

Technical perfection and top design

**kränzle**  
HOCHDRUCKREINIGER

# Operating manual

## High-pressure cleaner

**B 10/200**  
**B 13/150**  
**B 16/220**  
**B 16/250**



CE



Read and conform safety instructions prior  
to putting into operation !

- GB -

**kränzle**  
made in Germany

w w w . k r ä n z l e . c o m

# Description

## Dear Customer

We would like to congratulate you on your new portable/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.

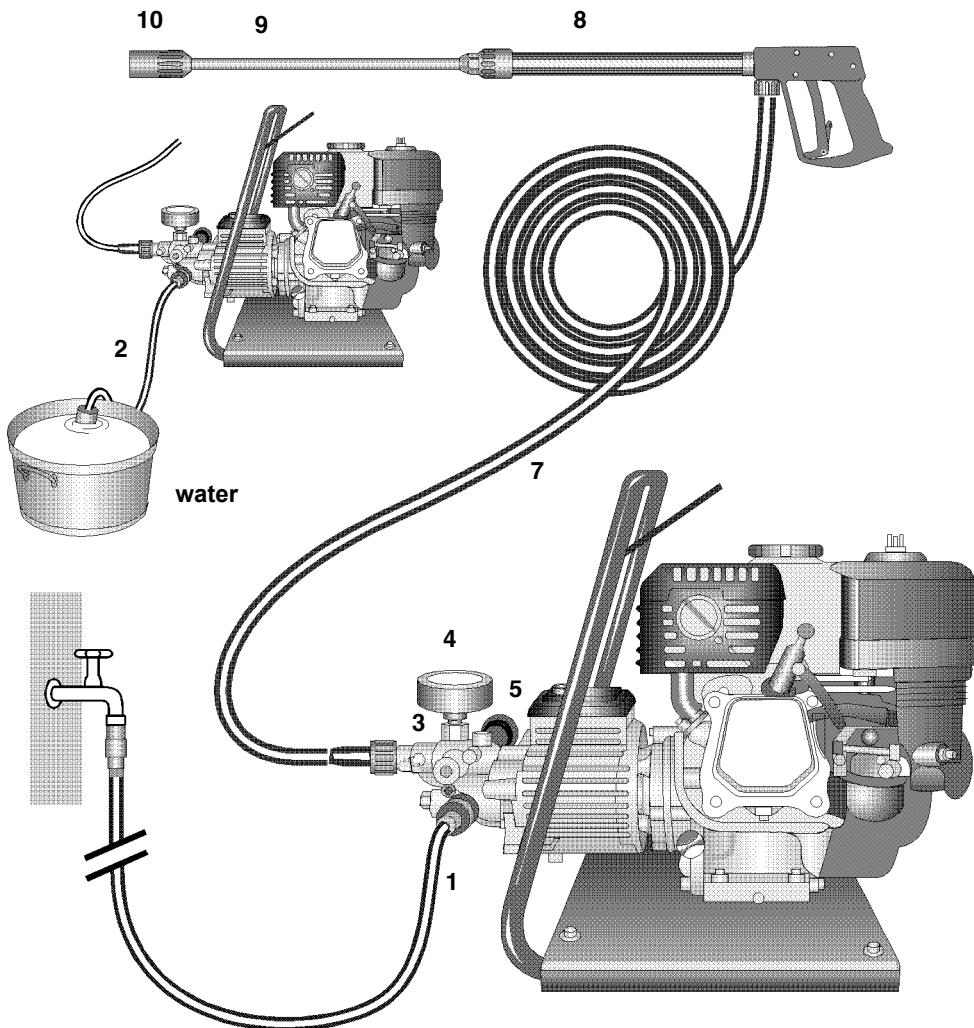
The equipment will assist you professionally in all cleaning tasks, e.g.:

- **facades**
- **flagstones**
- **terraces**
- **vehicles of all types**
- **sheds**
- **channels**
- **barrels and containers**
- **machines**
- **streets**

<b>technical specifications</b>	<b>B 10/200</b>	<b>B 13/150</b>	<b>B 16/220</b>	<b>B 16/250</b>
operating pressure, steplessly adjustable	10 - 200 bar	10 - 150 bar	10 - 220 bar	10 - 250 bar
permissible overpressure	220 bar	165 bar	240 bar	270 bar
water output	bei 1800 U/min 10 l/min	bei 1800 U/min 13 l/min	bei 1800 U/min 16 l/min	bei 1800 U/min 16 l/min
hot water input up to	70 °C	70 °C	70 °C	70 °C
suction height	1,0 m	2,5 m	2,5 m	2,5 m
high pressure hose with hose drum	10 m -	10 m 15 m	10 m 15 m	10 m 15 m
engine	Honda GX 200 LX	Honda GX 160 CX	Honda GX 340 CX	Honda GX 390 CX
weight	22 kg	24 kg	26 kg	26 kg
Guaranteed sound level L <sub>WA</sub>	103 dB (A)	103 dB (A)	103 dB (A)	103 dB (A)
Vibrations at lance	ca. 32 N	ca. 27 N	ca. 38 N	ca. 38 N
recoil at lance	2,0 m/s <sup>2</sup>	2,1 m/s <sup>2</sup>	2,2 m/s <sup>2</sup>	2,2 m/s <sup>2</sup>
<b>order No.</b>				
<b>portable</b>	<b>41.182</b>	<b>41.170</b>		
<b>with undercarriage</b>	<b>41.182 1</b>	<b>41.170 1</b>	<b>41.173 2</b>	<b>41.186</b>
<b>with undercarri- age and hose drum</b>		<b>41.170 2</b>	<b>41.173 3*</b>	
<b>with speed con- trol *</b>			<b>41.173</b>	

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

# Description



## Construction

The KRÄNZLE B 10/200 + B 13/150 + B 16/220 - 16/250- high pressure cleaners are portable/mobile machines. The design can be seen from the diagram.

### Item

- |  |                                   |
|--|-----------------------------------|
| 1 Water inlet connection with filter                                 | 7 High pressure hose              |
| 2 Suction hose with filter<br>(special accessory) order No. 15.038 3 | 8 Spray gun assembly              |
| 3 High pressure pump   | 9 Interchangeable lance           |
| 4 Pressure gauge with glycerin filling                               | 10 Regulator nozzle               |
| 5 Unloader valve - safety valve                                      | 10a B10/200 only with dirt-killer |

# Description

## Water - and Cleang - Care System

Water can be connected at mains pressure to the high pressure pump or it can be sucked directly from a storage tank.

The water is then forced under pressure by the high pressure pump to the lance.

The high pressure jet is formed by the nozzle at the end of the lance.

Cleaning and caring agents can be mixed with the water by a low pressure injector. (not with B10/200)



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

## Lance with trigger gun

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

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

The increase in pressure when the trigger gun is closed causes the unloader valve-safety valve to open. The pump remaines switched on and continues to pump liquid through the pump at reeducated pressure.

When the trigger gun ist opened, the unloader valve - safety valve closes and the pump ressumes pressure spraying from the lance.



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

## Unloader valve - safety valve

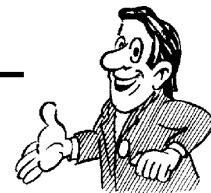
The unloader valve - safety valve protects the machine from a build-up of excess pressure, and is designed not to permit an excess pressure to be selected for operating. The limit nut on the handle is sealed with a spray coating.

The operating pressure and spray rate can be steplessly adjusted by tuning 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.

## **CAUTION !**



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

## **CAUTION !**



When running your high pressure cleaner with hot water of 70° C raised temperatures occur.

**Do not touch the machine without safety gloves.**

# 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).  
Afterwards you can roll up the high pressure hose.  
- Only use clean water ! Protect from frost !

## CAUTION !

Please pay attention to the regulations of your waterworks company.

In accordance with DIN 1988, the machine may not be directly connected to the public drinking water supply lines.

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

Also indirect connection to the public drinking water supply lines is permissible by way of free emission in accordance with DIN 1988, part 4; e.g. by using a reservoir with a float valve.

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

## High pressure hose and spray device

The high pressure hose and 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.*

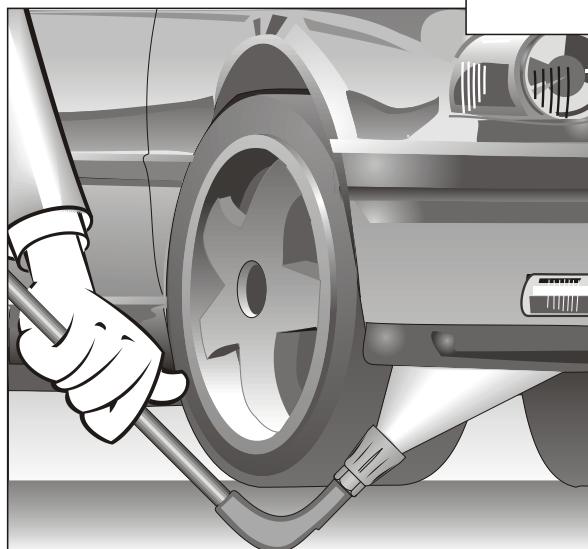
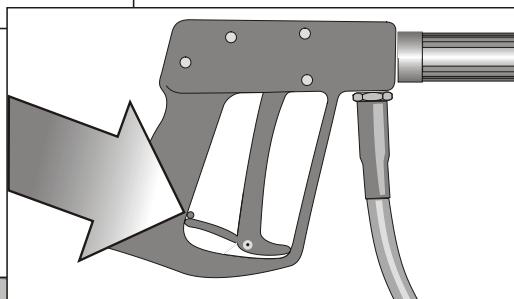


## **Safety notes**



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

**Apply the safety catch on  
the spray gun after each use,  
in order to prevent  
unintentional spraying.**



**Always aim the under-  
body lance. Note when  
using an angle under-  
body lance, like for  
example lance  
No. 41.075, that there  
is a certain amount of  
torque (twisting moti-  
on) in the recoil. (See  
also notice on page 2).**

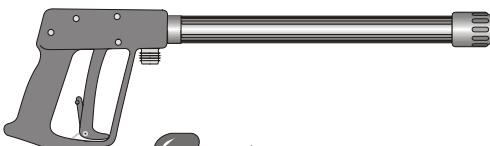
# **This is what you've purchased :**



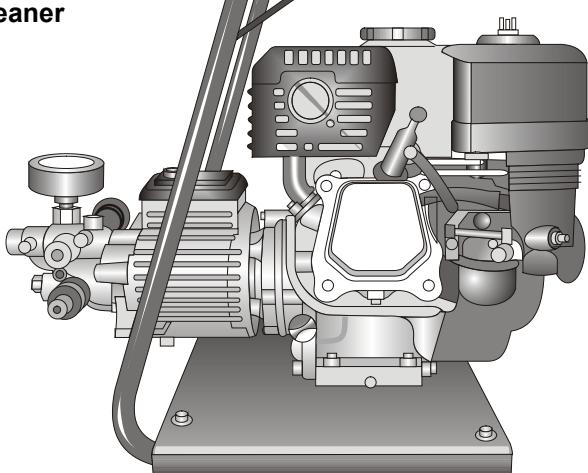
1. Spray lance with regulator and high pressure nozzle, flat spray (B10/200 only with dirt-killer, vario-jet)



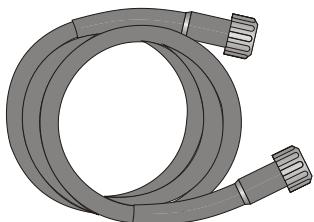
2. Spray gun with insulated pistol grip and screw connection



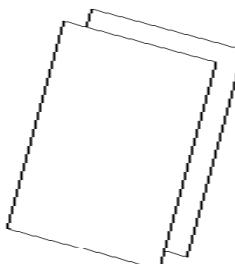
3. KRÄNZLE - High pressure cleaner  
B 10/200 B 13/150 B 16/220



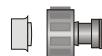
4. High pressure hose 10 m  
15 m HP-hose for cleaners with hose drum



5. Operating instructions pump  
Operating instructions motor

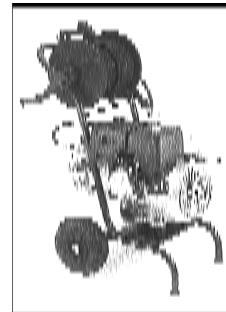
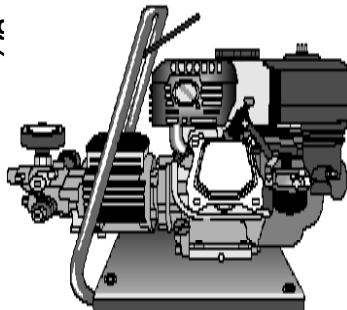


6. Water inlet components

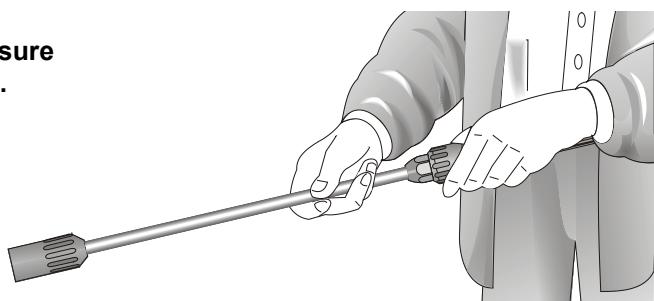


# **Prepare for use**

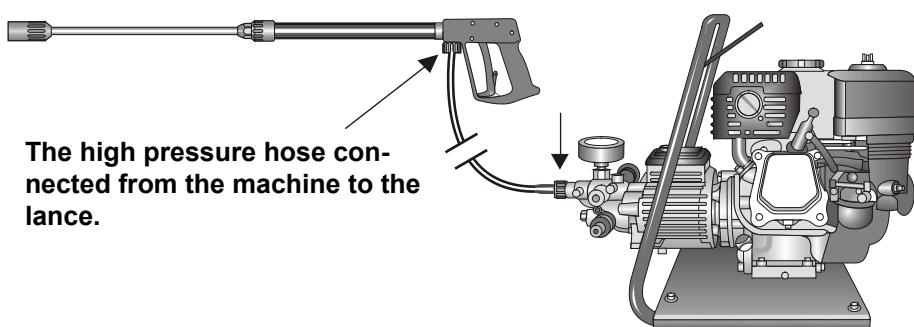
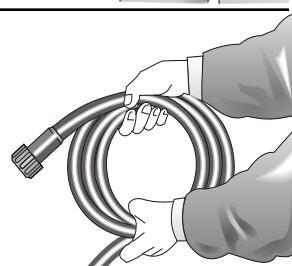
## **1. Oil-measuring**



## **2. Connect the high pressure lance to the spray gun**

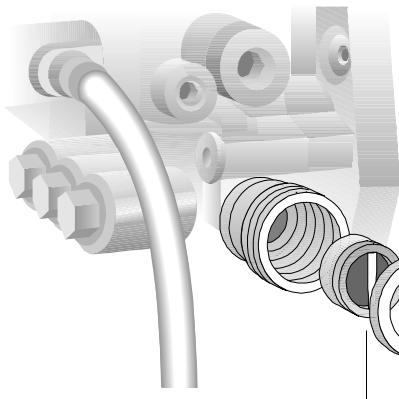


## **3. Unwind the high pressure hose without leaving kinks or „nooses“ and connect it to the spray gun and pump. When using extension hoses, use max. 20 m high pressure hose, or 2 x 10 m with hose connectors.**



**The high pressure hose connected from the machine to the lance.**

## **Preparation for use**



4. The machine can be connected to a pressurised water line with cold or 60 °C respectively 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 1 must always be clean.

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

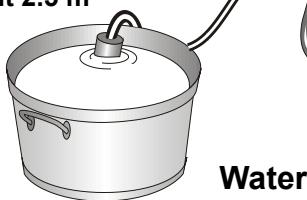
### **CAUTION !**



*When running your high pressure cleaner with hot water of 70° C raised temperatures occur.*

***Do not touch the machine without safety gloves.***

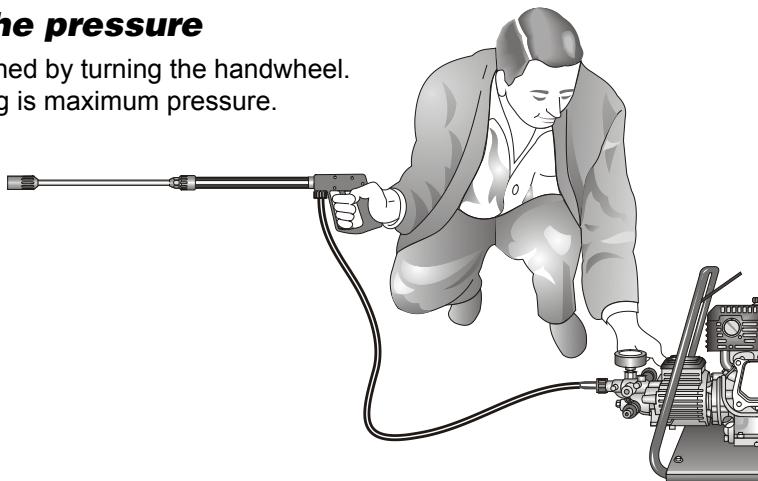
5. Maximum induction height 2.5 m  
- see technical data on page 2.



# **Preparation for use**

## **Adjusting the pressure**

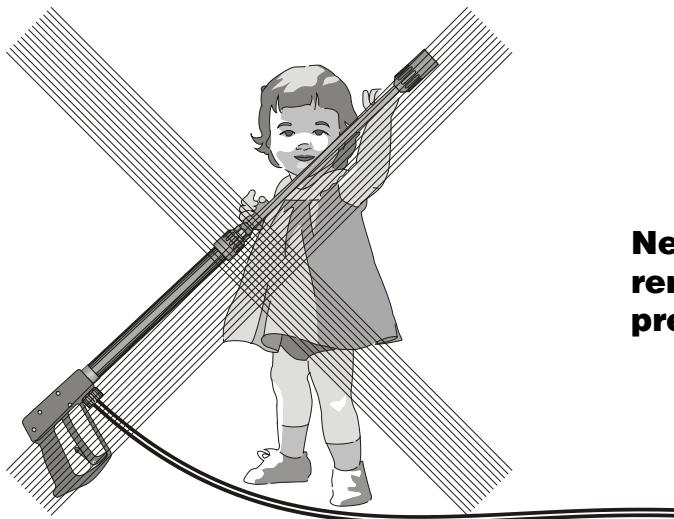
This is accomplished by turning the handwheel.  
The default setting is maximum pressure.



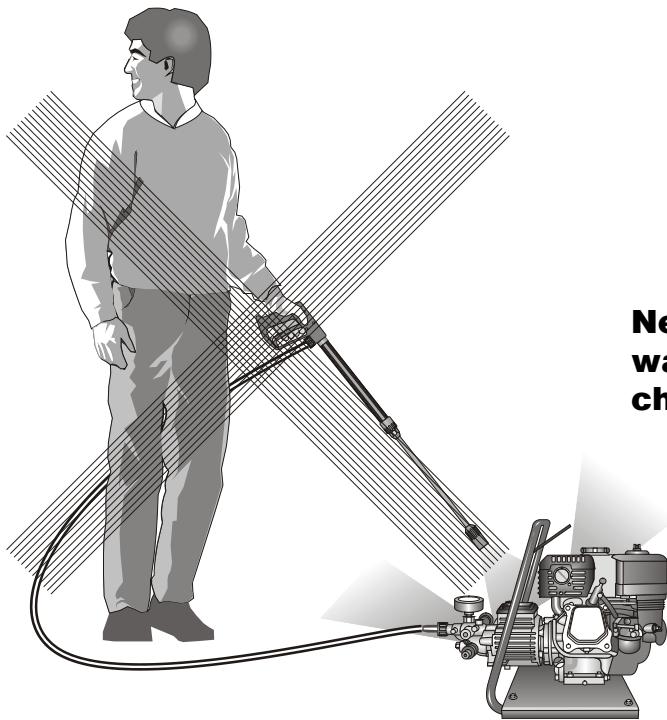
## **To shut down the pump:**

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***



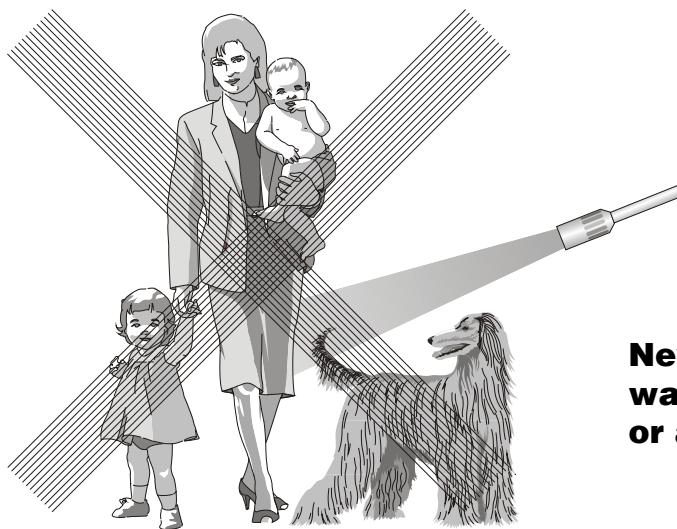
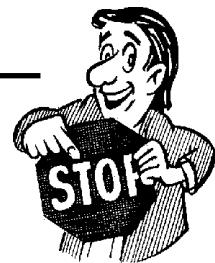
**Never allow children to use the high pressure cleaner !**



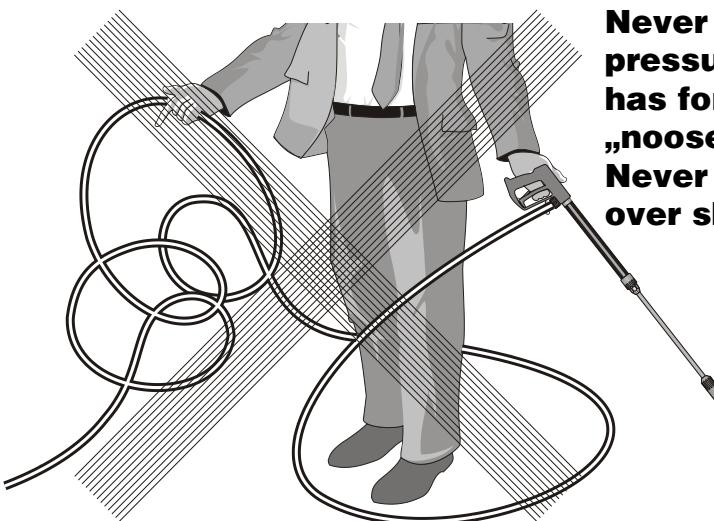
**Never direct the water jet at the machine itself !**

## ***This is prohibited***

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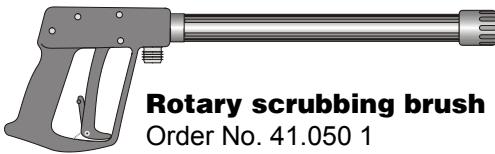
**Never direct the  
water jet at people  
or animals !**



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

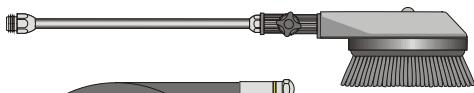
# **Additional KRÄNZLE accessories**

(not with B 10/200)



## **Rotary scrubbing brush**

Order No. 41.050 1

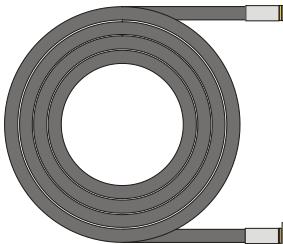


## **Drain and pipe**

### **cleaning hose**

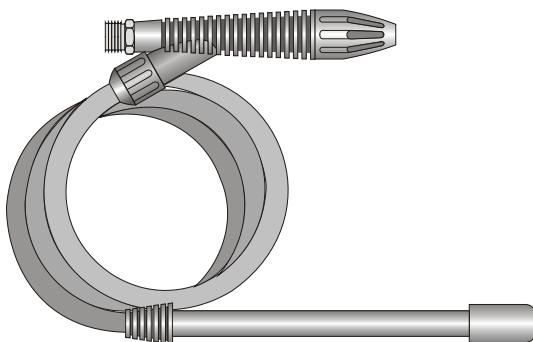
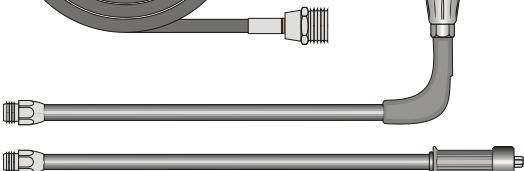
8 m - Order No. 41.051

15 m - Order No. 41.058



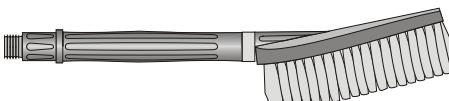
## **Underbody lance, new**

Order No. 41.075



## **Sandblaster**

Order No. 41.068 1



## **Flat brush**

Order No. 41.073



## **Schmutzkiller**

### **B 10/200**

Best.-Nr. 41.073 8



### **B 13/150**

Best.-Nr. 41.072 5



### **Turbokiller**

### **B 16/220**

Best.-Nr. 41.072 4



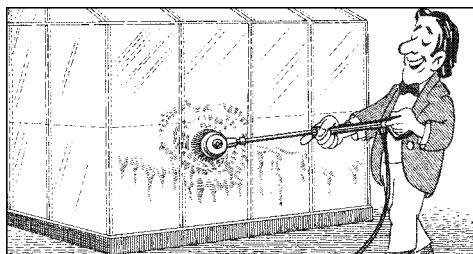
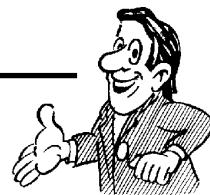
### **B 16/250**

Best.-Nr. 41.072 3

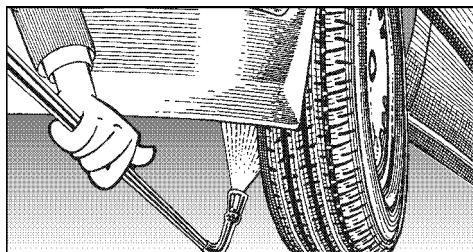


**Environmental, refuse disposal and water protection regulations must be observed when using the accessories.**

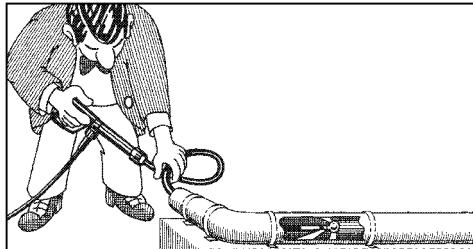
## **for further combination possibilities**



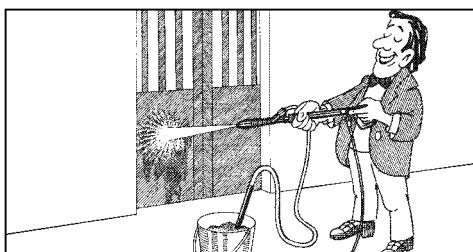
Car cleaning, glass, caravan, boat etc.: rotary washing brush with 40 cm extension and ST 30 nipple M 22



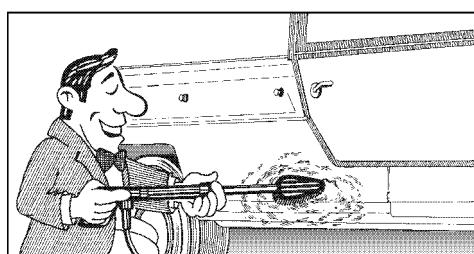
Underbody cleaning of cars, trailers and equipment: lance 90 cm with high pressure nozzle and ST 30 nipple. The lance must be aimed when spraying.



Cleaning pipes, channels and drains: Pipe cleaning hose with KN nozzle and ST 30 nipple M 22.



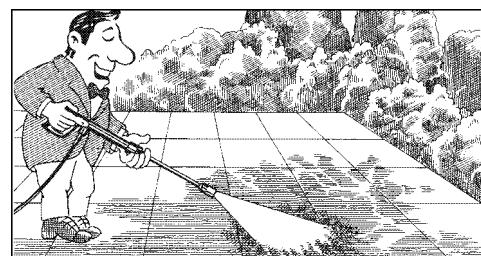
Blasting old paint, rust and facades: sandblasting injector with suction lance and 3 m PVC hose and ST 30 nipple M 22.



Cleaning cars and all smooth surfaces: brush with ST 30 nipple M 22.



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



Rotary point sprayer for extreme soiling: dirt killer with 40 cm extension and ST 30 nipple M 22.

## ***Small repairs –***

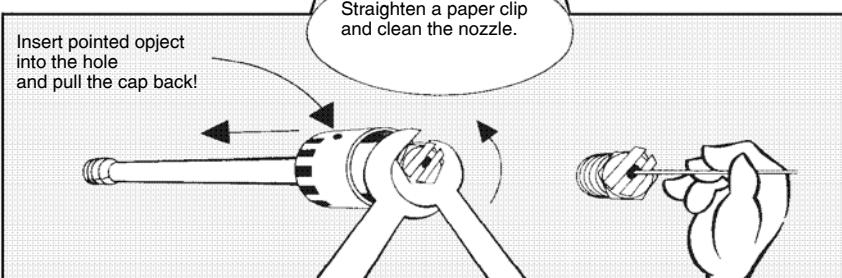
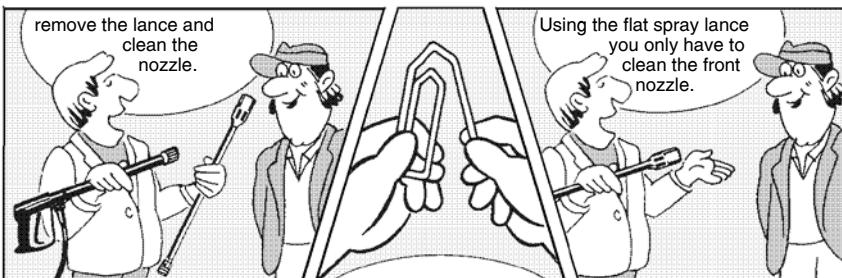
### **You only get a weak flow of water or no water at all !**

- The pressure gauge shows a 10% higher pressure than the working pressure.



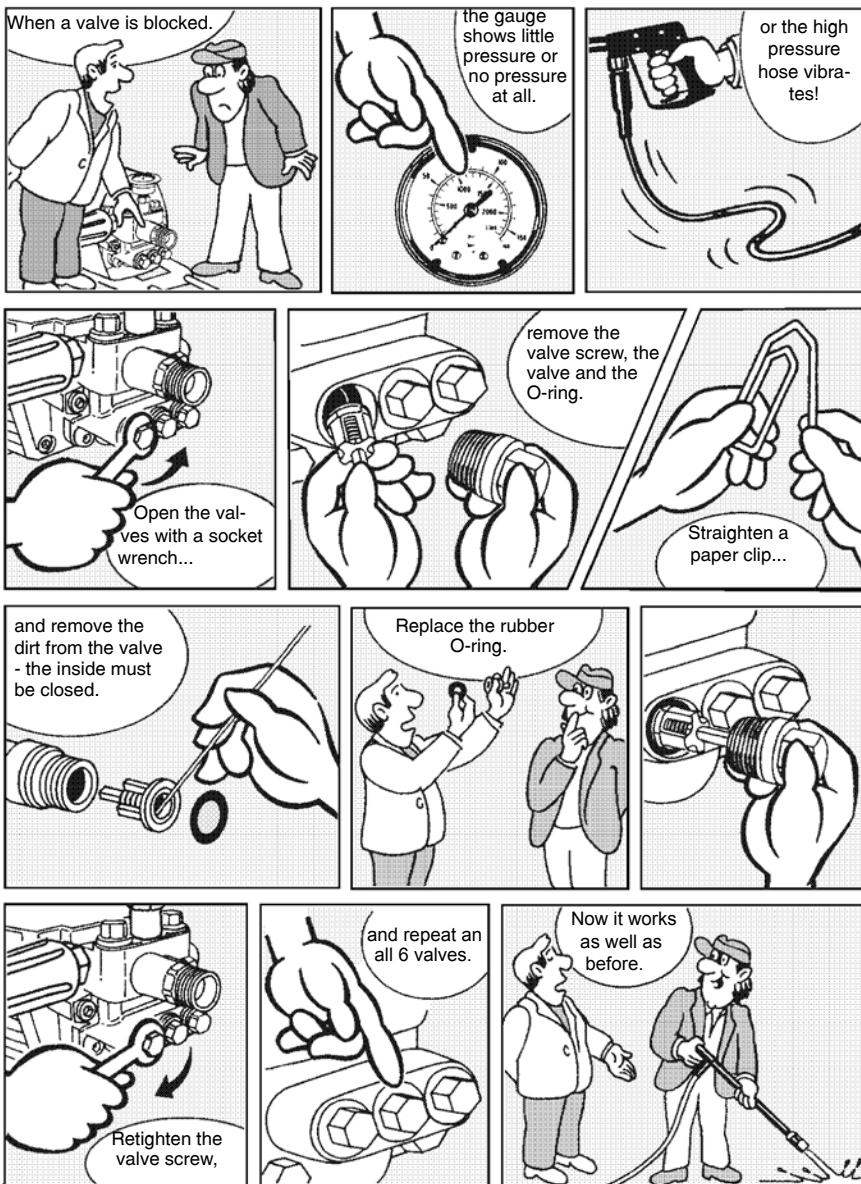
## **The nozzle is blocked !**

- No water but the gauge shows full pressure.



## **Valve 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.



# **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 with the oil-measuring stick prior to each use.  
(Ensure horizontal position!)**

### **Oil change B10/200 ; B13/150:**

No oil change is required during the working life of the machine. However, should it be necessary to change the oil in the event of repairwork, the oil sight glass is to be opened over a reservoir and the machine to be emptied. The oil is to be caught in the reservoir and disposed of in the approved manner.

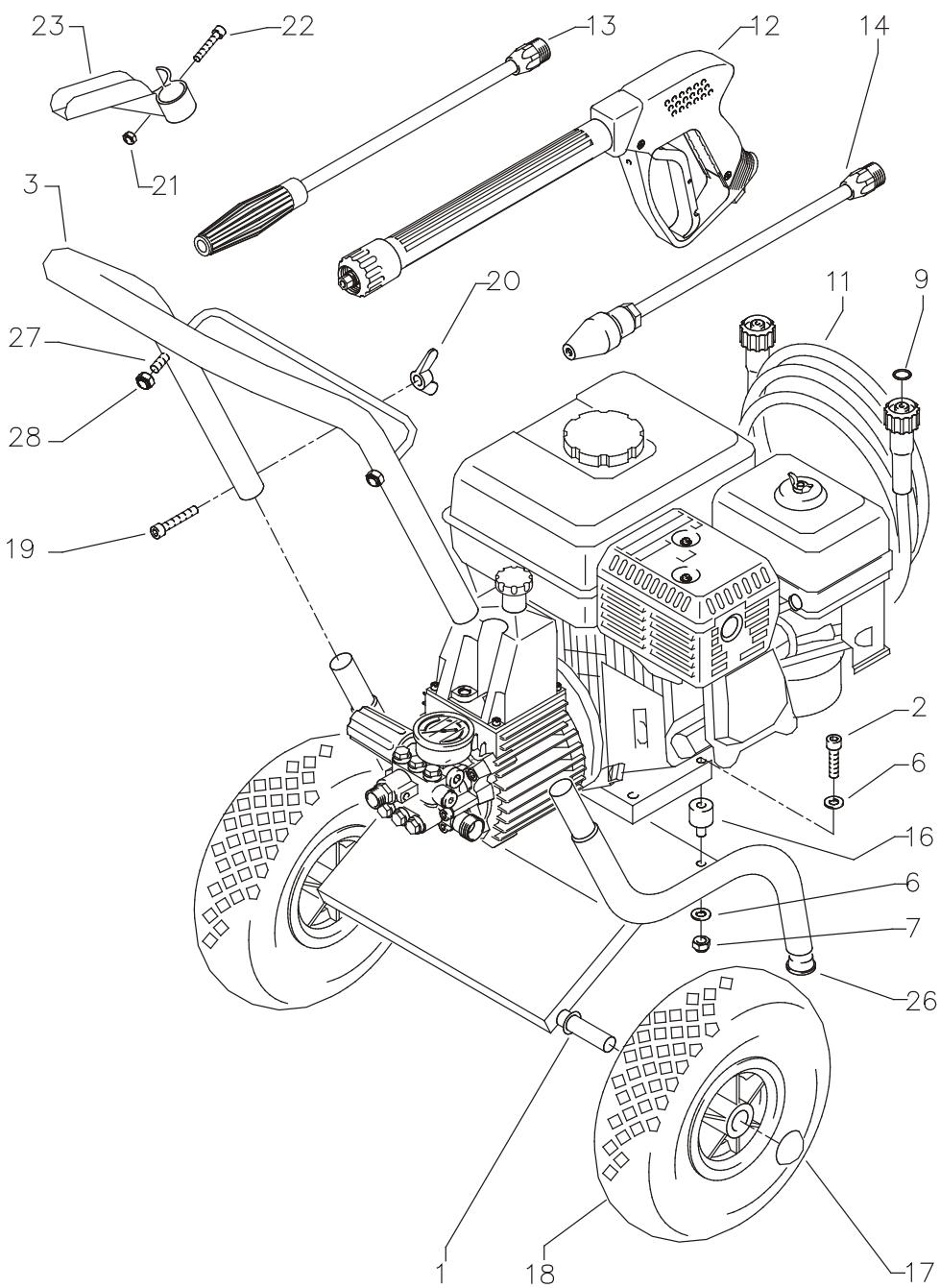
New oil: 0,3 l - Motor oil W 15/40

### **Oil change B16/220;B 16/250**

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 contianer and disposed of in a responsible, legal manner.

New oil: 1,0 l - Castrol Formula RS

# **Complete Assembly**

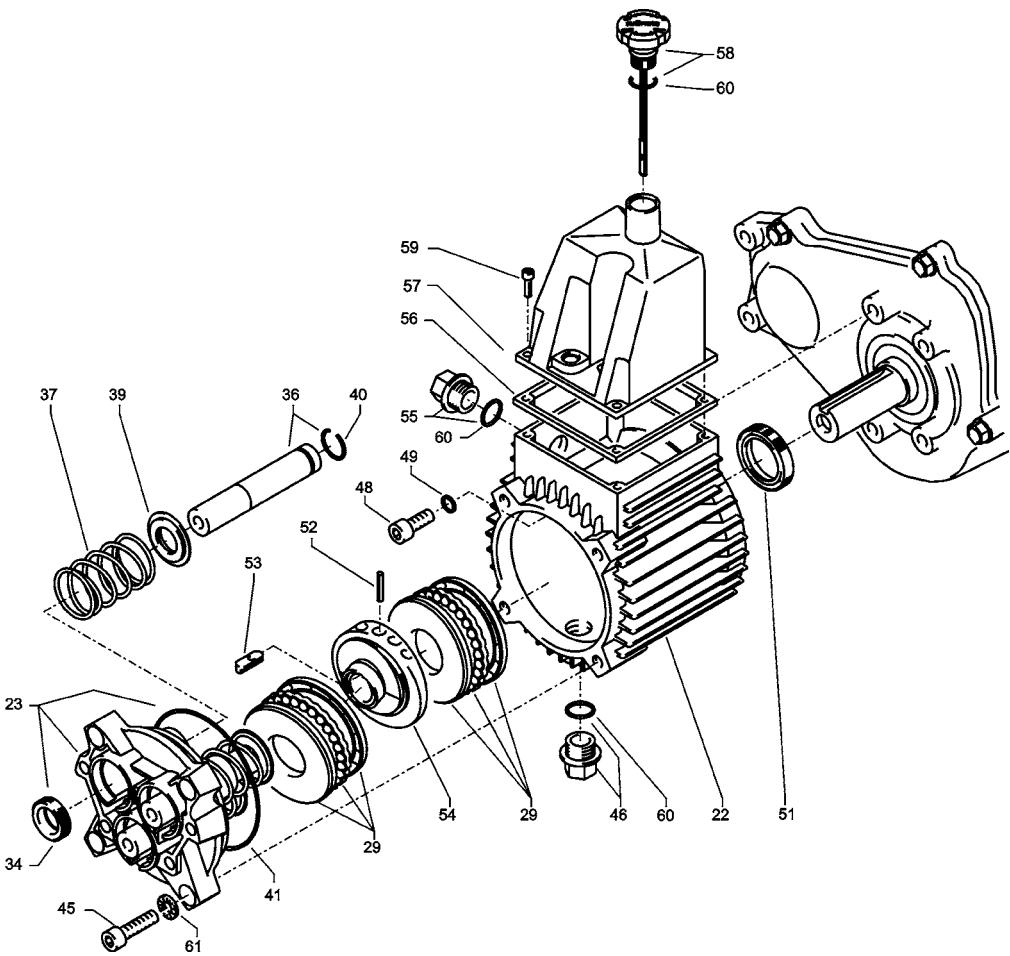


# KRÄNZLE B 10/200

## Spare parts list Profi-Jet B 10/200 with undercarriage Complete Assembly

No.	Description	Qty.	Ord.-No.
1	Wagen	1	41.101 7
1a	Wagen kompl. (Pos. 1 + 3)	1	41.101 5
2	Sechskantschraube M 8 x 25	2	44.137
2.1	Sechskantschraube M 8 x 30	2	44.033 2
3	Schubbügel	1	41.101 6
6	Unterlegscheibe 8,4 DIN125	8	41.515
7	Elastic-Stop-Mutter M 8	4	41.410
9	O-Ring 9,3 x 2,4	2	13.273
11	Hochdruckschlauch 10 m / DN 8 - 210 bar	1	41.081
12	Starlett II mit ISO-Handgriff	1	12.320 2
13	Lanze mit Vario-Jet 030	1	41.156 2
14	Lanze mit Schmutzkiller 030	1	41.073 8
16	Gummidämpfer	4	40.220
17	Starlock-Kappe	2	40.142
18	Rad luftbereift	2	40.141
19	Sechskantschraube M 6 x 40	2	40.133
20	Flügelmutter M 6	2	40.132
21	Mutter M 6	1	14.127 1
22	Innensechskantschraube M 6 x 35	1	40.131
23	Pistolenhalterung	1	40.130
26	Gummistopfen für Wagen	2	40.208 1
27	Bügel	1	41.101 6
28	Elastic-Stop-Mutter M 8	2	41.410
Motor Honda GX 200 LX			24.027 2

# **Transmission unit**

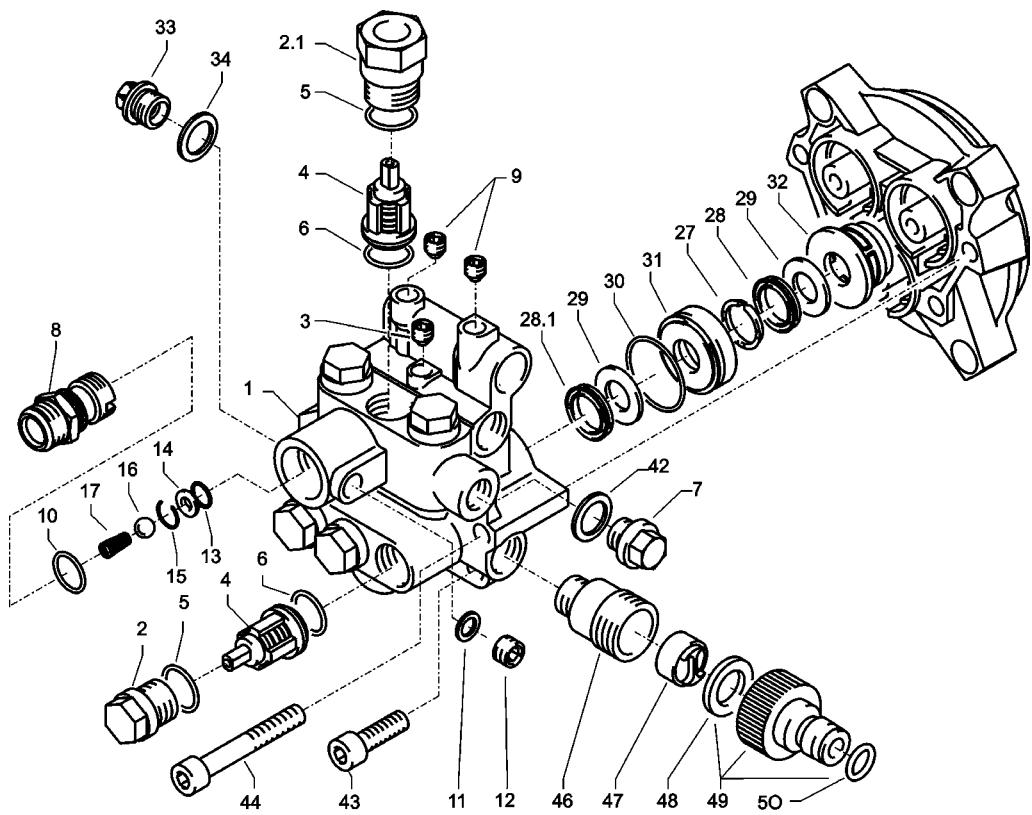


# Kräanzle B 10/200

## Spare parts list Profi-Jet B 10/200 Transmission unit

No.	Description	Qty.	Ord.-No.
22	Getriebegehäuse	1	41.481 1
23	Gehäuseplatte 15 mm	1	42.906
29	Axial-Rillenkugellager 3-teilig	2	43.486
34	Öldichtung 15 x 24 x 7	3	42.907
36	Plunger 15 mm	3	42.908
37	Plungerfeder	3	41.033
39	Federdruckscheibe 15 mm	3	42.909
40	Sprengring 15 mm	3	42.910
41	O-Ring Viton 88 x 2	1	41.021 1
45.1	Innensechskantschraube M 8 x 30	4	41.036 1
46	Ölablassstopfen M18x1,5 mit Magnet	1	48.020
48	Innensechskantschraube M 8 x 20	4	41.480
49	Kupferdichtring	4	41.500
51.1	Wellendichtring 25 x 35 x 5	1	41.019 5
52	Spannstift	1	14.148
53	Stufenkeil	1	41.183
54	Taumelscheibe 13°	1	41.028 6-13,0
55	Verschlussstopfen M 18 x 1,5	1	41.011
56	Flachdichtung	1	41.019 3
57	Deckel	1	40.518
58	Ölmessstab	1	42.520 2
59	Innensechskantschraube M 5 x 12	4	41.019 4
60	O-Ring 14 x 2	3	43.445
61	Sicherungsring	4	40.054
31	Leckagering 15 mm	3	42.905

# Valve housing



# Kräanzle B 10/200

## Spare parts list Profi-Jet B 10 / 200 Valve housing APG 15 mm

No.	Description	Qty.	Ord.-No.
1	Ventilgehäuse	1	42.163 3
2	Ventilstopfen	5	41.714
2.1	Ventilstopfen mit R1/4" IG	1	42.026 1
3	Dichtstopfen M 10 x 1	1	43.043
4	Ventile (grün) für APG-Pumpe	6	41.715 1
5	O-Ring 16 x 2	8	13.150
6	O-Ring 15 x 2	6	41.716
7	Dichtstopfen R 1/4" mit Bund	1	42.103
8	Ausgangsteil M22x1,5	1	40.522 1
9	Dichtstopfen M 8 x 1	2	13.158
10	O-Ring 18 x 2	1	43.446
11	Aluminium - Dichtring	3	13.275
12	Stopfen 1/4" AG mit ISK	1	13.387
13	O-Ring 11 x 1,5	1	12.256
14	Edelstahlsitz Ø 7	1	14.118
15	Sprengring	1	12.258
16	Edelstahlkugel Ø10	1	12.122
17	Rückschlagfeder „K“	1	14.120 1
27	Stützring rot 15mm	3	42.913
28	Manschette weich 15mm	3	42.902
28.1	Manschette Gewebe 15mm	3	42.902 1
29	Backring 15 x 24	6	42.903
30	O-Ring 28,3 x 1,78	3	40.026
31	Leckagering 15 mm	3	42.905
32	Zwischenring 15 mm	3	42.904 1
33	Verschlussstopfen R3/8"	1	14.113
34	Kupferring 17 x 22 x 1,5	1	40.019
42	Usit-Ring	1	42.104
43	Innensechskantschraube M 8 x 30	2	41.036 1
44	Innensechskantschraube M 8 x 55	2	41.017 1
46	Sauganschluss	1	41.016
47	Wasserfilter	1	41.046 1
48	Gummidichtung	1	41.047 1
49	Steckkupplung	1	41.047 2
50	O-Ring	1	41.047 3

### Repair kit Valves for APG-Pump 41.748 1

consisting of 6x No. 4; 6x No. 5; 6x No. 6

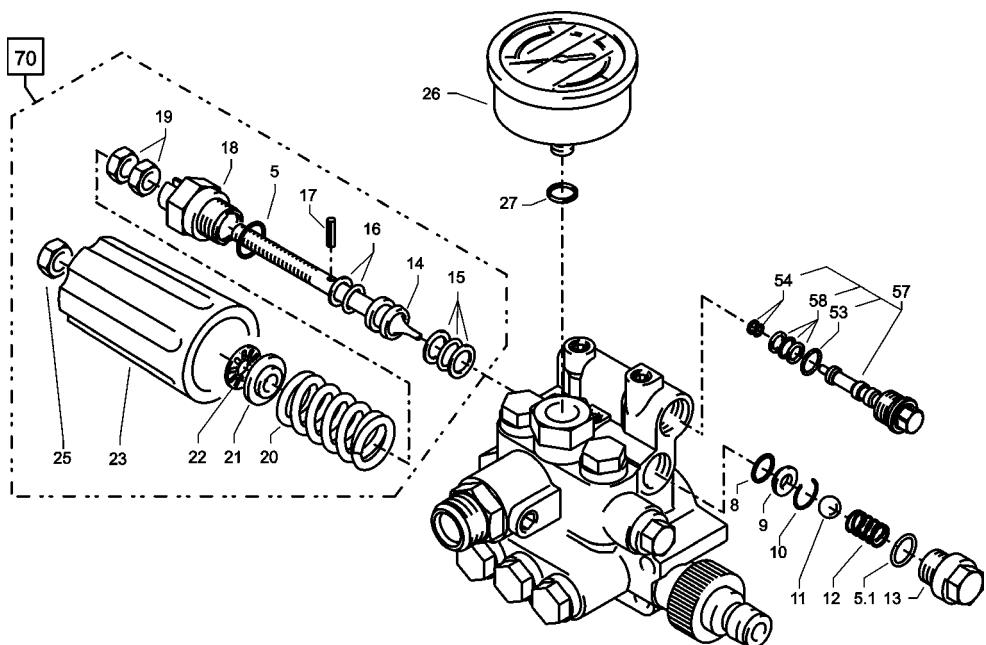
### Repair kit sleeves 15 mm 42.911

consisting of 3x No. 24; 3x No. 27;  
3x No. 28; 6x No. 29; 6x No. 30

### Valve housing compl. 42.912

with integr. ULH and pressure switch

# **Unloader**

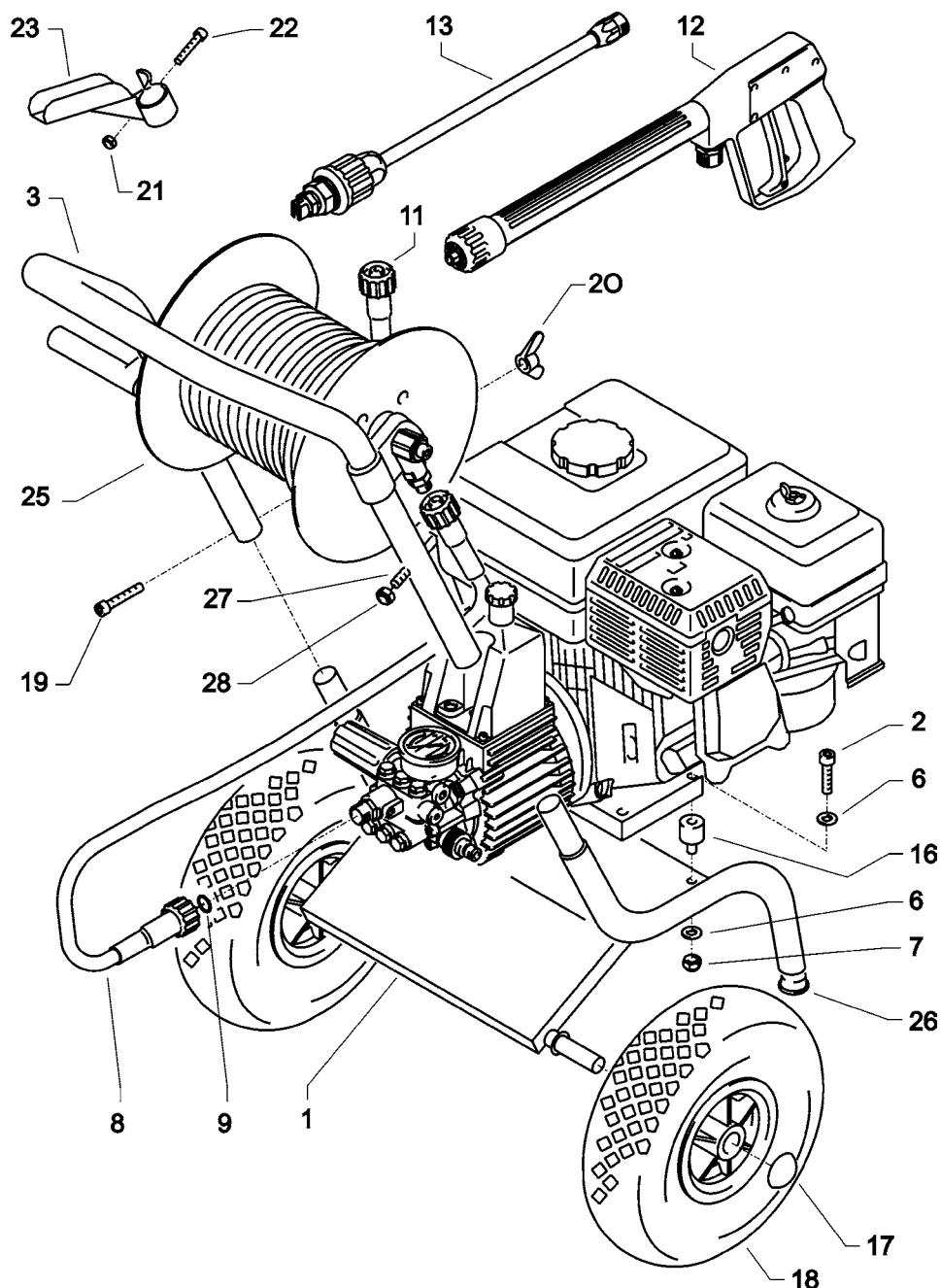


# Kräntze B 10/200

## Spare parts list Profi-Jet B 10 / 200 Unloader

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	Spanstift	1	14.148
18	Kolbenführung spezial	1	42.105
19	Kontermutter 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 0-250 Bar	1	15.039
27	Aluminium-Dichtring	2	13.275
50	O-Ring 3,3 x 2,4	1	12.136
53	O-Ring 14 x 2	1	43.445
54	Parbaks 4mm	1	12.136 2
57	Blindverschluss mit Dichtungen	1	44.551
58	Parbaks 7mm	1	15.013
<b>70</b>	<b>Piston valve compl. with Handwheel</b>		<b>43.444</b>

# **Complete Assembly**

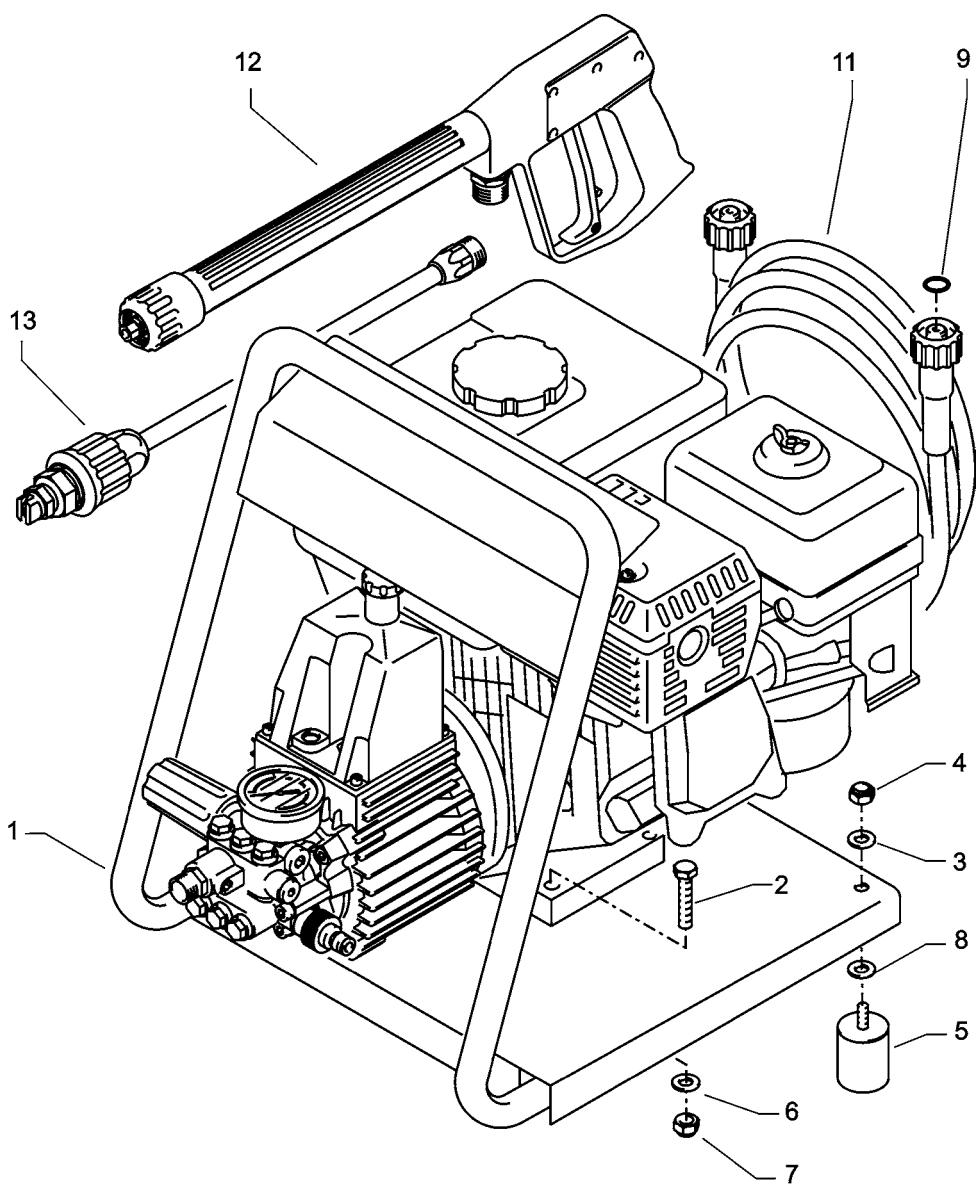


# Kräntze B 13/150

## Spare parts list Profi-Jet B 13/150 with undercarriage Complete Assembly

No.	Description	Qty.	Ord.-No.
1	Wagen	1	41.101 7
1a	Wagen kompl. (Pos. 1 + 3)	1	41.101 5
2	Sechskantschraube M 8 x 25	2	44.137
2.1	Sechskantschraube M 8 x 30	2	44.033 2
3	Schubbügel	1	41.101 6
6	Unterlegscheibe 8,4 DIN125	8	41.515
7	Elastic-Stop-Mutter M 8	4	41.410
8	Hochdruckschlauch 1m / DN 8 - 210 bar	1	41.265
9	O-Ring 9,3 x 2,4	2	13.273
11a	bei Gerät mit Schlauchtrommel Hochdruckschlauch 20 m / DN 8 - 210 bar	1	41.083
11b	bei Gerät ohne Schlauchtrommel Hochdruckschlauch 10 m / DN 6 - 210 bar	1	43.416
12	Pistole mit Verlängerung	1	41.053 1
13	Lanze mit Regeldüse 2505	1	41.053 2-D2505
16	Gummidämpfer	4	40.220
17	Starlock-Kappe	2	40.142
18	Rad luftbereift	2	40.141
19	Sechskantschraube M 6 x 40	2	40.133
20	Flügelmutter M 6	2	40.132
21	Mutter M 6	1	14.127 1
22	Innensechskantschraube M 6 x 35	1	40.131
23	Pistolenhalterung	1	40.130
24	Schraube 2,9 x 19	2	15.024
25	Schlauchtrommel	1	41.259
26	Gummistopfen	2	40.208 1
27	Bügel	1	41.101 6
28	Elastic-Stop-Mutter M 8	2	41.410
<b>Motor Honda GX 160 CX</b>			<b>24.027</b>
<b>Nachrüstsatz Schlauchtrommel</b>			<b>41.259 1</b>
mit 1m HD-Verbindungsschlauch			
mit 20m HD-Schlauch			

## **Complete Assembly**

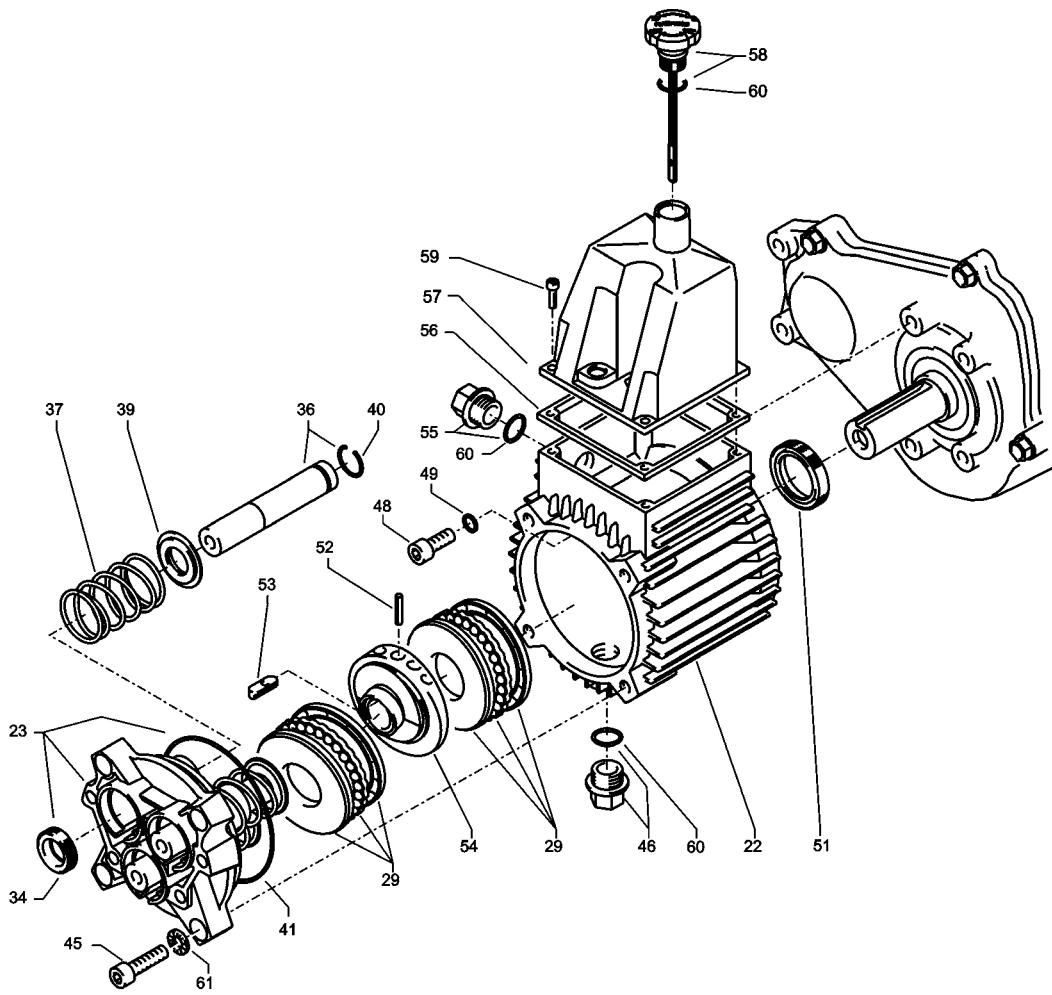


# **KRÄNZLE B 13/150**

## **Spare parts list Profi-Jet B 13/150 portable Complete Assembly**

No.	Description	Qty.	Ord.-No.
1	Tragbügel	1	41.098 3
2	Sechskantschraube M 8 x 40	4	44.033
3	Unterlegscheibe 6 mm DIN 125	4	41.511
4	Elastic-Stop-Mutter M 6	4	14.152 1
5	Gummifüße	4	41.513
6	Unterlegscheiben 8 mm DIN 125	4	41.515
7	Elastic-Stop-Mutter M 8	4	41.410
8	Unterlegscheiben 6 mm DIN 9021	16	41.516
9	O-Ring 9,3 x 2,4	2	13.273
11	Hochdruckschlauch 10 m / DN 6 - 210 bar1		43.416
12	Midi-Pistole mit Verlängerung	1	12.160
13	Lanze mit Regeldüse 2505	1	41.053 2-D2505
<b>Motor Honda GX 160 CX</b>			<b>24.027</b>

# **Transmission unit**

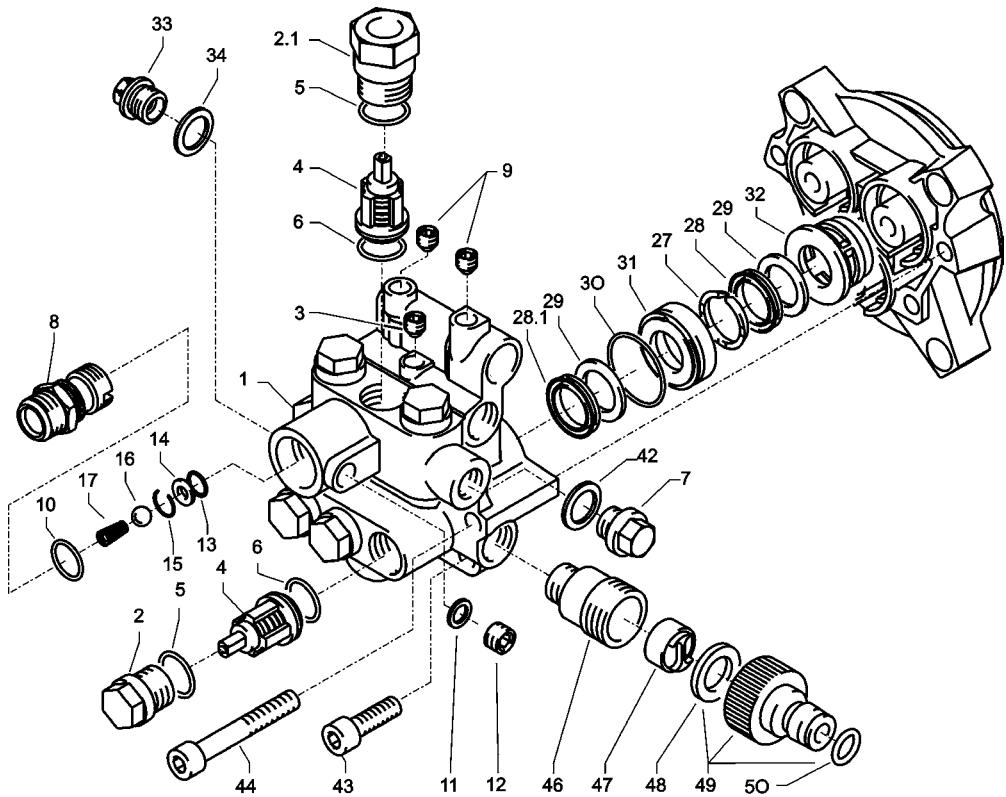


# KRÄNZLE B 13/150

## Spare parts list Profi-Jet B 13/150 Antrieb

No.	Description	Qty.	Ord.-No.
22	Getriebegehäuse	1	41.481 1
23	Gehäuseplatte 18 mm	1	41.020 2
29	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
45.1	Innensechskantschraube M 8 x 30	4	41.036 1
46	Ölablassstopfen M18x1,5 mit Magnet	1	48.020
48	Innensechskantschraube M 8 x 20	4	41.480
49	Kupferdichtring	4	41.500
51.1	Wellendichtring 25 x 35 x 5	1	41.019 5
52	Spannstift	1	14.148
53	Stufenkeil	1	41.183
54	Taumelscheibe 11,5°	1	41.028 6-11,5
55	Verschlussstopfen M 18 x 1,5	1	41.011
56	Flachdichtung	1	41.019 3
57	Deckel	1	40.518
58	Ölmessstab	1	42.520 2
59	Innensechskantschraube M 5 x 12	4	41.019 4
60	O-Ring 14 x 2	3	43.445
61	Sicherungsring	4	40.054
Motor Honda GX 160			24.027
Antrieb kpl. Pos. 22-61			41.481 2

# Valve housing



# KRÄNZLE B 13/150

## Spare parts list Profi-Jet B 13/150 Valve housing APG 18 mm

No.	Description	Qty.	Ord.-No.
1	Ventilgehäuse APG für 18 mm Plunger-Durchmesser	1	42.160 3
2	Ventilstopfen	5	41.714
2.1	Ventilstopfen mit R1/4" IG	1	42.026 1
3	Dichtstopfen M 10 x 1	1	43.043
4	Ventile (grün) für APG-Pumpe	6	41.715 1
5	O-Ring 16 x 2	8	13.150
6	O-Ring 15 x 2	6	41.716
7	Dichtstopfen R 1/4" mit Bund	1	42.103
8	Ausgangsteil M22x1,5	1	40.522 1
9	Dichtstopfen M 8 x 1	2	13.158
10	O-Ring 18 x 2	1	43.446
11	Aluminium - Dichtring	3	13.275
12	Stopfen 1/4" AG mit ISK	1	13.387
13	O-Ring 11 x 1,5	1	12.256
14	Edelstahlsitz Ø 7	1	14.118
15	Sprengring	1	12.258
16	Edelstahlkugel Ø10	1	12.122
17	Rückschlagfeder „K“	1	14.120 1
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 1
29	Backring	6	41.014
30	O-Ring 28,3 x 1,78	3	40.026
31	Leckagering	3	41.066
32	Zwischenring	3	41.015 2
33	Verschlussstopfen R3/8"	1	14.113
34	Kupferring 17 x 22 x 1,5	1	40.019
42	Usit-Ring	1	42.104
43	Innensechskantschraube M 8 x 30	2	41.036 1
44	Innensechskantschraube M 8 x 55	2	41.017 1
46	Sauganschluss	1	41.016
47	Wasserfilter	1	41.046 1
48	Gummidichtrung	1	41.047 1
49	Steckkupplung	1	41.047 2
50	O-Ring	1	41.047 3

### Repair kit Valves for APG-Pump

consisting of 6x No. 4; 6x No. 5; 6x No. 6

**41.748 1**

### Repair kit sleeves 18 mm

consisting of 3x No. 27; 3x No. 28;  
3x No. 28.1; 6x No. 29; 6x No. 30

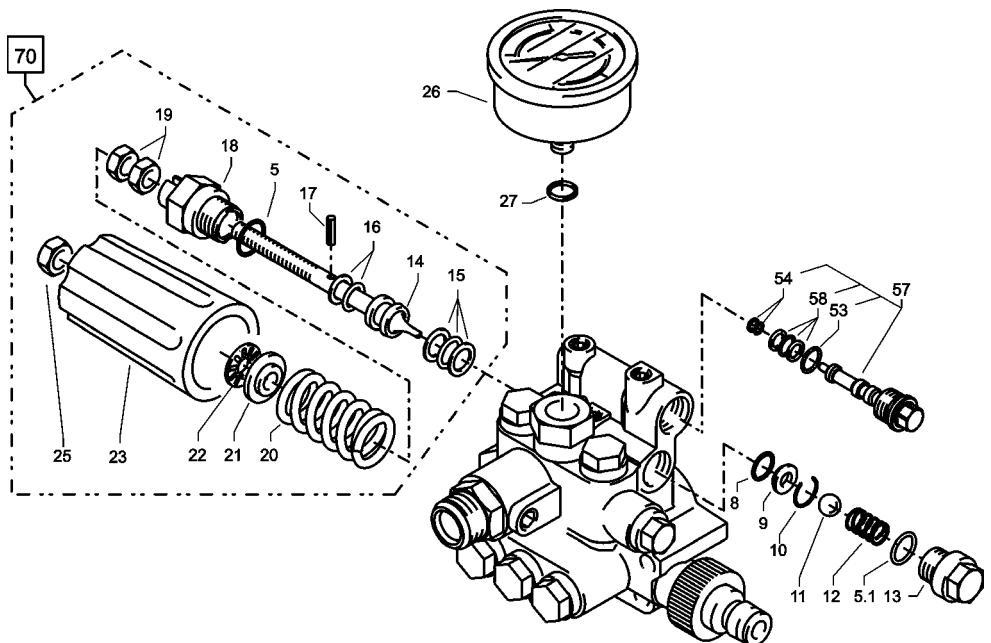
**41.049 2**

### Valvehousing compl.

with integr. ULH

**43.442**

# **Unloader**

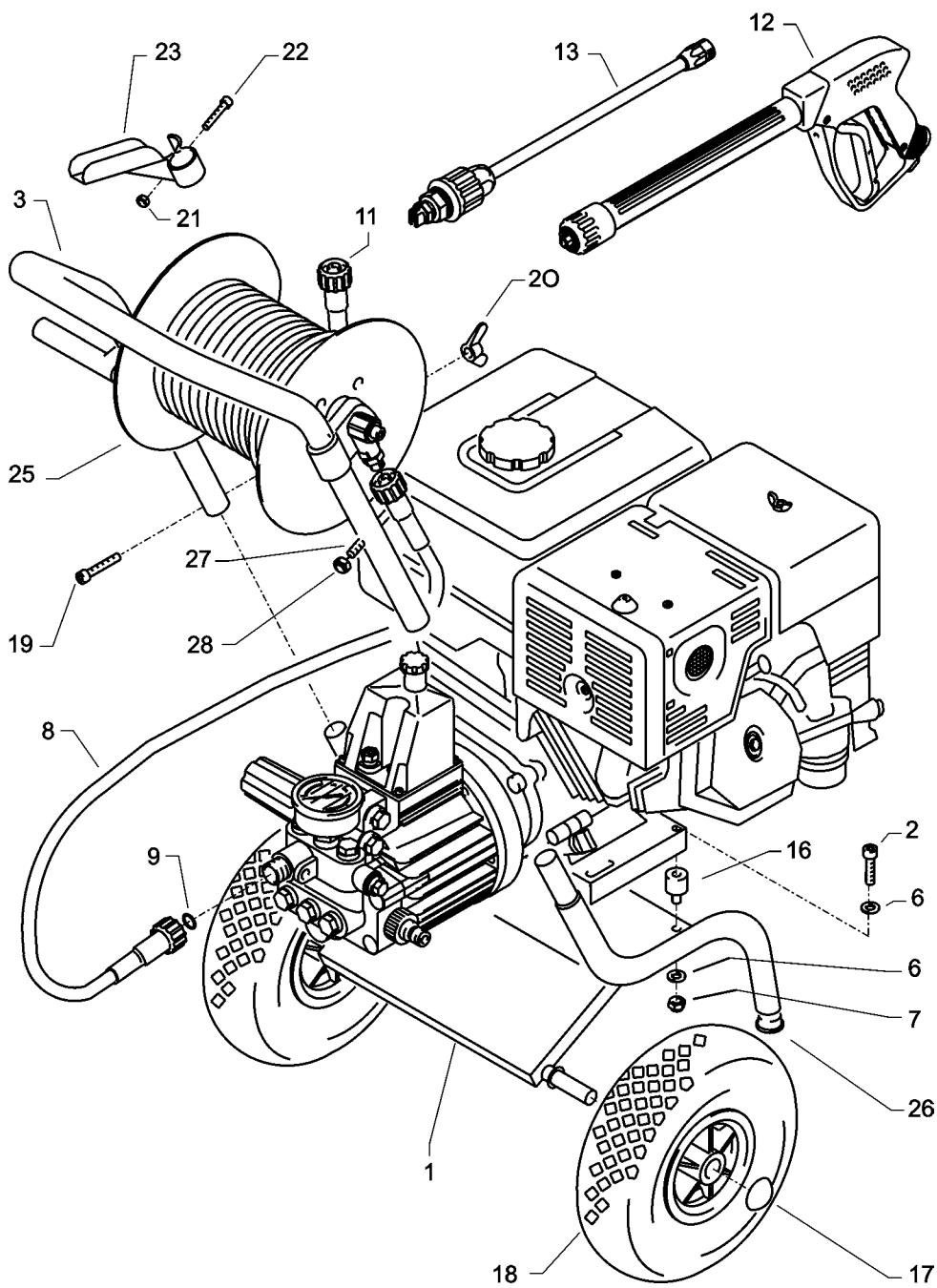


# Kräntze B 13/150

## Spare parts list Profi-Jet B 13 / 150 Unloader

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	Kontermutter 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 0-250 Bar	1	15.039
27	Aluminium-Dichtring	2	13.275
50	O-Ring 3,3 x 2,4	1	12.136
53	O-Ring 14 x 2	1	43.445
54	Parbaks 4mm	1	12.136 2
57	Blindverschluss mit Dichtungen	1	44.551
58	Parbaks 7mm	1	15.013
<b>70</b>	<b>Piston valve compl. with handwheel</b>		<b>43.444</b>

# **Complete Assembly**

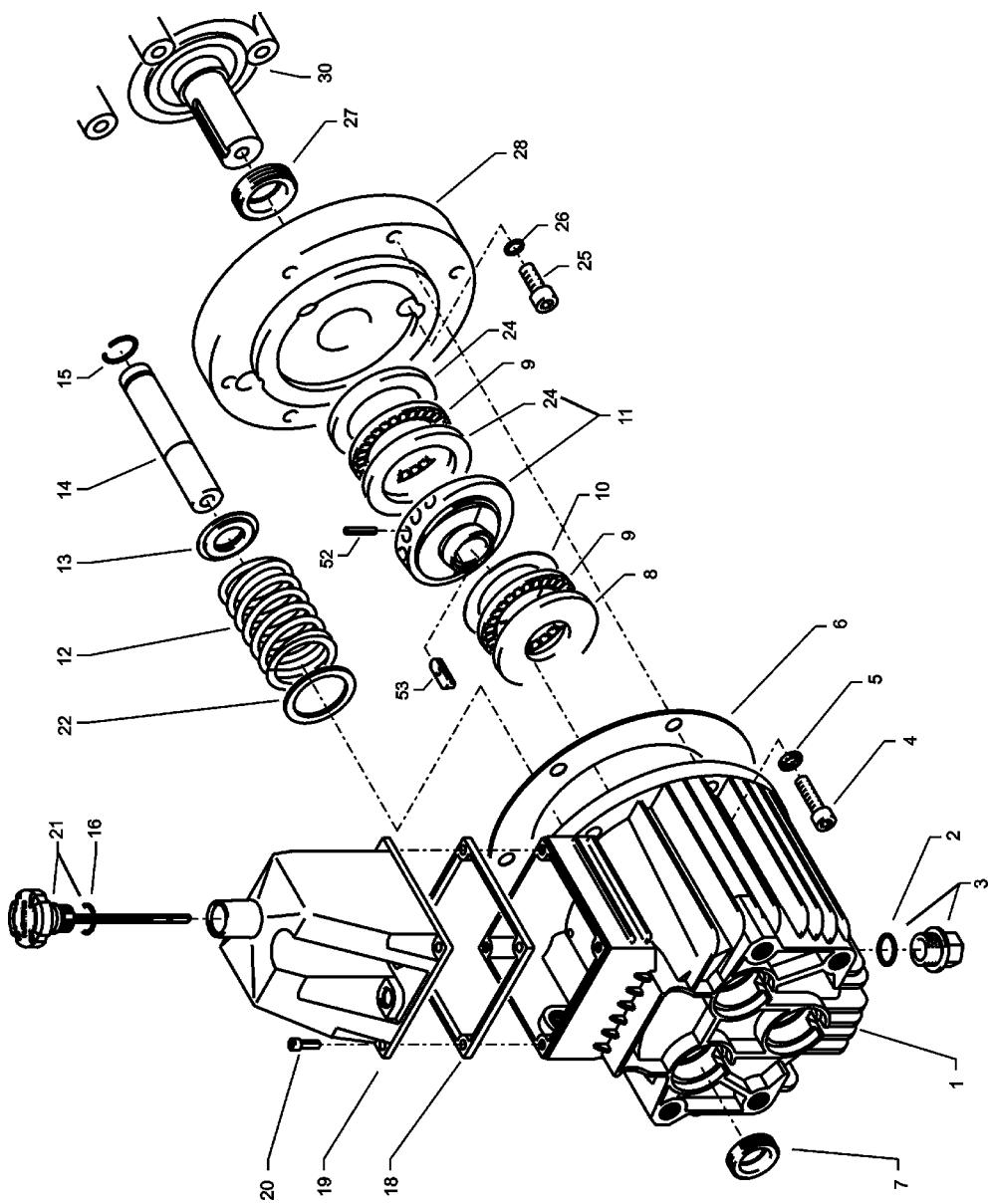


# KRÄNZLE B 16/220

## Spare parts list Profi-Jet B 16/220-B 16/250 with undercarriage Complete Assembly

No.	Description	Qty.	Ord.-No.
1	Wagen	1	41.101 7
1a	Wagen kompl. (Pos. 1 + 3)	1	41.101 5
2	Sechskantschraube M 8 x 30	2	40.221
2.1	Sechskantschraube M 8 x 35	2	44.033 3
3	Schubbügel	1	41.101 6
6	Unterlegscheibe 8,4 DIN 125	8	41.515
7	Elastic-Stop-Mutter M 8	4	41.410
8	Hochdruckschlauch 1m / DN 8 - 210 bar	1	41.265
9	O-Ring 9,3 x 2,4	3	13.273
11a	bei Gerät mit Schlauchtrommel Hochdruckschlauch 15 m / DN 8 - 210 bar	1	41.083
11b	bei Gerät ohne Schlauchtrommel Hochdruckschlauch 10 m / DN 8 - 210 bar	1	41.082
12	Starlett II mit ISO-Handgriff	1	12.320 2
13	Lanze mit Regeldüse 2505 (B16/220)	1	41.053 2-D2505
13.1	Lanze mit Regeldüse 25045 (B16/250)	1	41.053 2-D25045
14	Saugschlauch 3 m mit Saugfilter	1	15.038 3
16	Gummidämpfer	4	40.220
17	Starlock-Kappe	2	40.142
18	Rad luftbereift	2	40.141
19	Sechskantschraube M 6 x 40	2	40.133
20	Flügelmutter M 6	2	40.132
21	Mutter M 6	1	14.127 1
22	Innensechskantschraube M 6 x 35	1	40.131
23	Pistolenablage	1	40.130
24	Schraube 2,9 x 19	2	15.024
25	Schlauchtrommel kpl. ohne Schlauch	1	41.259
26	Gummistopfen	2	40.208 1
27	Bügel	1	41.101 6
28	Elastic-Stop-Mutter M 8	2	41.514
	<b>Speedcontrol with 1m Bowden cable</b>	<b>1</b>	<b>40.255 1</b>
	<b>Motor Honda GX 340 (B16/220)</b>	<b>24.026</b>	
	<b>Motor Honda GX 390 (B16/250)</b>	<b>24.026 1</b>	
	AQ-Pump compl.	40.265	
	<b>Upgrade kit hose drum</b>	<b>41.259 1</b>	
	with 1 m HP-Connection hose		
	with 20 m HP-hose		

# **Transmission unit**

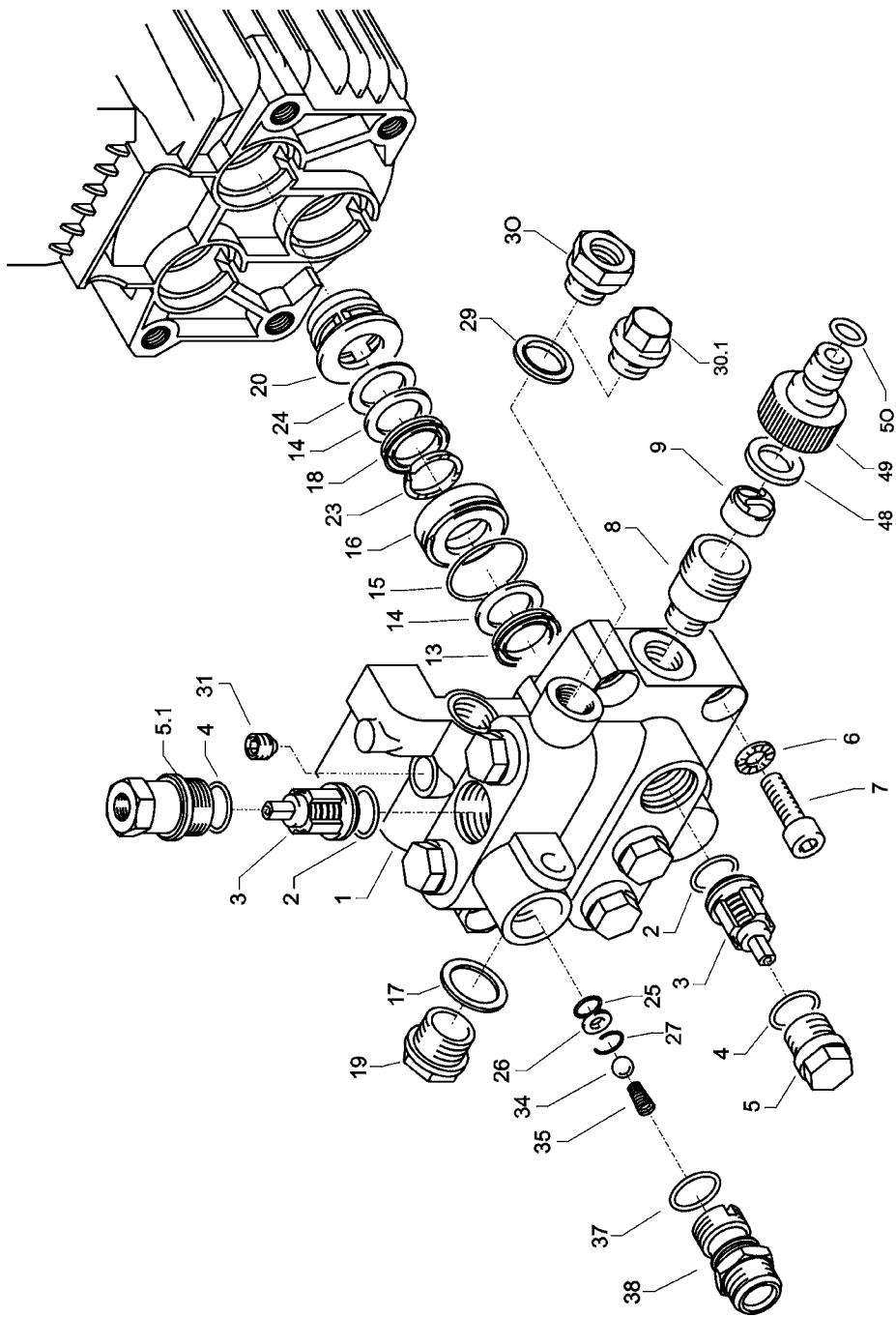


# KRÄNZLE B 16/220 - B 16/250

## Spare parts list Profi-Jet B 16/220-B16/250 Transmission unit AQ-Pump

No.	Description	Qty.	Ord.-No.
1	Ölgehäuse	1	40.501
2	O-Ring 13,94 x 2,62	1	42.167
3	Ölablassstopfen R 3/8"	1	42.019
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	Taumescheibe 8,0°	1	40.055-8,0
12	Plungerfeder	3	40.506
13	Fedderdruckscheibe	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	41.019.3
19	Deckel Ölgehäuse	1	40.518
20	Innensechskantschraube M 5 x 12	4	41.019.4
21	Ölmessstab	1	42.520.2
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	1	24.026
52	Spannstift	1	14.148
53	Stufenkeil	1	40.222

# Valve housing

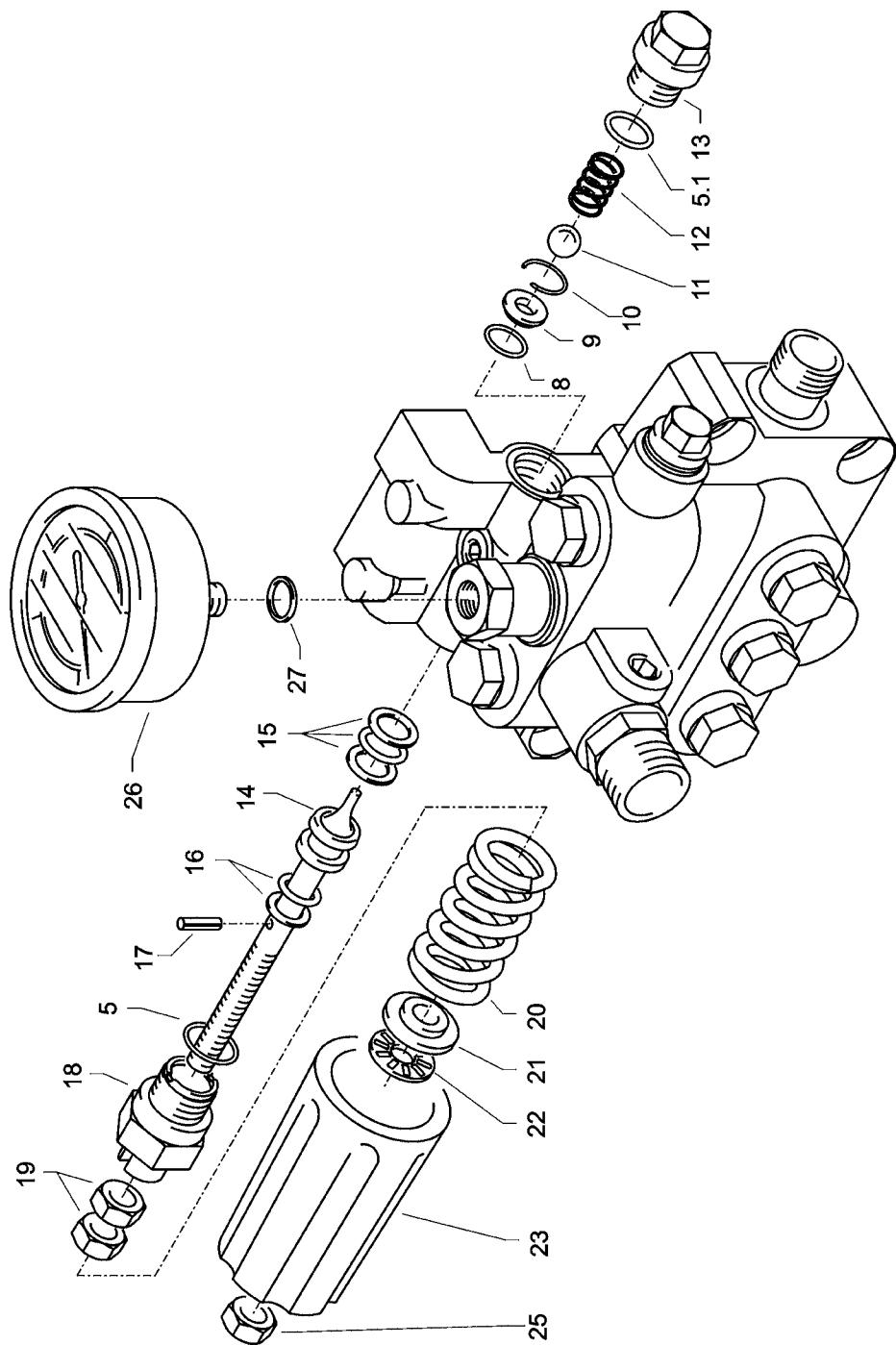


# KRÄNZLE B 16/220 - B 16/250

## Spare parts list Profi-Jet B 16/220-B 16/250 Valve housing AQ-Pump

No.	Description	Qty.	Ord.-No.	No.	Description	Qty.	Ord.-No.
1	Ventilgehäuse AQ mit integr. UL ohne integri. Druckschalter	1	40.521	31	Dichtstopfen M 10 x 1	1	43.043
2	O-Ring 18 x 2	6	40.016	34	Edelstahlkugel Ø10	1	12.122
3	Einlass- Auslass- Ventil	6	42.024	35	Rückschlagfeder „K“	1	14.120
4	O-Ring 21 x 2	6	42.025	37	O-Ring 18 x 2	1	43.446
5	Ventilstopfen	5	42.026	38	Ausgangsstück Injektor ST30 M22x1,5	1	40.522
5.1	Ventilstopfen mit R 1/4“ IG	1	42.026	48	Gummidichtung für Steckkupplung	1	41.047
6	Sicherungsring	4	40.032	49	Steckkupplung für Wassereingang	1	41.047
7	Innensechskantschraube M 12 x 45	4	40.504	49.1	Steckkupplung kpl.	4	41.047
8	Sauganschluss R 1/2“ AG	1	41.016	50	Pos. 48 - 50	1	41.047
9	Wassereingangsfilter	1	41.046	2	O-Ring	1	41.047
13	Gewebemanschette	3	40.023	<b>Repair kit sleeves</b>			
14	Backring 20 mm	6	40.025	consisting of: 3x No. 13; 6x No. 14;			
15	O-Ring 31,42 x 2,62	3	40.508	3x No. 15; 3x No. 16; 3x No. 18;			
16	Leckage ring 20 x 36 x 13,3	3	40.509	3x No. 20; 3x No. 23			
17	Cu-Dichtiring 21 x 28 x 1,5	1	42.039				
18	Gummimanschette	3	40.512				
19	Verschluss schraube R 1/2“	1	42.032	<b>Repair kit sleeves without</b>			
20	Distanzring mit Abstützung	3	40.507	<b>brassparts</b> consisting of:			
23	Druckring 20 mm	3	40.021	3x No. 13; 6x No. 14; 3x No. 15;			
24	Zwischenring 20 mm	3	40.516	3x No. 18; 3x No. 23			
25	O-Ring 11 x 1,5	1	12.256				
26	Edelstahlsitz Ø 7	1	14.118				
27	Sprengring	1	13.147	<b>Repair kit Valves</b>			
29	Dichtring 17 x 22 x 1,5 (Kupfer)	1	40.019				
30	Anschlussmuffe 3/8“ AG x 3/8“ G bei Ausführung mit Drehzahlregulierung	1	13.136	consisting of:			
30.1	Verschlussschraube 3/8“ AG bei Ausführung ohne Drehzahlregulierung	1	40.018	6x No. 2; 6x No. 3; 6x No. 4			

# **Unloadervalue**

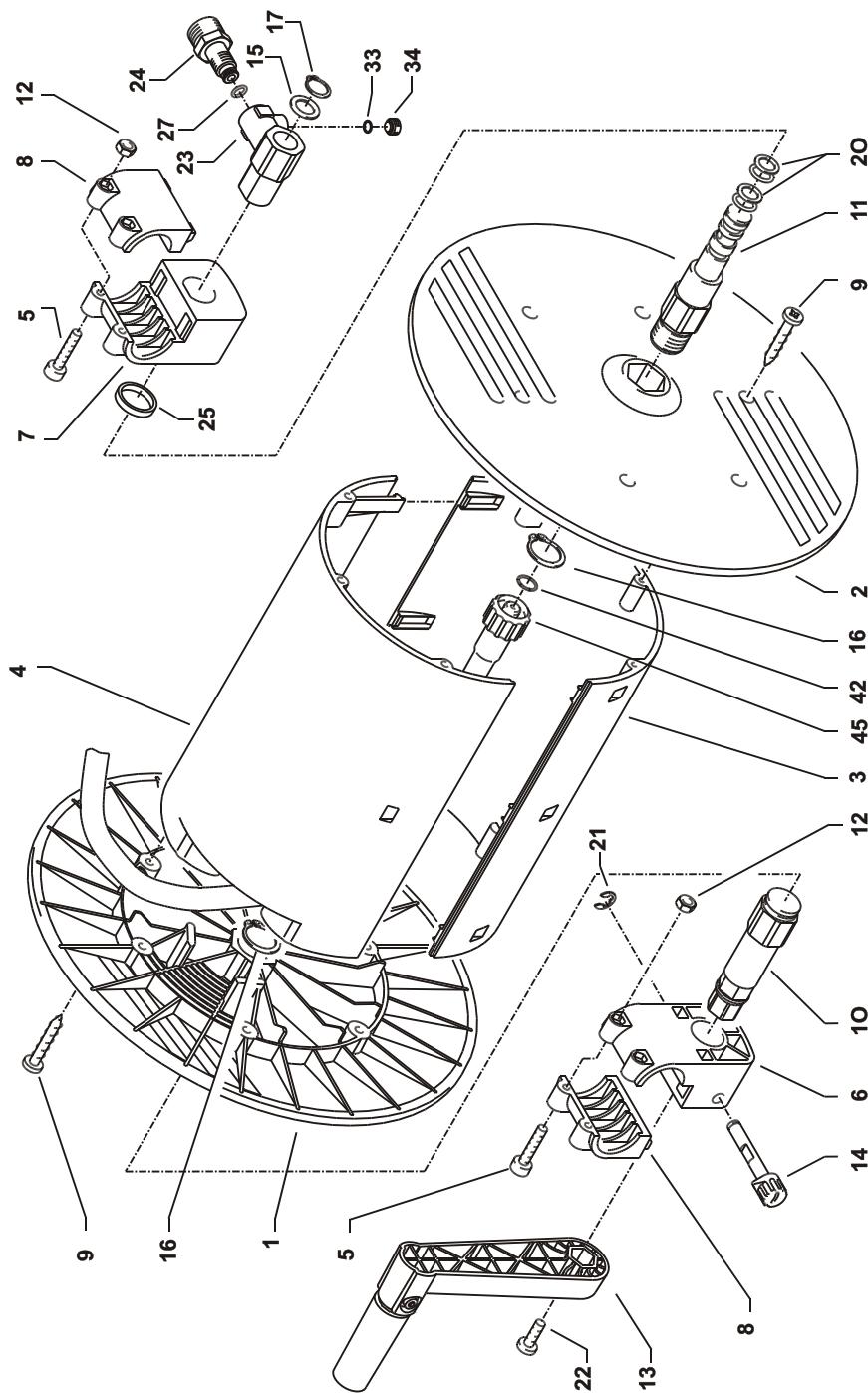


# KRÄNZLE B 16/220 - B 16/250

## Spare parts list Profi-Jet B 16/220 -B 16/250 Unloadervalve 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	Edelstahl sitz	1	14.118
10	Sicherungsring	1	13.147
11	Edelstahlkugel	1	13.148
12	Edelstahlfeder	1	14.119
13	Verschluss schraube	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	Nadel Lager	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-Dicht ring	2	13.275

# Hose drum



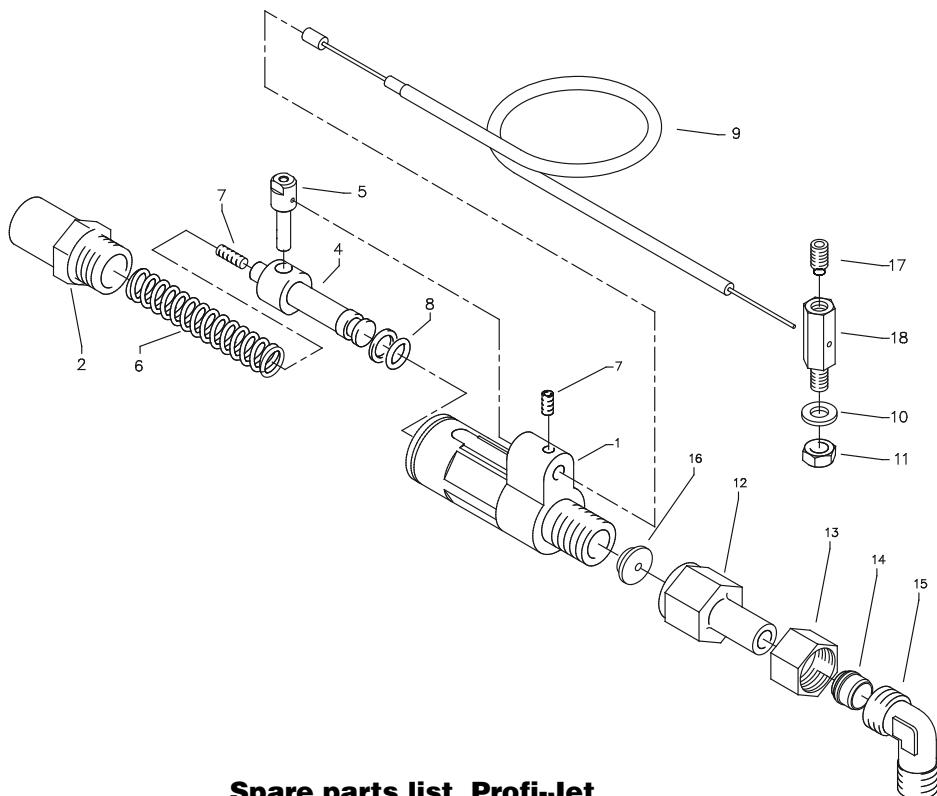
# KRÄNZLE B13/150;B16/220;B16/250

## Spare parts list Profi-Jet B 13/150; B 16/220 -B 16/250

### 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 Wasserleitung	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
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 Wasserleitung	1	40.311		<b>Hose Drum kpl.</b>		
12	Elastic-Stop-Mutter M 4	4	40.111		without Schlauch		
13	Handkurbel	1	40.320				
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				

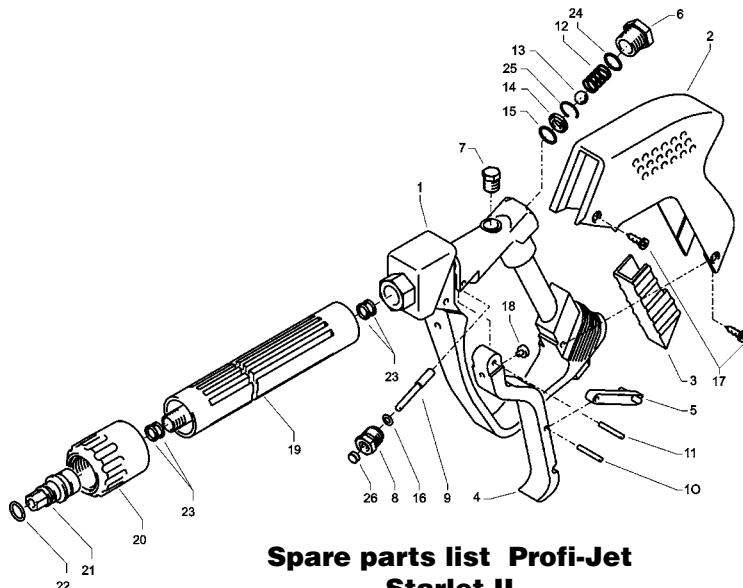
# **Speed control**



**Spare parts list Profi-Jet  
Speed control**

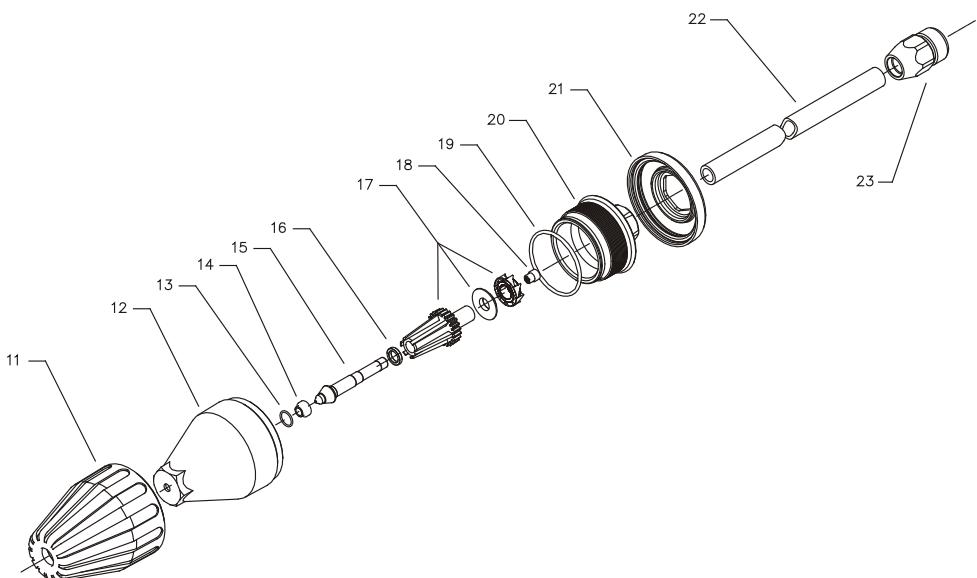
No.	Description	Qty.	Ord.-No.
1	Grundteil	1	42.581
2	Druckhülse	1	42.584
4	Steuerkolben	1	42.582
5	Querbolzen	1	42.583
6	Druckfeder 2,0 x 9,5 x 70	1	42.587
7	Gewindestift M4 x 6 DIN 913-A2	1	42.592
8	Parbaks 7 mm	1	15.013
9	Bowdenzug	1	42.586
10	Unterlegscheibe 6,4 DIN 125	1	50.189
11	Sechskantmutter M6	1	14.152 1
12	Anschlussmuffe Drehzahlregulierung	1	42.585
13	Überwurfmutter	1	40.075
14	Klemmhülse	1	40.074
15	Winkelverschraubung 3/8" x 12l	1	44.092
16	Drosselscheibe	1	42.589
17	Gewindestift M 6 x 12 DIN915	1	42.590
18	Klemmbolzen	1	42.591

# **Starlet II - Pistole**



**Spare parts list Profi-Jet  
Starlet II**

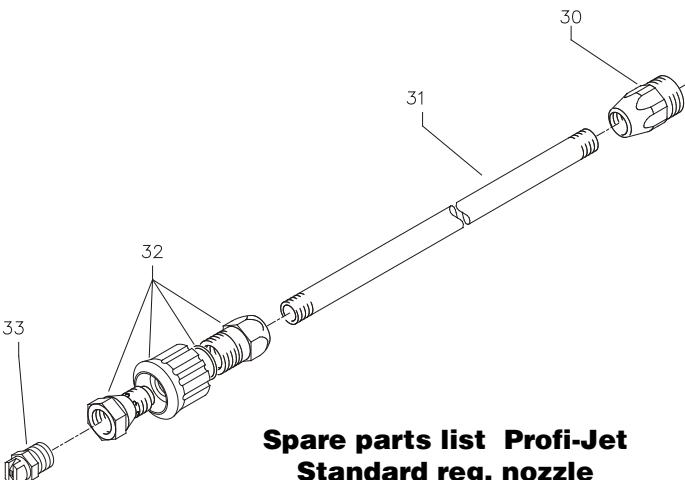
No.	Description	Qty.	Ord.-No.
1	Ventilkörper mit Handgriff	1	12.294
2	Schutzhülse	1	12.295
3	Abdeckschutz	1	12.296
4	Abzugshebel grau	1	12.298 3
5	Sicherungshebel	1	12.149
6	Abschlusssschraube M 16 x 1	1	12.247
7	Stopfen	1	12.287
8	Gewindeführungshülse 3mm R 1/4" AG	1	12.250 1
9	Aufsteuerbolzen abgesetzt 3mm	1	12.284 1
10	Stift	1	12.148
11	Lagernadel	1	12.253
12	Edelstahlfeder	1	12.246
13	Edelstahlkugel	1	12.245
14	Edelstahlsitz	1	14.118
15	O-Ring 11 x 1,44	1	12.256
16	O-Ring 2,84 x 2,62	1	12.136 1
17	Blechschraube 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
26	Gleitbüchse 3mm	1	12.289 1
<b>Starlet - Gun with extention</b>			<b>12.320 2</b>
<b>Repair kit „Starlet II“</b>			<b>12.299</b>
consisting of No. 9,10,13,14,15			



## **Spare parts list Profi-Jet Turbokiller 055**

No.	Description	Qty.	Ord.-No.
11	Sprühköperschutz	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	1	41.532
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 055 compl. with Lance		41.072 4
	Rep. kit Turbokiller 055		41.097 1

# **Standard regulation nozzle**



**Spare parts list Profi-Jet  
Standard reg. 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	Flat spray nozzle 2505	1	26.001

Please specify size of nozzle

## **Guarantee**

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

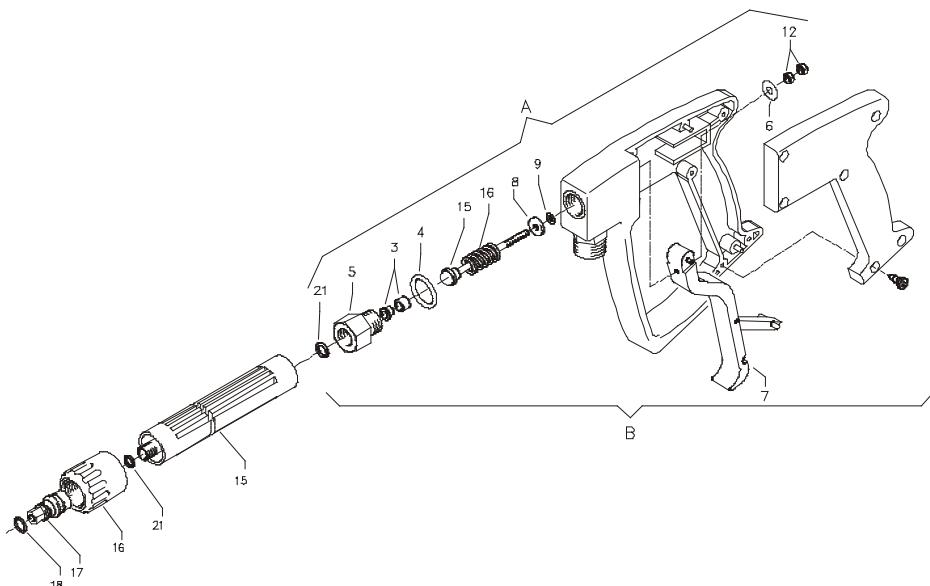
The instructions in our operating manual must be complied with. The operating instructions form part of the guarantee. The Guarantee is void if other parts are used than genuine Kränzle accessory parts or genuine Kränzle spare parts.

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](http://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.

# MIDI - Gun



## Spare parts list Profi-Jet B 13/150 Midi-Gun

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

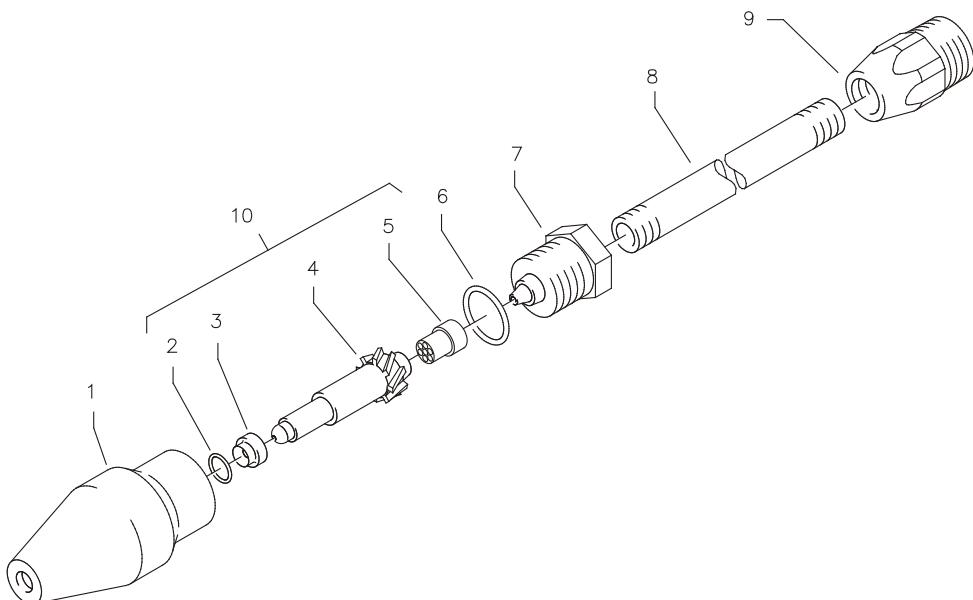
**Midi-Gun** with extention

**12.160**

**Repair kit „Pico“**

**12.158**

consisting of 1x No.:  
3.1, 3a, 3b, 4, 8, 9, 12, 21, 22



## Spare parts list Profi-Jet B 10/200; B 13/150 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	Düse 045 (B13/150)	1	41.523
4.1	Düse 03 (B 10/200)	1	41.523 4
5	Stabilisator	1	41.524
6	O-Ring	1	40.016 1
7	Sprühstopfen	1	41.526
8	Rohr 400 mm 2x M 12 x 1	1	41.527
9	ST 30-Nippel M 22 x 1,5 / M 12 x 1 ISK	1	13.363

**Repair kit Dirtkiller 045 (B13/150)** **41.097**  
consisting of No. 2; 3; 4; 5

**Repair kit Dirtkiller 03 (B13/150)** **41.096 1**  
consisting of No. 2; 3; 4.1; 5

**Dirtkiller 045 with Lance (B13/150)** **41.072 5**  
**Dirtkiller 03 with Lance (B10/200)** **41.073 8**

# ***Inspiration 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**

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

Inspection:

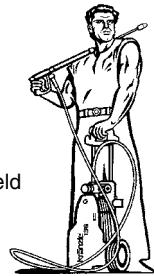
Liquid spray equipment should be inspected for safe operation by a qualified person whenever necessary, but no less than every 12 months. The maker's or supplier's instructions must be followed. The inspection intervals may be extended if the equipment is not in active use.

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:

**Kräntze B 10/200; B 13/150  
Kräntze B 16/220; B 16/250**

(techn. documentation available from):

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

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

**Machine guideline 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:      **100 dB (A)**  
                                  guaranteed:      **103 dB (A)**

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

Applied specifications and  
standards:      **EN 60 335-2-79 :2009  
EN 55 014-1 :2006  
EN 61 000-3-2 :2006  
EN 61 000-3-3 :2008**

Bielefeld, den 21.12.09

Droitsch  
(Managing Director)

Kräntze - world-wide:  
Technical perfection, top design.

kränzle®



I. Kränzle GmbH  
Elpe 97  
D - 33605 Bielefeld

Reprint only allowed with the authorisation of Kränzle.

As date of 01.03.2011

Subject to technical modifications. Order no. 30.212.1

www.kränenze.com