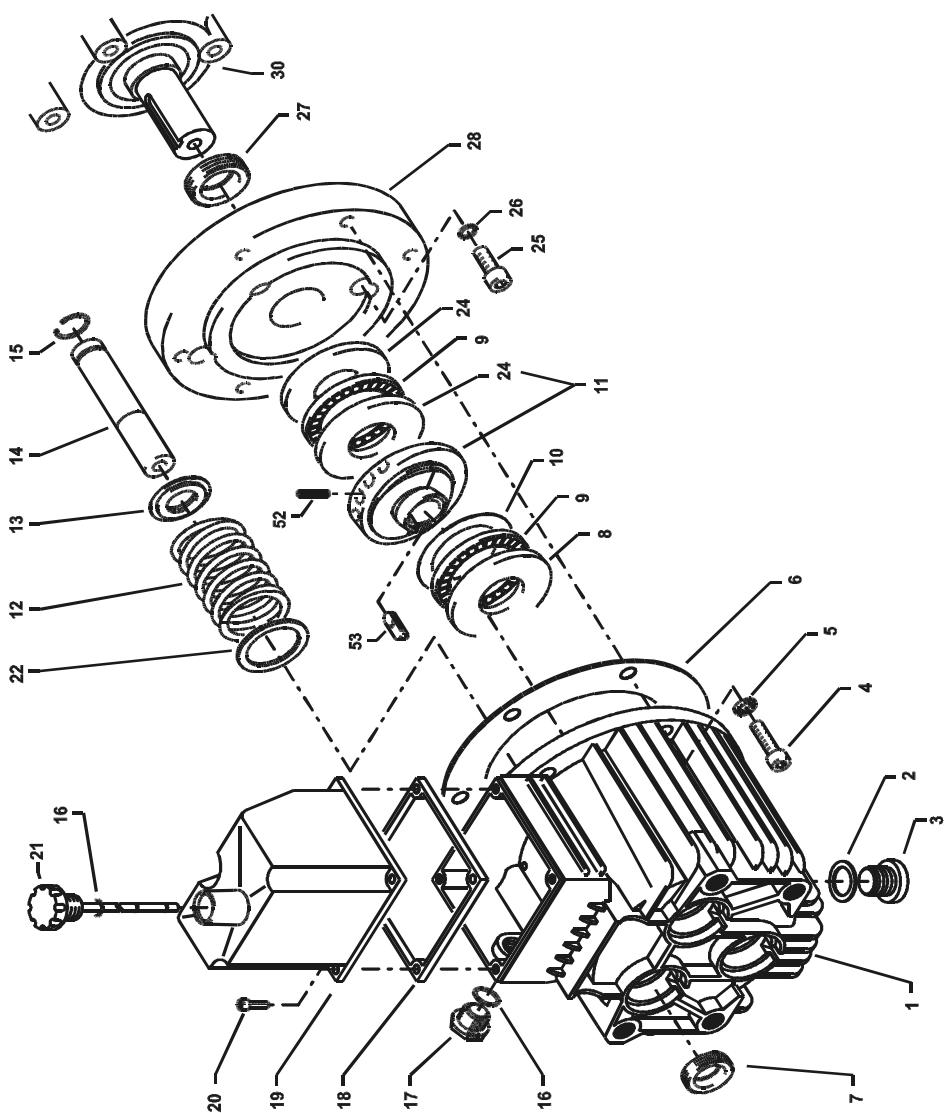
Complete assembly



Spare parts list Kränzle B230 T - B240 T - B270 T Complete assembly

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Motor Honda GX 340 LX2 für B240 T	1	24.026	26	Sechskantschraube M6 x 16	2	50 173
	Motor Honda GX 390 LX2 für B230/270 T	1	24.026	27	Scheibe 6,4	2	50 189
2	Wagen	1	40 230	28	Distanzhülse	1	40 237 1
3	Schubbügel	1	40 245	29	Elastic - Stop Mutter M 6	1	14 152 1
4	Bremstassel	1	40 246	30	Scheibe 6,4	1	50 189
5	Druckmeßleitung für Drehzahlregulierung	1	44.102	31	Gummipuffer 40 x 30	4	40 220 1
6	Frontplatte B230 T	1	40 231	32	Schraube M 8 x 30	4	41 221
	Frontplatte B240 T	1	40 231	33	Elastic - Stop Mutter M 8	8	41 410
	Frontplatte B270 T	1	40 231	34	Scheibe 8,4	8	40 515
7	Blechscheibe 4,8 x 12	4	44 112	35	Schutzbügel	1	40 247
8	Köcher groß	1	40 232	36	Sechskantschraube M 8 x 25	4	44 137
9	Kunststoffschraube 5 x 14	7	43 426	37	Unterlegscheibe DIN125 8,4	8	50 186
10	Köcher klein	1	40 233	38	Gummipuffer 30 x 20	1	42 516
11	Rad	4	44.017	40	Gun with extension - Starlett II	1	41 053 1
12	Achsklemmring 20 mm	4	40.142	41	Lance with reg. nozzle 2505 for B240 T	1	41 053 2-05
13	Radkappe	4	44.018		Lance with reg. nozzle 2505 for B270 T	1	41 053 2-05
14	Stift 6 x 40	1	44.035	1	Lance with reg. nozzle 2507 for B230 T	1	41 053 2-07
15	Saugschlauch 3 m mit Saugfilter	1	15.038	3	Please specify nozzle size		
16	Bremspedal	1	44.022	42	Turbokiller 055 for B240 T	1	41 072 4
17	Bremsklotz	1	44.024		Turbokiller 055 for B270 T	1	41 072 4
18	Bremshobel	1	44.023		Turbokiller 07 for B270 T	1	41 072 7
19	Starlockkappe 8 mm	1	44.165	43	Hochdruckschlauch 1m / DN 8	1	41.265
20	Abdeckung B230/240/270 T	1	40 235	44	Hochdruckschlauch NW8 20m	1	41.083
21	Innensechskantschraube M 4 x 30	3	40 236	45	Hose drum complete with 1m HP hose, but without 20m HP hose	1	41 259 1
22	Scheibe	6	43 472				
23	Elastic - Stop Mutter M 4	3	40 111				
24	Schraube M 6 x 12	1	43 421				
25	Federring A 6	1	44.222				

Transmission unit

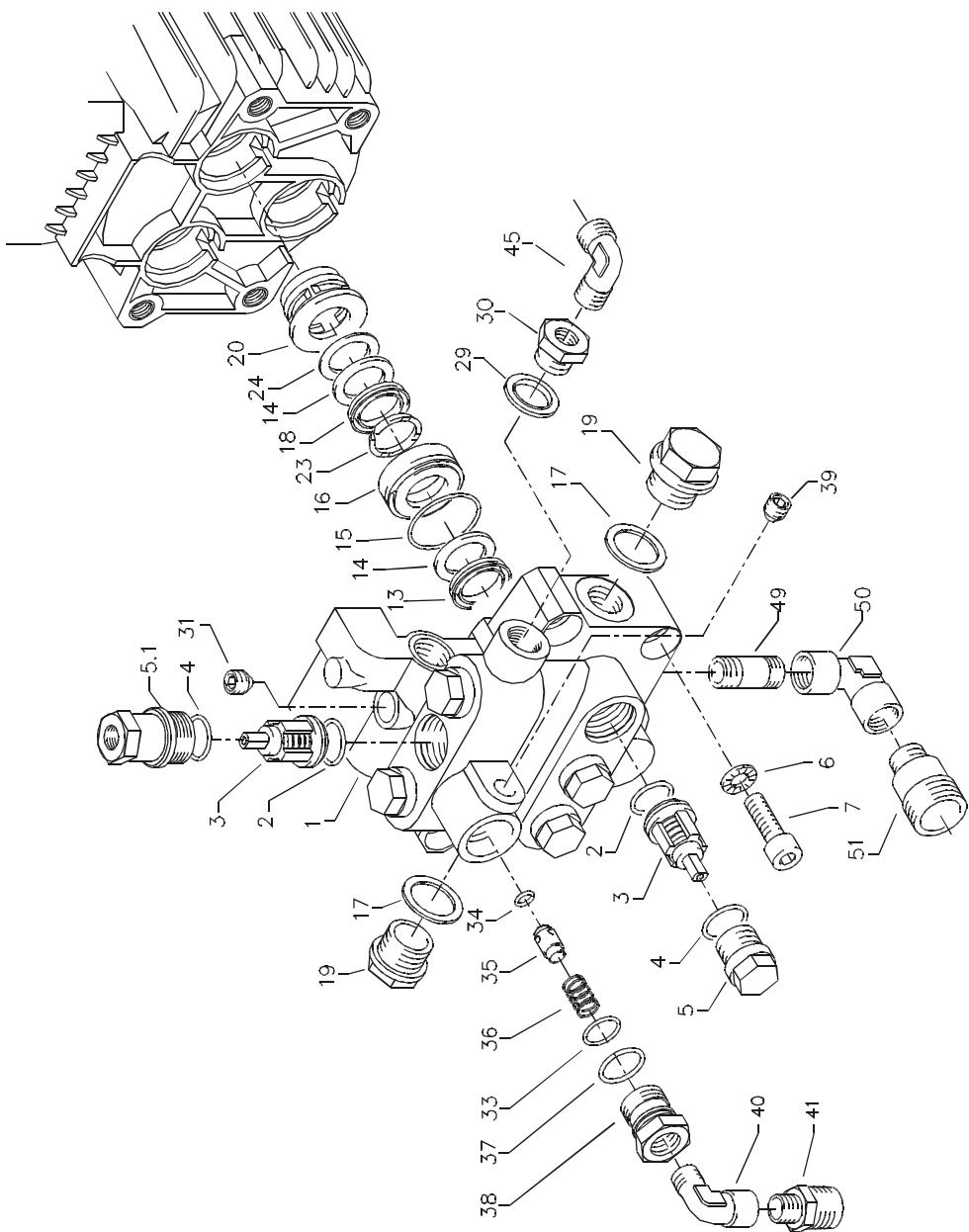


KRÄNZLE B230 T - B240 T - B270 T

Spare parts list KRÄNZLE B230 T - B240 T - B270 T Transmission unit AQ-Pump

No	Description	Qty.	Ord.-No
1	Ölgehäuse	1	40.501
2	Cu-Dichtring	1	40.052
3	Ölablassschraube	1	40.051
4	Innensechskantschraube M 8 x 25	6	40.053
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	AS-Scheibe	1	40.041
11	Taunelscheibe 10,2° bei B230 T	1	40.055-10,2
	Taunelscheibe 8° bei B240 T	1	40.055-8,0
	Taunelscheibe 8° bei B270 T	1	40.055-8,0
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	2	43.445
17	Ölschauglas M 18 x 1,5	1	42.018
18	Flachdichtung	1	41.019 3
19	Deckel Ölgehäuse	1	40.518
20	Innensechskantschraube M 5 x 12	4	41.019 4
21	Ölmassenstab	1	42.520
22	Stützscheibe	3	40.513
24	Gehäusescheibe	2	40.039
25	Innensechskantschraube M 8 x 30	4	41.036 1
26	Kupfer-Dichtring	4	41.500
27	Dichtring 30 x 42 x 7	1	40.224
28	Flansch für B 16/220	1	40.223
30	Motor Honda GX 340 LX2	1	24.026
30.1	Motor Honda GX 390 LX2	1	24.026 1
52	Spannstift	1	14.148
53	Stufenkeil	1	40.222

Valve housing

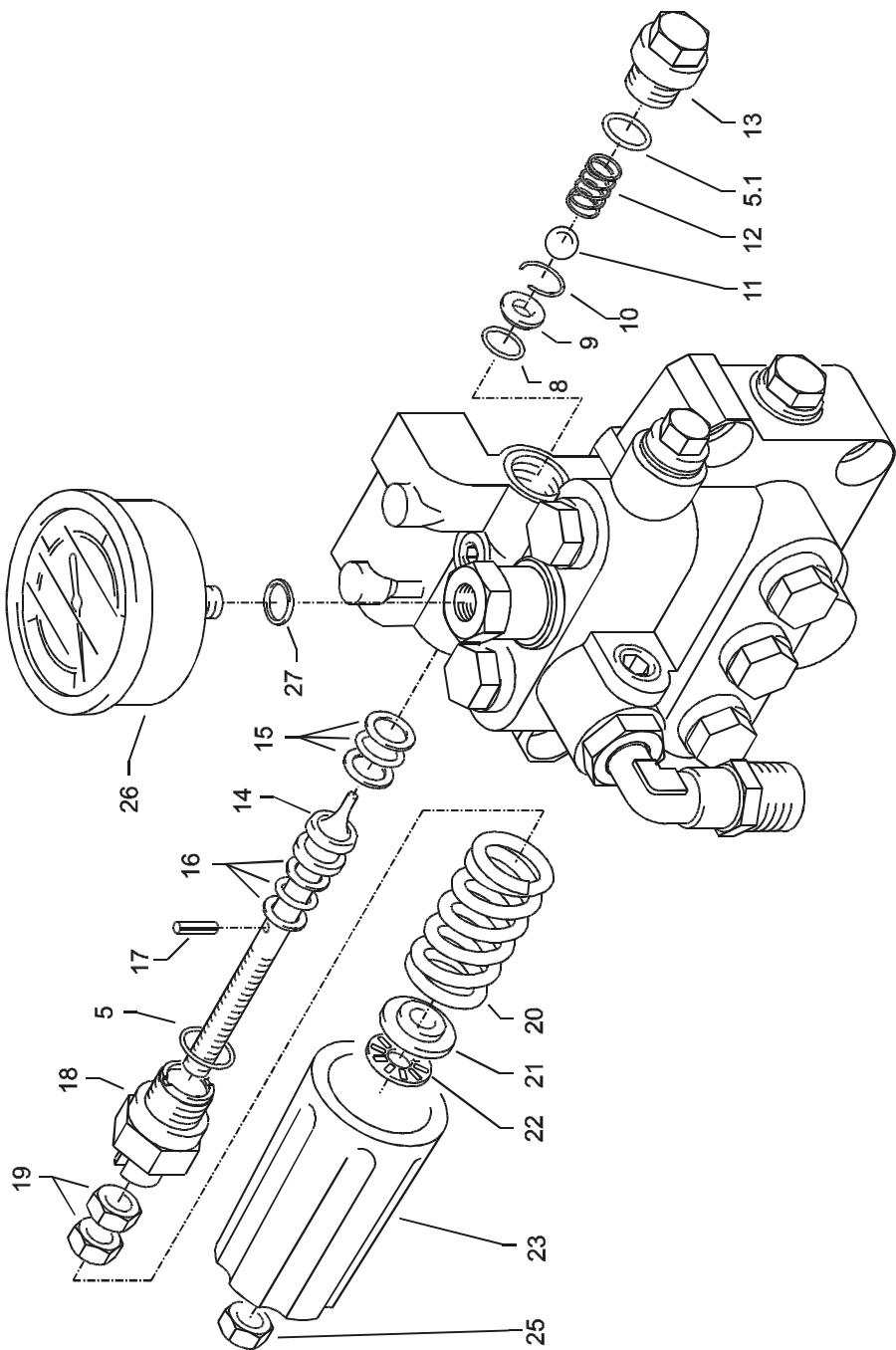


KRÄNZLE B230 T - B240 T - B270 T

Spare parts list Kränzle B230T - B240T - B270T Valve housing for integrated AQ-Pump

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Ventilgehäuse AQ mit Integr. UL ohne integr. Druckschalter	1	40.52112	29	Dichtring 17 x 22 x 1,5 (Kupfer)	1	40.019
	O-Ring 18 x 2	6	40.016	30	Stopfen 3/8" mit 1/8" IG	1	40.242
2	Einlaß-/Auslaß-Ventil	6	42.024	31	Dichtstopfen M 10 x 1	1	43.043
3	O-Ring 21 x 2	6	42.025	34	O-Ring 6 x 3	1	14.121
4	Ventilstopfen	5	42.026	35	Rückschlagkörper	1	14.122
5	Ventilstopfen mit R 1/4" IG	1	42.0262	36	Rückschlagfeder	1	14.120
5.1	Sicherungsring	4	40.032	37	O-Ring 18 x 2	1	43.446
6	Innensechskantschraube M 12 x 45	4	40.504	38	Ausgangsstück R3/8" IG	1	40.248
7	Wasserabfangfilter	1	41.0462	39	Dichtstopfen	1	13.385
9	Gewebemanschette	3	40.023	40	Einschraubwinkel R3/8" AG x R3/8" IG	1	44.127
13	Backing 20 mm	6	40.025	41	ST30-Nippel R3/8" AG x M22 x 1,5	1	13.365 2
14	O-Ring 31,42 x 2,62	3	40.508	45	Winkelverschraubung R 1/8" x 6	1	44.110 1
15	Leckagering 20 x 36 x 13,3	3	40.509	48	O-Ring	1	13.272
16	Cu-Dichtring 21 x 28 x 1,5	2	42.039	49	Distanzrohr 48 mm bds. R3/8" AG	1	41.628
17	Gummimanschette	3	40.512	50	Winkel R3/8" IG / IG	1	44.138
18	Verschlüssehrraube R 1/2"	2	42.032	51	Sauganschluss R 3/8" AG x R3/4"	1	41.016 0
19	Distanzring mit Absättigung	3	40.507	Repair kits:		40.065 1	
20	Druckring 20 mm	3	40.021	Rep.-kit sleeves		Consisting of: 3x No. 13; 6x No. 14; 3x No. 14; 3x No. 15; 3x No. 16; 3x No. 18; 3x No. 20; 3x No. 23	
23	Zwischenring 20 mm	3	40.516	Repair kit valves		40.062 1	
24				Consisting of: 6x No. 2; 6x No. 3; 6x No. 4			

Unloader valve

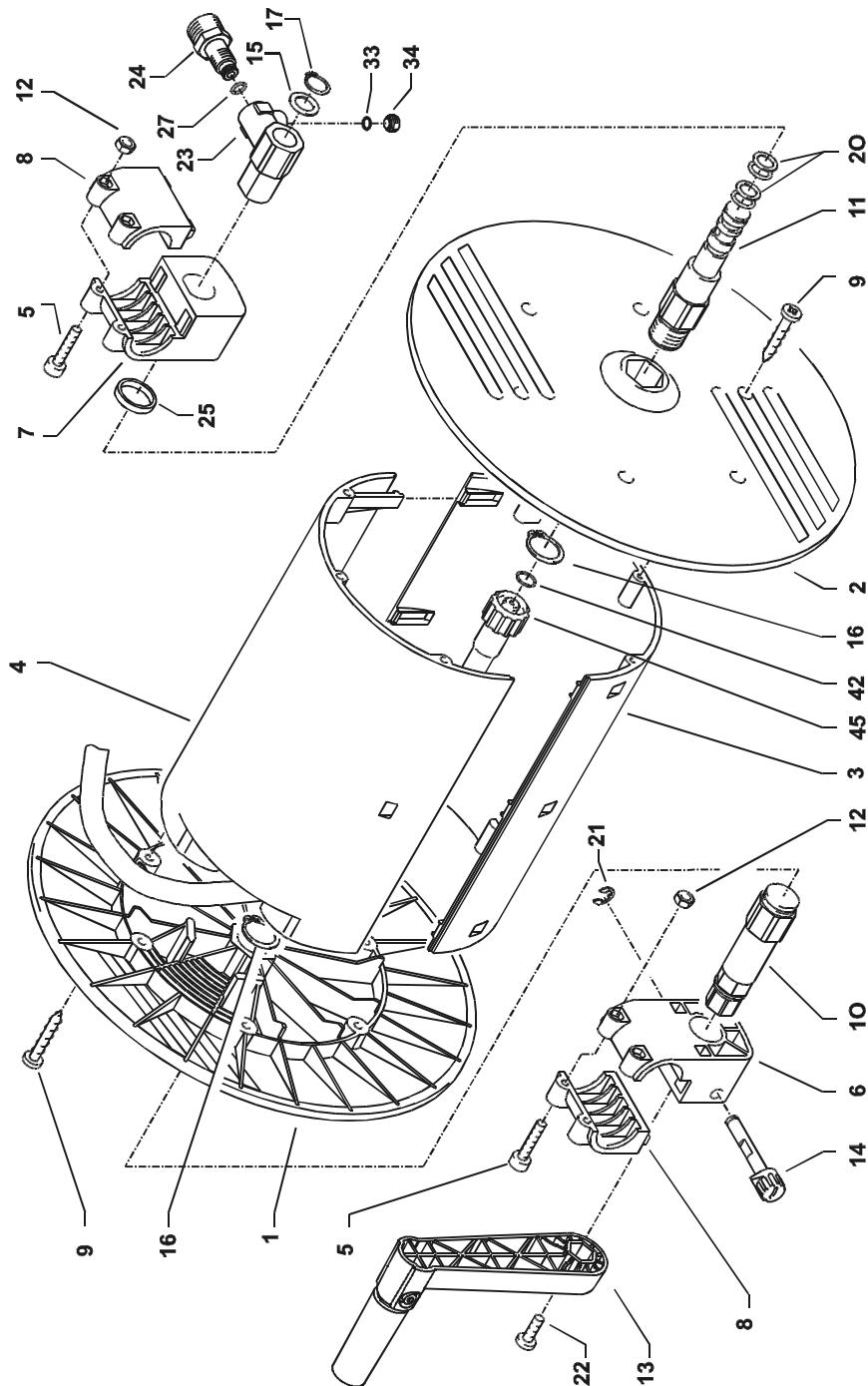


KRÄNZLE B230T / B240T / B270T

Spare parts list Kränzle B230T - B240T - B270T Unloader valve AQ-Pump

No	Description	Qty.	Ord.-No
5	O-Ring 16 x 2	1	13.150
5.1	O-Ring 13,94 x 2,62	1	42.167
8	O-Ring 11 x 1,44	1	12.256
9	Edelstahlsitz	1	14.118
10	Sicherungsring	1	13.147
11	Edelstahlkugel	1	13.148
12	Edelstahlfeder	1	14.119
13	Verschlusssschraube	1	14.113
14	Steuerkolben	1	14.134
15	Parbaks 16 mm	1	13.159
16	Parbaks 8 mm	1	14.123
17	Spannstift	1	14.148
18	Kolbenführung spezial	1	42.105
19	Konterschraube M 8 x 1	2	14.144
20	Ventilfeder schwarz	1	14.125
21	Federdruckscheibe	1	14.126
22	Nadellager	1	14.146
23	Handrad	1	14.147
25	Elastic-Stop-Mutter M 8 x 1	1	14.152
26	Manometer 0-400 Bar	1	15.039 4
27	Aluminium-Dichtring	2	13.275

Hose drum

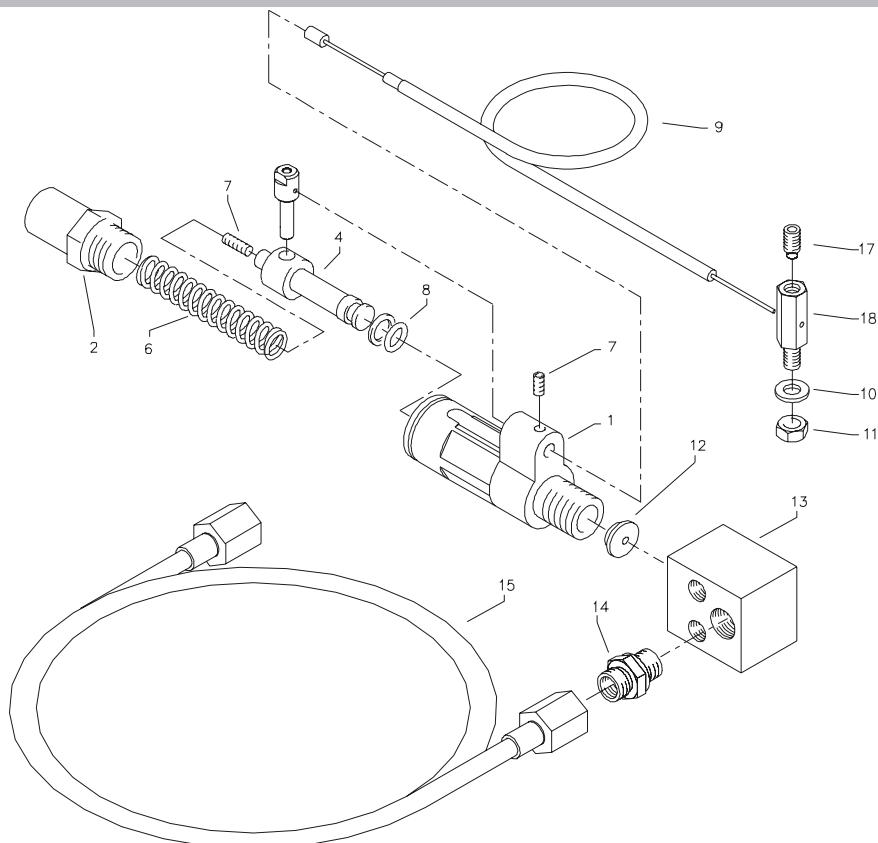


KRÄNZLE B 170 - 270 T

Spare parts list B 170 - 270 T Hose drum

No	Description	Qty.	Ord.-No	No	Description	Qty.	Ord.-No
1	Seitenschale Schlauchführung	1	40.302	21	Sicherungsscheibe 6 DIN6799	1	40.315
2	Seitenschale Wasserführung	1	40.301	22	Schraube M 5 x 10	1	43.021
3	Trommel Unterteil	1	40.304	23	Drehgelenk	1	40.167
4	Trommel Oberteil	1	40.303	24	Anschlussteil	1	40.308 1
5	Innensechskantschraube M 4 x 30	4	40.236	25	Distanzring	1	40.316
6	Lagerklotz mit Bremse	1	40.306	27	O-Ring 6,68 x 1,78	1	40.585
7	Lagerklotz links	1	40.305	33	O-Ring 6 x 1,5	1	13.386
8	Klemmstück	2	40.307	34	Stopfen M 10 x 1	1	13.385
9	Kunststoffschraube 5,0 x 20	12	50.157	42	O-Ring 9,3 x 2,4	4	13.273
10	Antriebswelle	1	40.310	45	Hochdruckschlauch 20 m NW 8	1	41.083
11	Welle Wasserführung	1	40.311		Schlauchtrommel kpl.		
12	Elastic-Stop-Mutter M 4	4	40.111		ohne Schlauch		
13	Handkurbel	1	40.320 0				
14	Verriegelungsbolzen	1	40.312				
15	Scheibe MS 16 x 24 x 2	1	40.181		Schlauchtrommel kpl.		
16	Wellensicherungsring 22 mm	2	40.117		mit Schlauch		
17	Wellensicherungsring 16 mm	1	40.182				
20	Parbaks 16 mm	2	13.159				

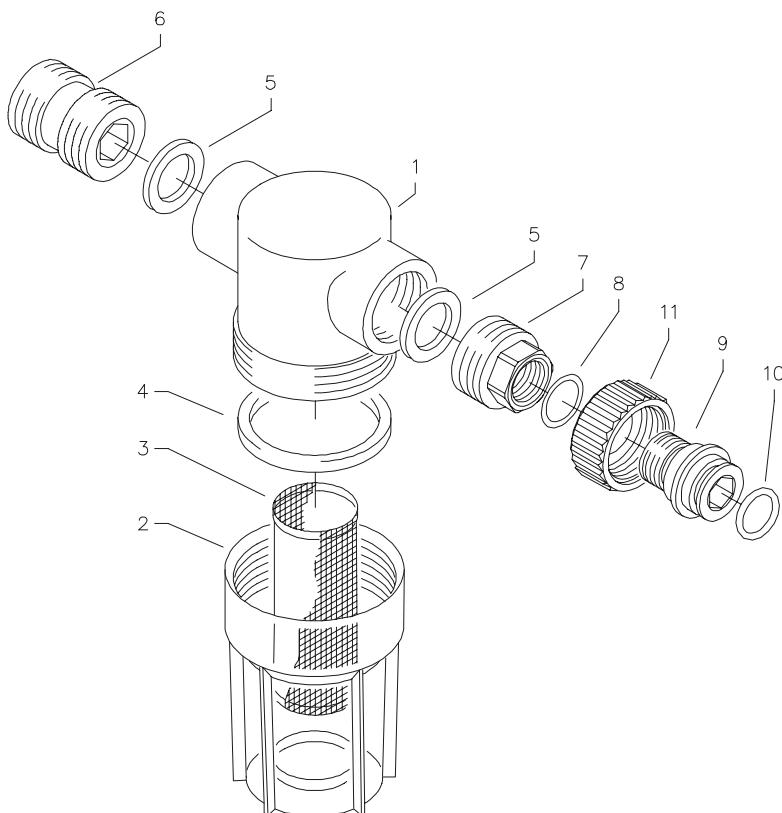
Speed control



**Spare parts list Kränzle B230 T / B240 T / B270 T
Speed control**

No	Description	Qty.	Ord.-No
1	Grundteil	1	42.581
2	Druckhülse	1	42.584
4	Steuerkolben	1	42.582
5	Querbolzen	1	42.583
6	Druckfeder 2,0 x 9,5 x 70	1	42.587
7	Gewindestift M4 x 6 DIN 913	1	43.469
8	Parbaks 7 mm	1	15.013
9	Bowdenzug	1	40.244
10	Unterlegscheibe 6,4 DIN 125	1	50.189
11	Sechskantmutter M6	1	14.152 1
12	Drosselscheibe	1	42.589
13	Anschlussblock	1	40.241
14	Verschraubung 1/8" x 6l	1	40.591 1
15	Druckmessleitung	1	44.102 1
17	Gewindestift M 6 x 12 DIN915	1	42.590
18	Klemmbolzen	1	42.591

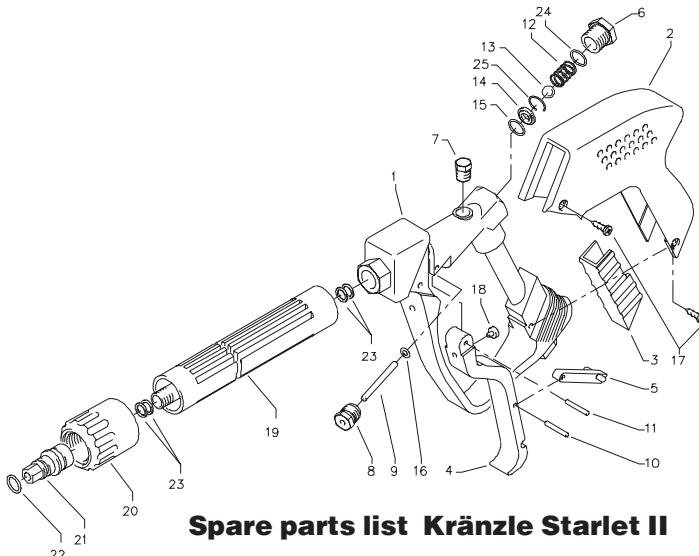
Water inlet filter



Spare parts list Kränzle B230 T / B240 T / B270 T Water inlet filter

No	Description	Qty.	Ord.-No
1	Filtergrundkörper	1	13 301
2	Filterbecher	1	13 302
3	Siebkörper	1	13 304
4	Gummidichtung	1	13 303
5	Gummidichtung 3/4"	2	41 047 1
6	Eingangsteil beids. 3/4" AG	1	13 305
7	Anschlußteil	1	13 306
8	O-Ring 14 x 2	1	43 445
9	Tülle	1	13 307
10	O-Ring 13 x 2,6	1	13.272
11	Überwurfmutter	1	41 047 5
Filter complete			13.300 3
No. 1 - 11			

Starlet II



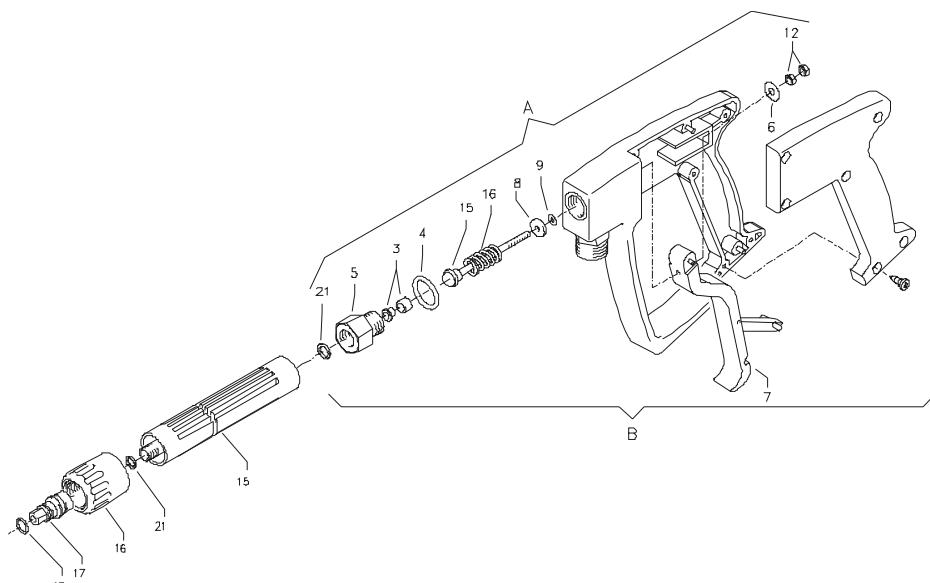
Spare parts list Kränzle Starlet II

No	Description	Qty.	Ord.-No
1	Ventilkörper mit Handgriff	1	12.294
2	Schutzhülse	1	12.295
3	Abdeckschutz	1	12.296
4	Betätigungshebel	1	12.298
5	Sicherungshebel	1	12.149
6	Abschlußschraube M 16 x 1	1	12.247
7	Stopfen	1	12.287
8	Gewindeführungshülse R 1/4" AG	1	12.250
9	Aufsteuerbolzen	1	12.284
10	Stift	1	12.148
11	Lagernadel	1	12.253
12	Edelstahlfeder	1	12.246
13	Edelstahlkugel	1	12.245
14	Edelstahlsitz	1	13.146
15	O-Ring 11 x 1,44	1	12.256
16	O-Ring 3,3 x 2,4	1	12.136
17	Blechschaube 3,9 x 8	4	12.297
18	Druckstück	1	12.252
19	Rohr kunststoffumspritzt bds. R 1/4" AG	1	15.004 5
20	Überwurfmutter ST30 M 22 x 1,5 IG	1	13.276 1
21	Außen-Sechskant-Nippel R 1/4" IG	1	13.277 1
22	O-Ring 9,3 x 2,4	1	13.273
23	Aluminium-Dichtring	4	13.275
24	O-Ring 15 x 1,5	1	12.129 1
25	Sicherungsring	1	12.258

Starlet-Gun with extention **12.320 2**

Repair kit "Starlet II" **12.299**
consisting of 1x No.: 9,10,13,14,15

PICO - Gun



Spare parts list MIDI-Gun

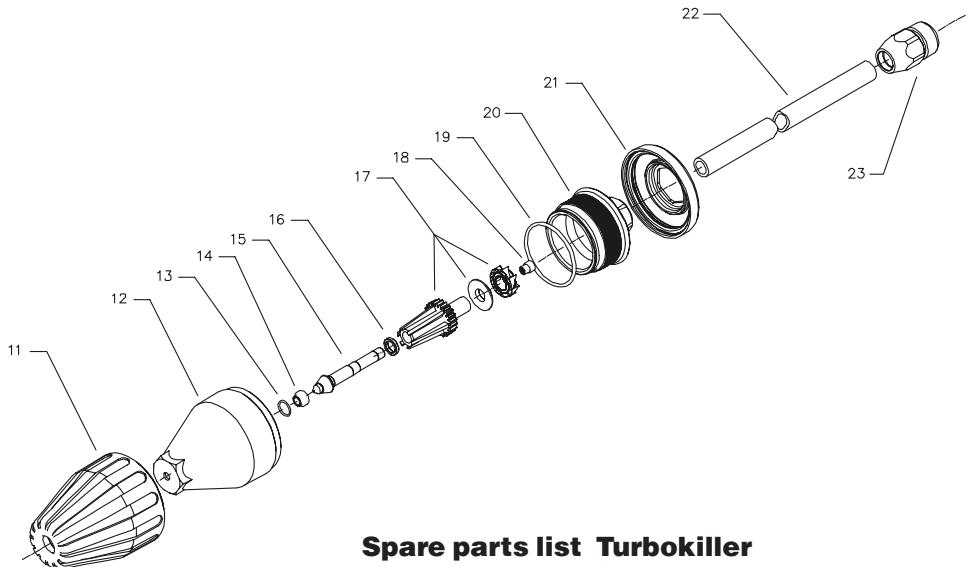
No	Description	Qty.	Ord.-No
5	Rohrabschlußteil R1/4" incl. Pos. 3, 4, 21	1	12.125
6	Scheibe 5,3 DIN9021	1	50.152
7	Abzug-Hebel kpl.	1	12.144 1
15	Rohr kunststoffumspritzt bds. R 1/4" AG	1	15.004 2
16	Überwurfmutter ST 30 M22 x 1,5 IG	1	13.276 1
17	Außen-Sechskant-Nippel R 1/4" IG	1	13.277 1
18	O-Ring 9,3 x 2,4	1	13.273
28	Aluminium Dichtring	6	13.275

Midi-Pistole mit Verlängerung **12.160**

Rep.-Satz **12.158**

bestehend aus je 1x Position:
3.1, 3a, 3b, 4, 8, 9, 12, 21,

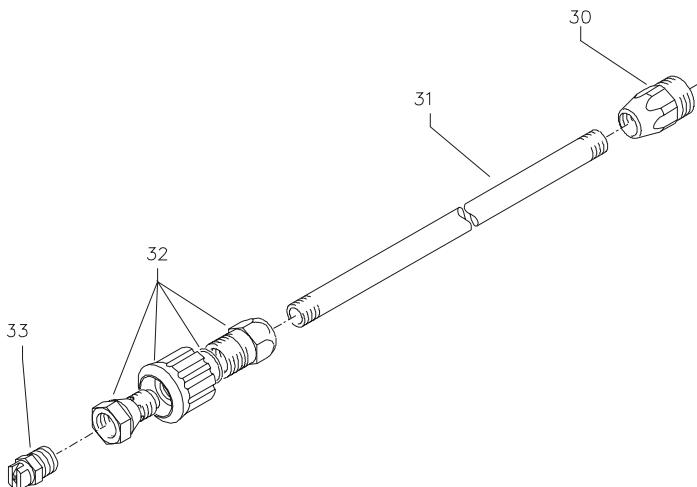
Turbokiller



Spare parts list Turbokiller

No	Description	Qty.	Ord.-No
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 055 für B 170 T / 240 T / 270 T	1	41 532
	Düse 045 für B 200 T	1	41 532 1
	Düse 07 für B 230 T	1	41 532 2
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. (200T)			41 072 3
Turbokiller 055 compl. (170T/240T/270T)			41 072 4
Turbokiller 07 compl. (230T)			41 072 7
Repair kit Turbokiller 045			41 097 6
Repair kit Turbokiller 055			41 097 1
Repair kit Turbokiller 07			41 097 2

Standard regulation nozzle



Spare parts list Standard regulation nozzle

No	Description	Qty.	Ord.-No
30	Nippel ST30 M22x1,5 AG / M 12 x 1	1	13.363
31	Rohr 400 mm, bds. M 12 x 1	1	15.002
32	Regeldüse mit Regulierring	1	13.201 2
33	Flachstrahldüse 25045 bei B200 Flat spray nozzle 2505 with B170/240 T/270 T Flat spray nozzle 2507 with B230 T Please specify size of nozzle	D 25 045 D 25 05 D 25 07	

Warranty

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

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

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

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

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

Inspection report

for KRÄNZLE - High Pressure Cleaners

Regular inspection every 12 months if used professionally!

Appliance No:

Type:

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 trigger released

2. General condition

- a) High pressure hose
- b) Spray gun
- c) Motor
- d) 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
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

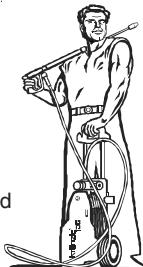
Excerpt from the Guidelines for Liquid Spray Equipment (ZH 1/46) by the Central Office of the Professional Trade Association.

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.

In Germany, inspections compliant with the (German) Emission Controls Act may be required for oil and gas-fired equipment, and the owner must arrange for these to be carried out independently of the main inspection.

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.



I. Kränzle GmbH
Elpke 97 . 33605 Bielefeld

EC declaration of conformity

We hereby declare,
that the high-pressure models:

(techn. documentation available from):

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

Kräntze B 170,200,230,240,270

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

Machine guideline 89/392/EEC
Low voltage guideline 2006/95/EG
Specification for electromagnetic
compatibility 89/336 EEC
Outdoor noise directive 2000/14/EC,
Art. 13, High-pressure water jet machines
Appendix 3, part B, chapter 27

Sound power level measured:
 100 dB (A)
 guaranteed:
 103 dB (A)

Applied specifications and
standards:

EN 60 335-2-79:2004
EN 55 014-1 / A2:2002
EN 61 000-3-2 / A14:2000
EN 61 000-3-3 / A1:2001
EN ISO 3744 : 1995

Bielefeld, den 05.10.05

Droitsch
(Managing Director)

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As date of 06.09..2007