

Operating Instructions

KÄRCHER

1500 G

1.884-812

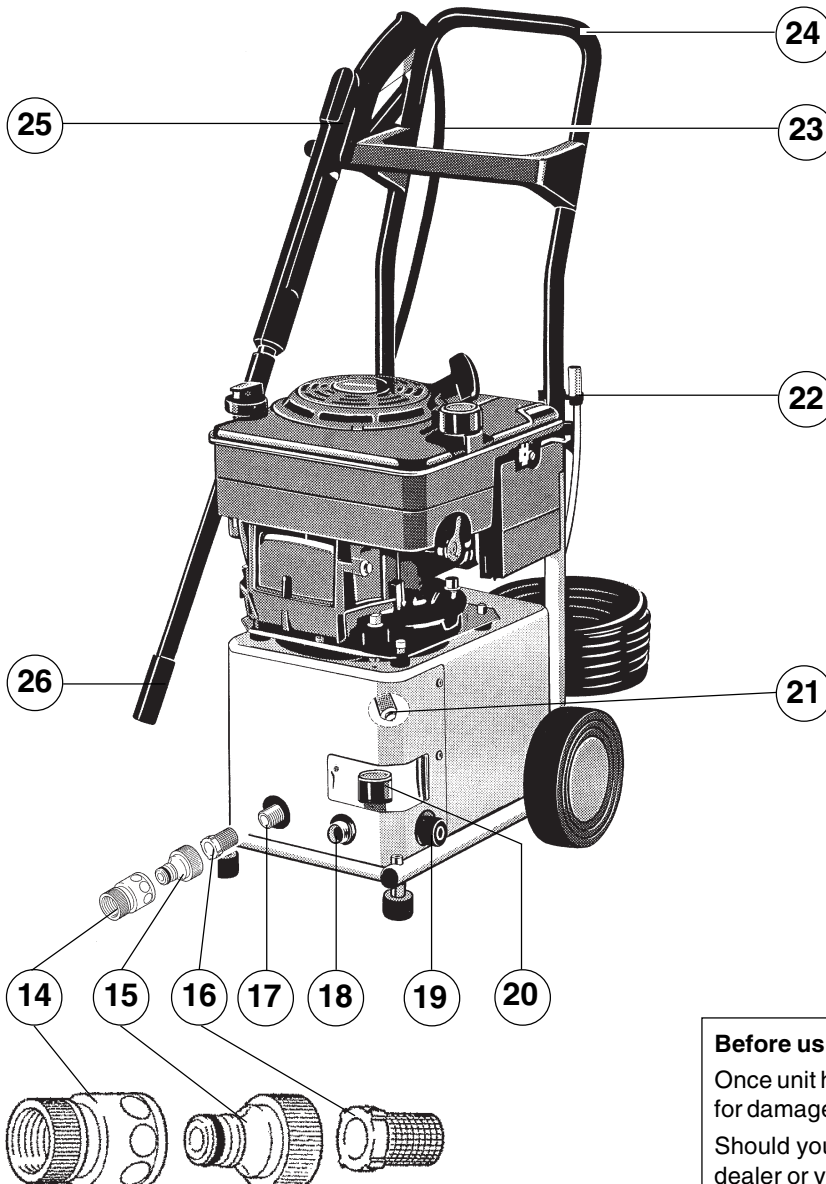
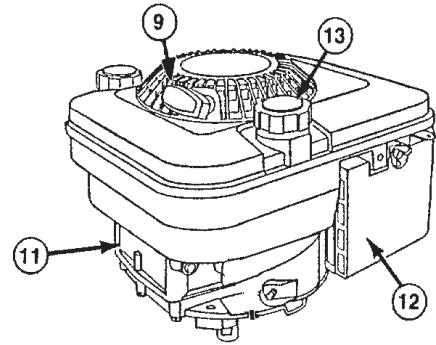
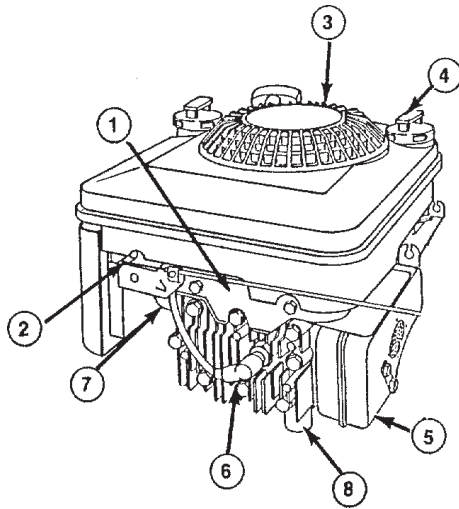


Before putting the cleaner into operation,
please read the operating instructions carefully.

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SCHEMATIC DRAWING



- 1 Model, type & serial numbers
- 2 Governor control lever
- 3 Static guard
- 4 Oil fill with oil dipstick
- 5 Muffler
- 6 Spark plug
- 7 Carburetor
- 8 Crankshaft
- 9 Starter grip
- 10 Cylinder
- 11 Air Cleaner
- 12 Fuel fill
- 13 Fuel fill
- 14 Garden hose connector
- 15 Quick coupler male
- 16 Strainer
- 17 Water inlet connection
- 18 High-pressure outlet
- 19 Pressure and flow regulation
- 20 Detergent metering valve
- 21 Oil drain plug
- 22 Detergent suction hose with filter
- 23 High-pressure hose
- 24 Handle
- 25 Trigger Gun
- 26 Spray lance with changeover nozzle

Before using the unit, please note the following point:

Once unit has been removed from carton inspect it carefully for damages.

Should you discover any damages please notify your local dealer or your Kärcher sales office.

I. IMPORTANT NOTES

Before putting the unit into operation, please note the following points:

1. TRANSPORT

- If, while unpacking the unit, you discover that it has become damaged during transport, please notify your dealer or your Kärcher sales office.

2. SAFETY PRECAUTIONS

WARNING

- DO NOT RUN unit in an enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.
- DO NOT check for spark with spark plug or spark plug wire removed. use an approved tester.
- DO NOT CRANK unit with spark plug removed. If unit is flooded, place throttle in "FAST" position and crank until unit starts.
- DO NOT SMOKE when filling the gasoline tank.
- DO NOT FILL gasoline tank while engine is running. Allow engine to cool down for two minutes before refueling.
- DO NOT OPERATE the unit when an odor of gasoline is present or other explosive conditions exists.
- DO NOT OPERATE the unit if gasoline is spilled. Move the unit away from the spill and avoid creating any ignition until the gasoline has evaporated.
- DO NOT STORE, spill or use gasoline near an open flame or any equipment such as a stove, furnace, water heater, which utilize a pilot light or devices which can create a spark.
- DO NOT REFUEL indoors where area is not well ventilated. Outdoor refueling is preferred.
- DO NOT OPERATE unit without a muffler. Inspect periodically and replaced if necessary.
- DO NOT USE the unit on any forest covered, brush covered or grass covered unimproved land unless a spark arrester is installed on the muffler.
- DO NOT RUN unit with air cleaner or air cleaner cover removed.
- High pressure jets can be dangerous if subject to misuse. The jet must not be directed at persons, animals, live electrical equipment or the machine itself. This machine has been designed for use with detergents supplied or recommended by the manufacturer. The use of other

detergents or chemicals may affect its safety.

CAUTION

- **Before starting for the first time fill the engine with oil 1.25 pt. (0,6 l). DO NOT overfill.**
- DO NOT RUN unit at excessive speeds, as this may result in injury.
- DO NOT TAMPER with governor springs, governor links or other parts which may increase the governed engine speed.
- DO NOT TAMPER with the engine speed selected by the original equipment manufacturer.
- DO NOT TOUCH hot mufflers, cylinders or fins as contact may cause burns.
- DO NOT PLACE hands or feet near moving or rotating parts.
- DO PULL starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.
- DO USE fresh gasoline. Stale gasoline can cause leakage.
- TO PREVENT ACCIDENTAL STARTING when servicing the unit or equipment, always remove the spark plug or wire from the spark plug.
- At temperatures below freezing the unit could be severely damaged if not completely emptied of water.
- A spark arrester must be added to the muffler of this engine if it is to be used on any forest covered, brush covered or grass covered unimproved land. The arrester must be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. See your Briggs & Stratton Authorized Service Center or equipment dealer for spark arrester muffler options.

In the interest of environment

A muffler which leaks because of rust or damage can permit an increased exhaust noise level. Therefore, examine the muffler periodically to be sure it is functioning effectively.

I. IMPORTANT NOTES

To purchase a new muffler, contact any Briggs & Stratton Authorized Service Center for correct replacement.

3. FUEL RECOMMENDATIONS

This engine will operate satisfactorily on any gasoline intended for automotive use. A minimum of 77 octane is recommended. DO NOT MIX OIL WITH GASOLINE.

Use clean, fresh, lead-free gasoline. Leaded gasoline may be used if lead-free is not available. The use of lead-free gasoline results in fewer combustion deposits and longer valve life.

Purchase fuel in quantity that can be used within 30 days. This will assure fuel freshness and volatility tailored to the season.

Note:

We DO NOT recommend the use of gasoline which contains alcohol, such as gasohol. However, if gasoline with alcohol is used, it must not contain more than 10 percent Ethanol and MUST be removed from the engine during storage. ~~DO NOT use gasoline containing Methanol.~~ See storage instructions.

Caution

~~Do not fill fuel tank to point of overflowing. Allow approximately 1/4 in. of tank space for fuel expansion.~~

4. WATER SUPPLY

- The garden hose must be at least 25 feet long with a diameter of at least 1/2".
- The flow rate of the water supply must not fall below 3 GPM and the temperature must not exceed 140 °F.
- The water inlet to the cleaner is protected by a strainer which should be checked from time to time to keep it clear of contamination.

Important

When connecting the water inlet to the water supply mains, local regulations of your water company must be observed. In some areas the unit must not be connected directly to the public drinking water supply. This is to ensure that there is no feedback of detergents into the water supply.

Direct connection via receiver tank or backflow preventer for example, is permitted. (A backflow preventer is obtainable from Kärcher under Order No. 6.412-578)

Suction operation

It is also possible to draw water by suction from an open tank.

- If this is required, the cleaner should be fitted with a suction hose with filter (Kärcher Order No. 4.440-258).
- The level of the water must not be more than 3 ft below the unit.

Important

Never use the unit to suck in liquids containing solvents, e.g. paint thinners, petrol, oil, etc. or unfiltered water. The seals in the unit are not resistant to solvents. ~~When solvents are sprayed the fine mist is~~ highly flammable, explosive and poisonous. Grit particles in unfiltered water could damage both the unit and the object being cleaned.

5. PREPARING UNIT

- Attach the handlebar (packed loose in the box). Tighten down the screws securely.
- Press the spray wand into the trigger gun against the spring tension and turn it as far as the stop.
- The spray wand must lock into position.

II. OPERATION

- Screw quick coupler male to the water inlet connection.
- Screw quick coupler female to your garden hose.

Operating sequence should be followed for best results.

1. PUTTING INTO OPERATION

- Fill the fuel tank.
- Screw the high-pressure hose to the high-pressure outlet
- Connect the garden hose to the water tap and with the garden hose connector to the unit.
- Turn the water faucet on full force.
- Vent the pump of air.
Squeeze the trigger gun until a steady flow of water emerges from the nozzle.

Tips to obtain best starting performance.

- Start, store and fuel engine in a level position.
- DO NOT use pressurized starting fluids as severe internal engine damage may occur due to loss of lubrication.

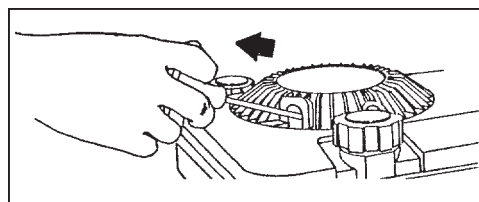
- Restart a warm engine with engine control lever in "FAST" position.
- To improve cool weather starting (40 °F), turn carburetor idle mixture screw 1/8 turn counterclockwise (richer mixture).

2. START ENGINE

- Move engine control lever to "CHOKE" position.



- Grasp starter grip as illustrated and pull slowly until resistance is felt.
- Then pull cord rapidly to overcome compression, prevent kickback and start engine.



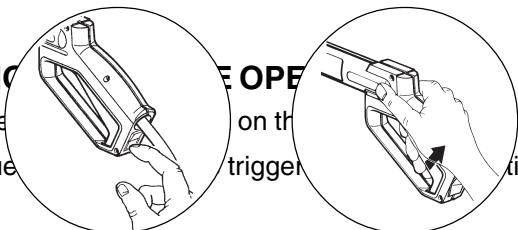
- Repeat if necessary with engine control lever in "FAST" position.

II. OPERATION

- When engine starts, move engine control to desired speed.

3. HIGH PRESSURE

- Release trigger on the trigger gun.
- Squeeze trigger gun.



In the event of a lengthy break (more than 10-15 minutes) switch the unit off to prevent damage caused by overheating.

Safety measures

The water jet causes the spray wand to recoil so the wand and the trigger gun should be held firmly.

Never direct the water jet towards any person. Injury could result from the high pressure and the chemical used may cause irritation to the skin and mucous membranes.

Never direct the water jet directly towards the unit or any other electrical equipment (risking short-circuits and other damage).

Children or adolescents must be allowed to use the

Flow regulation

- The water flow and pressure can be easily adjusted by turning the control knob.
- Turning clockwise:
less water and lower pressure
- Turning counterclockwise:
more water and higher pressure

unit only under supervision.

Safety glasses are recommended while using the unit.

Engage safety lock on the trigger gun when not spraying.

Changeover nozzle

It is possible to work with a high pressure or a low pressure jet.

Changing the jet form is only possible with the trigger gun closed.

- Release trigger gun.
- Turn changeover nozzle 90° to alter pressure of the water jet.



The symbol of the chosen jet form is on the upper side of the changeover nozzle.

Note:

Detergents can only be syphoned at low pressure.

4. SPRAYING DETERGENT

- Use detergent in accordance with usage instructions.
- Suspend detergent suction hose with filter in the detergent.
- Set changeover nozzle to "CHEM".
- The detergent intake can be adjusted by turning the detergent metering valve.
- Valve settings "3" and "4" should only be used when there

II. OPERATION

is very heavy soil.

Valve setting	1	2	3	4
Chemical intake (l/h)	10	18	25	34
Detergent in jet (%)	1.7	3.1	4.3	5.9

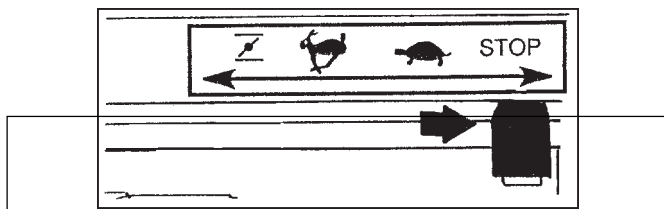
- Following completion of cleaning, suspend detergent suction hose in a container filled with clean water and flush through system until no detergent is discharged from the nozzle.

5. SUCTION OPERATION

- When drawing water from a lake or drum, you must use a suction hose with filter (Order No. 4.440-238)*
- Remove the garden hose connector as this is unsuitable for suction operation.
- Connect the suction hose to the water inlet connection.
- Suspend the filter in the water tank.
- Set engine control lever to "SLOW" position, until water emerges from the nozzle.

6. AFTER USE

- Run clean water through the unit to flush after spraying detergent.
- Stop the engine
Move control knob to "SLOW", then "STOP" position.



** Optional Accessory*

III. APPLICATIONS

- Shut off water supply.
- Squeeze trigger of gun until no further water emerges.
- Release trigger and secure with safety lock.

DO NOT choke carburetor to stop the engine. Fire may result if choke is used to stop engine.

The Kärcher 1500 G high-pressure cleaner is designed for use where no electricity is available.

The unit can be used for cleaning...

- Vehicles
(cars, motorcycles, vans, trailers, boats, etc.)
- House
(motor homes, buildings, vinyl and aluminium siding, shutters, awnings, gutters, downspouts, decks, patios, porchescreens, driveways, etc.)
- Garden
(garden equipment, grills, swimming pools, etc.)

The water pressure and the detergent metering valve can be adjusted to suit any cleaning task. Therefore you save both water and detergent and thus protect the environment.

With Kärcher special accessories it can also be used for such jobs as removing rust and paint, for cleaning pipes, for pumping water and for applying plant protection chemicals.

1. CLEANING METHOD

- 1st step:
Spray on the detergent and allow it to work in.
- 2nd step:
Wash off loosened dirt using high-pressure jet.

Tip:

Clean facades, terraces and garden equipment with the high-pressure jet alone, without detergent.

Recommended cleaning procedure:

- For best results, the high-pressure lance should be held between 6" - 24" away from the surface being cleaned. Holding the wand too close to the surface may damage the object being cleaned. On the other hand, if the lance is too far away, optimum cleaning results will not be achieved. It's always best to test the surface first to see if damage occurs when the lance is held too close.

- When cleaning car tires, the nozzle should be held at least 6" from the surface to avoid damage.

- Apply detergent at low pressure from the bottom up and pressure wash at high pressure from the top down.
- Always apply detergent to a dry surface and allow 1-3 minutes dwell time.
- To be environmentally safe, cleaning engines is only recommended where a suitable oil separator is provided.

Caution:

The unit should never be run indoors as the exhaust gases are poisonous.

2. DETERGENTS

Kärcher offers a variety of detergents for all your cleaning needs.

	Order No.	
Vehicle Wash	6.291-778	4 x 1 gal
Degreaser	6.291-779	4 x 1 gal
Vehicle Wax	6.291-780	4 x 1 gal
House Wash	6.291-781	4 x 1 gal

- Check with your local retailer for availability.
- Detergents must not be supplied with inlet water and the PH value must be between 4 and 12.

DO NOT USE:

- Bleach and other corrosive chemicals
- Liquids containing solvents
(ie. paint thinners, gasoline, oil)
- Chlorine products
- Tri-sodium phosphate products
- Ammonia products
- Acid-based products

Accessories, special accessories and cleaning agents can be obtained from your dealer.

IV. SERVICE AND MAINTENANCE

Caution:

To prevent accidental starting when servicing the unit, always remove the spark plug or wire from the spark plug.

Maintenance Operation		Daily or every 8 hours	Weekly 25 hours	Monthly 50 hours	Yearly 100 hours
A.	Clean Static Guard				
B.	Check Motor Oil Level				
C.	Clean Engine				
D.	Clean Strainer				
E.	Service Air Cleaner	2			
F.	Change Motor Oil	1			
G.	Inspect Spark Arrester (Optional Accessory)				
H.	Clean Cooling System	2			
I.	Replace or Clean Spark Plug				
K.	Remove Combustion Deposits				

1 Change oil after first 5 hours

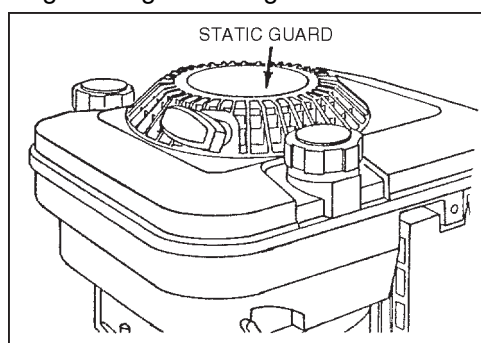
2 Clean more often under dusty conditions or when airborne debris is present

1. MAINTENANCE INTERVALLS

Follow the recommended maintenance schedule and make in-between checks. This will help you obtain maximum engine life.

A. Clean static guard

Clean the area shown as often as needed to prevent overheating and engine damage.



Caution

To assure smooth operation, keep governor linkage, springs and controls free of debris.

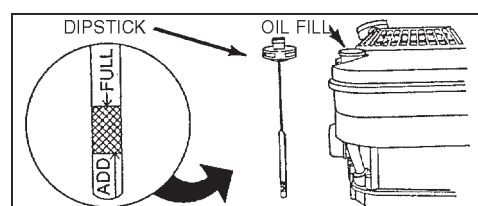
Periodically clean muffler area to remove all dirt and combustible debris.

B. Check motor oil level

Check after each 8 hours of operation. Be sure oil level is maintained.

Remove oil dipstick and wipe oil from dipstick with clean cloth. Screw dipstick firmly into place until cap bottoms on tube. Remove to check oil level.

Dipstick assembly must be firmly assembled into tube when engine is operating.



C. Clean engine

Remove dirt and debris with a cloth or brush. Cleaning with a forceful spray of water is not recommended as water could contaminate the fuel system.

IV. SERVICE AND MAINTENANCE

D. Clean Strainer

The strainer that is fitted in the water inlet should be checked once a week and be cleaned if it is found to be dirty.

E. Service Air Cleaner

Paper Cartridge:

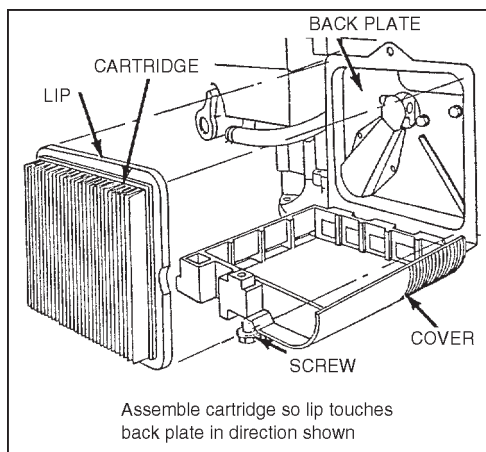
1. Loosen screw and tilt cover as illustrated.
2. Carefully remove cartridge.
3. Clean by tapping gently on a flat surface. If very dirty, replace cartridge or clean as follows:

Wash in a low or non-sudsing detergent and warm water solution. Rinse thoroughly with flowing water from mesh side until water runs clear. Let cartridge air dry thoroughly before using.

Caution:

Petroleum solvents, such as kerosene, are not to be used to clean cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.

4. Install cartridge, then close cover and fasten screw securely.



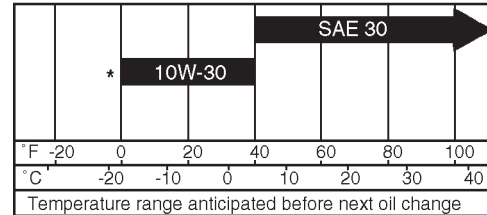
F. Change Motor Oil

Oil Recommendations

We recommend the use of a high quality detergent oil such as SAE 30 or detergent oil classified "For Service SC, SD, SE, SF, SG".

Detergent oils keep the engine cleaner and retard the formation of gum and varnish deposits. No special additives should be used with recommended oils.

RECOMMENDED SAE VISCOSITY GRADES



Oil Change

- Change oil while engine is warm.
- To drain oil completely, always place engine level.
- Open screws and remove front cover.
- Open oil drain plug.
- Drain oil completely through the oil drain plug.
- Replace oil drain plug.
- Replace front cover.
- Remove oil dipstick.
- Clean area around the oil fill.
- Pour oil slowly in oil fill. (Refill with new oil of proper grade.)
- Fill to "FULL" mark on dipstick.
- **DO NOT overfill.** (Capacity is approximately 1.25 pints.)
- Replace dipstick.

Caution:

When tipping to service engine or equipment keep engine spark plug or air cleaner side up.

IV. SERVICE AND MAINTENANCE

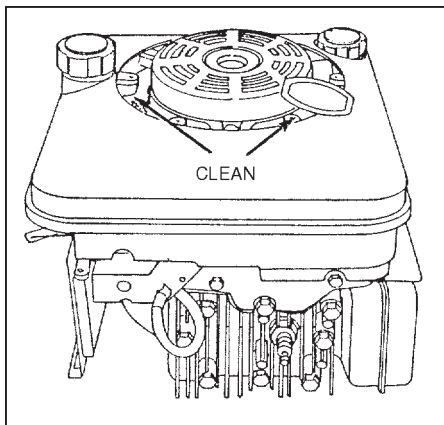
G. Clean Spark Arrester (Optional)

If engine is equipped with spark arrester screen assembly, remove for cleaning and inspection.

- Replace if damaged.

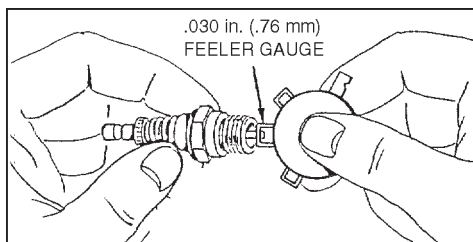
H. Clean cooling system

Dirt may clog the engine's air cooling system. The cooling fins and surfaces may require cleaning to prevent over-speeding, overheating and engine damage.



I. Replace spark plug

Replace yearly or every 100 hours of operation, whichever occurs first.



Note: Do not blast clean spark plug. Spark plug should be cleaned by scraping or wire brushing and washing with a commercial solvent.

Caution:

Sparking can occur if wire terminal does not fit firmly on spark plug. Reform terminal if necessary.

K. Remove Combustion Deposits

Remove cylinder every 100-300 hours of operation. Scrape and wire brush the combustion deposits from cylinder, cylinder head, top of piston and around valves. Replace head gasket and reassemble with cylinder head. Turn screws down finger tight. Turn the cylinder head screws in a staggered sequence to 140 inch pounds.

L. Cleaning changeover nozzle

- Disconnect the spray wand from the trigger gun.
- Remove dirt from nozzle bore with needle and rinse with water from nozzle end.

IV. SERVICE AND MAINTENANCE

2. REPAIRS

For service and repairs on the pump please contact a Kärcher Authorized Service Center.

For service and repairs on the engine please contact a Briggs & Stratton Authorized Service Center.

To serve you promptly and efficiently, the Service Center will need the model, type and serial numbers of your unit.

Attention:

Do not strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation, causing personal injury or property damage. To remove flywheel, use Briggs & Stratton approved tools only.

The relief valve and safety valve must only be serviced by a properly trained technician.

3. HIGH-PRESSURE HOSES

Particular care should be paid to the hoses. All high-pressure hoses must comply with the safety regulations and be marked with their working pressure, date of manufacture and name of the maker.

High-pressure hoses must not be kinked, twisted, crushed or damaged in any other way. Damaged high-pressure hoses may burst and are thus dangerous so they should be replaced without delay.

It is extremely dangerous to use high-pressure hoses of low durability or that have been inexpertly repaired and so you should only use high-pressure hoses that have been tested and marked.

Original Kärcher high-pressure hoses meet these safety requirements.

4. SPARE PARTS

Please bear in mind that the use of other than original spare parts can lead to faults and also to severe accidents if the parts have not been properly manufactured or if they do not exactly replace the part that was faulty or lead to hazardous operation of the unit.

If only original spare parts are used, you can be sure that your unit will also work safely and without trouble in the future.

5. ACCESSORIES

Incorrect, unsuitable or defective accessories affect the function of your unit. Their use is dangerous and so you should inquire for suitable and tested accessories. The use of original accessories from Kärcher is desirable since

they are specially made to suit the units concerned.

6. PROTECTION AGAINST FREEZING

The cleaner will be severely damaged if it is stored in a location where the temperature falls below freezing point without its first being emptied of water or flushed through with 50 % Anti-freeze solution.

The best protection against freezing is to store the cleaner and the accessories (high-pressure hose, trigger gun, spray lance) in a room where the temperature will not fall to the freezing point.

To empty the cleaner

- Disconnect the cleaner from the water supply.
- Disconnect the HP hose from the cleaner.
- The water will drain out.

A cleaner that may have frozen up should first be thawed before it is put back into use as otherwise damage may be caused.

Flushing with Anti-freeze solution

If the cleaner is to be out of operation for any length of time, it is advisable to flush it through with a glysantine solution as this provides a certain degree of protection against corrosion. A solution of 50 % Anti-freeze, 50 % water is pumped through the cleaner.

7. STORAGE INSTRUCTIONS

Engines to be stored over 30 days should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, fuel filter and tank.

1. For engine protection, we recommend the use of Briggs & Stratton Gasoline Additive, Part No. 5041, available from any Authorized Briggs & Stratton Service Center. Mix Additive with fuel tank or storage container. Run engine for a short time to circulate Additive through carburetor. Engine and fuel can be stored up to 24 months.

Caution:

If Additive is not used or if engine is operating on gasoline containing alcohol, remove all fuel from tank and run engine until it stops from lack of fuel.

2. While engine is still warm, drain oil from crankcase. Refill with fresh oil. See oil recommendations.
3. Remove spark plug and pour approximately 1/2 ounce (15 ml) of engine oil into the cylinder. Replace spark plug and crank slowly to distribute oil.
4. Clean dirt and carbon from cylinder, cylinder head fins, blower housing, rotating screen and muffler areas.
5. Store in a clean and dry area.

8. GENERAL INFORMATION

In some areas, local law requires the use of a resistor spark plug to suppress ignition signals. If an engine was originally equipped with a resistor spark plug, be sure to use the same type of spark plug for replacement.

V. TROUBLE - SHOOTING

Caution:

To prevent accidental starting when servicing the unit, always remove the spark plug or wire from the spark plug.

Fault	Cause	Remedy
Engine will not start	<ul style="list-style-type: none"> - Fuel tank empty - Fuel valve closed 	<ul style="list-style-type: none"> Fill fuel tank Open fuel valve
Unit does not come up to pressure	<ul style="list-style-type: none"> - Pump is sucking air - Strainer is blocked - Pump not bled to remove air - Flow regulation control is set to low pressure - Pump or relief valve defective 	<ul style="list-style-type: none"> - Open water supply and check garden hose - Clean strainer - Stop engine, press trigger of gun, start engine and run unit while depressing trigger - Turn control knob to high pressure - Have unit repaired by authorized service
Water spray irregular	<ul style="list-style-type: none"> - Nozzle clogged - Water supply inadequate - Relief valve incorrectly set 	<ul style="list-style-type: none"> - Clean nozzle - Check to see that water supply is on full force or use stationary water source. - Have unit repaired by authorized service
No intake of detergent	<ul style="list-style-type: none"> - Nozzle in improper position - Detergent metering valve closed - Suction filter clogged - Nozzle clogged 	<ul style="list-style-type: none"> - Set nozzle to low pressure position - Adjust detergent metering valve to desired setting. - Clean filter in suction nozzle - Clean nozzle

No adjustments should be made to any parts that are sealed.

VI. TECHNICAL DATA

Engine

Briggs & Stratton Model 123702 - Single cylinder, L-head, air cooled

Rated power	4	HP
Torque (Max.) @ 2400 rpm	6.1	FT.- Lbs.
Bore	2 11/16	in.
Stroke	2 3/64	in.
Displacement	11.57	cu. in.
Fuel tank capacity	0.37	gal
Specific fuel consumption	0.48	US-gal/h

High-pressure pump

Working pressure	1500	psi
Capacity	2.3	gpm
Detergent intake	0.2	gpm
Water supply temperature max.	140	°F
Suction height with cold water (50 °F/10° C)	3	ft
Nozzle recoil (Spray lance 4.760-214 high-pressure jet)	23	Newton
Length/width/height	18 1/2 x 14 x 32 1/2	in
Weight not including accessories	55	lbs