

## **EN** Operating manual with spare parts list

High-pressure cleaner

**B 170 T**

**B 230 T**

**B 240 T**

**B 270 T**



This manual is a translation of the original manual. Read and conform safety instructions before use! Keep instructions in a safe place for later use and pass them on to any future user.



## 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.

## Description



### Construction

The KRÄNZLE B 170 T + B 230 T + B 240 T + B 270 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 !

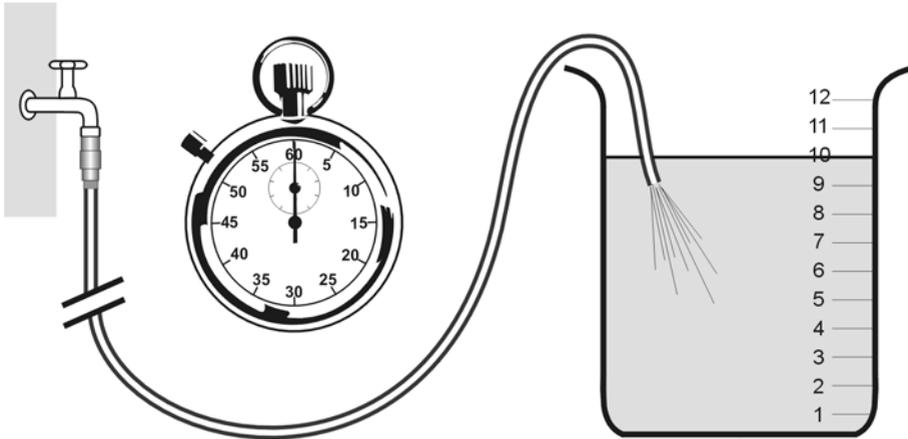


When running your high pressure cleaner with hot water of 70° C (with B 230 T 50°) raised temperatures occur. Do not touch the machine without safety gloves.

## 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 turn over the unit during transport, possible return transport or operation!** In this case, engine oil will get into the carburettor and the engine will have to be cleaned thoroughly before it can be used again.
  - **Operate the unit horizontally!** If the unit is tilted more than this when starting the engine or during operation, the low oil switch of the engine may switch off the engine or make it impossible to start the engine.

### 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.

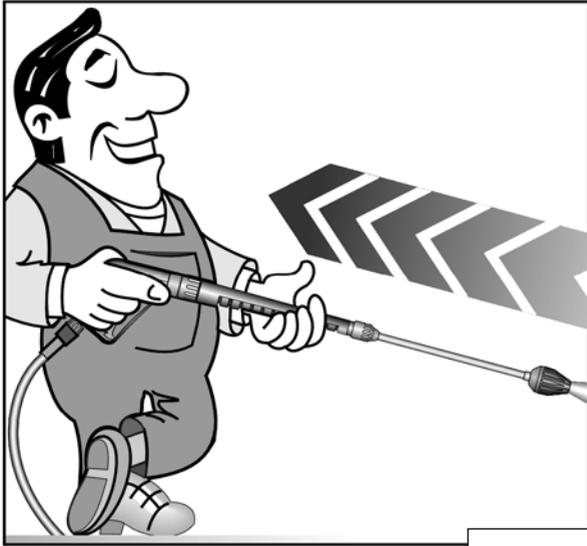
### High pressure hose and spray device

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.

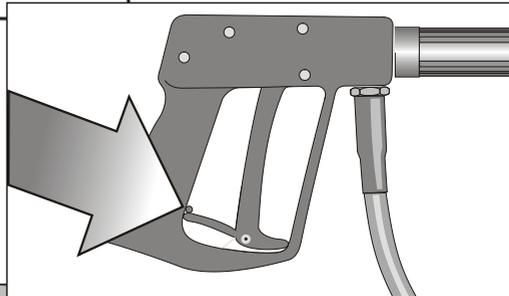


## Safety notes

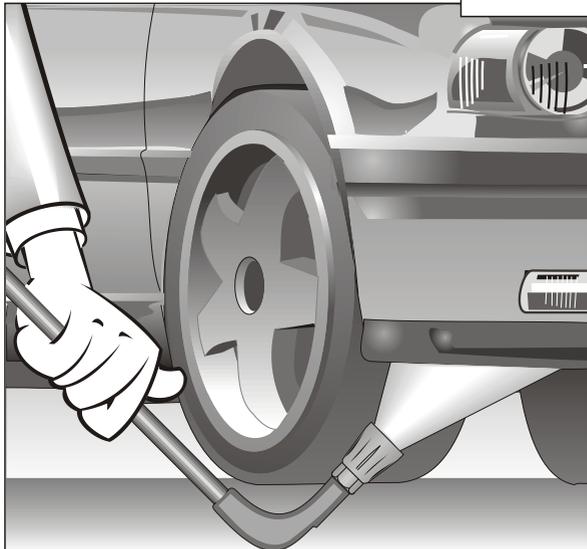


As to the recoil  
- see notice on  
page 2!

Apply the safety catch on the spray  
gun after each use, in order to pre-  
vent unintentional spraying!



Always aim the underbody  
lance. Note when using an  
angled underbody lance,  
like for example lance No.  
41075, that there is a cer-  
tain 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 con-  
nection



2. Spray lance with high pressure  
nozzle, flat spray



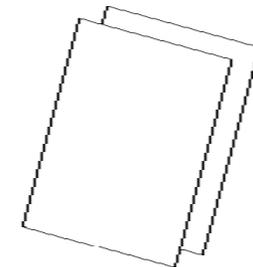
3. Turbokiller



4. KRÄNZLE - high-pressure cleaners  
B 170 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

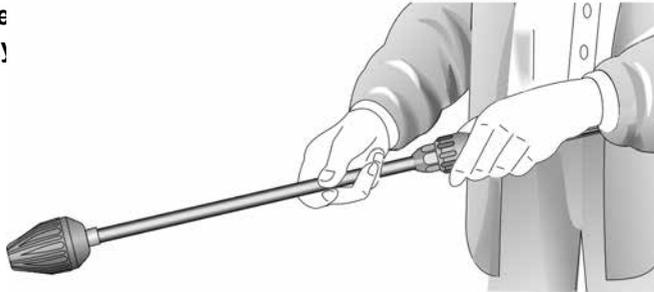


## Preparation for use

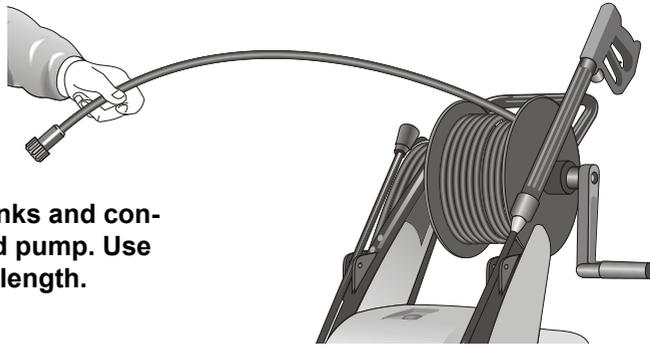
1. Check oil level  
( Pump and motor)



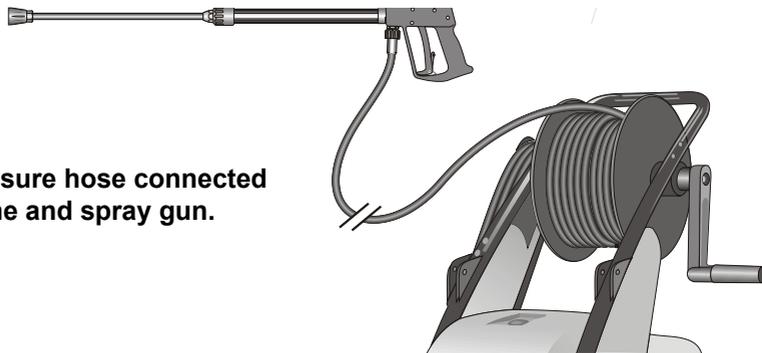
2. Connect high pressure  
Turbokiller to the spray



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.



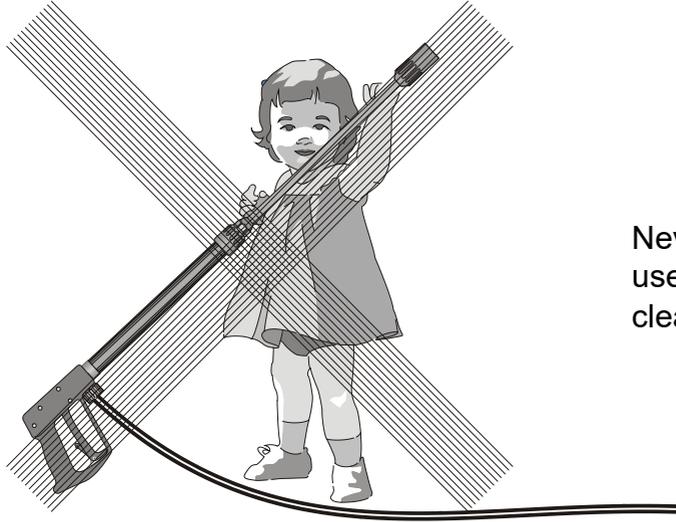
5. Maximum induction height 2.5 m - see technical data on page 2.

Water

### To shut down the pump:

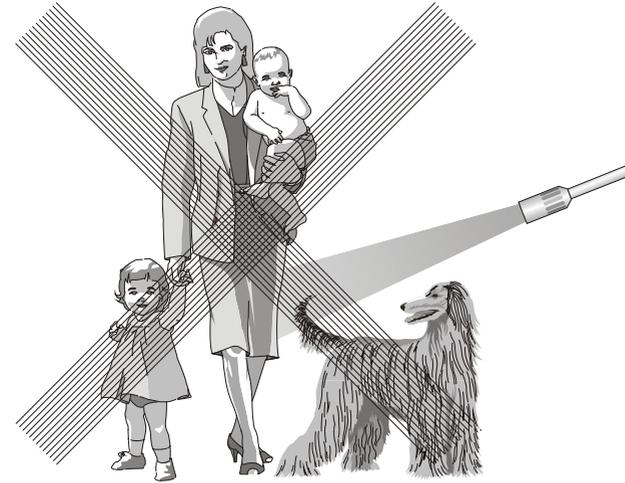
1. Switch off the machine
2. Cut off the water supply
3. Open the spray gun briefly until the pressure is released
4. Apply the safety catch on the spray gun
5. Remove the water hose and high pressure hose
6. Drain the pump: switch on the motor for approx. 20 seconds
7. Winter: store the pump in rooms above 0° C
8. Clean the water filter

This is prohibited !



Never allow children to use the high pressure cleaner !

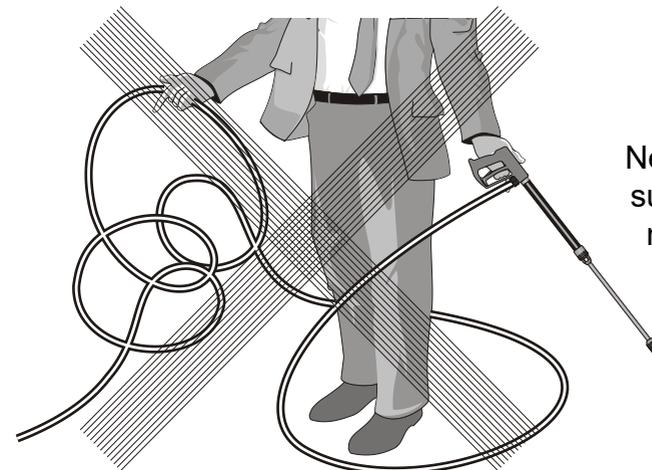
This is prohibited !



Never direct the water jet at people or animals !



Never direct the water jet at the machine itself !



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

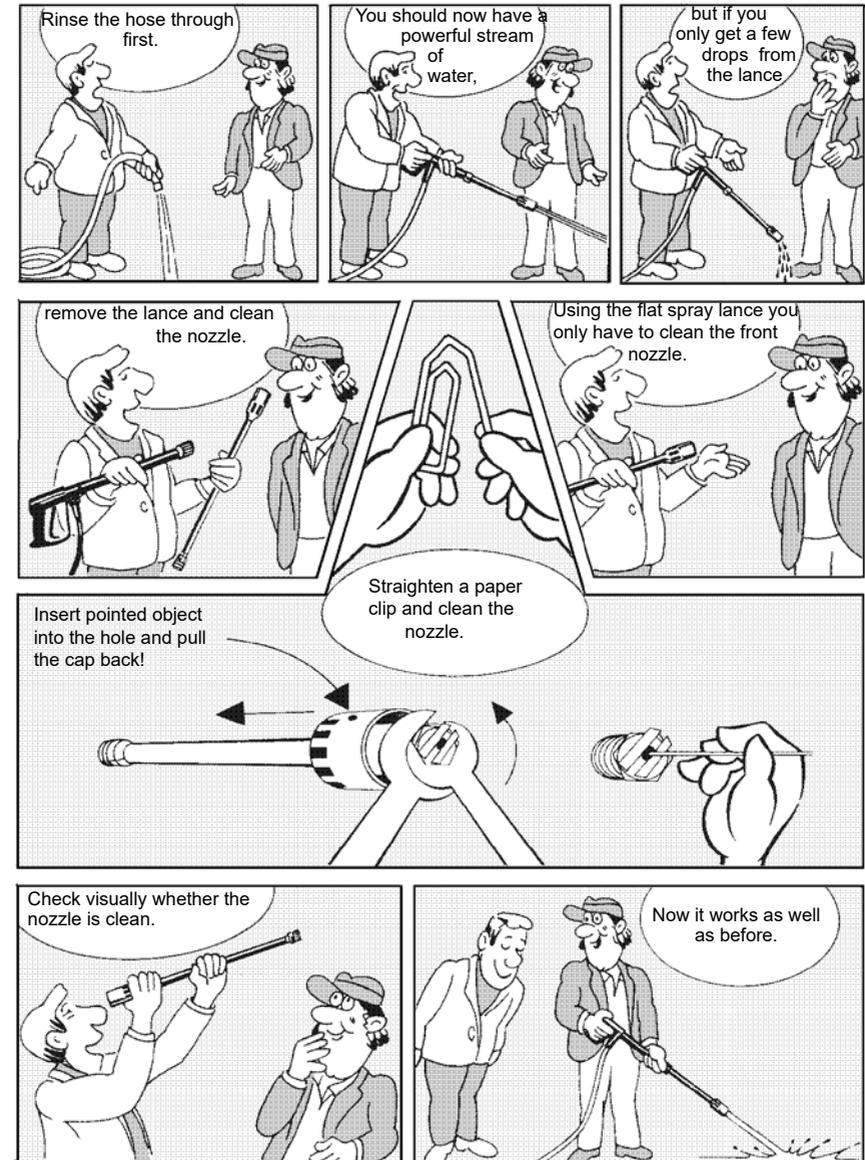
## Nozzle dirty or sticky!

- 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.



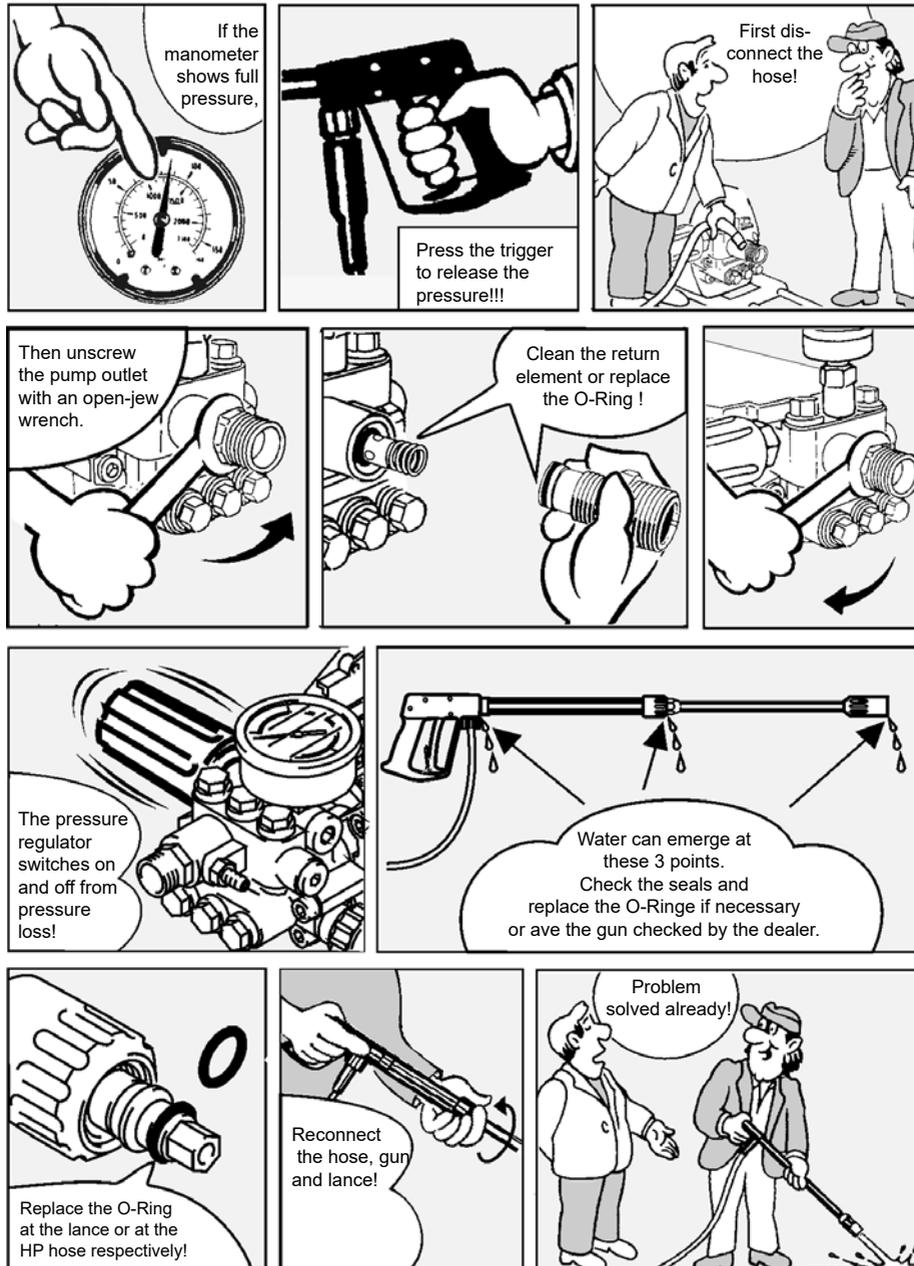
## The nozzle is blocked!

- No water but the gauge shows full pressure !



## Stopping leaks from hose or gun

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



## 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 B 170 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: 0,3 l - Motor oil W 15/40

### Oil change for high-pressure pump B 230 T / B 240 T / B 270 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 oil-plug 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

## Oil leak

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

We hereby declare,  
that the high-pressure models:  
Nominal flow

**Kränzle B 170 T, 230 T, 240 T, 270 T**

**B 170 T: 750 l/h**  
**B 240 T; B 270 T: 960 l/h**  
**B 230 T: 1200 l/h**

(techn. documentation available from):

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

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

**Machine guideline 2006/42/EEC**  
**Specification for electromagnetic com-  
patibility 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:  
guaranteed:

**100 dB (A)**  
**103 dB (A)**

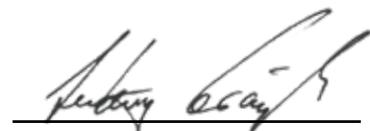
Applied conformity evaluation proce-  
dures

**annex V, noise directive 2005/88/EC**

Applied specifications and  
standards:

**EN 60 335-2-79 :2015**  
**EN 55 014-1 :2006**  
**EN 61 000-3-2 :2014**  
**EN 61 000-3-3 :2013**

Josef Kränzle GmbH & Co. KG  
Rudolf-Diesel-Straße 20  
D - 89257 Illertissen



Ludwig Kränzle  
(Managing director)

Illertissen, March 30, 2017

The warranty obligation of Josef Kränzle GmbH & Co. KG towards the dealer  
from whom you have purchased this Kränzle high-pressure cleaner (= product)  
applies to material faults only such as material and manufacturing defects.

Defects attributable to long and frequent use of the product, typically arising  
due to the age of the high-pressure cleaner and intensity of its use are defined  
as normal wear in respect of product components. Purchaser's rights to assert  
claims for such defects are ruled out. Parts subject to wear include in particular  
the pressure gauge, nozzle, valves, sleeves, high-pressure hose and spray equipment.

The product is to be operated in conformity with this operating manual.  
The operating manual is deemed to be part of the warranty provisions.

Any changes made to the safety devices of the product or instances of  
maloperation – such as exceeding the temperature and speed limits,  
undervoltage, insufficient water supply and sewage water, or failure to  
use the product for the intended purpose – may result in damage occurring  
to the product. Such damage is not deemed to constitute any material defect.

Should the use of accessories or spares other than original Kränzle component parts  
and original Kränzle replacement parts be the cause of defects on our product,  
this may lead to all warranty claims becoming null and void. Only the use of  
original Kränzle replacement parts matching the relevant Kränzle high-pressure  
cleaner provides adequate assurance for safe and trouble-free operation of the  
Kränzle high-pressure cleaner.

With regard to legal warranty claims, the limitation periods of the respective  
countries shall apply.

Where warranty claims apply to any other defects, please contact your  
local dealer, presenting the accessories together with your purchase receipt,  
or the nearest authorised service centre. This can also be found on the  
internet under **www.kraenzle.com**.

## 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.

Technische Daten	B 170 T	B 230 T
Arbeitsdruck, stufenlos regelbar	10 - 150 bar / 1-15 MPa	10 - 200 bar / 1-20 MPa
Düsengröße	05	07
Max. zulässiger Überdruck	170 bar / 17 MPa	230 bar / 23 MPa
Wasserleistung**	bei 1.800 U/min 12,5 l/min	bei 1.800 U/min 20 l/min
max. Wasserzulaufdruck	10 bar / 1,0 MPa	10 bar / 1,0 MPa
Warmwasserzulauf	max. 60 °C	max. 60 °C
Schlauchtrommel	ja	ja
Stahlgewebe-Hochdruckschlauch	20 m	20 m
Ansaughöhe	2,5 m	2,5 m
Verbrennungsmotor	Honda GX 160 LX2	Honda GX 390 LX2
Gewicht	67 kg	67 kg
Schallleistungspegel* L <sub>WA</sub>	103 dB (A)	103 dB (A)
Rückstoß an Lanze	ca. 32 Nm	ca. 32 Nm
Vibration an Lanze**	2,1 m/s <sup>2</sup>	2,1 m/s <sup>2</sup>
<b>Art.-Nr.</b>	<b>620001</b>	<b>620013</b>

Zulässige Abweichung der Zahlenwerte ± 5 % nach VDMA Einheitsblatt 24411

\*\* mit Drehzahlregulierung

Technische Daten	B 240 T	B 270 T
Arbeitsdruck, stufenlos regelbar	10 - 220 bar / 1-22 MPa	10 - 250 bar / 1-25 MPa
Düsengröße	05	045
Max. zulässiger Überdruck	240 bar / 24 MPa	270 bar / 27 MPa
Wasserleistung**	bei 1.800 U/min 16 l/min	bei 1.800 U/min 16 l/min
max. Wasserzulaufdruck	10 bar / 1,0 MPa	10 bar / 1,0 MPa
Warmwasserzulauf	max. 60 °C	max. 60 °C
Schlauchtrommel	ja	ja
Stahlgewebe-Hochdruckschlauch	20 m	20 m
Ansaughöhe	2,5 m	2,5 m
Verbrennungsmotor	Honda GX 340 LX2	Honda GX 390 LX2
Gewicht	92 kg	92 kg
Schallleistungspegel* L <sub>WA</sub>	103 dB (A)	103 dB (A)
Rückstoß an Lanze	ca. 38 Nm	ca. 42 Nm
Vibration an Lanze**	2,1 m/s <sup>2</sup>	2,1 m/s <sup>2</sup>
<b>Art.-Nr.</b>	<b>620023</b>	<b>620033</b>

Zulässige Abweichung der Zahlenwerte ± 5 % nach VDMA Einheitsblatt 24411

\*\* mit Drehzahlregulierung

Technical data	B 170 T	B 230 T
operating press. fully adjustable	10 - 150 bar / 1-15 MPa	10 - 200 bar / 1-20 MPa
nozzle size	05	07
permissible overpressure	170 bar / 17 MPa	230 bar / 23 MPa
water output	at 1.800 U/min 12,5 l/min	at 1.800 U/min 20 l/min
max. Water inlet pressure	10 bar / 1,0 MPa	10 bar / 1,0 MPa
water inlet temperature	max. 60 °C	max. 60 °C
hose drum	yes	yes
steel braided high-pressure hose	20 m	20 m
suction height	2,5 m	2,5 m
engine	Honda GX 160 LX2	Honda GX 390 LX2
weight	67 kg	92 kg
sound power L <sub>WA</sub>	103 dB (A)	103 dB (A)
recoil at lance	ca. 32 Nm	ca. 38 Nm
vibrations at lance	2,1 m/s <sup>2</sup>	2,1 m/s <sup>2</sup>
<b>Art.-Nr.</b>	<b>620001</b>	<b>620013</b>

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

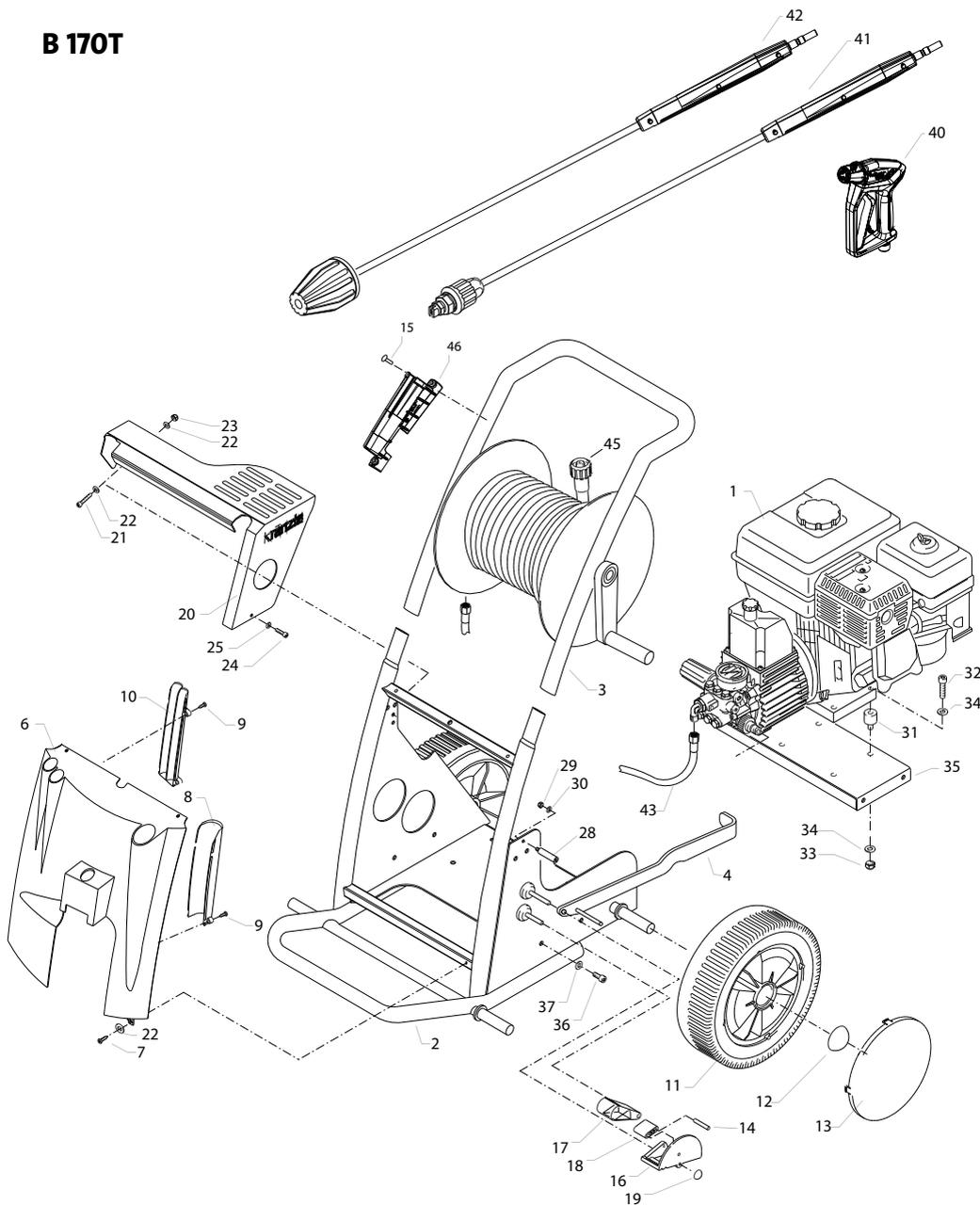
\*\* with speed control

Technical data	B 240 T	B 270 T
operating press. fully adjustable	10 - 220 bar / 1-22 MPa	10 - 250 bar / 1-25 MPa
nozzle size	05	045
permissible overpressure	240 bar / 24 MPa	270 bar / 27 MPa
water output	at 1.800 U/min 12,5 l/min	at 1.800 U/min 20 l/min
max. Water inlet pressure	10 bar / 1,0 MPa	10 bar / 1,0 MPa
water inlet temperature	max. 60 °C	max. 60 °C
hose drum	yes	yes
steel braided high-pressure hose	20 m	20 m
suction height	2,5 m	2,5 m
engine	Honda GX 340 LX2	Honda GX 390 LX2
weight	92 kg	92 kg
sound power L <sub>WA</sub>	103 dB (A)	103 dB (A)
recoil at lance	ca. 38 Nm	ca. 42 Nm
vibrations at lance	2,1 m/s <sup>2</sup>	2,1 m/s <sup>2</sup>
<b>Art.-Nr.</b>	<b>620023</b>	<b>620033</b>

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

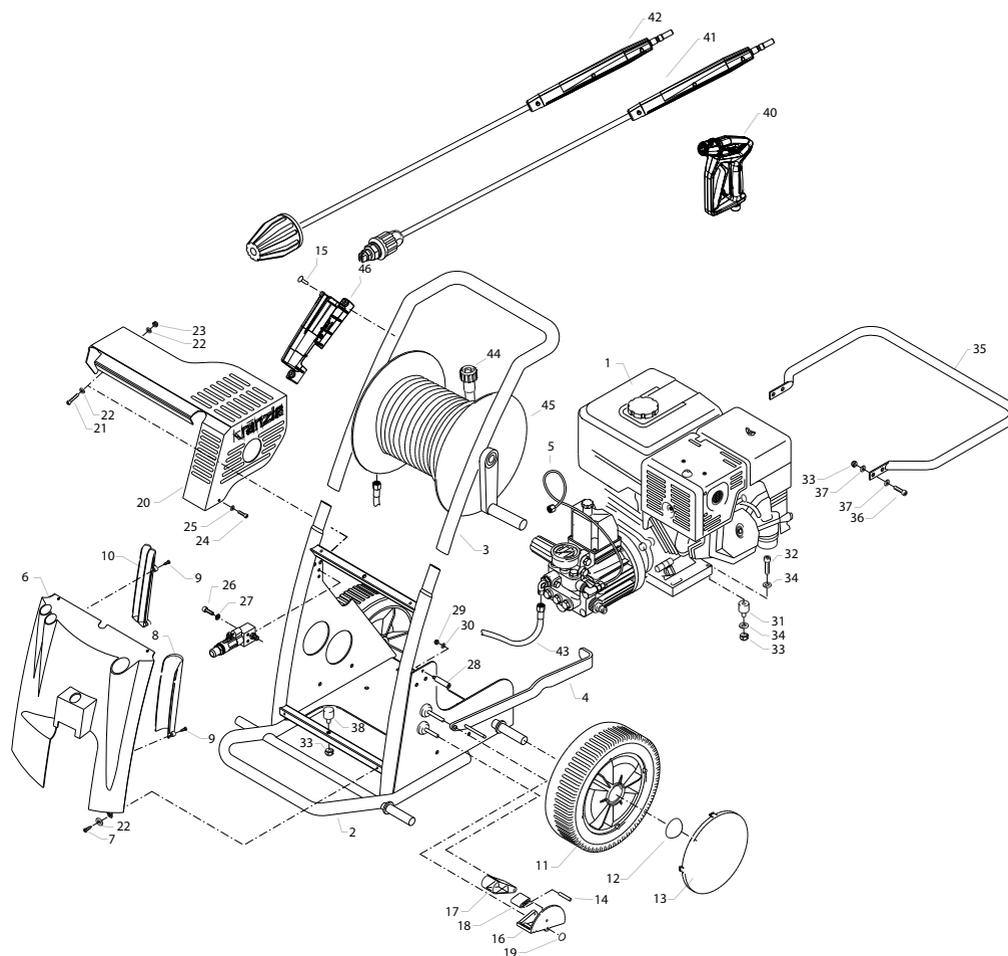
\*\* with speed control

**B 170T**



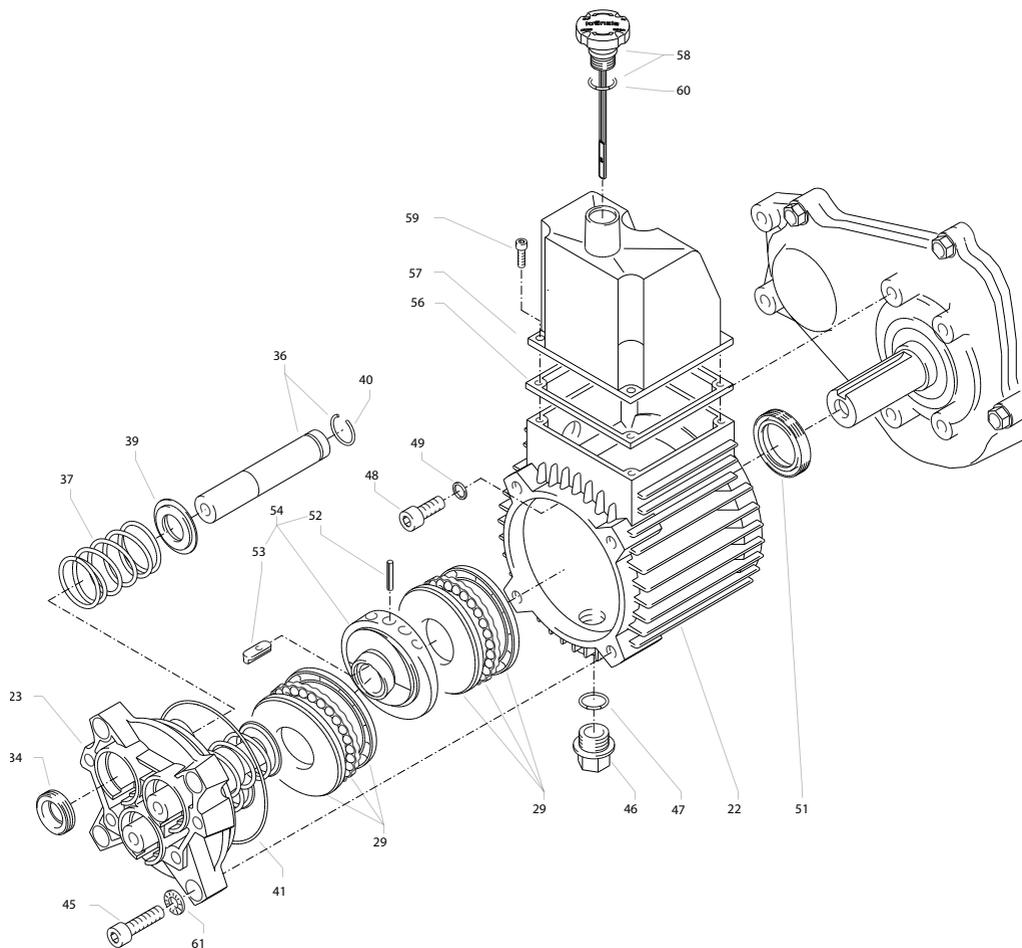
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Motor Honda GX 160 LX2 für B170 T	1	24027
2	Wagen	1	40230
3	Schubbügel	1	48704
4	Bremshebel	1	40246
6	Frontplatte B170 T	1	402311
7	Blechschaube 4,8 x 12	4	44112
8	Köcher groß	1	40232
9	Kunststoffschaube 5 x 14	7	43426
10	Köcher klein	1	40233
11	Rad	4	44017
12	Achsklemmring 20 mm	4	40142
13	Radkappe	4	44018
14	Stift 6 x 40	1	440351
15	Blechschaube 4,8 x 25	4	42647
16	Bremspedal	1	44022
17	Bremsklotz	1	44024
18	Bremshebel	1	44023
19	Starlockkappe 8 mm	1	44165
20	Abdeckung B170 T	1	40234
21	Innensechskantschraube M 4 x 30	3	40236
22	Scheibe	6	43472
23	Elastic - Stop Mutter M 4	3	40111
24	Schraube M 6 x 12	1	43421
25	Federring A 6	1	442221
28	Distanzhülse	1	40237
29	Elastic - Stop Mutter M 6	1	141521
30	Scheibe 6,4	1	50189
31	Gummipuffer 40 x 30	4	40220
32	Schraube M 8 x 30	4	40221
33	Elastic - Stop Mutter M 8	4	41410
34	Scheibe 8,4 DIN 125	8	50186
35	Zwischenplatte	1	40239
36	Schraube M 8 DIN 933	4	40140
37	Federring A8 DIN 127	4	44222
40	Starlet 3	1	12500
41	Lanze mit Regeldüse 2005 für B170 T	1	12431-M2005
42	Turbokiller 05 bei B170 T	1	12430-05
43	Hochdruckschlauch 1m / DN 8	1	41265
44	Hochdruckschlauch NW8 20m	1	41083
45	Schlauchtrommel kpl. mit 1m HD-Schlauch, jedoch ohne 20m HD-Schlauch	1	412591
46	Lanzenhalter	2	42645

**B 230 T, B 240 T, B 270 T**



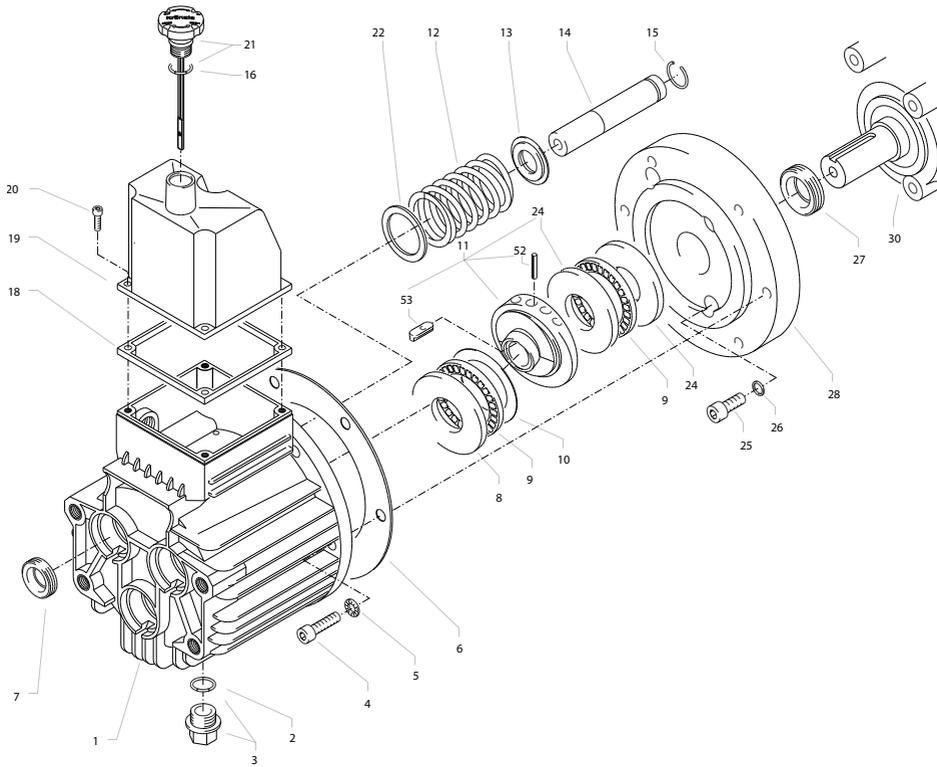
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Motor Honda GX 340 LX2 für B240 T	1	24026
	Motor Honda GX 390 LX2 für B230/270 T	1	240261
2	Wagen	1	40230
3	Schubbügel	1	48704
4	Bremshabel	1	40246
5	Druckmessleitung für Drehzahlregulierung	1	441021
6	Frontplatte B230 T	1	402313
	Frontplatte B240 T	1	402314
	Frontplatte B270 T	1	402315
7	Blechschraube 4,8 x 12	4	44112
8	Köcher groß	1	40232
9	Kunststoffschraube 5 x 14	7	43426
10	Köcher klein	1	40233
11	Rad	4	44017
12	Achsklemmring 20 mm	4	40142
13	Radkappe	4	44018
14	Stift 6 x 40	1	440351
15	Blechschraube 4,8 x 25	4	42647
16	Bremspedal	1	44022
17	Bremsklotz	1	44024
18	Bremshebel	1	44023
19	Starlockkappe 8 mm	1	44165
20	Abdeckung B230/240/270 T	1	40235
21	Innensechskantschraube M 4 x 30	3	40236
22	Scheibe	6	43472
23	Elastic - Stop Mutter M 4	3	40111
24	Schraube M 6 x 12	1	43421
25	Federring A 6	1	442221
26	Sechskantschraube M6 x 16	2	50173
27	Scheibe 6,4	2	50189
28	Distanzhülse	1	402371
29	Elastic - Stop Mutter M 6	1	141521
30	Scheibe 6,4	1	50189
31	Gummipuffer 40 x 30	4	402201
32	Schraube M 8 x 30	4	40221
33	Elastic - Stop Mutter M 8	8	41410
34	Scheibe 8,4	8	40515
35	Schutzbügel	1	40247
36	Sechskantschraube M 8 x 25	4	44137
37	Unterlegscheibe DIN125 8,4	8	50186
38	Gummipuffer 30 x 20	1	42516
40	Starlett 3	1	12500
41	Lanze mit Regeldüse 2505 bei B240 T	1	12431-D2505
	Lanze mit Regeldüse 25045 bei B270 T	1	12431-D25045
	Lanze mit Regeldüse 2507 bei B230 T	1	12431-D2507
42	Turbokiller 05 bei B240 T	1	12430-05
	Turbokiller 045 bei B270 T	1	12430-045
	Turbokiller 07 bei B230 T	1	12430-07
43	Hochdruckschlauch 1m / DN 8	1	41265
44	Hochdruckschlauch NW8 20m	1	41083
45	Schlauchtrommel kpl. mit 1m HD-Schlauch, jedoch ohne 20m HD-Schlauch	1	412591
46	Lanzenhalter	2	42645

B 170T



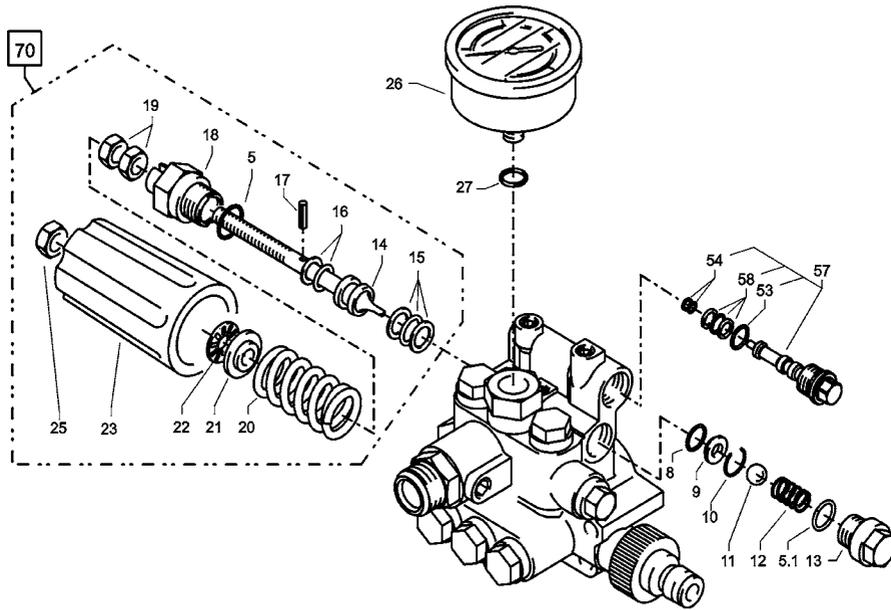
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
22	Getriebegehäuse	1	414811
23	Gehäuseplatte 18 mm	1	410202
29	Axial-Rillenkugellager 3-teilig	2	43486
34	Öldichtung 18 x 28 x 7	3	41031
36	Plunger 18 mm	3	410321
37	Plungerfeder	3	41033
39	Federdruckscheibe 18 mm	3	41034
40	Sprengring 18 mm	3	41035
41	O-Ring Viton 88 x 2	1	410211
45	Innensechskantschraube M 8 x 30	4	410363
46	Ölablassstopfen M18x1,5 mit Magnet	1	48020
47	O-Ring 12 x 2	1	150051
48	Innensechskantschraube M 8 x 20	4	41480
49	Kupferdichtring	4	41500
51	Wellendichtring 25 x 35 x 5	1	410195
52	Spannstift 3 x 16	1	141481
53	Stufenkeil	1	41183
54	Taumelscheibe 11,5°	1	410286-11,5
56	Flachdichtung	1	410193
57	Deckel	1	40518
58	Ölmeßstab	1	425201
59	Innensechskantschraube M 5 x 12	4	410194
60	O-Ring 14 x 2	1	43445

B 230 T, B 240 T, B 270 T



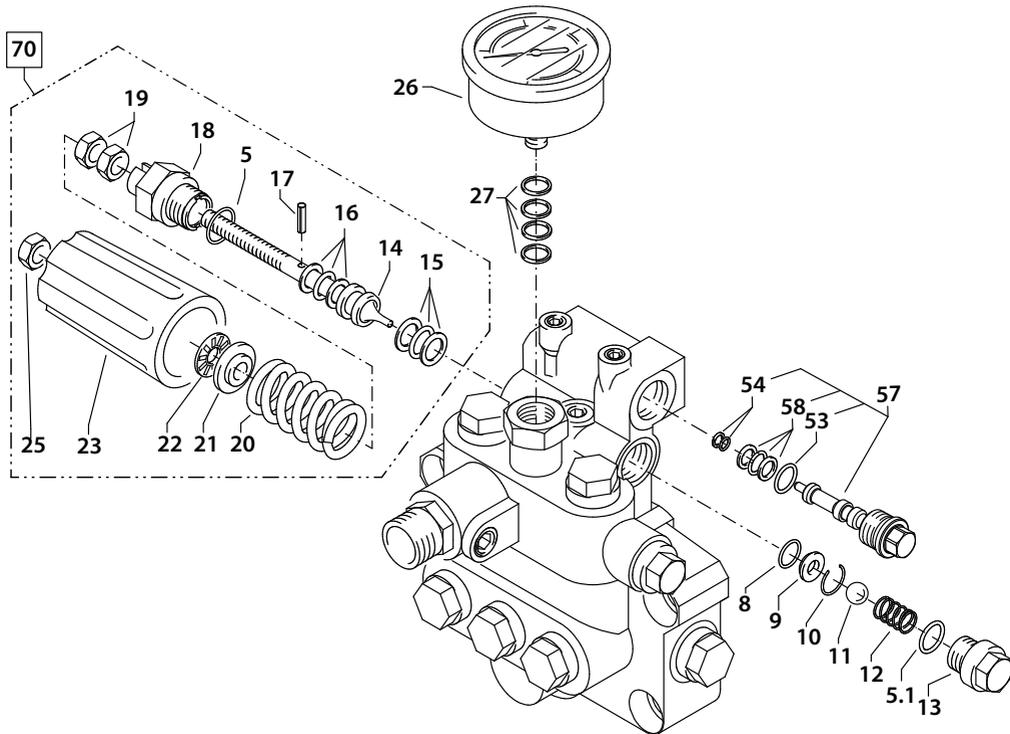
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Ölgehäuse	1	40501
2	Cu-Dichtring	1	40052
3	Ölablassstopfen R 3/8"	1	42019
4	Innensechskantschraube M 8 x 25	6	40053
5	Sicherungsscheibe	6	40054
6	Flachdichtung	1	40035
7	Öldichtung 20 x 30 x 7	3	400441
8	Wellenscheibe	1	40043
9	Axial-Rollenkäfig	1	40040
10	AS-Scheibe	1	40041
11	Taumelscheibe 10,2° bei B230 T	1	40055-10,2
	Taumelscheibe 8,0° bei B240 T	1	40055-8,0
	Taumelscheibe 8,0° bei B270 T	1	40055-8,0
12	Plungerfeder	3	40506
13	Federdruckscheibe	3	40510
14	Plunger 20 mm (lang)	3	40505
15	Sprengring	3	40048
16	O-Ring 14 x 2	1	43445
18	Flachdichtung	1	410193
19	Deckel Ölgehäuse	1	40518
20	Innensechskantschraube M 5 x 12	4	410194
21	Ölmessstab	1	42520
22	Stützscheibe	3	40513
24	Gehäusescheibe	2	40039
25	Innensechskantschraube M 8 x 30	4	410363
26	Kupfer-Dichtring	4	41500
27	Dichtring 30 x 42 x 7	1	40224
28	Flansch für B 16/220	1	40223
30	Motor Honda GX 340 LX2	1	24026
30.1	Motor Honda GX 390 LX2	1	240261
52	Spannstift 3 x 16	1	141481
53	Stufenkeil	1	40222
30	Motor Honda GX 340 für B 16/220	1	24026
30.1	Motor Honda GX 390 für 20/200	1	240261
52	Spannstift 3 x 16	1	141481
53	Stufenkeil	1	40222

**B 170T**



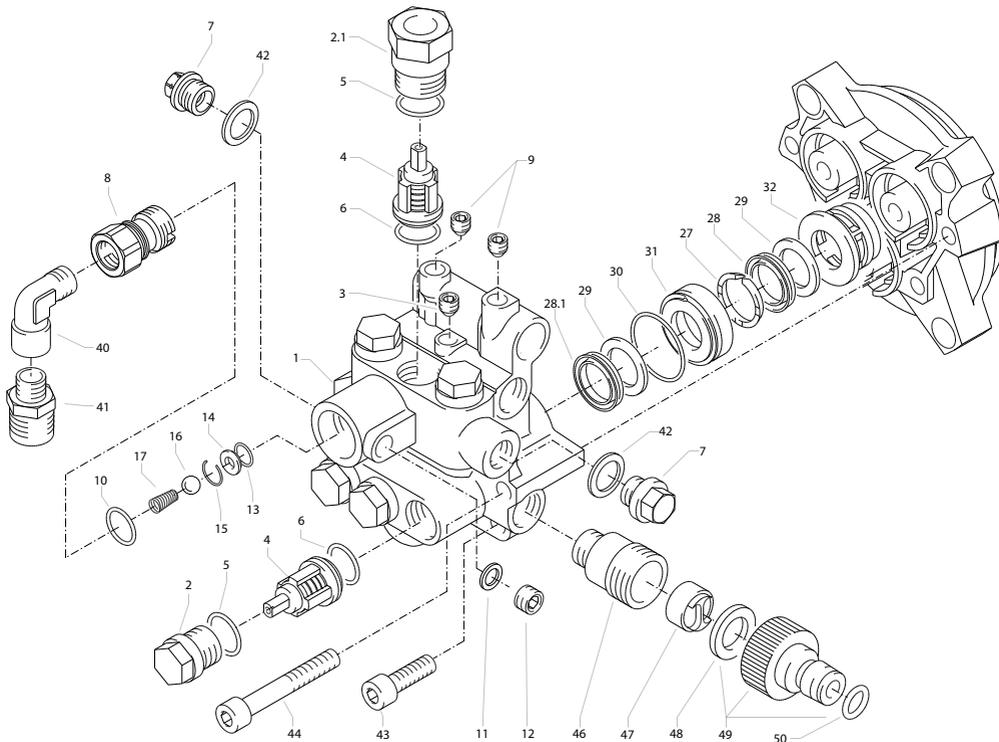
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
5	O-Ring 16 x 2	1	13150
5.1	O-Ring 13,94 x 2,62	1	42167
8	O-Ring 11 x 1,44	1	12256
9	Edelstahlsitz	1	14118
10	Sicherungsring	1	13147
11	Edelstahlkugel	1	12245
12	Edelstahlfeder	1	14119
13	Verschlusschraube	1	14113
14	Steuerkolben	1	14134
15	Parbaks 16 mm	1	13159
16	Parbaks 8 mm	1	14123
17	Spanstift	1	14148
18	Kolbenführung spezial	1	42105
19	Kontermutter M 8 x 1	2	14144
20	Ventilfeder schwarz	1	14125
21	Federdruckscheibe	1	14126
22	Nadellager	1	14146
23	Handrad	1	14147
25	Elastic-Stop-Mutter M 8 x 1	1	14152
26	Manometer 0-250 Bar	1	15039
27	Aluminium-Dichtring	4	13275
53	O-Ring 14 x 2	1	43445
54	Parbaks 4mm	1	121362
57	Blindverschluss mit Dichtungen	1	44551
58	Parbaks 7mm	1	15013
<b>70</b>	<b>Steuerkolben kpl. mit Handrad</b>		<b>43444</b>
<b>71</b>	<b>Ventilgehäuse kpl.</b>		<b>402491</b>

**B 230 T, B 240 T, B 270 T**



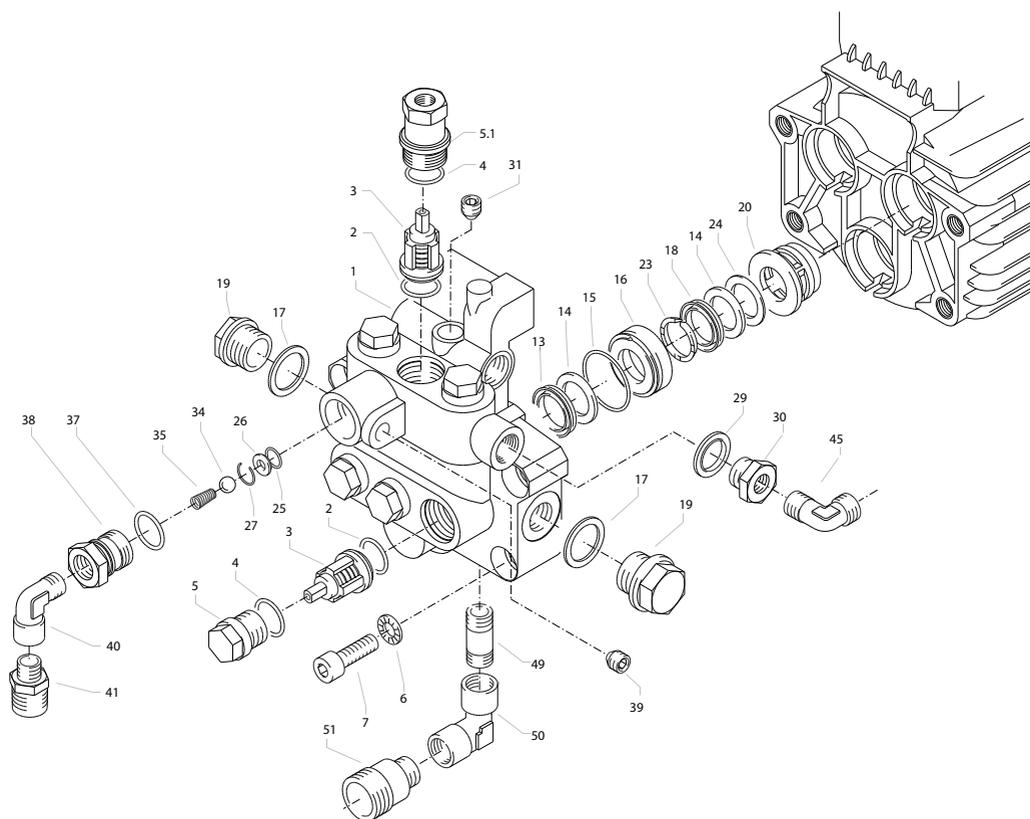
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
5	O-Ring 16 x 2	1	13150
5.1	O-Ring 13,94 x 2,62	1	42167
8	O-Ring 11 x 1,44	1	12256
9	Edelstahlsitz	1	14118
10	Sicherungsring	1	13147
11	Edelstahlkugel	1	12245
12	Edelstahlfeder	1	14119
13	Verschlusschraube	1	14113
14	Steuerkolben	1	14134
15	Parbaks 16 mm	1	13159
16	Parbaks 8 mm	1	14123
17	Spanstift	1	14148
18	Kolbenführung spezial	1	42105
19	Kontermutter M 8 x 1	2	14144
20	Ventilfeder schwarz (B20/200)	1	14125
20.1	Ventilfeder rot (B16/220, B16/250)	1	141251
21	Federdruckscheibe	1	14126
22	Nadellager	1	14146
23	Handrad	1	14147
25	Elastic-Stop-Mutter M 8 x 1	1	14152
26	Manometer 0-400 Bar	1	150394
27	Aluminium-Dichtring	4	13275
53	O-Ring 14 x 2	1	43445
54	Parbaks 4 mm	1	121362
57	Blindverschluss mit Dichtungen	1	44551
58	Parbaks 7 mm	1	15013
<b>70</b>	<b>Steuerkolben kpl. mit Handrad (B230T)</b>		<b>43444</b>
<b>70.1</b>	<b>Steuerkolben kpl. mit Handrad (B240T, B270T)</b>		<b>434441</b>

B 170T

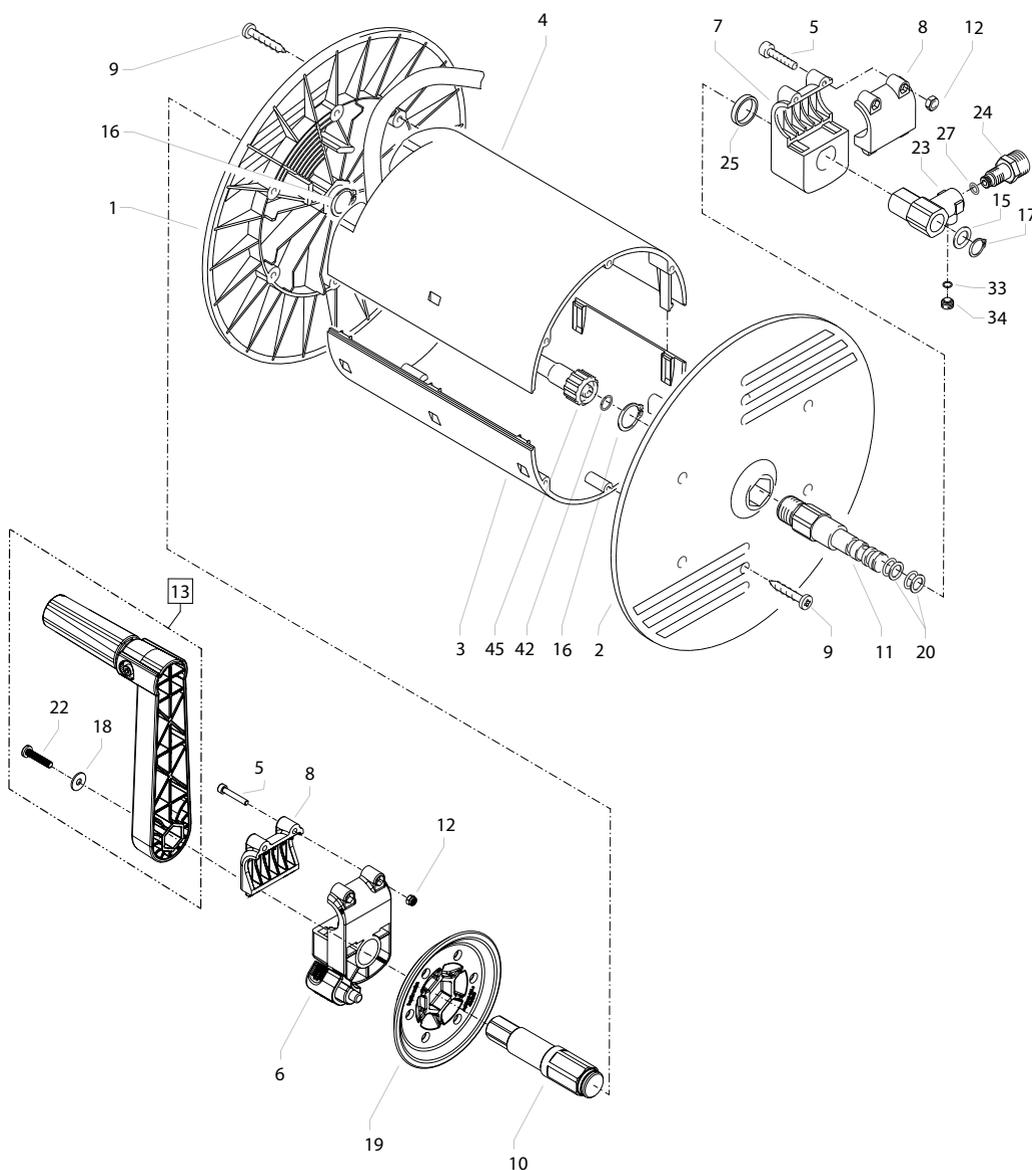


Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Ventilgehäuse APG	1	421604
2	Ventilstopfen	5	41714
2.1	Ventilstopfen mit R1/4" IG	1	42102
3	Dichtstopfen M 10 x 1	1	43043
4	Ventile (grün) für APG-Pumpe	6	417151
5	O-Ring 16 x 2	6	13150
6	O-Ring 15 x 2	6	41716
7	Dichtstopfen R 1/4" mit Bund	1	42103
8	Ausgangsteil R3/8" IG	1	402481
9	Dichtstopfen M 8 x 1	2	13158
10	O-Ring 18 x 2	1	40016
11	Aluminium - Dichtring	3	13275
12	Stopfen 1/4" AG mit ISK	1	13387
13	O-Ring 11 x 1,5	1	12256
14	Edelstahlsitz Ø 7	1	14118
15	Sprengring	1	12258
16	Edelstahlkugel Ø10	1	12122
17	Rückschlagfeder „K“	1	141201
27	Druckring	3	41018
28	Manschette 18 x 26 x 4/2	3	410132
28.1	Gewebemanschette 18 x 26 x 4/2	3	410131
29	Backing	6	41014
30	O-Ring 28,3 x 1,78	3	40026
31	Leckagering	3	41066
32	Zwischenring	3	410152
33	Verschlussstopfen R3/8"	1	14113
34	Kupferring 17 x 22 x 1,5	1	40019
40	Einschraubwinkel R3/8" AG x R3/8" IG	1	40256
41	ST30-Nippel R3/8" AG x M22 x 1,5	1	133652
42	Usit-Ring	1	42104
43	Innensechskantschraube M 8 x 30	2	410363
44	Innensechskantschraube M 8 x 55	2	410172
46	Sauganschluss	1	41016
47	Wasserfilter	1	410461
49	Steckkupplung	1	410474
	<b>Rep.-Satz Ventile für APG-Pumpe</b> bestehend aus je 6x Pos. 4; 6x Pos. 5; 6x Pos. 6		<b>417481</b>
	<b>Rep.-Satz Manschetten 18 mm</b> bestehend aus je 3x Pos. 27; 3x Pos. 28; 3x Pos. 28.1; 6x Pos. 29; 6x Pos. 30		<b>410491</b>
	<b>Ventilgehäuse kpl. mit Handrad</b>		<b>40249</b>

B 230 T, B 240 T, B 270 T

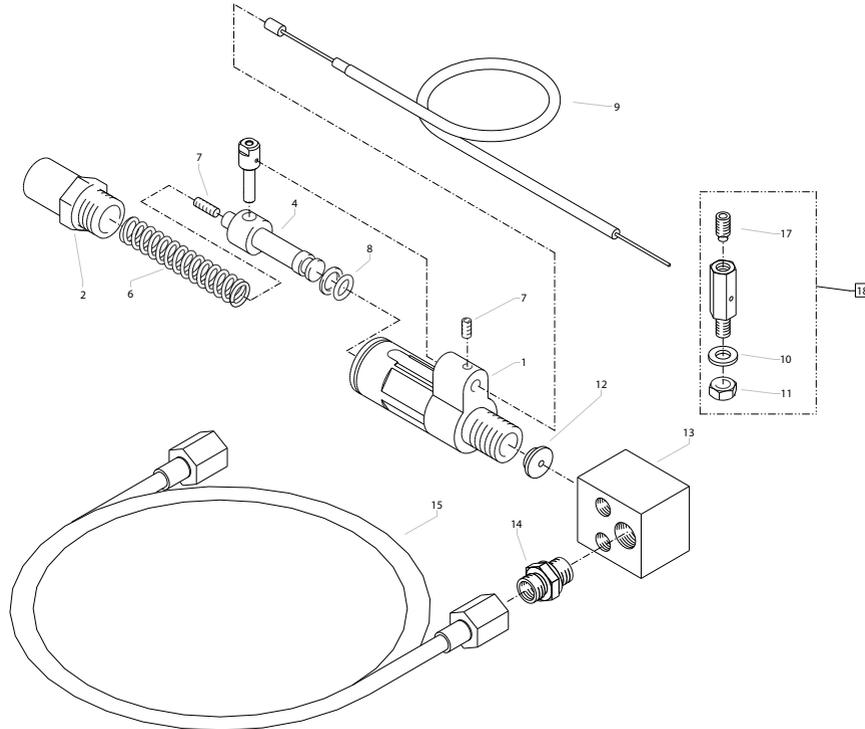


Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Ventilgehäuse AQ mit integr. UL	1	405212
2	O-Ring 18 x 2	6	40016
3	Einlass- / Auslass-Ventil	6	42024
4	O-Ring 21 x 2	6	42025
5	Ventilstopfen	5	42026
5.1	Ventilstopfen mit R 1/4" IG	1	420262
6	Sicherungsring	4	40032
7	Innensechskantschraube M 12 x 45	4	40504
13	Gewebemanschette	3	40023
14	Backring 20 mm	6	400251
15	O-Ring 31,42 x 2,62	3	40508
16	Leckagering 20 x 36 x 13,3	3	40509
17	Cu-Dichtring 21 x 28 x 1,5	2	42033
18	Gummimanschette	3	40512
19	Verschlusschraube R 1/2"	2	42032
20	Distanzring mit Abstützung	3	40507
23	Druckring 20 mm	3	40021
24	Zwischenring 20 mm	3	40516
25	O-Ring 11 x 1,5	1	12256
26	Edelstahlsitz Ø 7	1	14118
27	Sprengring	1	13147
29	Dichtring 17 x 22 x 1,5 (Kupfer)	1	40019
30	Stopfen 3/8" mit 1/8" IG	1	40242
31	Dichtstopfen M 10 x 1	1	43043
34	Edelstahlkugel Ø10	1	12122
35	Rückschlagfeder „K“	1	141201
37	O-Ring 18 x 2	1	40016
38	Ausgangsstück R3/8" IG	1	402481
39	Dichtstopfen	1	13385
40	Einschraubwinkel R3/8" AG x R3/8" IG	1	40256
41	ST30-Nippel R3/8" AG x M22 x 1,5	1	133652
45	Winkelverschraubung R 1/8" x 6	1	441101
49	Distanzrohr 48 mm bds. R3/8" AG	1	41628
50	Winkel R3/8" IG / IG	1	44138
51	Sauganschluss R 3/8" AG x R3/4"	1	410160
	<b>Reparatur-Satz Manschetten</b> bestehend aus: 3x Pos. 13; 6x Pos. 14; 3x Pos. 15; 3x Pos. 16; 3x Pos. 18; 3x Pos. 20; 3x Pos. 23		<b>400651</b>
	<b>Reparatur-Satz Manschetten ohne</b> Messingteile bestehend aus: 3x Pos. 13; 6x Pos. 14; 3x Pos. 15; 3x Pos. 18; 3x Pos. 23		<b>40517</b>
	<b>Reparatur-Satz Ventile</b> bestehend aus: 6x Pos. 2; 6x Pos. 3; 6x Pos. 4		<b>400621</b>

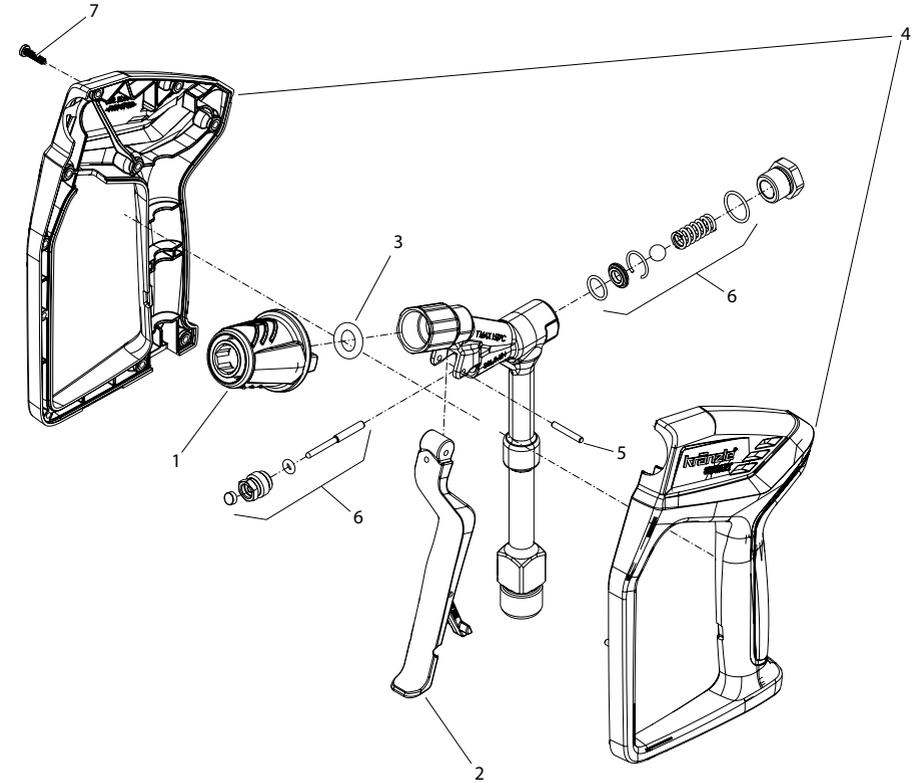


Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Seitenschale Schlauchführung	1	40.302
2	Seitenschale Wasserführung	1	40.301
3	Trommel Unterteil	1	40.304
4	Trommel Oberteil	1	40.303
5	Innensechskantschraube M 4 x 30	4	40.236
6	Lagerklotz mit Bremse	1	40.327
7	Lagerklotz links	1	40.305
8	Klemmstück	2	40.307
9	Kunststoffschraube 5,0 x 20	12	43.018
10	Antriebswelle	1	40.328
11	Welle Wasserführung	1	40.311
12	Elastic-Stop-Mutter M 4	4	40.111
13	Handkurbel	1	40.320 0
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
18	Unterlegscheibe Ø 6,4	1	50.189
19	Arretierscheibe	1	40.325
20	Parbaks 16 mm	2	13.159
22	Schraube M 5 x 10	1	43.021
23	Drehgelenk	1	40.167
24	Anschlußteil	1	40.308 1
25	Distanzring	1	40.316
27	O-Ring 6,68 x 1,78	1	41.521
33	O-Ring 6 x 1,5	1	13.386
34	Stopfen M 10 x 1	1	13.385
42	O-Ring 9,3 x 2,4	4	13.273
45	Hochdruckschlauch 20 m NW 8	1	41.083
	<b>Schlauchtrommel kpl. ohne Schlauch</b>		<b>41.259 0</b>
	<b>Schlauchtrommel kpl. mit Schlauch</b>		<b>41.259 1</b>

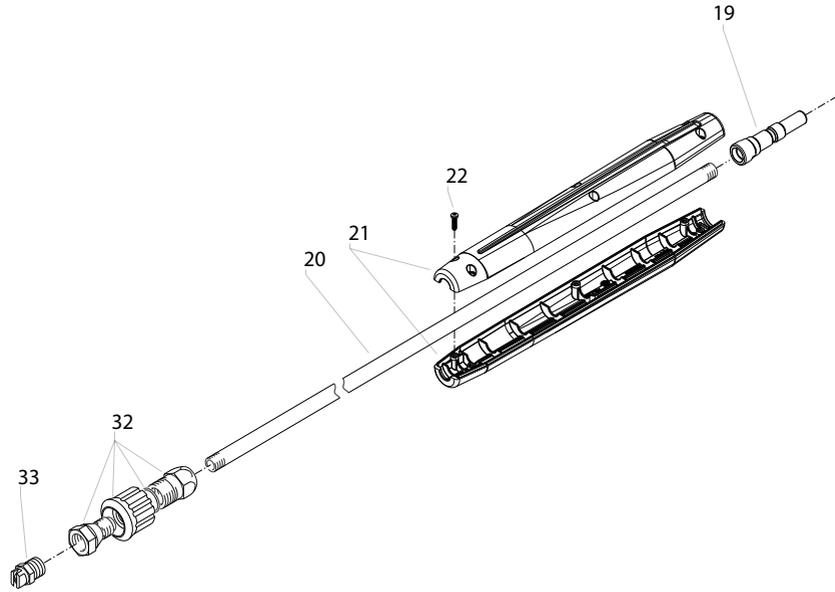
B 230 T, B 240 T, B 270 T



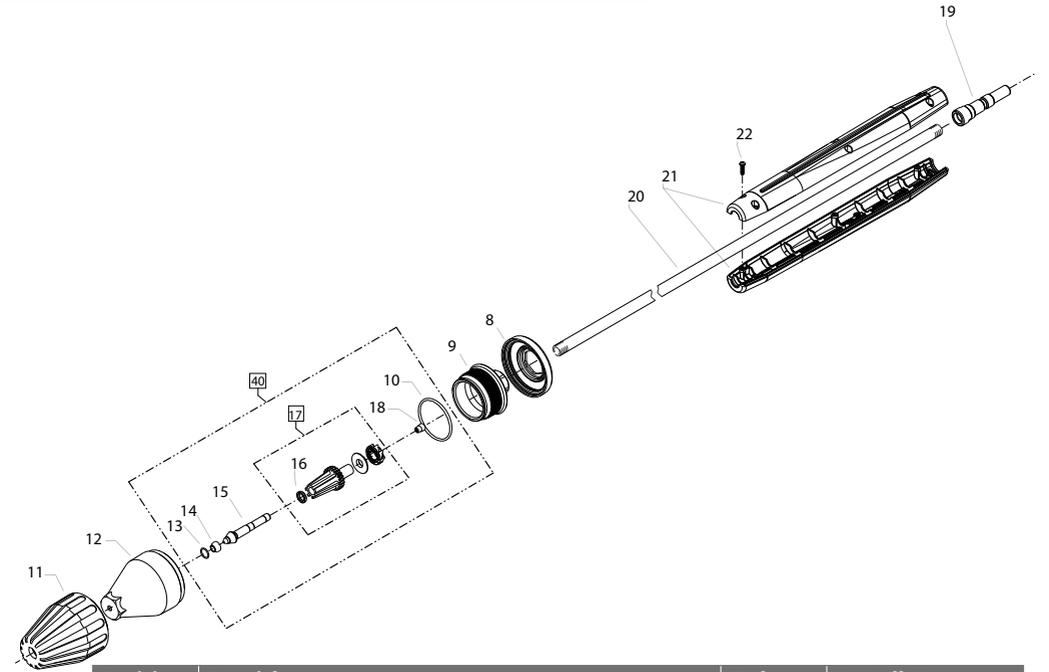
Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Grundteil	1	42581
2	Druckhülse	1	42584
4	Steuerkolben	1	42582
5	Querbolzen	1	42583
6	Druckfeder 2,0 x 9,5 x 70	1	42587
7	Gewindestift M4 x 6 DIN 913	2	43469
8	Parbaks 7 mm	1	15013
9	Bowdenzug	1	40244
10	Unterlegscheibe 6,4 DIN 125	1	50189
11	Sechskantmutter M6	1	141521
12	Drosselscheibe	1	42589
13	Anschlussblock	1	40241
14	Verschraubung 1/8"x 6l	1	405911
15	Druckmessleitung	1	42593
17	Gewindestift M 6 x 12 DIN915	1	42590
18	Klemmbolzen	1	425911
	<b>Drehzahlregulierung kpl.</b>	<b>1</b>	<b>425801</b>



Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
1	Steckkupplung D12	1	13457
2	Abzugshebel Kpl.	1	12509
3	O-Ring 11,5 x 3,5	1	134601
4	Pistolschale rechts, Links	1	12508
5	Zylinderstift 3x21	1	12253
6	Rep. Satz Starlet 3	1	12510
7	Kunststoffschraube 3,5 x 14	8	44525
	<b>Starlet 3 mit Steckkupplung</b>		<b>12500</b>



Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
19	Stechnippel D12	1	13474
20	Rohr 965 mm, bds. R1/4"	1	13519
21	Griffschalen li, re	1	12406
22	Schraube 3,5 x 14	6	44525
32	Regeldüse mit Reguliering	1	132012
<b>33</b>	<b>Flachstrahldüse 2504 (B170 T, B240 T)</b>	<b>1</b>	<b>D2505</b>
<b>33.1</b>	<b>Flachstrahldüse 2507 (B230 T)</b>	<b>1</b>	<b>D2503</b>
<b>33.2</b>	<b>Flachstrahldüse 25045 (B270 T)</b>	<b>1</b>	<b>D25045</b>



Position No	Bezeichnung Description	Stck. Qty.	Bestell-Nr. Item no.
8.1	Deckelschutz 045 (B270 T)	1	415405
8.2	Deckelschutz 05 (B170 T, B240T)	1	41540-05
8.3	Deckelschutz 07 (B230 T)	1	415406
9	Deckel	1	41539
10	O-Ring 41 x 1,78	1	41538
11	Sprühkörperschutz	1	41528
12	Sprühkörper	1	41529
13	O-Ring 6,86 x 1,78	1	41521
14	Düsensitz	1	41522
15.1	Düse 045 (B270 T)	1	415321
15.2	Düse 05 (B170 T, B240T)	1	415326
15.3	Düse 07 (B230 T)	1	415322
16	Gleitring	1	41533
17	Rotor	1	41534
18	Stabilisator	1	41524
19	Stechnippel D12	1	13474
20	Rohr 965 mm, bds. R1/4"	1	13519
21	Griffschalen li, re	1	12406
22	Schraube 3,5 x 14	6	44525
	<b>Reparatur Satz Turbokiller 045 (B270 T)</b>		<b>410976</b>
	<b>Reparatur Satz Turbokiller 05 (B170 T, B240T)</b>		<b>410966</b>
	<b>Reparatur Satz Turbokiller 07 (B230 T)</b>		<b>410972</b>
	<b>Turbokiller 045 kpl. (B270 T)</b>		<b>12430-045</b>
	<b>Turbokiller 05 kpl. (B170 T, B240T)</b>		<b>12430-05</b>
	<b>Turbokiller 07 kpl. (B230 T)</b>		<b>12430-07</b>



**Josef Kränzle GmbH & Co. KG**

Rudolf-Diesel-Straße 20  
89257 Illertissen (Germany)

[sales@kraenzle.com](mailto:sales@kraenzle.com)

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