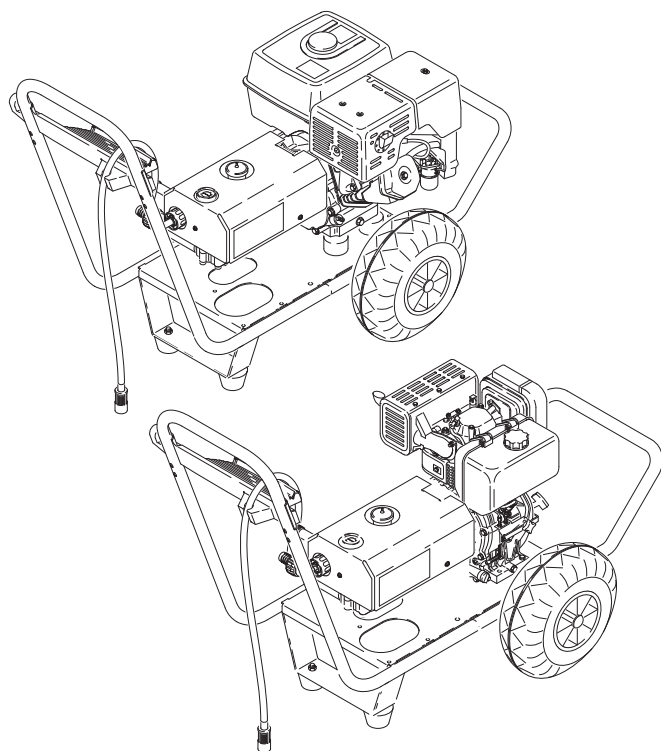


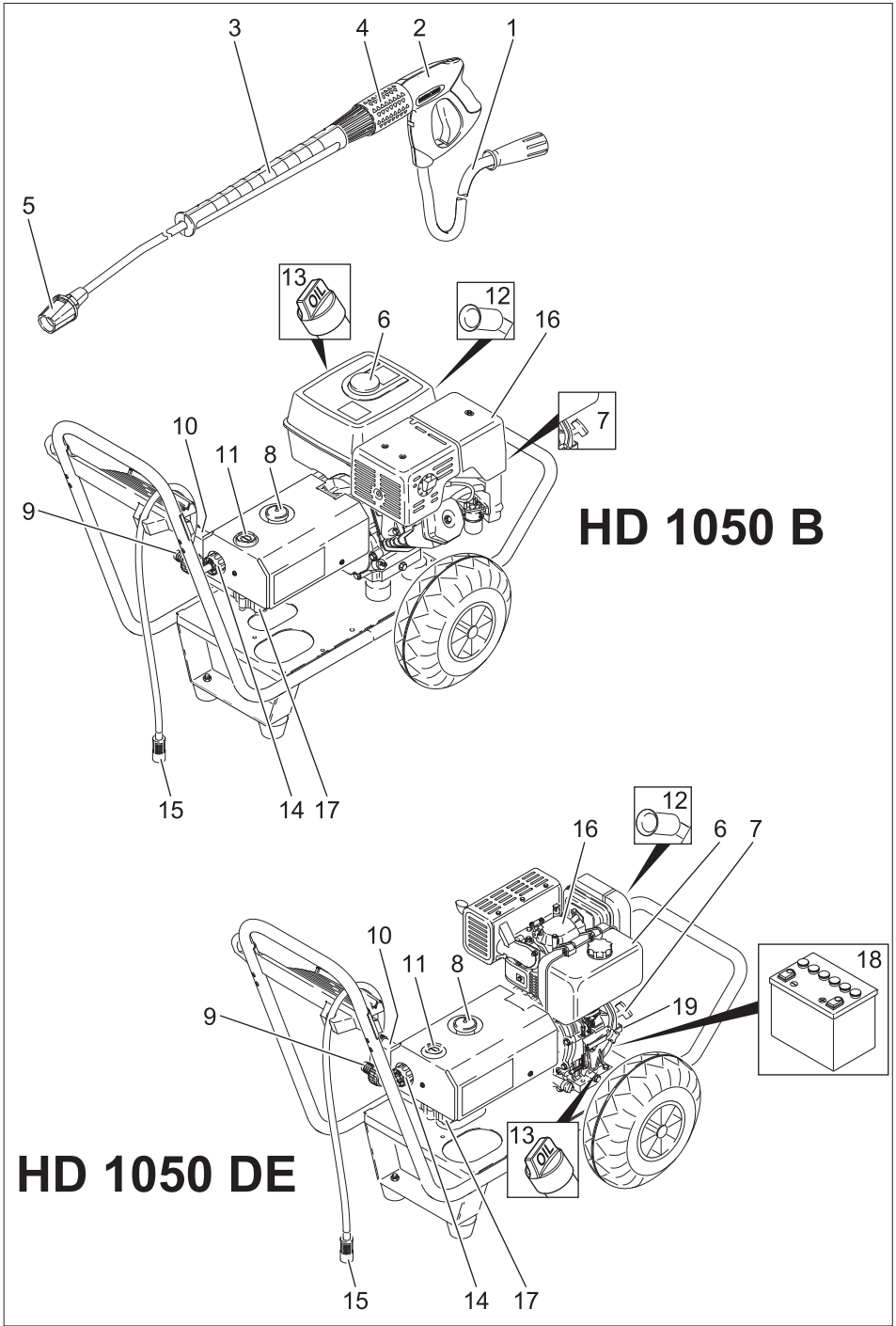
HD 1050 B
HD 1050 DE



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Register and win!
www.kärcher.com







Please read and comply with these original instructions prior to the initial operation of your appliance and store them for later use or subsequent owners.

- Before first start-up it is definitely necessary to read the operating instructions and safety indications Nr. 5.951-949!
- In case of transport damage inform vendor immediately
- Check the contents of the pack before unpacking.

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Environmental protection



The packaging material can be recycled. Please do not throw the packaging material into household waste; please send it for recycling.



Old appliances contain valuable materials that can be recycled; these should be sent for recycling. Batteries, oil, and similar substances must not enter the environment. Please dispose of your old appliances using appropriate collection systems.

Please do not release engine oil, fuel oil, diesel and petrol into the environment. Protect the ground and dispose of used oil in an environmentally-clean manner.

Notes about the ingredients (REACH)

You will find current information about the ingredients at:

www.kaercher.com/REACH

Symbols in the operating instructions

Danger

Immediate danger that can cause severe injury or even death.

Warning

Possible hazardous situation that could lead to severe injury or even death.

Caution

Possible hazardous situation that could lead to mild injury to persons or damage to property.

Device elements

- 1 High pressure hose
 - 2 Hand spraygun
 - 3 Spray lance
 - 4 Pressure/ quantity regulation
 - 5 Triple nozzle
 - 6 Fuel tank
 - 7 Device for manual start
 - 8 Oil tank
 - 9 Connection for water supply with filter
 - 10 High pressure connection
 - 11 Manometer
 - 12 Storage for spray pipe
 - 13 Oil dip (engine)
 - 14 Dosage valve for detergent
 - 15 Detergent suction hose with filter
 - 16 Motor
 - 17 High pressure pump
 - 18 Battery *
 - 19 Lever for motor stop *
- * only HD 1050 DE

Symbols on the machine



High-pressure jets can be dangerous if improperly used. The jet may not be directed at persons, animals, live electrical equipment or at the appliance itself.



Risk of burns! Beware of hot components.



Risk of poisoning! Do not breathe in the exhaust fumes.

According to the applicable regulations, the appliance must never be used on the drinking water supply without a system separator. Use a suitable system separator manufactured by KÄRCHER; or, as an alternative, a system separator as per EN 12729 Type BA. Water flowing through a system separator is considered non-drinkable.



Caution

Always connect the system separator to the water supply, never directly to the appliance!

Proper use

High pressure cleaner to clean: Machines, Vehicles, Structures, Tools, Facades, Terraces, Gardening tools, etc.

- Use only the high pressure jet without detergent for cleaning facades, terraces, garden equipment, etc.
- For stubborn dirt, we recommend the use of the dirt blaster as a special accessory.

Danger

Risk of injury! Follow the respective safety regulations when operating at gas stations or other dangerous areas.

Please do not let mineral oil contaminated waste water reach soil, water or the sewage system. Perform engine cleaning and bottom cleaning therefore only on specified places with an oil trap.

Safety instructions

- Please follow the national rules and regulations for fuel spray jets of the respective country.
- Please follow the national rules and regulations for accident prevention of the respective country. Fuel spray jets must be tested regularly and the results of these tests must be documented in writing.

Danger

- Do not use high pressure cleaners when there has been an oil spill; move the appliance to another spot and avoid any sort of spark formation.
- Do not store, spill or use fuel in the vicinity of open flames or appliances such as ovens, boilers, water heaters, etc. that have an ignition flame or can generate sparks.

- Keep even mildly inflammable objects and materials away from the silencer (at least 2 m).
- Do not start the engine without the silencer; check, clean and replace, if required, the silencer at regular intervals.
- Do not use the engine in forest, bushes or grassy areas without fitting a spark receiver at the exhaust.
- Except for setting jobs, do not run the engine when the air filter is removed or there is no cover over the suction support.
- Do not make any adjustments to the regulator springs, regulator bars or other parts that can bring forth an increase in the engine speed.
- Risk of burns! Do not touch hot silencers, cylinders or radiator ribs.
- Do not put hands or feet close to moving or rotating parts.
- Risk of poisoning! The appliance should not be operated in closed rooms.
- Do not use unsuitable fuels, as they may be dangerous.

Safety Devices

Safety devices serve for the protection of the user and must not be put out of operation or bypassed with respect to their function.

Overflow valve

- If the hand spray gun is closed, the overflow valve opens and the high pressure pump diverts the water back to the pump suction side. Thus the permissible working pressure is not exceeded.
- The overflow valve is set by the manufacturer and sealed. Setting only by customer service.

Start up

⚠ Danger

Risk of injury! Device, tubes, high pressure hose and connections must be in faultless condition. Otherwise, the appliance must not be used.

Check oil level of the high pressure pump

- Check oil level of the high pressure pump at the oil sight glass.

Do not operate the appliance if the oil level has fallen below "MIN".

- Add oil if required (see technical specifications).

Motor

Follow the instructions given in the section "Safety Notes"!

→ For HD 1050 DE:

Connect battery.

- Read the operating instructions of the engine manufacturer before start-up and follow the safety instructions carefully.

→ For HD 1050 B:

Fill the fuel tank with unleaded petrol.

Do not use 2-speed mixture.

→ For HD 1050 DE:

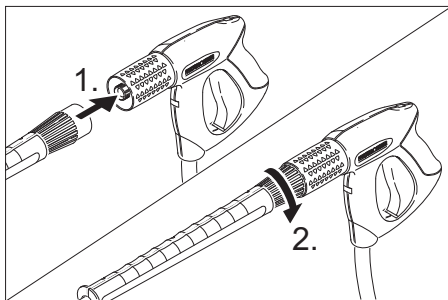
Fill fuel tank with diesel.

- Check oil level of the engine.

Do not operate the appliance if the oil level has fallen below "MIN".

- If required, top up oil carefully.

Install hand spray gun, spray lance and nozzle



- Connect high pressure hose and spray pipe to the hand spray gun.
- Tighten the screw connection of the spray lance fingertight.
- Install the nozzle on the spray pipe in such a way that the marking is on the top.

- Tighten covering nut firmly.
- Connect the high pressure hose to the high pressure connection point of the machine.

Water connection

For connection values refer to technical specifications

- Connect the supply hose (minimum length 7.5 m, minimum diameter 3/4") to the water connection point of the machine and at the water supply point (for e.g. a tap).
- Open the water supply.

Note: The supply hose is not included.

Suck in water from vessel

⚠ Danger

Never suck in water from a drinking water container. Never suck in liquids which contain solvents like lacquer thinner, petrol, oil or unfiltered water. The sealings within the device are not solvent resistant. The spray mist of solvents is highly inflammable, explosive and poisonous.

- Connect suction hose (minimum diameter 3/4") with filter (accessory) to the water connection point.
- Set dosing value for detergent to "0".
- Remove air from appliance before operation.

Dearating the appliance

- Open the water supply.
- Start the engine according to the operating instructions of the engine manufacturer.
- To deaerate the appliance, unscrew the nozzle and allow the appliance to run until the water exits in a bubble-free state.
- Switch off the appliance and fit the nozzle again.

Operation

⚠ Danger

Risk of explosion!

Do not spray flammable liquids.

⚠ Danger

Risk of injury! Never use the appliance without the spray lance attached. Check and ensure proper fitting of the spray lance prior to each use. The screw connection of the spray lance must be fingertight.

⚠ Danger

- *Place the appliance on firm surface.*
- *The high pressure cleaner must not be used by children. (Risk of accident on account of improper use of the appliance).*
- *The high pressure spray generates high levels of noise when the appliance is in use. Risk of hearing impairment. Always use proper ear-protection aids while working with the appliance.*
- *The water jet coming out of the high pressure nozzle causes the gun to recoil. Further, an angular spray pipe can cause additional torque. Hence hold the spray pipe and gun firmly.*
- *Never direct the water jet on to persons, animals, the appliance itself or electrical components.*
- *Vehicle tyres/ tyre valves may be cleaned only with a minimum spray distance of 30 cm. Otherwise, the high pressure spray can cause damage to the vehicle tyre/ tyre valve. The discolouring of the tyre is the first sign of damage. Damaged vehicle tyres are a source of danger.*
- *Do not spray materials contains asbestos or other health-hazardous substances.*
- *The operator must wear proper safety gear to be protected against the water sprays.*
- *Pay attention to ensure that all screws of all connecting hoses are tightened properly.*
- *The lever of the hand spray gun must not be locked during the operation.*

Replace the nozzle

⚠ Danger

Switch the appliance off prior to replacing nozzle and activate hand spray gun until device is pressureless.

Turning on the Appliance



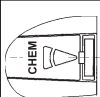
- Open the water supply.
- Start the engine according to the operating instructions of the engine manufacturer.
- Press the lever on the hand spray gun.

Triple nozzle

Select round or flat spray using touch-less switching:

- Close the hand spray gun.
- Turn the spray pipe towards the left or right to select the desired spray type.

Meaning of the symbols

	High pressure circular spray (0°) for specially stubborn dirt
	High pressure flat spray (25°) for large dirt areas
	Flat low pressure spray (CHEM) for operating using detergents or cleaning at low pressure.

Note: To prevent damage due to too much pressure, always position high pressure ray first from a greater distance towards object to be cleaned.

Set working pressure and flow rate

- Set (+/-) the working pressure and quantity by turning the pressure/ quantity regulation mechanism at the hand spray gun.

⚠ Danger

When adjusting the pressure/quantity regulation, make sure that the screw connection of the spray lance does not become loose.

Operation with detergent

⚠ Warning

Unsuitable detergents can cause damage to the appliance and to the object to be cleaned. Use only those detergents that have been approved by Kärcher. Observe the dosage and other instructions provided with these detergents. For considerate treatment of the environment use detergent economically.

Follow the safety instructions for using detergents.

Kärcher detergents ensure smooth functioning. Please consult us or ask for our catalogue or our detergent information sheets.

- Suspend end of suction hose in a container filled with detergent.
- Set nozzle to "CHEM".
- Set dosing value for detergent to the desired concentration.

Recommended cleaning method

- Loosen the dirt:
Spray detergent economically and let it work for 1...5 minutes but do not let it dry up.
- Remove the dirt:
Spray off loosened dirt with the high-pressure jet.

After operation with detergent

- Set dosing value for detergent to "0".
- Open the hand spray gun and rinse the appliance for at least 1 minute.

Interrupting operation

- Release the lever on the trigger gun.

Note: When the lever of the hand spray gun is released, the engine continues to run at zero speed.

- In case of extended interruptions (several minutes), switch off the engine.

Turn off the appliance

After operating the water using saline water (sea water), open the hand spray gun and rinse the appliance for at least 2 - 3 minutes using tap water.

→ For HD 1050 B:

Set the appliance switch at the engine to OFF and close the fuel supply valve.

→ For HD 1050 DE:

Press the regulator lever at the engine to "STOP" till the engine comes to a halt and turn off the fuel tap.

- Shut off water supply.
- Activate hand spray gun until device is pressure-less.
- Secure the hand spray gun using the safety catch so that it doesn't open accidentally.
- Remove the water inlet hose from the appliance.

Frost protection

Warning

Risk of damage! Freezing water in the appliance can destroy parts of the appliance. Store the appliance in a heated room during winter or empty it. During longer breaks in operation, it is advisable to pump in anti-frost agents into the appliance.

Drain water

- Screw off water supply hose and high pressure hose.
- Operate device for max. 1 minute until the pump and conduits are empty.

Flush device with anti-freeze agent

Note: Observe handling instructions of the anti-freeze agent manufacturer.

- Pump in conventional frost protection agents through the appliance.

A certain corrosion protection is achieved with this as well.

Transport

Caution

Risk of injury and damage! Observe the weight of the appliance when you transport it.

- Use the pushing handle to push the appliance.
- When transporting in vehicles, secure the appliance according to the guidelines from slipping and tipping over.

Storage

Caution

Risk of injury and damage! Note the weight of the appliance in case of storage.

This appliance must only be stored in interior rooms.

Maintenance and care

You can sign with your dealer a contract for regular safety inspection or even sign a maintenance contract. Please take advice on this matter.

Note: The maintenance plan given below only lists the maintenance tasks for the high-pressure pump. The maintenance tasks for the engine must also be done according to the details given in the operating instructions manual of the engine manufacturer.

Warning

Risk of injury if the machine is left running in an unattended state. Remove the spark plug before doing any work on the appliance.

Risk of burns! Do not touch hot silencers, cylinders or radiator ribs.

Maintenance intervals

Daily

- Check the high pressure hose for damages (risk of bursting). Please arrange for the immediate exchange of a damaged high-pressure hose.

Weekly

- Check oil level.

Please contact Customer Service immediately if the oil is milky (water in oil).

Monthly

- Clean the sieve in the water connection.
- Clean filter at the detergent suck hose.

After 500 operating hours, at least annually

- Oil change.

Maintenance Works

High-pressure pump

Oil change:

- Ready a catch bin for appr. 1 Liter oil.
- Turn out the oil drain screw.
- Drain the oil in a collection basin.

Dispose of old oil ecologically or turn it in at a collection point.

- Turn out the oil drain screw.
- Slowly fill in new oil until the "MAX" marking on the oil sight glass.

Note: Air pockets must be able to leak out.

For oil type refer to technical specifications.

Troubleshooting

Warning

Risk of injury if the machine is left running in an unattended state. Remove the spark plug before doing any work on the appliance.

Risk of burns! Do not touch hot silencers, cylinders or radiator ribs.

Appliance is not running

Follow operating instructions of the engine manufacturer!

Device is not building up pressure

- Operating speed of the engine is too low
- Check operating speed of the engine (refer to technical data).
- Nozzle is set to "CHEM"
- Set nozzle to "High pressure".
- Nozzle is blocked/ washed out
- Clean/ replace nozzle.
- Filter at the water connection is dirty
- Clean filter.
- Air within the system
- Appliance ventilation:
- Amount of water supply is too low.
- Check water supply level (refer to technical data).
- Pipe inlets to pump are leaky or blocked
- Check all inlet pipes to the pump.

Device leaks, water drips from the bottom of the device

- Pump leaky
- Note:** 3 drops/minute are allowed.
- With stronger leak, have device checked by customer service.

Pump is vibrating

- Inlet pipes to the pump are leaky.
- Check all inlet pipes to the pump.
- Air within the system
- Appliance ventilation:

Detergent is not getting sucked in

- Nozzle is set to "High pressure"
- ➔ Set nozzle to "CHEM".
- Detergent suction hose with filter is leaky or blocked
- ➔ Check/ clean detergent suction hose with filter.
- Backflow valve in the connection of the detergent suction hose is jammed
- ➔ Clean/ replace backflow valve in the connection of the detergent suction hose.
- Detergent dosing valve is closed or leaky/ blocked
- ➔ Open or check/clean detergent dosing valve.

If malfunction can not be fixed, the device must be checked by customer service.

Warranty

The warranty terms published by our competent sales company are applicable in each country. We will repair potential failures of the appliance within the warranty period free of charge, provided that such failure is caused by faulty material or defects in fabrication.

Accessories and Spare Parts

- Only use accessories and spare parts which have been approved by the manufacturer. The exclusive use of original accessories and original spare parts ensures that the appliance can be operated safely and troublefree.
- At the end of the operating instructions you will find a selected list of spare parts that are often required.
- For additional information about spare parts, please go to the Service section at www.kaercher.com.

EC Declaration of Conformity

We hereby declare that the machine described below complies with the relevant basic safety and health requirements of the EU Directives, both in its basic design and construction as well as in the version put into circulation by us. This declaration shall cease to be valid if the machine is modified without our prior approval.

Product: High-pressure cleaner
Type: 1.810-xxx

Relevant EU Directives
2006/42/EC (+2009/127/EC)
2004/108/EC
2000/14/EC

Applied harmonized standards

EN 60335-1
EN 60335-2-79
EN 61000-6-2: 2007

Applied national standards

CISPR 12

Applied conformity evaluation method

2000/14/EC: Appendix V

Sound power level dB(A)

HD 1050 B

Measured: 106
Guaranteed: 108


HD 1050 DE

Measured: 109
Guaranteed: 110

5.957-559

The undersigned act on behalf and under the power of attorney of the company management.


H. Jenner
CEO


S. Reiser
Head of Approval

Authorised Documentation Representative
S. Reiser

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Fax: +49 7195 14-2212

Winnenden, 2010/07/14

Technical specifications

		HD 1050 B	HD 1050 DE
Motor			
Type	--	Honda GX 390, 1 cylinder, 4-stroke	Yanmar L 100 AE, 1 cylinder, 4-stroke
Maximum torque at 3600 rpm	kW/HP	9,5/12,9	6,6/9
Operating speed	1/min	3300±100	3300±100
Fuel tank	l	6,5	5,5
Fuel	--	Petrol, unleaded*	Diesel
* Appliance is suitable to use E10 petrol			
Water connection			
Max. feed temperature	°C	60	60
Min. feed volume	l/h (l/min)	1000 (16,7)	1000 (16,7)
Max. feed pressure	MPa (bar)	1 (10)	1 (10)
Inlet hose length (min.)	m	7,5	7,5
Inlet hose diameter (min.)	Inch	3/4	3/4
Suck height from open container (20 °C)	m	1	1
Pump			
Working pressure	MPa (bar)	4...23 (40...230)	4...23 (40...230)
Flow rate	l/h (l/min)	400...780 (6,7...13)	400...900 (6,7...15)
Nozzle size	--	047	047
Max. excess operating pressure (safety valve)	MPa (bar)	25 (250)	25 (250)
Oil quantity - pump	l	0,35	0,35
Oil type - pipe	Engine oil 15W40	Order no. 6.288-050.0	Order no. 6.288-050.0
Detergent suck in	l/h (l/min)	0...50 (0...0,8)	0...50 (0...0,8)
Max. recoil force of hand spray gun	N	51	51
Dimensions and weights			
Length x width x height	mm	1044 x 570 x 662	1044 x 570 x 725
Weight without accessories	kg	74	103
Values determined as per EN 60355-2-79			
Noise emission			
Sound pressure level L_{pA}	dB(A)	91	94
Uncertainty K_{pA}	dB(A)	2	1
Sound power level L_{WA} + Uncertainty K_{WA}	dB(A)	108	110
Hand-arm vibration value			
Hand spraygun	m/s ²	<2,5	<2,5
Spray lance	m/s ²	<2,5	<2,5
Uncertainty K	m/s ²	1	1

HD 1050 B

1.810-987.0 * EUR

HD 1050 DE

1.810-988.0 * EUR

