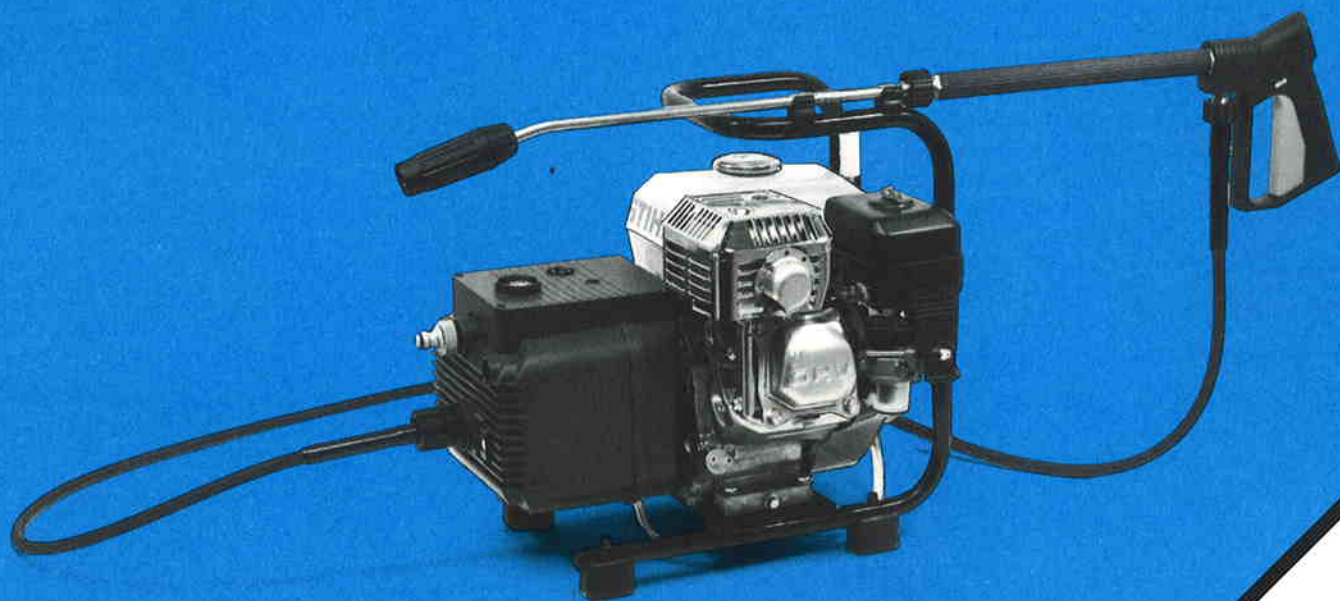


# ***STIHL RB 220 K***

**Safety Precautions  
Assembling  
Operating Instructions  
Maintenance**



**Warning!**  
Always follow safety precautions in  
Owner's Manual — improper use  
can cause serious injury!

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This Manual contains operating and safety instructions for the STIHL RB 220 K high pressure cleaner. The RB 220 K high pressure cleaner is driven by a Honda gasoline engine. It is important that you read and understand the maintenance and safety precautions in the accompanying Honda Owner's Manual GX 110 and this manual to reduce the risk of serious or fatal injury.

Because of the dangers associated with the high water pressure produced by the machine, some special safety precautions must be observed to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury. Contact your STIHL dealer or the STIHL distributor for your area if you do not understand any of the instructions in this manual. Only persons who have read and understand both manuals should be allowed to operate the high pressure cleaner. If you do not have a copy of the Honda GX 110 owner's manual, a copy can be obtained by writing to your nearest STIHL distributor.

STIHL's philosophy is to continually improve all of its products. We therefore reserve the right to modify the appearance, specifications and equipment without prior notice or liability.

**STIHL®**

**Andreas Stihl  
D-7050 Waiblingen**

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## Safety Precautions

### General

#### Warning!



This machine develops high water pressure. In order to reduce the risk of personal injury, extreme caution must be employed with respect to all pressure components.

It is important that you read, fully understand and observe the safety precautions and warnings contained in this and the Honda GX 110 Owner's Manual.



Read both the Owner's Manuals **and** the safety precautions periodically. Careless or improper use of any high pressure cleaner may cause serious or even fatal injury.

Have your STIHL dealer show you how to operate the cleaner. Observe all applicable and local safety regulations, standards and ordinances.

#### Warning!

Minors should never be allowed to use a high pressure cleaner. Bystanders, especially children, and animals should not be allowed in the area where a cleaner is in use. Never let it run unattended.

Do not lend or rent your cleaner without the Owner's Manual. Be sure that anyone using it understands the information contained in this manual.

Most of these safety precautions and warnings apply to the use of all STIHL high pressure cleaners.

Different models may have different parts and controls. See the appropriate section of your Owner's Manual for a description of the controls and function of the parts of your model. Safe usage involves

1. the operator;
2. the high pressure cleaner; and
3. the use of the cleaner.

### The OPERATOR!

#### Physical condition

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgement. Do not operate a high pressure cleaner when you are fatigued.

Be alert, if you get tired while operating, take a break. Tiredness may result in loss of control. Working with any high pressure cleaner can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating.

### Proper clothing



To reduce the risk of injury to your eyes, never operate a high pressure cleaner unless wearing goggles or safety glasses with adequate top and side protection complying with ANSI Z 87.1 (or your applicable national standard).

Good footing is most important. Wear shoes with non-slip soles.

### The high pressure cleaner

For illustrations and definitions of the cleaner parts see the chapter on "Main parts of the machine".

#### Warning!

Never modify your machine in any way, as this could be extremely dangerous. Only attachments supplied by STIHL or expressly approved by STIHL for use with a specific STIHL high pressure cleaner model are authorized.

### Preparation for usage

Before starting work, always check that your machine is completely assembled and in good condition. Pay special attention to the high pressure hose and wand/lance.

## Prior to Operation

### Working conditions

### Reactive forces

#### Caution!

The high pressure stream of fluid causes reactive forces on the gun or wand/lance. Always hold the spray gun or wand/lance firmly with both hands so that you can control these forces including those which may push the gun or wand/lance back towards your face or body. Observe local regulations when connecting your machine to the drinking water supply, (i.e. a one way water connector valve may be required).

#### Warning!

In order to reduce the risk of serious injury, **never** point the high pressure jet at persons or animals. **Never** direct the nozzle or fluid stream at **any** part of your body.

#### Warning!

Only use a high pressure hose which is approved for the machine's operating pressure. The permissible operating pressure is printed on the high pressure hose. The high pressure hose must never be crushed, stretched, kinked or twisted. Do not attempt to move the machine by pulling the high pressure hose.

An underrated or improperly used hose can explode from excess pressure and may result in serious injury.

#### Warning!

Never modify your machine in any way as this could be extremely dangerous and cause serious personal injury.

### Maintenance and Repairs

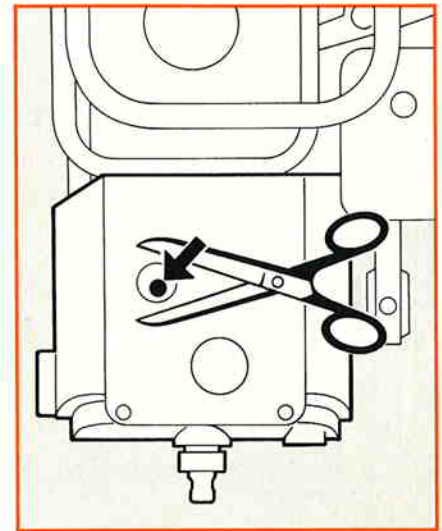
The spray gun's trigger must move freely and automatically spring back to the off position.

Shut off the engine before performing any maintenance.

Only carry out the maintenance operations and repairs described in this manual. Other work should be performed by your STIHL servicing dealer.

Only use original replacement parts for maintenance and repair. Use of parts manufactured by others may cause serious or fatal injury.

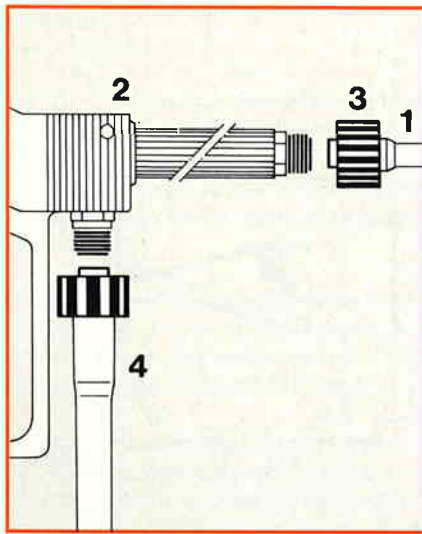
Only use STIHL chemicals and detergents and follow the instructions supplied with them. Other chemicals and detergents are not authorized and may cause damage to property or serious personal injury.



- Cut the tip off the oil plug.

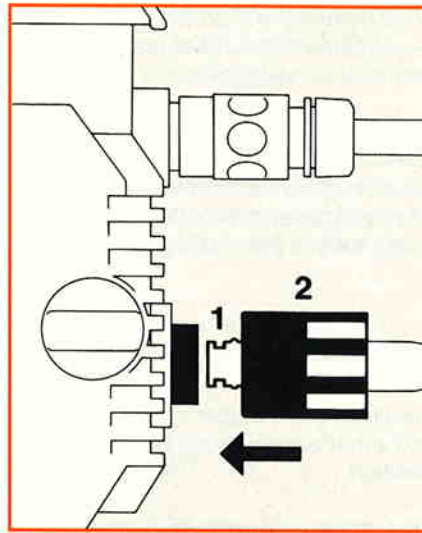
This opens the vent hole.

### Assembling Spray Gun



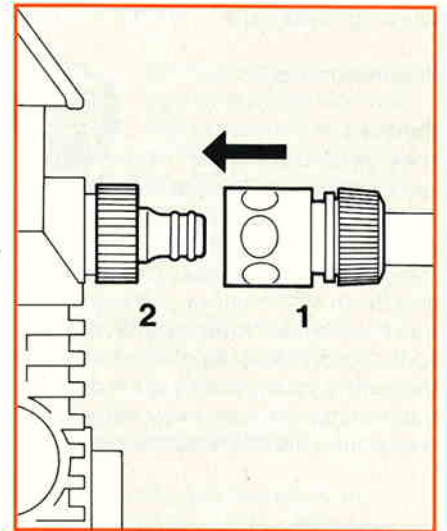
- Push the wand/ lance (1) into the spray gun (2) and tighten the union nut (3). Connect the high-pressure hose (4).

### Connecting High-Pressure Hose



- Push high-pressure hose (1) into the machine outlet and tighten the union nut (2) by hand.

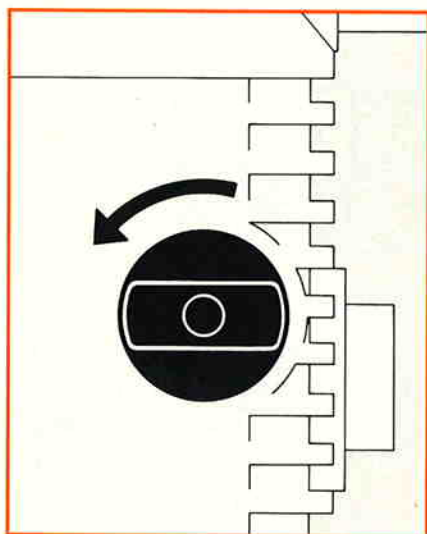
### Connecting Machine to Drinking Water Supply



- Push the coupling (1) onto the hose connector (2).
- Connect the hose to pressurized water supply.

The machine can also take its water supply from a reservoir, tank, stream, river etc. See "Water Intake from External Source".

## Starting Engine

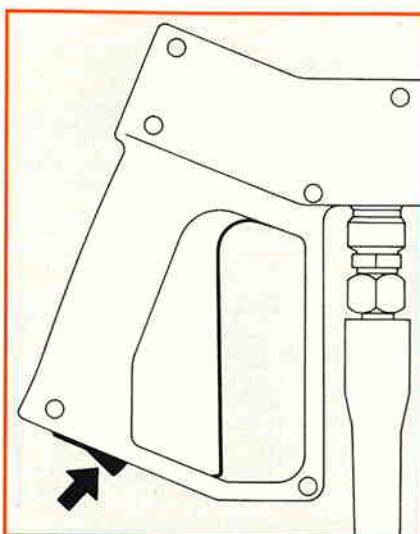


Switch on the machine only after connecting the water supply hose and opening the water tap. The machine may be damaged if this point is not observed.

Do not allow the motor to run for more than 10 minutes with the spray gun closed as this could otherwise damage the pump seals.

- Turn pressure control knob counterclockwise as far as stop.
- Start the engine as described in the accompanying Honda Owner's Manual.

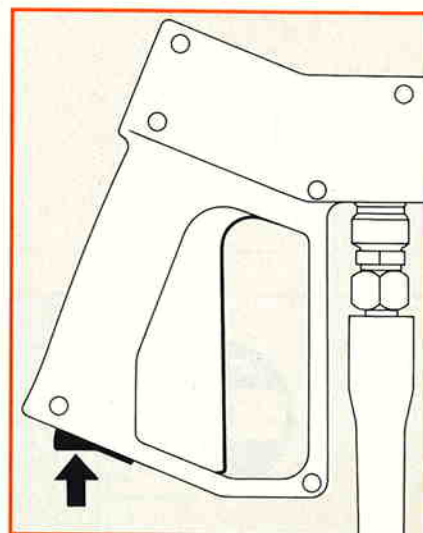
## Shutting down Engine



- Shut down the engine as described in the Honda Owner's Manual.
- Close the water tap.
- Squeeze spray gun trigger until only a few drops of water emerge at nozzle (machine is now depressurized).
- Depress latch on spray gun.

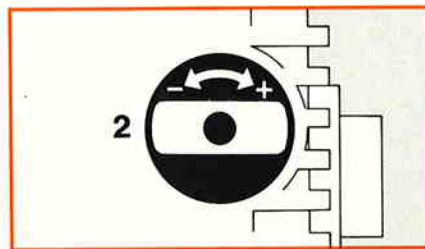
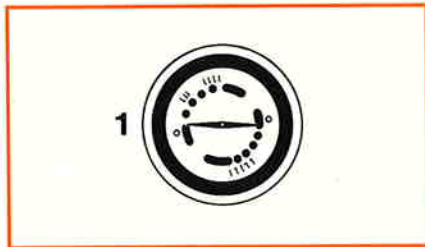
This reduces the risk of accidental operation.

## Unlatching Spray Gun



- Depress latch on spray gun.

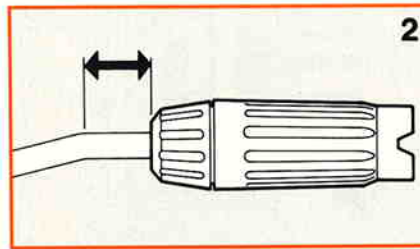
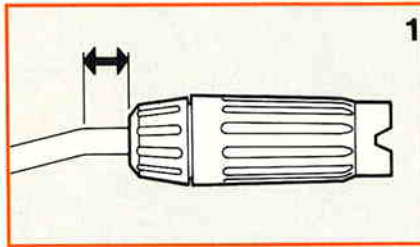
## Adjusting Operating Pressure



Pressure gauge (1) shows operating pressure.

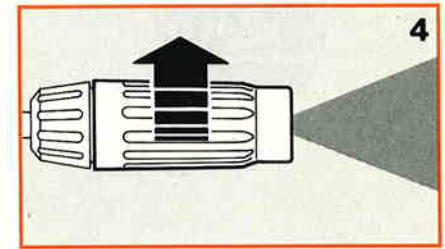
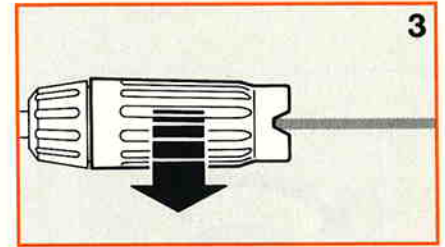
Operating pressure can be infinitely varied with the pressure control knob (2).

## Adjusting Angle of Spray Jet



Always close the spray gun before changing from the high-pressure mode to the low-pressure mode or vice versa. Pull or push the spray head along the lance to select

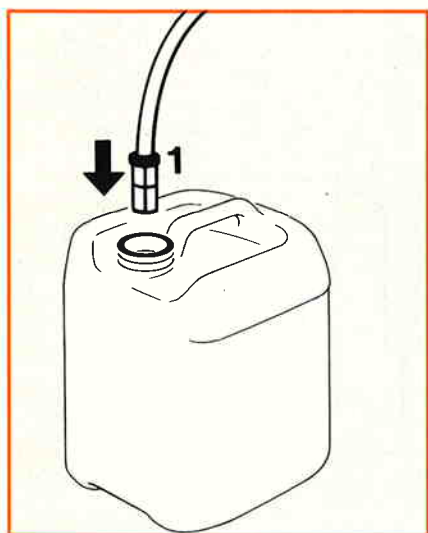
1 = High-pressure mode  
2 = Low-pressure mode



While in either the high or low-pressure mode, rotate the nozzle sleeve to infinitely vary the spray angle between

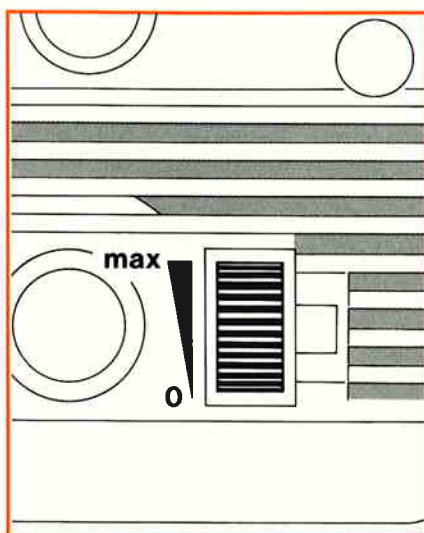
3 = Solid pencil jet  
and  
4 = Fan jet

## Adding chemicals



- Hang the pickup body (1) in the chemical canister.
- Set the spray head to low-pressure mode.

Chemical is drawn in from the canister only in the low-pressure mode.



- Adjust the amount of chemical to be added at the thumb wheel.

If no further chemical is required:

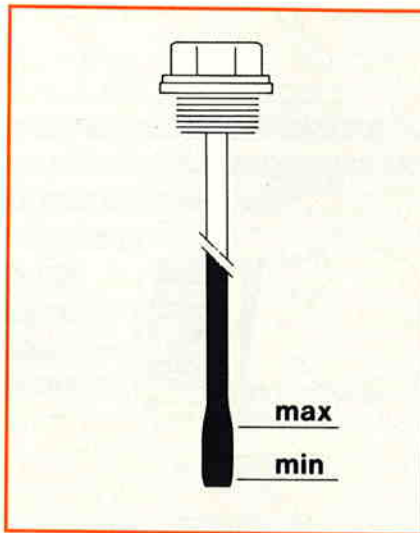
- Immerse pickup body in clear water.
- Turn thumb wheel upward to max. position.
- Operate the spray gun for approx. 5 seconds.  
(Pickup body and suction hose are flushed out to reduce the risk of chemical sediment accumulation.)

## Water Intake from External Source

- Connect machine to pressurized water supply (drinking water) and run it for a brief period.
- Shut down the engine as described in the enclosed Honda Owner's Manual.
- Remove the high-pressure hose from the machine.
- Install suction hose (special accessory) in place of water supply hose.
- Start the engine as described in the accompanying Honda Owner's Manual.



## Checking Oil Level in Pump



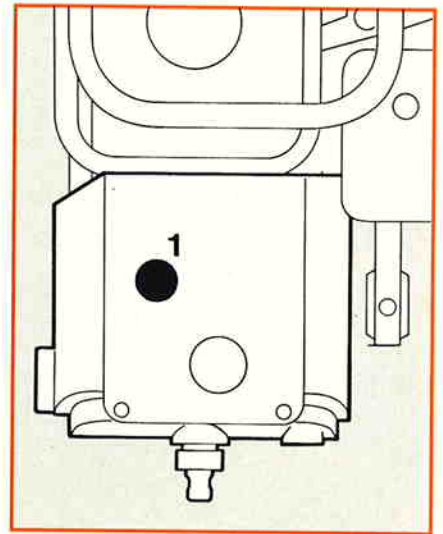
- Wait until a uniform jet of water emerges at the machine's high-pressure outlet.
- Shut down the engine as described in the Honda Owner's Manual.
- Connect the high-pressure hose.
- Start the engine as described in the Honda Owner's Manual
- Squeeze spray gun trigger several times to quickly vent the machine.

The suction hose is equipped with a filter. Nevertheless, it is advisable to install an additional fine-mesh filter between the suction hose and the unit to filter out the fine impurities suspended in the water.

Check oil level in pump at regular intervals:

- Unscrew the oil filler plug.
- Check oil level on dipstick. Top up with SAE 15W40 engine oil if necessary.
- Refit and tighten down the oil filler plug.

## Changing Oil in Pump



Carry out first oil change after approx. 40 operating hours.

The oil should then be changed every 150 operating hours or once a year.

- Unscrew the oil filler plug (1).
- With the machine standing level, draw the oil out of the filler opening.
- Fill up with 0.25 l (½ US pt) SAE 15W40 engine oil.
- Refit and tighten down the oil filler plug.
- Be sure to dispose the oil in a manner complying with local laws/ordinances.

## Storing Machine

## Specifications

Store the machine in a dry place protected from freezing.

If freezing temperatures cannot be avoided:

Draw glycol-based antifreeze, as used in motor vehicles, into the pump as follows:

- Immerse water supply hose in canister of antifreeze.
- Set spray jet to low-pressure fan jet.
- Immerse the nozzle in the same canister.
- Start the engine as described in the accompanying Honda Owner's Manual
- Squeeze spray gun's trigger several times.
- Shut down the engine as described in the accompanying Honda Owner's Manual

Water output  
Max. suction lift

100–720 l/h (0.2–3.2 GPM)  
1.5 m (5 ft)

Length approx.

485 mm (19")

Width approx.

810 mm (31<sup>7</sup>/<sub>8</sub>") with chassis  
345 mm (13.6")

Height approx.

520 mm (20<sup>1</sup>/<sub>2</sub>") with chassis  
450 mm (17<sup>3</sup>/<sub>4</sub>")  
945 mm (37<sup>3</sup>/<sub>16</sub>") with chassis

Weight approx.

29 kg (64 lb)  
35 kg (77.2 lb) with chassis

Oil capacity  
Oil grade

0.25 l (1/2 US pt)  
SAE 15W40

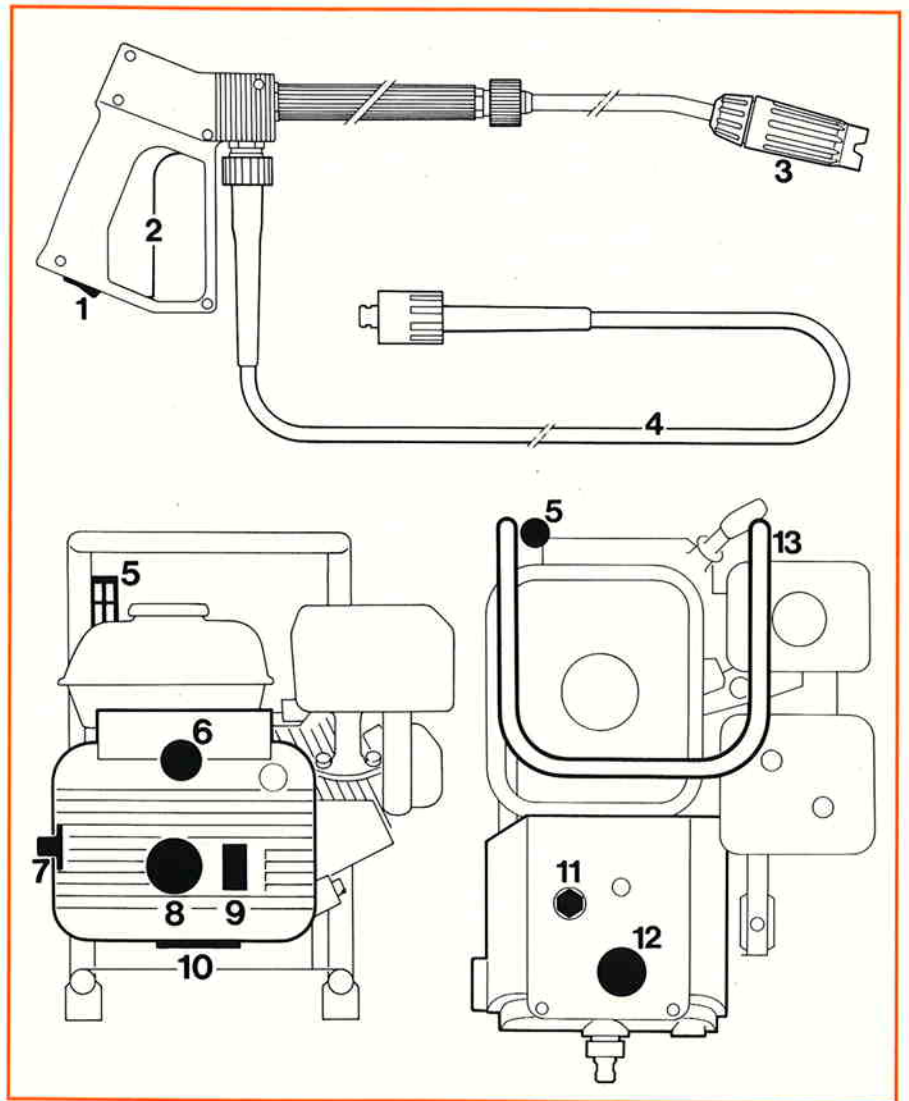
see also specifications in  
the Honda Owner's Manual

## Troubleshooting Chart

**Warning!** Before doing any work on the machine: Shut off the engine close the water tap and squeeze spray gun trigger until machine is depressurized.

Fault	Cause	Remedy
Pressure fluctuates or drops	Insufficient water	Open water tap
	Water supply hose too long or wrong diameter	Use recommended water supply hose (min. 1/2" dia.)
	Water filter blocked	Clean the filter
No chemical feed	Injector blocked	Clean the injector
	Spray head is not set to low-pressure mode	Spray head to low-pressure mode
	Spray head is blocked	Clean the nozzle
	Chemical intake hose is blocked	Clear the blockage
	Chemical intake hose is kinked	Straighten the hose
	No seal fitted at high-pressure hose connection, or seal is faulty	Fit a new seal

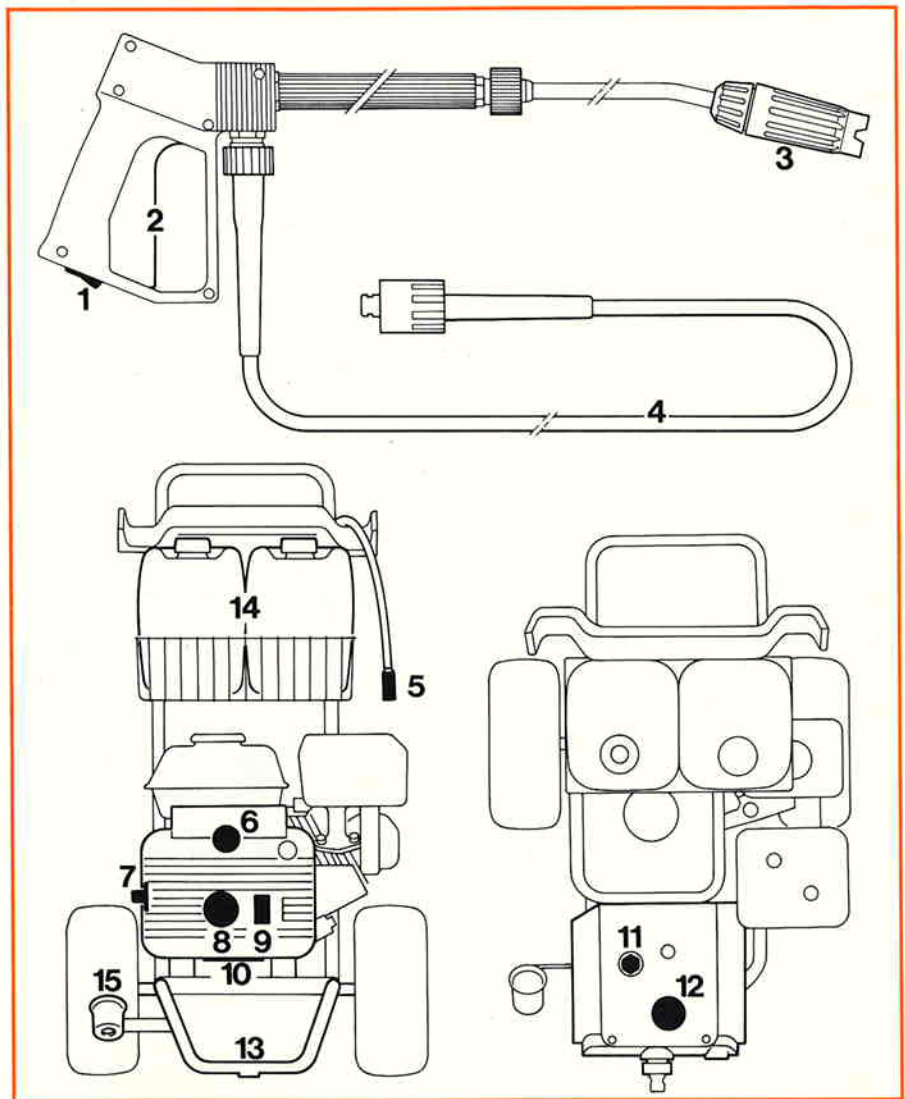
## Main Parts of the Machine (with Support Frame)



- 1 Latch
- 2 Trigger
- 3 Spray head
- 4 High-pressure hose
- 5 Chemical intake hose with pickup body
- 6 Water inlet with filter
- 7 Pressure control knob
- 8 Outlet for high-pressure hose
- 9 Chemical metering
- 10 Nameplate
- 11 Oil filler plug
- 12 Pressure gauge
- 13 Support frame

Main parts of gasoline engine:  
See accompanying Honda Owner's Manual

## Main Parts of the Machine (with Chassis)



- 1 Latch
- 2 Trigger
- 3 Spray head
- 4 High-pressure hose
- 5 Chemical intake hose  
with pickup body
- 6 Water inlet with filter
- 7 Pressure control knob
- 8 Outlet for high-pressure hose
- 9 Chemical metering
- 10 Nameplate
- 11 Oil filler plug
- 12 Pressure gauge
- 13 Chassis
- 14 Chemical Canisters
- 15 Support for spray head

Main parts of gasoline engine:  
See accompanying Honda Owner's  
Manual