

**Betriebsanleitung
Instruction manual
Manuel d'instructions**

HD 1050 B

1.810-112

1.810-122

1.810-132



C o n t e n t s

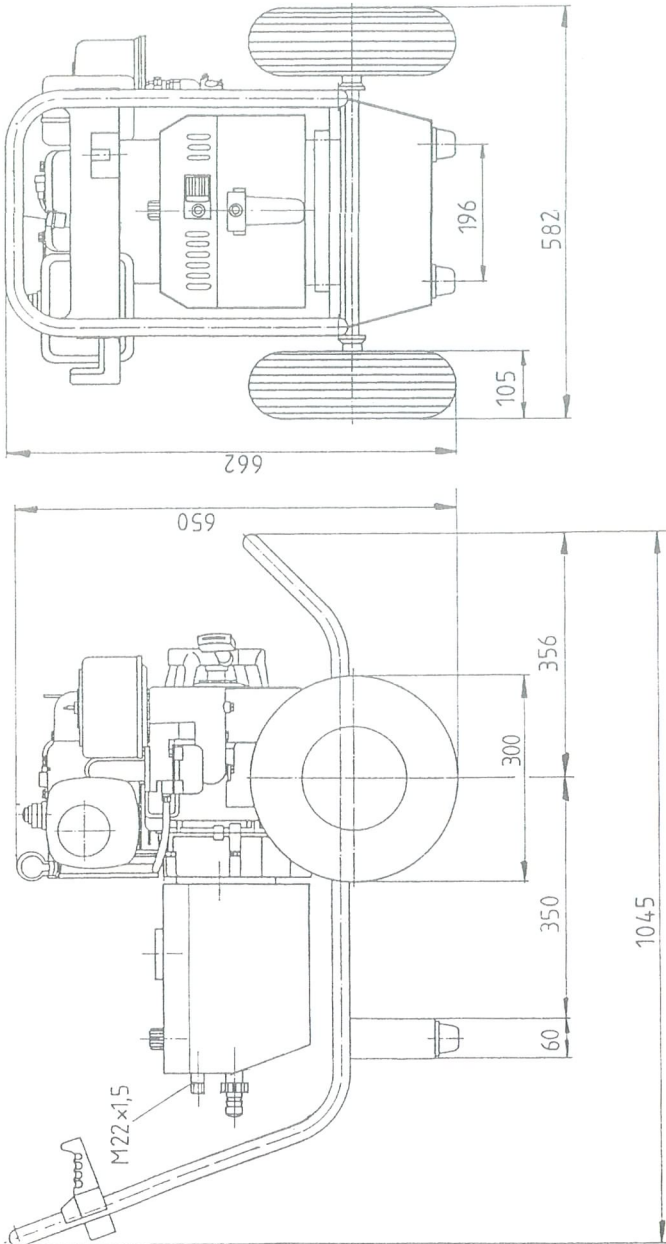
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1. Technical data

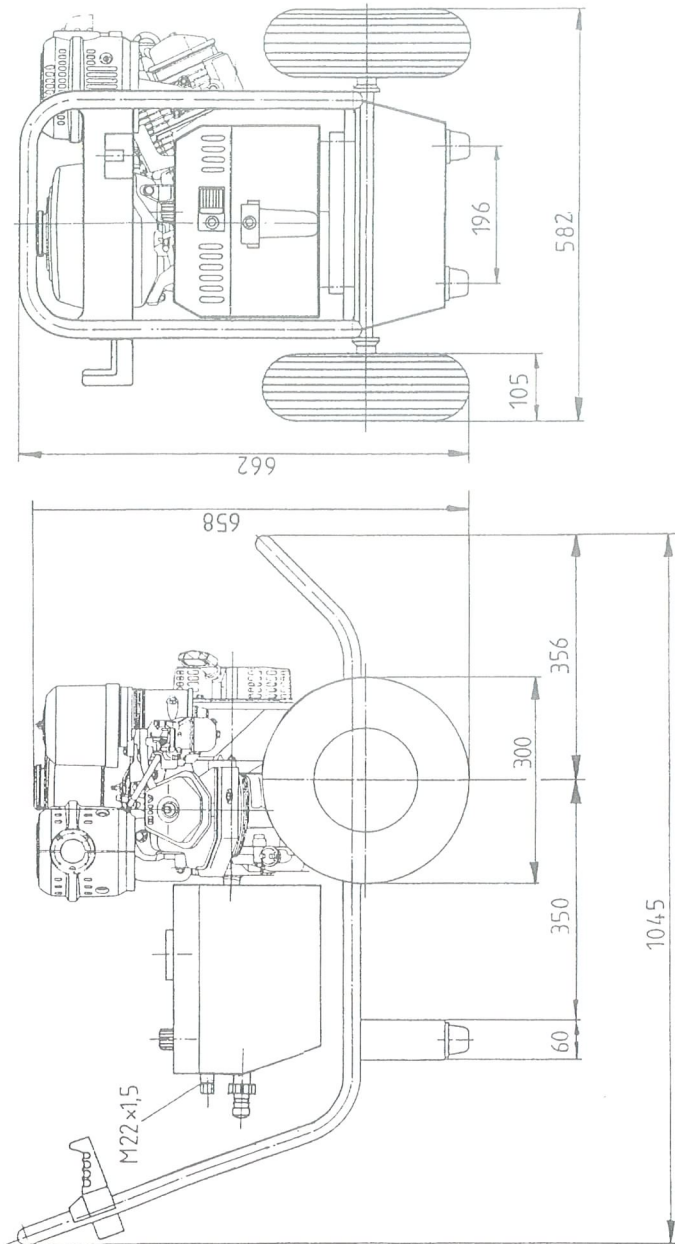
1.1	Engine:		Briggs & Stratton	Honda
	Air-cooled single-cylinder		254 422	GX340
	4-stroke-engine			
	with recoil starter			
	Rated power at 3600 rpm	kW	8.0	8.0
	Specific consumption	g/kWh	358	313
	Tank capacity	liter	5.6	6
1.2	High-pressure pump			
	Delivery, max.	liters/h	850	925
	inifinitely adjustable down to	liters/h	150	150
	Working pressure	bar	170	190
	inifinitely adjustable down to	bar	20	20
	Permissible working pressure	bar	190	210
	Suction head with water at 30 °C	m	1	1
	Cleaning agent draw-in	Liters/h	0 - 40	0 - 40
	Water feed temperature	°C	60	60
1.3	Dimensions of cleaner			
	Length	mm	1045	1045
	Width	mm	582	582
	Height	mm	662	662
	Weight approx. *	kg	65	67

* Without fuel, without accessories

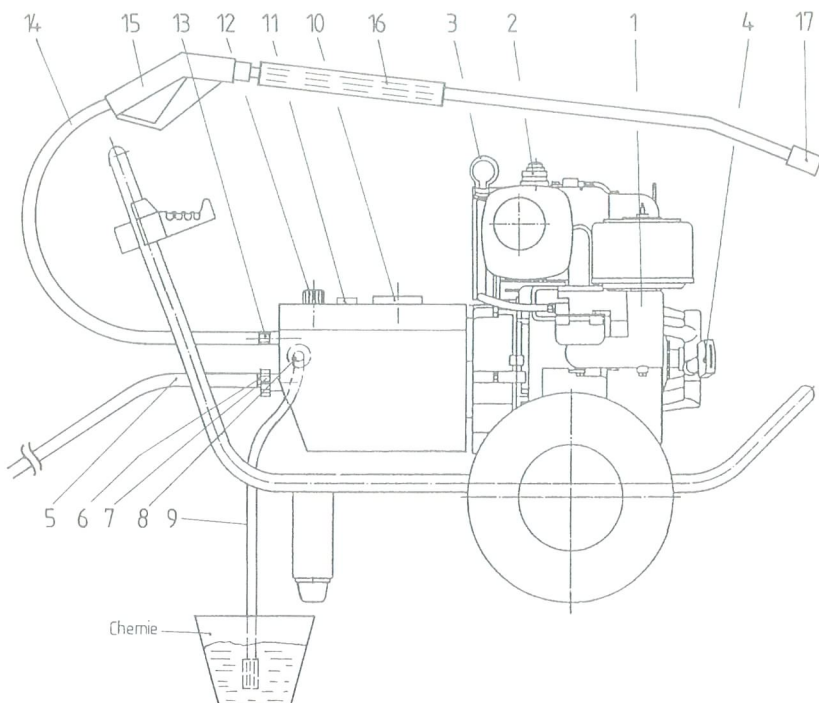
Dimension Sheet: Model with Briggs & Stratton Engine



Dimension Sheet: Model with Honda Engine



Diagrammatic Arrangement



- | | |
|---|-------------------------------|
| 1. Engine | 10. Oil tank |
| 2. Fuel tank | 11. Manometer |
| 3. Oil dipstick | 12. Pressure and flow control |
| 4. Recoil starter | 13. High-pressure connection |
| 5. Hose connection | 14. High-pressure hose |
| 6. Water connection | 15. Hand spray gun |
| 7. Strainer | 16. Spray lance |
| 8. Detergent dosing valve | 17. 3-way nozzle |
| 9. Detergent suction hose with strainer | |

2. Important notes

Before using the cleaner, please note the following points:

- 2.1 If any damage should be detected on unpacking the cleaner, then please inform your KÄRCHER-sales office immediately.
- 2.2 Before starting up, it is essential to read the operating instructions for the engine (enclosed) most carefully, particularly the references to safety precautions.

Only use regular petrol (preferably lead-free);
do not use 2-stroke petrol mixture)

- CAUTION:**
- The cleaner must not be used indoors in unventilated rooms. The exhaust gases contain poisonous carbon monoxide and must not be breathed in. There is a **HEALTH HAZARD**.
 - Fuel must not be poured into the fuel tank while the engine is running or hot. There is a **RISK OF FIRE and EXPLOSION**.
 - There should be no smoking, sparks or open flames in the vicinity.
 - Avoid spilling fuel. If fuel is spilt, it should be dried up immediately.
 - Keep the fuel tank and fuel canister properly closed.
 - Fuel vapour is poisonous; do not breathe it in.
 - The silencer becomes very hot when the engine is running and remains hot for some time after the engine is stopped. So do not touch the silencer.
 - Easily flammable objects and materials should be kept away from the silencer by a distance of at least 1 m.

2.3 Water supply

Fit a water hose (5) at least 1/2" to the cleaner and connect it to a water tap. A suitable 3/4" water hose can be ordered from Kärcher under Order No. 4.440-222.

- A water supply of at least 15 liters per minute is required.
- The regulations of your water supply authority should be followed.
- The cleaner is fitted with a strainer on the inlet-side. This strainer should be checked regularly for contamination and be cleaned if necessary. Where the water supply is by suction, it is very strongly recommended that a water filter be fitted. A suitable water filter with fittings is available under Order No. 2.637-691.

2.4 Suction operation

The water supply can also be from an open tank in which case a water hose with a minimum internal diameter of 3/4" (Kärcher Order No. 4.440-222) should be used and, if possible, a water filter 2.637-691 should also be fitted.

In order to avoid the filter being quickly blocked with coarse material, the suction hose should also be fitted with a foot strainer. A suitable foot strainer for use with the 3/4" water hose 4.440-222 is obtainable from Kärcher under Order No. 4.730-019.

The water temperature must be below 60° C.

The surface of the water should not be more than 1 meter below the level of the cleaner.

Caution: Never draw in unfiltered water or water containing any solvent, such as paint thinner, petrol, oil, etc.

- 2.5 Connect the spray lance (16) to the hand gun (15) and connect to the high-pressure connection (13) of the pump. Fit the 3-way nozzle (17) to the spray lance (16). The positions referred to are indicated on the diagrammatic arrangement on Sheet 4.

- 2.6 Before first starting the cleaner, cut the tip off the lid of the oil tank (10) for the HP pump.



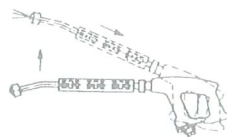
3. Operation

3.1 Putting into operation

- Turn on the water supply
- Start the engine in accordance with the operating instructions
- Pull the trigger of the hand spray gun (15).

The pump first pumps the air out of the cleaner and after a short time, water emerges from the 3-way nozzle.

Caution: As the water leaves the nozzle it causes the hand gun to kick back and so it should be held firmly.



- 3.2 If the trigger of the hand gun is released during operation, the relief valve opens and the water circulates within the pump. At the same time, the engine-speed control on the cylinder head reduces the speed of the engine from working speed to idle speed.

When the trigger is pulled again, the relief valve closes, the engine accelerates to working speed and the spray pressure is resumed.

3.3 Adjusting the pressure and water flow

The water flow and pressure can be infinitely varied by turning the knob of the flow and pressure control valve (12) on the pump. Turning the knob counter-clockwise results in the maximum water flow and pressure while turning it clockwise reduces the water flow and pressure. A manometer mounted adjacent to the control valves indicates the current delivery pressure.

3.4 Suction operation

If there should be difficulty in priming the pump in suction operation, the high-pressure hose (14) should be unscrewed from its connection (13) so that the pump can prime itself under no counter-pressure.

At the same time, the strainer supplied with the cleaner and any water filter that is fitted should be checked and cleaned as necessary.

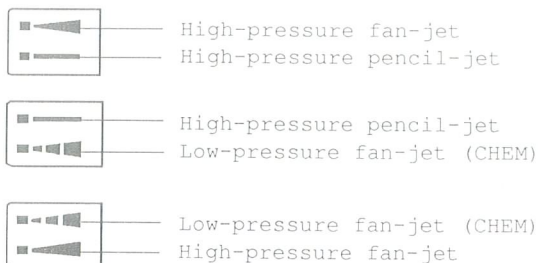
3.5 3-way nozzle

The 3-way nozzle (17) is a combined fan-jet nozzle, high-pressure pencil-jet nozzle and low-pressure fan-jet nozzle.

The 3-way nozzle is secured by means of a union nut to the spray lance in such a way that the two nozzles required for the cleaning operation concerned and their associated symbols are at the top.

It is then possible to switch from either of these two nozzles to the other by slightly turning the swivel-mounted spray lance while the trigger of the hand gun is released. When the trigger of the hand gun is pulled again, water will emerge from the nozzle that is in the highest position and, for so long as the trigger of the hand gun is kept pulled, that nozzle will remain open independent of the attitude of the spray lance.

Meaning of the symbols on the 3-way nozzle



3.6 How the safety devices work

- Relief valve:

When the trigger of the hand gun is released, the relief valve opens and the high-pressure pump feeds water back from its delivery side to its suction side. This prevents the permissible working pressure being exceeded.

- Safety valve:

The safety valve is a supplementary means of protecting the high-pressure pump from developing an excessively high pressure. It opens briefly whenever the trigger of the hand gun is suddenly released. When it opens, the water is fed back to the suction side of the pump.

The safety valve is sealed. Its setting must not be altered.

3.7 Putting out of operation

- Stop the engine by turning the stop switch to OFF.
- Turn off the fuel cock (only on units with a Honda engine).
- Turn off the water supply.
- Pull the trigger of the hand gun until no more water comes from the nozzle. The cleaner is then relieved of pressure.
- Lock the trigger of the hand gun with the catch to prevent it being pulled unintentionally.
- If an aggressive cleaning agent or disinfectant was used, clean water without cleaning agent should be pumped through the cleaner for at least 30 seconds, in order to rinse it.

4. Application

4.1 Pump application

The HD 1050 B high-pressure cleaner is intended particularly for applications where no electricity supply is available.

- a) for cleaning construction-site vehicles
- b) for cleaning in the open air

CAUTION: The cleaner should not be used indoors in unventilated rooms because the exhaust gas from the engine is poisonous.

To clean, for example, a construction-site vehicle

Here the full water flow should be set and for normal application the fan-jet nozzle should be used. For particularly stubborn dirt, the pencil-jet nozzle can be used.

4.2 Working with cleaning agents

There are 2 ways in which a cleaning agent can be fed:

1.) Drawing-in of the cleaning agent by an integral low-pressure injector:

- Insert the suction hose (9) in the cleaning-agent container
- Use the cleaner with the low-pressure fan-jet nozzle. (If a high-pressure nozzle is used, no cleaning agent will be drawn in.)
- The amount of cleaning agent drawn into the water flow can be infinitely adjusted by means of the dosing valve (8) up to about 5%.

2.) Drawing-in of cleaning agent through the pump

Water and cleaning agent can be mixed in a tank to the required concentration and then be drawn from the tank in suction operation and pumped through the pump.

After using the cleaner with a cleaning agent, it should be run for at least 1 minute with clean water in order to remove any water containing chemicals from the cleaner and its attachments.

4.3 Kärcher cleaning agents

The Table below lists the more important Kärcher cleaning agents for use on farms. Further information is to be found in our cleaning-agent catalogue and our product-information sheets which are obtainable from all Kärcher agents and sales offices on request.

- All the materials used in construction of the HD 1050 B cleaner have been tested for compatibility with Kärcher cleaning agents.
- If cleaning agents or chemicals are used other than those recommended by us, then the operator must accept responsibility for any increase of operational reliability or health hazards.
- The instructions for use on the labels of the cleaning-agent containers and in our product information sheets should be followed.
- The information is given in good faith to the best of our knowledge and experience but without commitment. It does not relieve the user of responsibility for checking the suitability of the material concerned for the intended purpose and application.
- Not being under our control, the use and storage of these materials is the sole responsibility of the user and thus we disclaim any liability for loss or damage resulting from their use and storage materials.

Surface	Cleaning agent (RM)	Dilution with water	RM in jet	Order No.
1 Automobiles, cycles, caravans	RM 22, powder	1:9	1-2%	6.291-220 20 kg
	RM 81, liquid	1:9	1-2%	6.291-810 30 kg
2 Lime and urine scale on non-sensitive surfaces	RM 25, liquid	1:4	2-5% Max. 30°C	6.291-252 10 l
3 Heavy contamination with oil and grease on non-sensitive surfaces	RM 31, liquid	1:9	1-2%	6.291-310 10 l
4 Disinfection of animal boxes and disinfection in sanitary facilities	RM 35 liquid	100%	2,5-7,5%	6.291-351 10 l
	RM 32, liquid	100%	2-5%	6.291-327 20 l
5 Sensitive surfaces	RM 55, liquid	1:9	1-2%	6.291-552 10 l
6 Facades with light	RM 81, liquid	1:3	1-4%	6.291-810 30 kg

4.4 Nozzles for the hand-spray gun

The HD 1050 B is fitted at the works with a 3-way interchangeable nozzle that generates a 25° high-pressure fan-jet, a high-pressure pencil-jet and a low-pressure fan-jet. The facility of varying the pressure and water flow at the pump makes these nozzles suitable for practically all work but some particular applications may call for the use of other nozzles.

Order No.	Nozzle Type	Spray Angle	Pressure bar	Kick-back Force N
6,415-314	00055	0°	170	33
6,415-313	15055	15°	170	33
6,415-311	25055	25°	170	33
6,415-312	40055	40°	170	33

5. Servicing and maintenance

5.1 Maintenance

1. High-pressure pump: Check the oil level in the oil tank once a week or after 40 operating hours. The oil tank is transparent and has a "max." and a "min." mark.

When the oil should be topped up as necessary with Kärcher special oil SAE 15 W 40, Order No. 6.288-050.

2. Petrol engine: Maintenance in accordance with the operating instructions for the engine.
3. The strainer fitted in the cleaner should be checked and cleaned as necessary once a week.

5.2 Oil changes

1. High-pressure pump: Once year or after about 400 operating hours the oil should be changed by draining the old oil by unscrewing the oil-drain screw beneath the pump housing and filling with new Kärcher special oil SAE 15 W 40 through the oil tank.
2. Petrol engine: Change the oil in accordance with the engine operating instructions.

5.3 Repairs

The safety valve is set of the works and sealed. Overhaul of the relief valve and safety valve must only be effected by a trained technician.

5.4 High-pressure hoses

Particular attention should be paid to the hoses. It is important that only tested Kärcher original high-pressure hoses are used.

5.5 Protection from freezing

The HD 1050 B cleaner cannot be damaged by frost if it is fully drained of water or flushed through with a glysantine solution.

Draining the cleaner

Unscrew the high-pressure hose (14) from the high-pressure connection (13). Unscrew the water hose (5) from the water connections (6) and run the cleaner until no more water emerges from the high-pressure connection (13).

If there is any risk of water in a cleaner being frozen then, to avoid a risk of damage, the cleaner should first be thawed before being put into use.

Glysantine flushing

A 50 % glysantine solution is pumped through the cleaner.

The best protection against freezing is to store the cleaner in a room whose temperature will not fall to below freezing.

6. Trouble shooting

Fault	Cause	Remedy
1. The engine will not run	1. The engine stop switch is turned to OFF 2. Fuel tank empty 3. Spark plug 4. For further causes see operating instructions for engine	Turn switch to ON Check, fill See operating instructions for engine
2. Cleaner does not come up to pressure	1. Pump sucking air 2. Strainer blocked 3. Pump not vented 4. Pump or relief valve defective 5. Safety valve out of adjustment	Check water hose Open water tap Clean strainer Turn off the cleaner, pull hand-gun trigger, start cleaner with hand-gun trigger pulled, if necessary repeat the operation Call customer service Call customer service
3. Water jet irregular	1. 3-way nozzle blocked 2. Water supply inadequate 3. Safety valve out of adjustment	Blow through the nozzle with compressed air or clean with a drawing pin or something similar Run the cleaner in suction operation from a storage tank Call customer service
4. Nozzle change not possible	The ball in the 3-way nozzle is jamed	Tap the 3-way nozzle lightly to free the ball

Fault	Cause	Remedy
5. No cleaning-agent drawn in	1. Suction filter blocked 2. 3-way nozzle blocked 3. Low-pressure nozzle not used 4. Nozzle insert blocked (pressure increases) 5. Ball in the check valve of the injector jamed	Clean filter at in the suction hose Clean 3-way nozzle (See 6.3.1) Use low-pressure nozzle Unscrew the nozzle insert from the injector, clean and fit it back Pull the knob of the cleaning-agent dosing valve (8), unscrew the plastic nipple and pass a short length of wire through the suction opening to release the ball.
6. Oil has a milky-white appearance	Seals leaking	Call customer service
7. Groove ring leaking	Machine not use for a long period	A littl leakage (max. 3 drops per minute) is permissible. Groove ring is in order.

If you need assistance from customer service, please bring your cleaner with its accesories to the nearest Kärcher service station.

If the defect is in the engine, contact may also be made to the engine manufacturer's nearest service station.

If a fault should be the result of any material or manufacturing fault within the guarantee period, the machine would be repaired and sent back without charge.