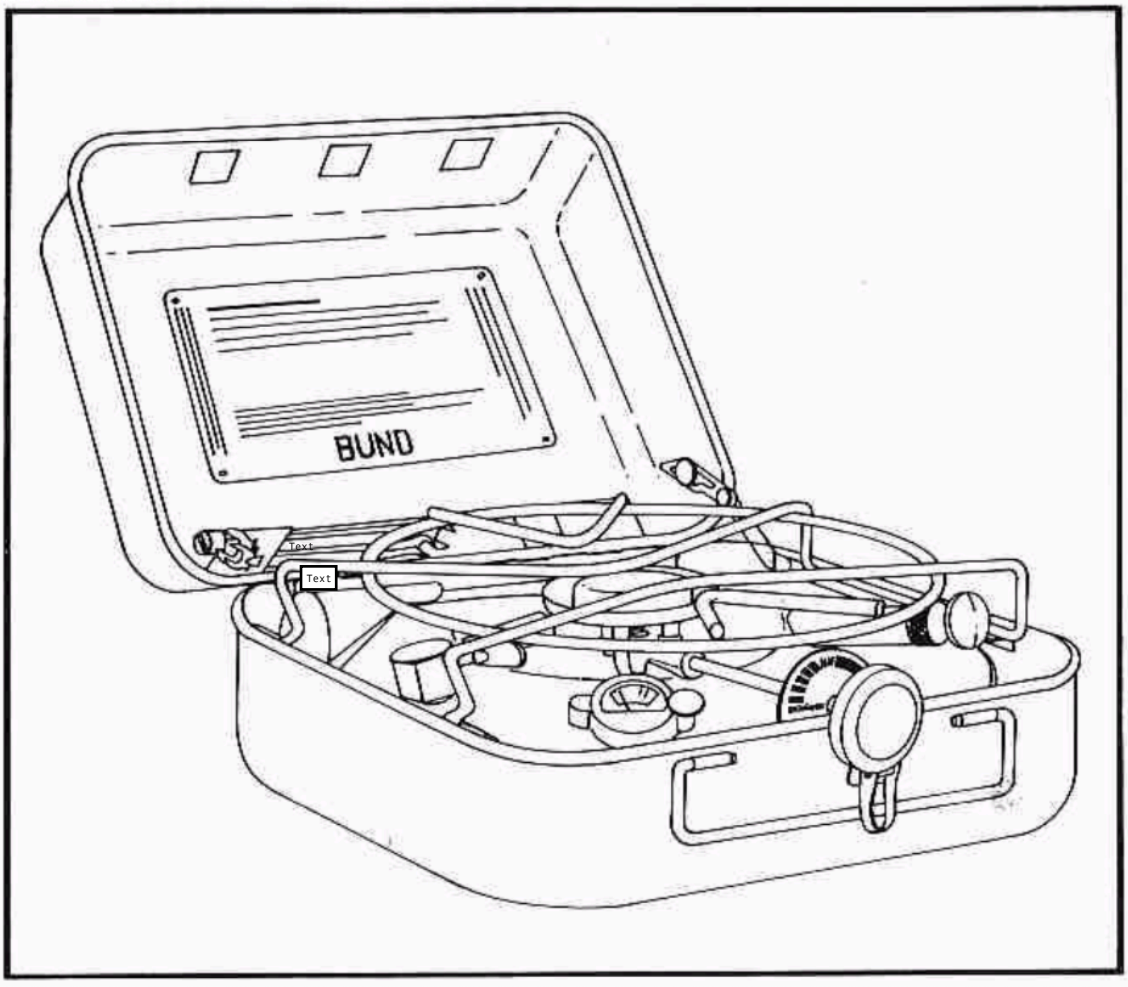
OPERATING - MAINTENANCE - AND REPAIR MANUAL FOR

STOVE



SUPPLY NUMBER 7310-12-187-4098

FRANZ HEINZE KG · POSTFACH 131314 · D-5600 WUPPERTAL 13

(Revised version 2)

1. TECHNICAL SPECIFICATIONS

- Dimensions:	Width:	280	mm
	Depth:	280	mm
	Height:	155	mm
- Dry weight:		4.8	kg
- Operating pressure:		1.6	bar
- Tank capacity		1.4	l
- Nominal heat output		2.5	KW
- Fuel consumption		0.22	l/h

2. OPERATING MANUAL

Important Instructions
With this cooker, a device has been developed that works trouble-free even under the toughest conditions. The manufacturer guarantees perfect functioning if the stove is regularly serviced, the instructions in the operating, maintenance and repair instructions are strictly observed and only ORIGINAL spare parts from the manufacturer are used.
The device is designed for petroleum and diesel fuels.

It is essential to ensure that only clean fuel is used. Otherwise dirt residues will settle in front of the nozzle holes of the burner and RAPID preheater device and impair the function of the stove.

NOTE
The stove should preferably be operated with kerosene in order to ensure long-term trouble-free and soot-free operation.
When using diesel fuel, make sure that the burner is operated at full power if possible. Otherwise there is a risk of sooting.

Caution - the stove must not be operated with petrol (gasoline).

2.1 OPENING THE COOKER
Lift the flap of the box lock and remove the bracket from the lock hook.
Open the upper part of the housing and let it click into the outermost position.

2.2 FILLING THE TANK WITH FUEL
Bring the stove as horizontally as possible. Fold the pan support (6202) to the left, unscrew the pressure gauge (149), place the filler funnel (6239) on the pressure gauge connector and fill with petroleum or diesel fuel.

The tank is full when there is no more flow of fuel. Slowly raise the funnel and let the residual liquid flow in. After removing the funnel, clean it with a rag and place it in the folded top part of the housing. Screw on the pressure gauge.

2.3 PRESSURING THE TANK
Check that the pressure gauge (149) and overpressure valve (6231) are screwed hand tight and the air drain screw of the pressure gauge is closed. The rocker arm (223N) must be closed, i.e., in the opening of the flame tube (6218). Slide the regulating rod (6216) through the opening of the retaining plate (6801) and place it on the square of the burner (6215). Turn the regulating handle to the right as far as it will go (“Zu”, or “closed” position).

The tank is now pressure sealed. Loosen the fixed pump button (40) and actuate the pump piston (6) until the pointer of the manometer is on the red marking.

2.4 LIGHT
Light a match or a lighter, fold the rocker arm down and hold the pilot flame to the opening of the flame tube (6218). RAPID preheater (6217) ignites. Should the pilot flame go out due to escaping “wrong air”, close the rocker arm again immediately, repeat the ignition process or, if necessary, clean the nozzle (221) with hand cleaner (6254). (see 3.2)
Preheating flame is dependent on the ambient temperature. Let it burn 30-50 sec. If the air pressure on the manometer falls below 0.5 bar during the preheating time, pump more air. After the preheating time has elapsed, turn the burner control handle to the left (“Open” or “Auf” position). The burner will now ignite automatically. Shut the rocker arm again immediately. Fold the pan support to the right in the starting position. Build up pressure to the red mark.

NOTE
If the burner flashes with yellow flame after ignition, it has not been preheated sufficiently. Repeat the heating process and extend the heating time.
In the normal state, the burner burns with a blue ring of flames. However, soot residues can impair combustion.

After preheating, a yellow ring of flames can form, which turns blue again after approx. 5-10 minutes at the latest.

2.5 SMALL BURNER SETTING

Slowly turn the control handle from the “open” (“Auf”) position in the “closed” (“Zu”) direction and select the desired flame size.

NOTE

When using diesel fuel, the burner should only be operated in the low position for a short time, as there is a risk of sooting and diesel fuel does not burn optimally in this burner position.

2.6 ENDING THE BURNER PROCESS

Turn the regulating handle to the right as far as it will go (do not over tighten).
CAUTION - the burner can burn for a few seconds.
If the pressure is to be reduced, open the air drain screw on the pressure gauge, let air escape and close the screw tightly again.

IMPORTANT

After using the stove for the first time, retighten all screw connections on the burner and RAPID preheater.

DO NOT over tighten the thread of the torch nozzle.

2.8 CLOSING THE COOKER HOUSING

Before closing the housing, let the burner cool down, press the pump knob in and lock it, turn the control rod to the right as far as it will go, pull it off the burner and place it in the rear part of the housing. Place the funnel in the rear part of the lower part of the housing. Unlock the upper part of the housing and close it. Lift the flap of the box lock, insert the bracket into the lock hook and press the flap down. The stove housing is now closed.

CAUTION

The stove may only be transported in a depressurized state. The tank must be completely emptied for longer storage.

3. MAINTENANCE MANUAL

3.1 CLEANING THE BURNER NOZZLE

During the firing process, especially if it is operated for a long time in the low position, combustion residues are deposited on the nozzle hole, which impair the burners performance. If the performance of the burner drops significantly at normal operating pressure, clean the outside of the burner nozzle (6250) with the middle wire of the hand cleaner (6254). To do this, remove the burner cap (5209) and guide the hand cleaner through the burner tube against the nozzle. Pierce the nozzle hole several times.

NOTE

However, it is recommended to dismantle the burner nozzle for the cleaning process with the socket wrench (6240) and to clean it inside and out.

CAUTION

Risk of burns if the burner is still hot.

3.2 CLEANING THE JET AND THE PREHEATER ORIFICE

Release pressure completely.
Fold the rocker arm(223N) back, remove the flame tube(6218). Clean the jet(221) with one of the two cross wires of the hand cleaner(6254) and move the wire up and down several times in the jet orifice.
To clean the nozzle orifices in the preheater body(6226), screw the nozzle(221) of the preheater body(6226) with a 14mm open-ended spanner. Clean the orifice and both side openings of the preheater with one of the two cross wires from the hand cleaner.
Assemble in reverse order.

3.3 GREASING THE LEATHER PUMP CUP

The leather pump cup must be greased annually with any lubricating grease.
If the pump does not work when first brought into service, the leather pump cup must also be greased.

4. REPAIR MANUAL

4.1 REPLACING THE BURNER(6215)

Release pressure completely.
Remove the control handle from the burner, loosen the union nut from the burner with a 19mm open-ended spanner, pull off the burner and remove the copper seal (6244) from the union nut.

NOTE
A new copper gasket must be used when installing the replacement burner.

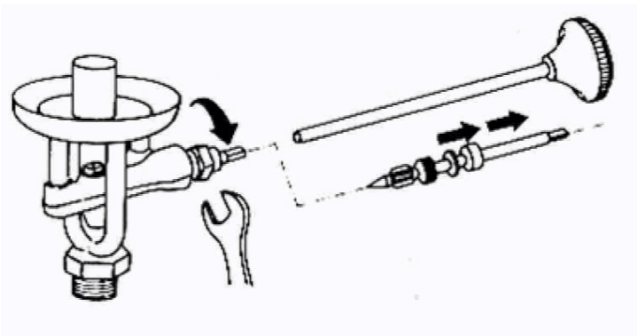
Insert the burner into the hexagon of the tank mounting and alignment bracket and tighten the union nut. Make sure that the burner is in the correct position before tightening the union nut (the square of the burner spindle faces the housing lock). Push the control handle through the holding plate and place it on the square of the burner spindle. Make sure that the burner stays in this position when tightening the union nut.

4.2 REPLACING THE BURNER JET(6250)

Release pressure completely.
Remove the outer cap (5209) from the burner. Loosen the nozzle from the burner with the socket wrench (6240) and remove it with the tweezers (6243). Place the new nozzle on the burner opening using tweezers and tighten with the socket wrench. (Do not over tighten the nozzle as this will damage the thread.)

4.3 REPLACING THE REGULATING SPINDLE(5223), THE SPINDLE RING(5224), THE GRAPHITE SEAL(5225) AND THE SPINDLE SCREW(5226)

Release pressure completely.
Remove the regulating handle from the burner.
Loosen the spindle nut with a 10mm open-ended spanner and pull it off the regulating spindle.



Push the regulating rod through the retaining plate and place it on the square of the regulating spindle. Loosen the spindle from the burner by turning it to the left and screw it out completely. Pull the graphite seal and the spindle ring of the spindle. The parts are assembled in the reverse order.

4.4 REPLACING THE LEATHER PUMP CUP(46)

Unscrew the pump cap (46) and pull out the pump piston (6).
Unscrew the piston nut (47), remove the used leather pump cup and replace it with a new one.
Assemble in reverse order.

4.5 REPLACING THE PUMP VALVE(10) AND THE PUMP VALVE GASKET(83)

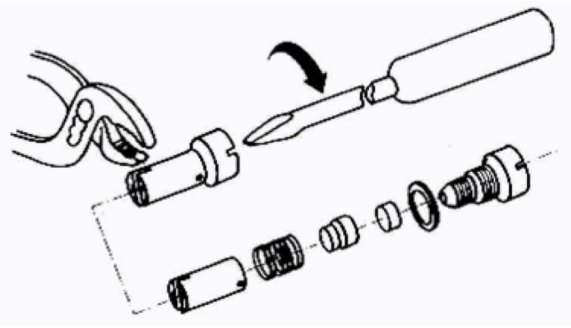
Release pressure completely.
Remove the pump piston (6). Loosen the pump valve with a screwdriver, and tilt the tank until the valve with the valve gasket falls out.

CAUTION
Tip the tank so that no fuel spills out of the tank.

Replace valve gasket and/or valve.
Assembly in reverse order.

4.6 REPLACING THE RUBBER PIP SEAL (6230) OF THE PUMP VALVE

Dismantle the pump valve as described in section 4.5.
Hold the valve housing (19) with combination pliers and unscrew the valve head (48) from the housing with a screwdriver.
Remove the valve insert (17) and spring (18) from the valve housing.
Replace the rubber pip seal of the valve insert with a new one.
Assemble the parts in reverse order.



4.7 REPLACING THE COPPER GASKET(6249) OF THE RAPID PREHEATER

Release pressure completely. Fold the rocker arm down and pull the flame tube off the nozzle. Unscrew the nozzle of the RAPID preheater (221) from the preheater body (6226) using a 14mm open-ended spanner. Loosen the nut (222) with a 14mm open-ended spanner and remove it from the preheater with the rocker arm (223N). Remove the union nut of the preheater from the tank nozzle with a 19mm open-ended spanner; the preheater body must be held with a 14mm open-ended spanner. Carefully remove the complete preheater body (6253) from the tank nozzle. Remove the old seal (6249) from the union nut of the preheater and replace it with a new one. Reinstall in reverse order.

NOTE

When installing, make sure the fuel pickup pipe (6245) is vertical.

4.8 REPLACING THE ROCKER ARM SEAL(229)

Release pressure completely. Fold the rocker arm back. Unscrew the cylinder head (6226) with a screwdriver. Remove the seal (229) with screw and replace it with a new one. Assemble in reverse order. Close the rocker arm.

4.9 REPLACING THE SEAL(11) ON THE MANOMETER AND/OR PRESSURE VALVE

Release pressure completely. Unscrew the pressure gauge or pressure relief valve from the tank, remove the seal and replace it with a new one. Screw the pressure gauge or pressure relief valve onto the tank.

ATTENTION

Pressure gauge (149) and pressure relief valve (6231) must neither be dismantled in the individual parts or changed in their setting.

4.10 REPLACING THE PAN SUPPORT(6202)

Press the pan support ends against each other until the guides of the bracket release the pan support ends. Lift off the pan support. When assembling, press the ends of the pan supports together and let them snap back into the guides of the mounting brackets.

4.11 REPLACING THE PIVOT PIN(6204)

Open the cooker housing. After opening, the hinge pin must be in the bracket (6203) in such a way that the pin can be easily removed after removing the lock washer (6205) and replaced with a new one. The assembly is done in reverse order.

4.12 REPLACING THE FUEL TANK(6214)

Remove the regulating handle from the burner. Take the funnel out of the housing.Fold the pan support to the side. Loosen the hexagon nut (6208) on the underside of the housing with a 17mm open-ended spanner and pull off the spring washer (6209). Remove the fuel tank with the regulating handle from the housing.
Assemble in reverse order.

4.13 REPLACING THE TOOL HOLDER(6237)

Remove tools and supplies from the tool holder. Remove 4 rivets (6207), take tool holder out of the housing. Assemble in reverse order.

4.14 REPLACING THE COVER(6238) AND THE TOOL HOLDER

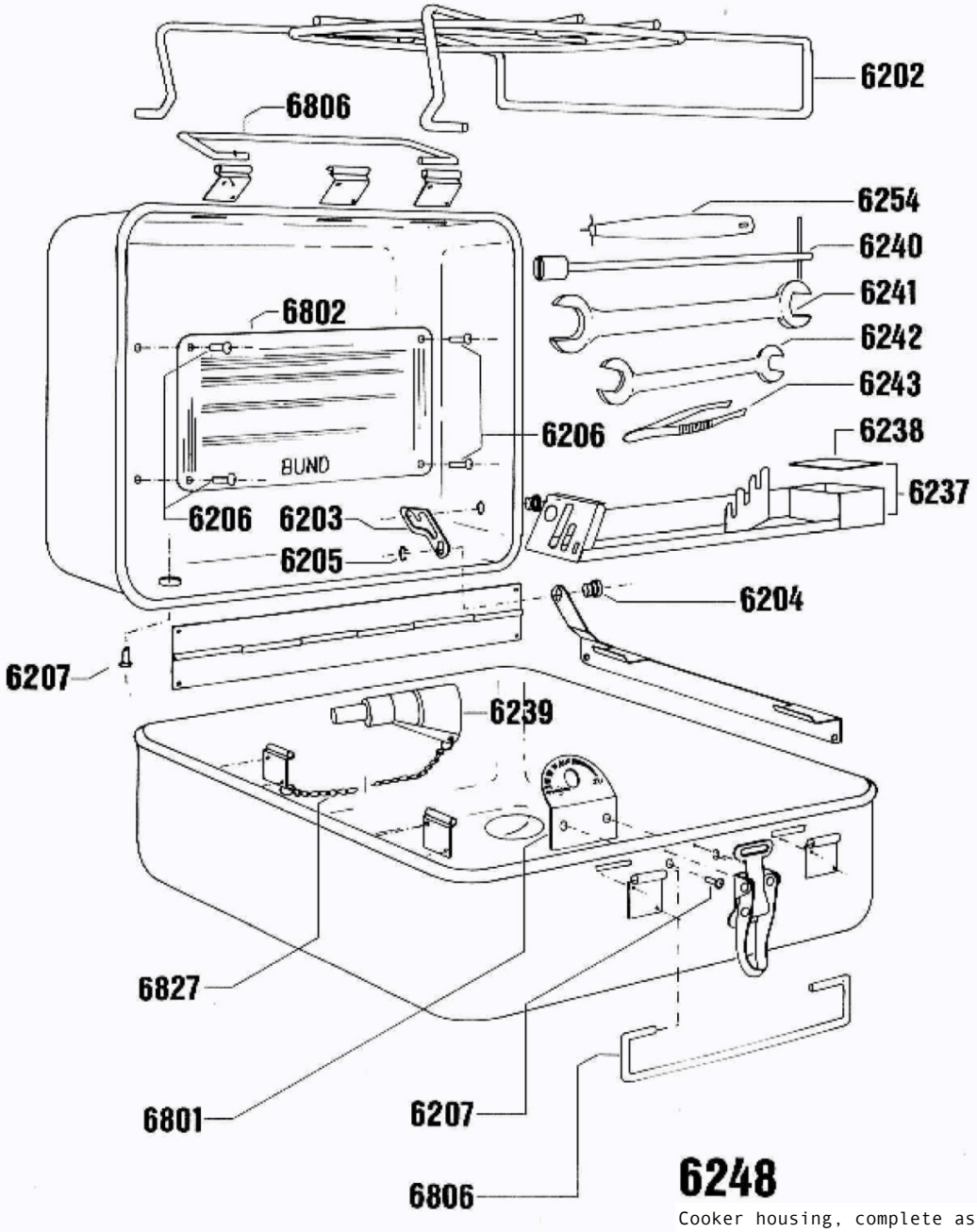
Open the cooker housing. To unhook the cover of the tool holder, lift the cover, push the left partition wall outwards slightly until the left cover pin is exposed. Lift the left side of the cover and pull the cover off to the left. When assembling the cover, push the right cover pin into the hole in the right housing wall, push the left partition wall outwards and fit the left cover pin into the hole. Release the partition again and snap the cover into place.

5. FUNCTIONAL CONTROLS, THEIR POSSIBLE SOURCES OF ERRORS AND THEIR REMEDY

MALFUNCTIONS	SOURCES OF ERROR	ELIMINATION
A. BURNER		
bad flame	Insufficient preheating	Repeat the preheating process
	Regulation is too low	Bring the regulator to the “open” position
	Burner draws wrong air (underburn)	Retighten the burner nozzle
Performance too low	Not enough pressure in the tank	Pump up air
	Nozzle sooty	Clean the outside and the inside of the nozzle
	Regulation is too low	Bring the regulator to the “open” position
Yellow flame at the spindle nut	Graphite packing leaking	Tighten the spindle nut with an open-ended spanner until the flame goes out
Loud noises when igniting the burner	Burner draws wrong air (underburn)	Close the burner and re-ignite with a match or fire tool
B. QUICK LIGHTER		
Stutters or doesn’t ignite	Igniter nozzle holes dirty	Clean the orifices of the nozzle nut and ignitor body with the cleaner wire tool
	Dirty fuel	Filter the fuel through a linen cloth
	Insufficient pressure or over-pressure in the tank	Increase or reduce pressure
	The fuel pickup filter is dirty	Clean the filter
	Fuel pickup is not upright in the tank	Dismantle the igniter, place the fuel pickup pipe vertical and tighten it in this position
Fuel leaks at the nozzle nut	Rocker arm seal does not seal	Replace rocker arm seal
	Nozzle nut does not close	Retighten or replace nozzle nut
C. TANK		
does not hold pressure	Pressure gauge air vent screw is not closed	Tighten the air vent screw
	Pressure gauge seal worn out	Replace seal
	Pump valve leaking	Tighten the pump valve
		Replace pump valve head gasket
		Replace pump valve
…	Pressure relief valve does not close	Replace large gasket
		Replace valve pip
	Screw connection of the quick lighter does not seal (leaks)	Replace the copper seal
Fuel in the recess of the tank	Burner not closed	Turn the spindle to the right as far as it will go
	Burner screw connection leaking	Tighten the burner union nut
D. PUMP		
Pump does not pull	Leather pump cup dry	Grease or replace the pump cup
Pump plunger pushes out	Pump valve is not closing	Retighten the pump valve
		Replace pump valve head gasket
		Replace pump valve
Fuel in the pump tube	as mentioned above	as mentioned above

6. INCLUDED PARTS AND TOOLS

Part Nbr.	Name	Order Nbr.	Supply Nbr.	Supply item Number	Quantity
1	Stove	6000	7310-12-187-4098	7300004	1
	Tools:				
2	Socket wrench with slot	6240	5120-12-303-3699	7300004-5000-01	1
3	Wrench, open-ended	6241	5120-12-120-5152	D8286-17x19 DIN 895	1
4	Wrench, open-ended	6242	5120-12-123-0222	D3254-200-10x14	1
5	Tweezers, 90mm long standard handle	6243	3120-12-126-1971	D3057-5473	1
6	Manual wire cleaner for burner jet and quick-lighter	6254		6254	1
	Spare Parts:				
7	Burner jet	6250	4530-12-303-3555	7300004-2200-04	1
8	Graphite spindle packing	5225	5330-12-303-4534	7300004-2200-06	1
9	Preheater pip cup w/pip	12417	6260-12-127-2595	7300004-2311 C1128-229	1
10	Seal for pressure gauge & pressure relief valve	12224	5330-12-126-5209	7300004-2700-06 C1128-11	1
11	Leather pump cup	12254	6260-12-130-5582	7300004-2500-05 C1128-46	1
12	Pump valve	12223	4820-12-303-2896	7300004-2600 C1128-10	1
13	Burner seal	6244	5330-12-132-7079	A8x13x1 DIN 7603 C-Cu	2
14	Preheater seal	6249	5330-12-165-4517	A8x13.8x1 DIN 7603 C-Cu	2
	Other:				
15	Operating, maintenance & repair instructions	6252		DIN A 5	1



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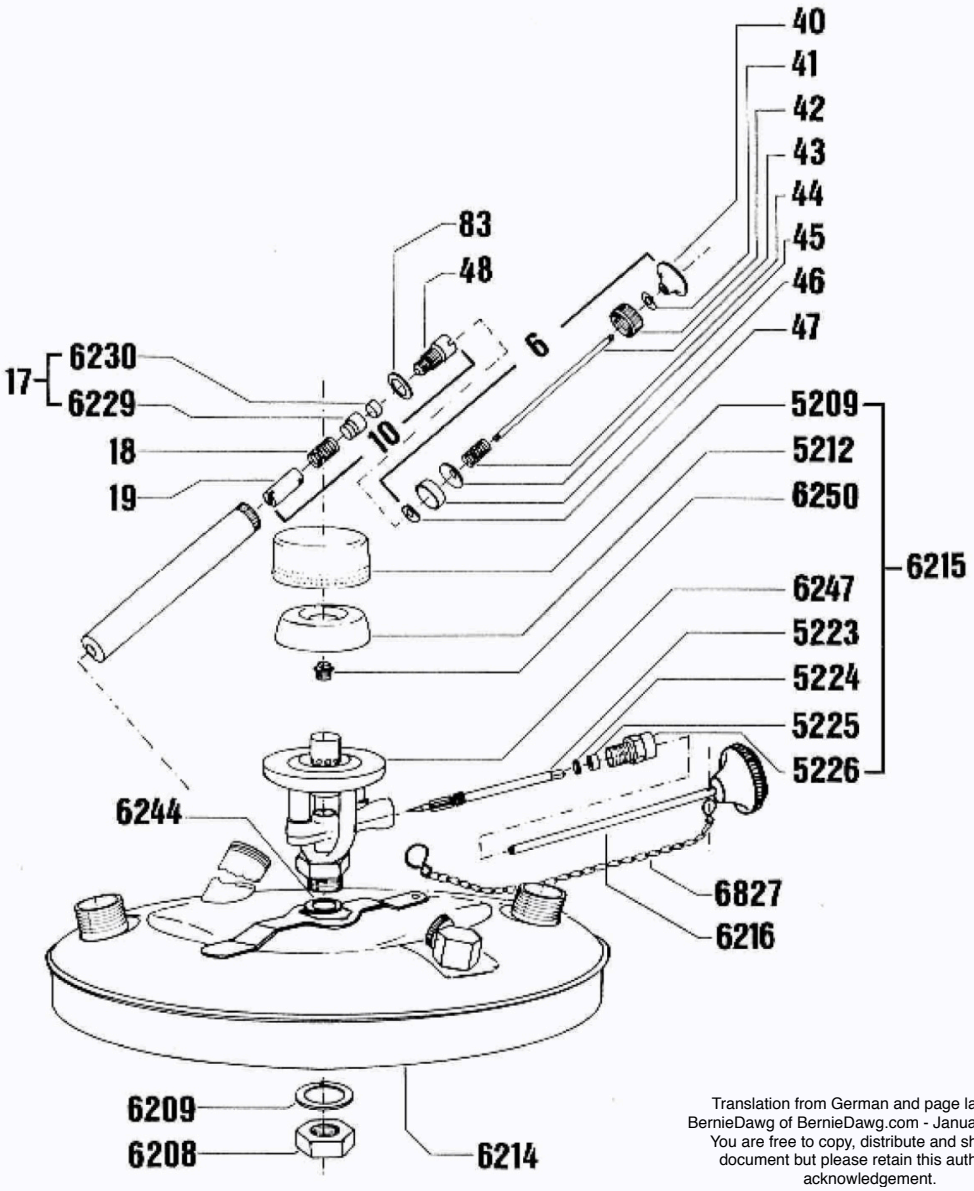
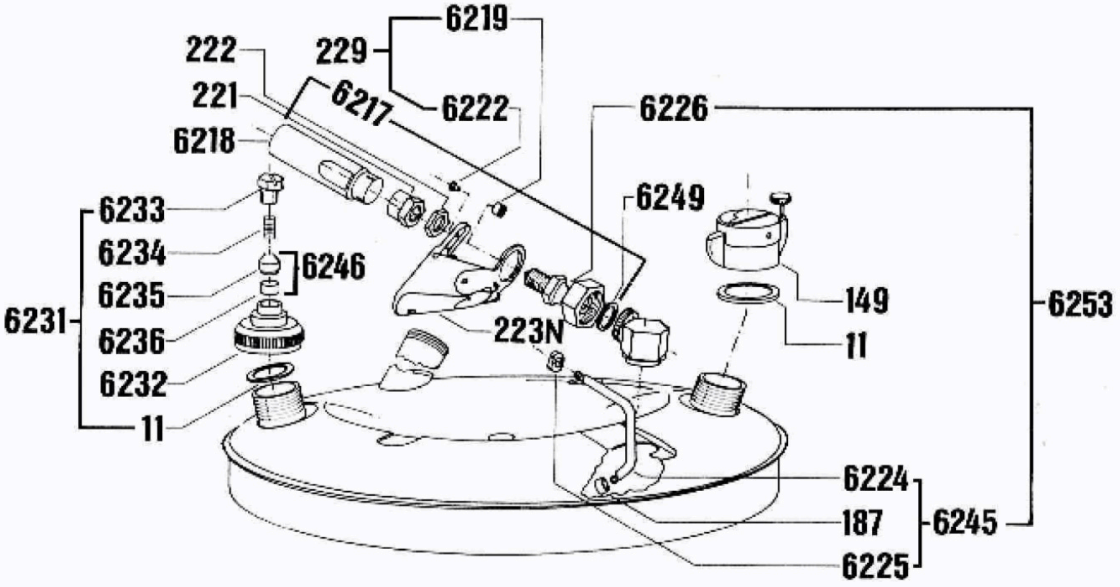
Cooker housing, complete as shown page 11, without funnel, chain, grate, accessories and spare parts.





7. SPARE PARTS LIST

Item Nr.	Name	Order Nr.	Stock Number	Drawing Number
6	Pump piston, complete	12222	6260-12-133-1538	7300004-2500
10	Pump Valve	12223	4820-12-303-2896	-2600
11	Seal for Manometer and Pressure relief valve	12224	5330-12-126-5209	-2400-09
17	Valve insert	12229		-2610
18	Valve spring	12230		-2600-02
19	Valve body	12317		-2600-03
40	Pump knob	12244		-2510
41	Mounting washer	12246	5305-12-133-2975	-2500-03
42	Pump cap	12250	6260-12-133-1536	-2500-02
43	Pump rod	12251	6260-12-133-1537	-2500-01
44	Pump spring	12252	5360-12-132-1817	-2500-06
45	Pump plate	12253	6260-12-133-1534	-2500-04
46	Leather pump cup	12254	6260-12-130-5582	-2500-05
47	Pump rod nut	12255	5310-12-303-3996	-2500-07
48	Pump valve head	6220		-2600-01
83	Pump valve washer	12279	5330-12-303-4539	-2600-04
149	Pressure gauge with seal	12379	6260-12-127-7425	-2400
187	Filter	12391		-2322
221	RAPID preheater nozzle	12400	6260-12-173-8436	-2300-02
222	Nut	12401	5310-12-173-9852	-2300-03
223N	Rocker arm, complete	12405	6260-12-135-0936	-2310
229	Nozzle pip cup with seal and screw	12417	6260-12-127-2595	-2311
5209	Outer cap	5209	4530-12-303-3553	-2200-02
5212	Inner cap	5212	4530-12-303-3554	-2200-03
5224	Spindle ring	5224	5310-12-303-3995	-2200-08
5225	Graphite seal	5225	5330-12-303-4534	-2200-06
5226	Spindle nut aka Stuffing box	5226	4730-12-303-4538	-2200-07
6202	Pan support	6202	7330-12-303-4871	-0000-01
6203	Tab, galvanized	6203	5340-12-303-3356	-1000-01
6204	Hinge pin, galvanized	6204	5315-12-303-4535	-1000-02
6205	Lock washer for hinge pin DIN 6799-5	6205	5320-12-156-4494	
6206	Blind rivet 2.8x4.83 for operating instructions	6206	5320-12-303-4536	
6207	Blind rivet 4x6.8 for holding plate & tool holder	6207		
6208	Hex nut DIN 936-M10, steel, Zinc-plated Grade 5	6208		
6209	Spring washer DIN 137-810 steel, zinc-plated Gr5	6209		
6214	Fuel tank with brazed fittings	6214		-2100
6215	Burner, complete, without regulating control knob	6215		
6216	Regulating control knob, complete, with chain and snap hook	6216	5355-12-303-5795	-2210-01
6217	RAPID preheater, complete, with fuel pickup tube	6217		-2300
6218	Flame tube	6218	4530-12-303-4873	-2300-01
6222	Pip cup screw DIN 84-M2.2 - 4.8 nickel-plated steel	6222		
6224	Fuel pickup tube, bent, without nut and filter	6224		-2320-01
6225	Round nut, M3	6225		-2320-02
6226	Preheater, complete, without fuel pickup tube	6226		-2321

8. SPARE PARTS LIST

Item Nr.	Name	Order Nr.	Stock Number	Drawing Number
6229	Pip cup for pump valve	6229		7300004-2610-01
6230	Seal, Viton, for pip cup No. 6229	6230		-2311-02
6231	Pressure relief valve, complete	6231	4820-12-303-2897	-2700
6237	Tool holder, complete, without tools	6237	5140-12-303-7885	-3000
6238	Cover for tool holder	6238		-3000-04
6239	Filling funnel with hole	6239	7240-12-129-1352	-4000-01
6240	Socket wrench	6240	5120-12-303-3699	-5000-01
6241	Open-ended wrench DIN 895 - 17mm x 19mm, black	6241	5120-12-120-5152	
6242	Open-ended wrench 200-10x14	6242	5120-12-123-0222	
6243	Tweezers 90mm long	6243	5120-12-126-1971	
6244	Seal for burner connection, copper DIN 7603-A8x13-C-Cu HZ	6244	5330-12-303-7979	
6245	Fuel pickup tube with filter and nut	6245		
6247	Bare burner, brazed	6247	4530-12-303-4537	-2200-01
6248	Cooker housing, complete, as on page -8- shown and described	6248	7310-12-303-4872	-1000
6249	Seal for RAPID preheater, copper, DIN 7603 - A8x13.8 C-Cu-HZ	6249	5330-12-165-4517	
6250	Burner jet	6250	4530-12-303-3555	-2200-34
6253	RAPID preheater, complete	6253	4530-12-303-3558	-2320
6254	Hand cleaning needle for burner jet and RAPID preheater	6254		
6255	Regulating spindle	6255	4530-12-303-3557	-2200-05
6801	Retaining plate for spindle knob shaft	6801	5355-12-303-5794	-1000-03
6802	Instructions for use label	6802		-1000-04
6806	Handle	6806		-1100-04
6827	Patent chain DIN 5279A 0.3x10 - Cu/Zn alloy			