



# Operating Instructions

## GS 0700R





Manufacturer:

**GS Engineering B.V.**  
manufacturer hydraulic sweepers

Tel: 0031 (0)486-415370

Fax: 0031 (0)486-411325

E-mail: [info@gsengineering.nl](mailto:info@gsengineering.nl)

Machine:

GS 0700R



## Table of Contents

<b>1</b>	<b>General</b>	<b>4</b>
1.1	User	5
1.2	Liability	5
1.3	Guarantees offered	6
1.4	Documentation	6
1.5	Technical data	7
<b>2</b>	<b>Safety</b>	<b>8</b>
2.1	Safety symbols	9
2.2	Safety aspects	10
2.3	Safety devices	10
2.4	Emergencies	11
2.5	Non-advisable use	11
<b>3</b>	<b>Sweeping Process</b>	<b>12</b>
3.1	Recommended application	12
3.2	Engine	13
	3.2.1 Starting the engine	13
	3.2.2 Turning off the engine	15
	3.2.3 Refuelling	16
3.3	Brush	17
	3.3.1 Starting and stopping the brush	17
	3.3.2 Configurations	18
	3.3.3 Adjusting brush height by means of the caster wheel	19
	3.3.4 Adjusting brush height by means of the wheels	21
	3.3.5 Adjustment of the push bar	23
3.4	Releasing the caster wheel	24
<b>4</b>	<b>Maintenance and Control</b>	<b>26</b>
4.1	Inspection before sweeping	26
4.2	Inspection after sweeping	26
4.3	Brush check	26
4.4	Maintenance and repairs	27
	4.4.1 Hydraulic system	27
	4.4.2 Engine	27
	<b>Maintenance Dates</b>	<b>29</b>
	<b>EC Declaration</b>	<b>30</b>



## 1. General

These operating instructions intend to set forth the correct use of the GS 0700R.

It addresses all aspects that are of relevance to the operation and daily maintenance of the GS Twister. It also pays attention to important aspects in respect of technical maintenance. The operating instructions must be carefully read in order to use the machine correctly and safely.

The text in these operating instructions is printed in the following ways:

Normal text is printed in normal type.

**Important information is printed in bold.**

*Options are printed in italics.*

The following pictograms are used to draw attention to issues that require special attention and/or involve risks for persons, the machine and/or the sweeping process:



Text preceded by this sign requires special attention



Warning

Instructions preceded by this sign warn you about the risk of damage to the machine or failures if the instructions are not followed carefully.



Physical injury

Text preceded by this sign warns of physical injury if the instructions are not followed carefully.



## 1.1 User

In these operating instructions, 'user' means: Anyone who is put into contact with the GS 0700R or parts thereof under normal operating conditions.

The company or user has to make sure that each user is sufficiently qualified to handle this kind of machines and is able to comply with relevant provisions and safety aspects. A clear distinction is made between two groups:

The user is the person who actually operates the machine in preparation or execution of the production process.

The mechanic is the person who carries out repairs or maintenance works to the machine.

The mechanic must be qualified to perform technical operations. The mechanic must have a solid understanding of technical matters and be able to read technical drawings.

Before the machine is operated or serviced by the operator or mechanic, they must have been adequately instructed. The first instruction is given by specialists from GS. This does not apply when a company already has several machines of the same type or if there is sufficient knowledge available within a company. GS cannot be held responsible in any way for works that have been carried out by an operator who is not or not sufficiently instructed or qualified.

## 1.2 Liability

These operating instructions and the data they contain have been drawn up with the utmost care. C / S and/or your supplier are not liable for lack of clarity, mistakes and/or damages to the GS 0700R or personal accidents.

In addition, they are not liable for personal accidents caused by incorrect use or attempts to have the sweeper serviced by others that are not qualified mechanics.



### 1.3 Warranty conditions

The warranty terms, mentioned in the general terms and conditions of delivery, will lapse immediately by operation of law if:

1. Service activities and/or repairs have not been carried out strictly in accordance with the instructions.
2. Repair activities have not been carried out by service mechanics from GS engineering or its official dealer, or have been carried out by the customer's mechanics without written approval from GS.
3. Changes have been made to the delivered product without prior written approval from GS.
4. Other than original GS parts are used.
5. Other than the prescribed lubricants are used.
6. The delivered product is handled improperly, carelessly, incorrectly and/or negligently.
7. The machine is used for other purposes than those it was designed and built for.

### 1.4 Machine attachments

Each machine comes with:

- the operating instructions for the GS 0700R
- the operating instructions for the engine
- warranty certificate



## 1.5 Technical Data

**Technical data of the GS 0700R**

Illustration 1

Sweeping width	70 cm
Engine power	Briggs & Stratton 3,4 kW (4,5 hp)
Brush drive	Hydro
Brush rotating left/right	Yes
Brush diameter	700 mm



## 2. Safety

The GS 0700R has been manufactured in accordance with regulations that are currently applicable. Nevertheless, this machine could cause dangers to man and machine if:

- it is not operated in accordance with the operating instructions;
- it is not operated by qualified personnel;
- it is changed or used inexpertly;
- the safety instructions are not being observed.

Therefore, anyone who is involved in the operation, maintenance and/or repair of the machine has to read and follow the safety instructions. If so desired, this could be confirmed by the user's signature.

Apart from the requirements and regulations mentioned in these operating instructions, the following apply:

- general safety requirements;
- land specific regulations





## 2.1 Safety symbols

The safety symbols on the machine must be kept complete and legible. Damaged and illegible safety symbols must be replaced by new ones.



1. Applied to the case of the machine, on the side, "hearing protection must be worn"



2. Applied to the case of the machine, behind the engine, "read operating instructions before use"



3. Applied to the case of the machine, on the side, "eye protection must be worn"



4. Applied to the case of the machine, near the switch with the indications:
  - "Arrow forward" (brush turns to the left)
  - "Horizontal line" (neutral position)
  - "Arrow backward" (brush turns to the right)



5. Applied on the backside of the chassis case; this is the CE mark and serial number.



## 2.2 Safety Aspects

- Safety aspects and pictograms included in these operating instructions as well as the safety symbols on the machine must always be observed by the operator.  
The procedures laid down in the operating manual must always be executed in the correct order.
- When operating the machine, the operator must always see to proper visibility so he can see the work area and the machine. He has to make sure that his attention is not distracted from his work and always has to act according to circumstances.
- With each movement the machine makes, the operator must be certain that there are no persons near the machine.
- It is not permitted to use the machine to transport people.
- When using the machine, safety glasses must be worn.
- When using the machine, hearing protection must be worn.
- The operator's clothing must be tight-fitting, preferably no loose clothing. In addition, the operator must wear sturdy shoes.
- All maintenance, repairs, remedy of failures and other similar activities not mentioned in these operating instructions must be carried out by a mechanic.
- If the operator detects any defect or fault to the machine, a mechanic has to be informed immediately.

## 2.3 Safety Precautions

The machine is equipped with an overload protection.

If the (sweeping) force requested from the brush is too high, it will stop as long as this force is requested. The control handle of the brush also equipped with a safety device: when the handle is pulled backwards and is subsequently released, the machine will stop immediately.



## 2.4 Emergencies

An emergency means a situation in which people, animals and/or the machine are in danger or danger threatens them.

If an emergency arises, the operator must bring the machine to a standstill and turn of the engine.

In case of damages to the machine or other situations in which machine parts might have been affected, the machine must be thoroughly checked. Only this way it can be guaranteed that also after an emergency, it is safe to operate the machine.

## 2.5 Non-advisable use



It is not allowed to sweep materials that are dangerous to human health in any way whatsoever.



It is advised not to drive the GS 0700R without tools.



Do not use the sweeper in confined spaces.



### 3. Sweeping Process

#### 3.1 Recommended application

The sweeper is mainly used for cleaning straight surfaces. The material to be swept will largely consist of leaves, rubbish, snow, sand, gravel or a combination hereof. However, the machine can also be used to sweep heavier waste like silage, hay, straw, etc.



When sweeping certain materials, (large) clouds of dust may be raised. The use of protective glasses is therefore compulsory.



Particles might fly up due to the sweeping method. The operator has to make sure that there are no persons or animals in the direct surroundings of the machine.



Under normal circumstances, the machine generates a noise level of +/- 96 dB (A). Prolonged exposure to this sound level can result in serious hearing injury. This is why hearing protection must be used.



## 3.2 Engine

Standard engine of the GS 0700R is a Briggs & Stratton 3.4 kW (4.5 hp).

### 3.2.1 Starting the engine



Check the engine's oil level each time before using the GS 0700R.

Type of engine oil: **SAE 5W40**

Engine capacity: 0.6 litre.




Before the operator starts the engine, the machine must be checked and found in good order.



Upon starting the engine, the brush drive must be turned off. First turn off the brush, otherwise unexpected and dangerous situations might arise.



Follow the procedure below to start the engine:

1. Push the adjusting handle towards the CHOKE position. Indicated by the choke symbol (  ) on the adjusting handle. (see Illustration 1)



**ATTENTION:** Do not use the choke when the engine is hot or when the air temperature is high.



Illustration 1

2. Slowly pull the starter handle until you feel resistance, then pull firmly. (see Illustration 2)



Illustration 2



**ATTENTION:** Do not allow the starter handle to swing back against the engine. Carefully return the handle to avoid damage to the starter.



3. Push the adjusting handle on the push bar towards the "turtle" (slow position) or the "hare" (fast position). (see Illustration 3)



Illustration 3

### 3.2.2. Turning off the engine

Follow the procedure below to turn off the engine:

Push down the adjusting handle on the push bar until it reaches the STOP sign. (see Illustration 1)



Illustration 1



Do not stop the engine by choking. This could cause backfire and could damage the engine.



### 3.2.3. Refuelling

The engine runs on normal unleaded car petrol: **Euro unleaded**



Use fresh petrol.



Do not mix petrol with oil.



Do not replenish the fuel tank in a confined space



Do not replenish the fuel tank when the engine is running. Wait at least two minutes for the engine to cool down before refuelling.



Never turn on the engine when fuel has been spilled. Keep the engine away from the spilled fuel and avoid ignition sources. Wait for the fuel to evaporate.





### 3.3 Brush

#### 3.3.1 Starting and stopping the brush

A control handle has been mounted bottom left next to the push bar to switch the brush on and off.

The GS 0700R has 3 brush positions:

1. To activate the brush, push the handle away from you (see Illustration 1).  
The brush will now rotate to the left.



Illustration 1

2. Put the handle on "neutral" for the neutral position, which also switches the brush off. Indicated by the horizontal line on the sticker. (see Illustration 3)



Illustration 2



Illustration 3



3. When the handle is pulled towards the user, the brush will rotate to the right.  
(see Illustration 4)



Illustration 4



The brush is equipped with an overload protection. If the (sweeping) force requested from the brush is too high, it will stop as long as this force is requested.



If the brush jams, move the machine back. If the brush continues to be jammed, turn off the machine and have it checked by a mechanic. Never check the brush when the machine is running.

### 3.3.2 Configurations

The GS 0700R has three different settings. The right setting will result in an optimum sweeping result. These configurations refer to the brush height.



### 3.3.3 Adjusting brush height by means of the caster wheel

It is possible to adjust the caster wheel in such a way that it affects the height of the brush. This wheel can be found by tilting the machine backwards. When the brush is mildly worn, it is advisable to adjust this wheel.



Never tilt the machine sideward. By doing so, oil could flow out the machine or parts of the engine could get damaged.

Take the following steps to adjust the caster wheel and brush height:

1. Tilt the machine backwards. The wheel can be found under the brush.
2. Place two '**spanners 17'** on both rear bolts and loosen them. You can do this by holding the left bolt with one of the spanners and loosening the other by turning the spanner to the left (see Illustration 1).



Illustration 1



3. By pushing the wheel away and tightening the bolts turning the spanners to the right, the distance between the brush and the surface to be swept is reduced. (see Illustration 2)



Illustration 2



When adjusting the height, make sure that there is a difference of +/- 40 mm between the rear part of the brush and the surface to be swept. (see Illustration 3)



Illustration 3



### 3.3.4 Adjusting brush height by means of the wheels

In case of severe wear of the brush, you can raise the wheels a few centimetres. Next to the hole where the axle has been screwed down, there are two additional predrilled holes where the wheel can be screwed down. In case of a +/- 50 mm wear of the brush, it is advisable to use this way.

Take the following steps to adjust the brush height by adjusting the wheels:

1. Use '**spanner 16**' to loosen the wheel from the machine. Turn to the left (see Illustration 1). When the screw is almost loose, the user has to hold the machine to prevent it from tipping over.



Illustration 1

2. The wheel is now uncoupled from the machine and can be placed in the desired hole. (see Illustration 2)



Illustration 2



3. Turn to the right to tighten the wheel again.
4. Repeat step 1 to 3 to adjust the other wheel.



When adjusting the height, make sure that there is a difference of  $\pm 40$  mm between the rear part of the brush and the surface to be swept. (see Illustration 3)



Illustration 3



### 3.3.5 Adjustment of the push bar

The height of the push bar can be adjusted. Normally this is done after adjusting the wheels. This is due to the fact that the user will find the push bar in a lower position since the wheels have been placed in a higher position on the case.

Follow the procedure below to adjust the height of the push bar:

1. Use '**spanner 19**' to loosen both bolts on the side of the push bar. Turn to the left. (see Illustration 1)



Illustration 1



2. When the bolts have been loosened enough, the push bar is released. Now you can take hold of the push bar from above and pull it towards you (see Illustration 2). Pull until you obtain the desired position.



Illustration 2

3. Turn to the right to tighten the bolts on the push bar again.

#### 3.4 Releasing the caster wheel

On the front of the case, a handle has been placed (the locking catch) that can be used to release the caster wheel. This handle can be used when light sweeping work has to be carried out. (for instance: sand, leaves, etc.). The machine will be a lot easier to manoeuvre.

Follow the procedure below to release the caster wheel:

1. Push the locking clasp down and turn it 45°. (see Illustration 1)



Illustration 1





2. The locking pin now has to jump away from the clasp (see Illustration 2). If this is not the case, the pin must be pushed away manually until the locking clasp jumps up again.



Illustration 2

Lock the caster wheel when you have to carry out heavy sweeping activities (for instance: straw, hay, silage, etc.).



## 4. Maintenance and Control

### 4.1 Inspection before starting to work with the GS 0700R.

Before starting any activity, several points must be checked first:

- check whether the machine is in good condition. For instance: check if there are any loose parts due to vibration.
- check the air pressure of the tyres (0.8 bar)
- check if there are no persons or animals in the immediate surroundings of the GS 0700R.

A visual check is enough. After prolonged use, lengthy standstill of more than 30 days or unexpected circumstances, the sweeper must be thoroughly checked.



Bolts and nuts must be checked regularly for tightness

### 4.2 Maintenance after sweeping

After sweeping, the machine can be cleaned with water. The use of a high-pressure spraying device is allowed. During cleaning, the engine of the GS 0700R must be turned off.



During cleaning, the engine of the sweeper must be turned off.

### 4.3 Brush check

Depending on the use, the brush hairs are liable to wear. Hairs are also pulled out by the sweeping process. As a result, it could be necessary to adjust the height of the brush. In case of severe wear, several parts where a lot of hairs are missing from the brush or poor sweeping results, the brush must be replaced.



#### 4.4 Maintenance and repairs

Maintenance and repairs to the machine must be carried out by a mechanic.

##### 4.4.1 Hydraulic system

Maintenance and repairs to the hydraulic system must be carried out by a mechanic. The hydraulic hoses installed on the machine must be replaced once every 5 years.



Do not use the machine when the hydraulic lines are damaged. After a mechanic has replaced the hydraulic lines, the machine can be used again.



If however injuries do occur in case of a leaking line, do not use the machine and seek medical advice immediately.



Check the engine's hydraulic oil level each time before using the GS 0700R.

Type of hydraulic oil **HLP.46**  
(available capacity of 3.7 litres)



Change the hydraulic oil after the first 50 hours. After that, change the oil at least once a year or after every 300 hours of use.

##### 4.4.2 Engine

The machine is equipped with an engine that must be serviced at regular intervals. Have the engine checked by a mechanic once a year or after a standstill of more than 30 days.



Check the engine's oil level each time before using the GS 0700R. Type of engine oil: **SAE 5W40**  
Engine capacity: 0.6 litre.



For more detailed information about the GS 0700R engine, please refer to the enclosed manuals.



---

## Maintenance Dates



**EC DECLARATION OF CONFORMITY FOR MACHINES**  
(Directive 89/392/CEE, Annex II, paragraph A)

Wilser Constructions  
Ravenstein

Hereby declares that sweeper  
**GS 0700R**

- conforms to the provisions of the Directive relating to machinery (directive 89/392/CEE, as amended lately) and the national legislation implementing this directive;

and furthermore declares that

- the following (parts of) harmonized standards have been applied:

**EN 292-1: Machine safety, part 1**

Made in Ravenstein

, 11 April 2003

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

A.A.W. Giesbers  
Technical director