

fiorenttini



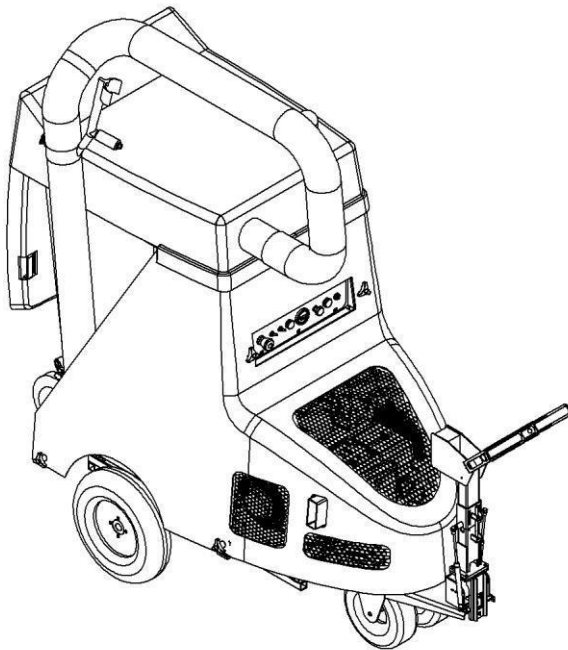
rev.01



Operating instructions

ASPIRIK-P

Petrol Vers.



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1 Safety Standards

This document contains important information relating to appliance safety.

As well as a guide for its proper use. Before putting the unit into operation for the first time, you must read and understand this instruction manual carefully. Keep the instructions for further reference.

1.1 Symbols used in the instructions

HAZARD



Hazard that leads directly to serious or irreversible injuries, or even death.

WARNING



Hazard that can lead to serious or irreversible injuries, or even death.

CAUTION



Hazard that can lead to minor injuries.

1.2 General warnings

Immediately inform your dealer should damage be discovered when unpacking due to transport.

Read the operating manual of the machine and especially comply with the safety standards before operating it.

The warning plates on the appliance provide important information for safe use.

In addition to the operating instructions and mandatory regulations for the prevention of accidents in the country of use, you must observe the general safety and operating rules.

1.3 Driving mode

HAZARD



Risk of tipping over on steep slopes.

- Do not drive or operate on slopes greater than 10%.
- For short straight segments and with the waste container empty, it is possible to exceed 30% slopes (e.g. truck ascent ramp). In any case do not operate on slopes greater than 10%.

HAZARD



Risk of tipping over when driving fast on curves.

- Drive bends at low speed.

HAZARD



Risk of tipping over on unstable ground.

- Only drive the appliance on stable floors.

HAZARD



Risk of tipping over in case of excessive lateral inclination.

- Drive on slopes no greater than 10% diagonally to the direction of travel.
- Comply in principle with the rules, regulations and provisions that apply to motor vehicles.
- The operator must use the appliance according to the intended use. While driving, he must take account of conditions on site and pay attention to third parties (in particular children) when using the machine.
- The appliance must only be used by personnel trained on its use or who have proven to know how to use the machine and are expressly in charge of its use.
- Prior to use, try using the appliance in a non-public area.
- It is prohibited for children or adolescents to use the machine.
- It is prohibited to transport other people.
- Remove the ignition key to prevent unauthorised persons from using the appliance.
- Never leave the appliance unintended while the engine is running.
- The operator may only leave the appliance after having switched off the engine, blocked it against movements, engaged the brake and removed the ignition key.

1.4 Appliances with Combustion Engine

CAUTION



Before commissioning the appliance, read the operating manual supplied by the manufacturer of the engine.

In particular observe the safety-related warnings.

HAZARD



Risk of explosion.

- Refuel only with the engine off.
- Only use the fuel stated in the engine operating instructions.
- Do not refuel in closed environments.
- Do not smoke or use naked flames.
- Make sure that the fuel does not come into contact with hot surfaces.

WARNING



Risk of burns.

- The gas exhaust outlet must not be closed.
- Do not lean over the gas exhaust outlet.
- Do not touch the gas exhaust outlet.
- Before carrying out any maintenance or repair, let the appliance cool down sufficiently.
- Do not touch the drive engine.

HAZARD



Risk of poisoning.

- Exhaust gases contain carbon monoxide, and therefore are harmful and injurious to health and should not be inhaled.
- It is prohibited to use the machine in closed environments.

HAZARD



Risk of shearing.

- After switching off, the engine takes about 3-4 seconds to stop completely. During this

time frame, keep absolutely away from the transmission area.

- Open the bonnet of the appliance only with the engine off.
- Do not insert your fingers into the steering column lock mechanism.
- Do not remove the safety devices.

1.5 Compliant and Intended Use

Use this light waste vacuum cleaner only in accordance with the directions given by this operating manual.

Before use, check the perfect condition and safe operation of the appliance and of the work equipment. Otherwise it is forbidden to use it.

Before starting work, the operator must ensure that all the safety devices are correctly placed and functioning.

In the standard version (with coarse filter) the appliance is suitable for suction of light waste (e.g. jars and beverage bottles, cigarette boxes etc.).

This appliance is designed to vacuum clean outside environments.

The appliance is not suitable to vacuum and collect dust harmful to health.

No changes may be made to the appliance.

Never vacuum explosive liquids, flammable gases, or acids and solvents. This includes petrol, paint or gasoline thinners that, together with the intake air, may form explosive vapours or mixtures, as well as acetone, acids and solvents that may corrode the materials of the machine.

Reactive metal powders (e.g. aluminium, magnesium, zinc) form explosive gases together with strongly alkaline detergents and acids.

Do not vacuum burning objects.

It is forbidden to remain in the danger areas.

It is forbidden to use the appliance in explosive environments.

Keep the appliance away from any easily flammable substance.

Protect the appliance against freezing.

Any other use is considered improper use. The manufacturer does not accept responsibility for any damage caused by improper use. The risk resulting from such use is the sole responsibility of the user. Suitable use includes appropriate operation, maintenance and repairs as specified by the manufacturer.

1.6 Symbols on the Machine

The following symbols are displayed on adhesive labels on the external surfaces of the machine. Their presence is essential to ensure the safe use of the machine.

The operator is responsible to replace missing, damaged or illegible labels due to wear. The ordering code of the corresponding label is shown below next to its description.



Code ET054

Crushing hazard. Keep hands away from moving parts of the machine or wait until all moving parts have stopped.



Code ET085

Burning hazard. Do not touch surfaces near the symbol as they are hot. Let the engine and exhaust system cool down before attempting any work on the appliance.



Code ET058

Risk of shearing. Forbidden to remove the guards and safety devices.

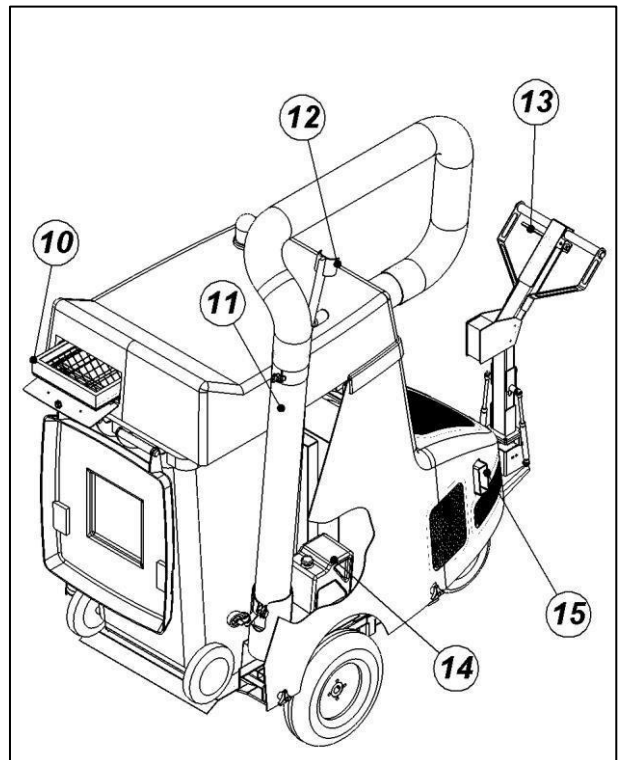
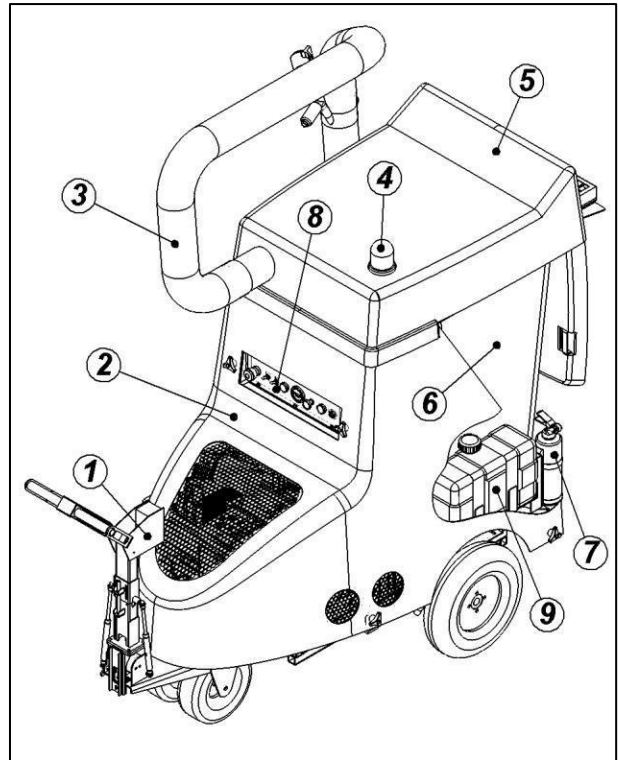


Code ET065

Fire hazard. Do not smoke or use naked flames near the machine. Keep easily flammable materials and substances away from the machine.

2 Description

2.1 Control and operating parts



1. Steering column
2. Bonnet
3. Suction hose
4. Flashing light
5. Suction head
6. Waste container
7. Fire extinguisher

8. Dashboard
9. Fuel tank
10. Suction filter
11. Rigid suction pipe
12. Handle
13. Steering column unlock lever
14. Exhaust gas outlet
15. Water tank for dust removal

2.2 Identification Plate

ING. O. FIORENTINI spa Loc. Rombola 50030 - Piancaldoli (FI) Tel. 0558173610 - Fax. 055817144		MADE IN ITALY  <small>A.E.E.n.IT12010000007391</small>
Mod. ASPIRIK-P	S.N. 160600536	 2 0 1 6
V 24 	Hz	
Unladen Mass 360 kg	Ah 20 W 5000	
 <small>160600536</small>		

An adhesive machine identification label containing indelible "CE" marking details is affixed on the outside of the bonnet.

The plate must never be removed and must always be legible. If it should be damaged, another must be requested. The appliance cannot be marketed without the plate.

3 Before putting into Service

3.1 Unloading the appliance

HAZARD



Risk of injury and damage.

Do not use a forklift truck to unload the appliance. Proceed as follows.

- Open the cardboard box.
- The machine is fixed to a wooden platform with belts and with brackets to lock the wheels.
- Cut the belts and remove the wheel brackets. The machine can then be moved and pushed off the platform.
- The appliance can be handled in two ways: with or without drive engaged.

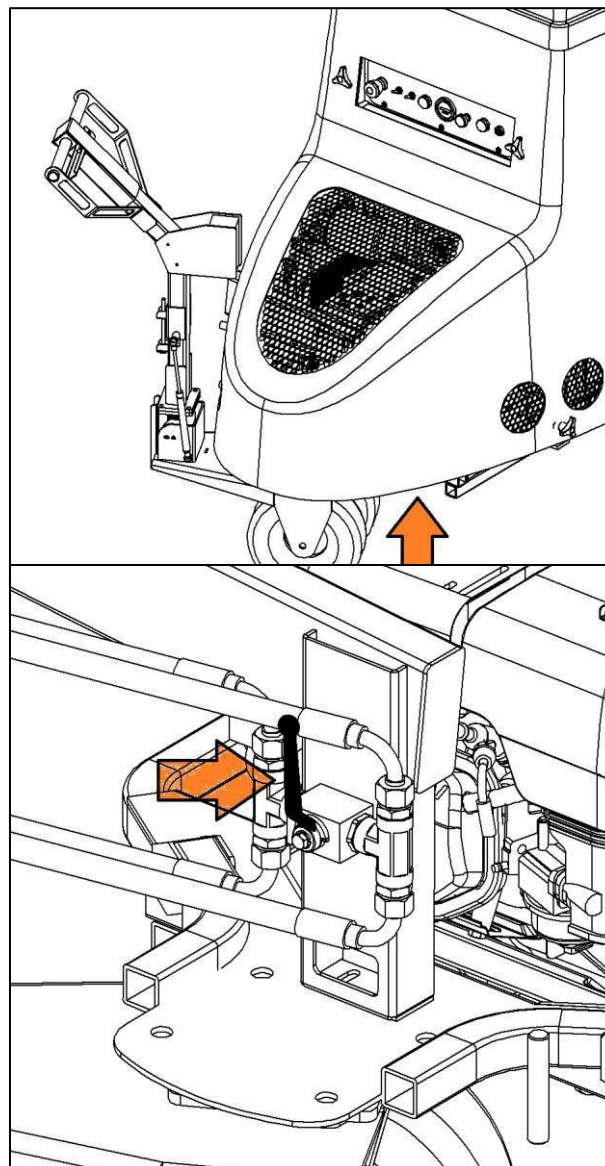
3.2 Drive Disengaged

HAZARD



Risk of injury and damage.

Before releasing the drive, keep the appliance still so that it cannot move accidentally.



Reach the hydraulic bypass valve through the open bottom part of the bonnet. The valve is located at the front of the machine. Operate the lever.

This disengages the drive and the machine is free to move.

Do not move the machine with drive disengaged over long tracts and at speeds exceeding 6 km/h.

3.3 Drive Engaged

Refuel the machine (see next paragraph).

Switch on the machine and move it by means of its hydraulic drive (see next paragraph).

Carefully move it down from the packaging platform.

The machine can be moved with its drive only if unpacked outdoors.

4 Commissioning

WARNING



Place the appliance on a level surface.

4.1 Fuelling

HAZARD



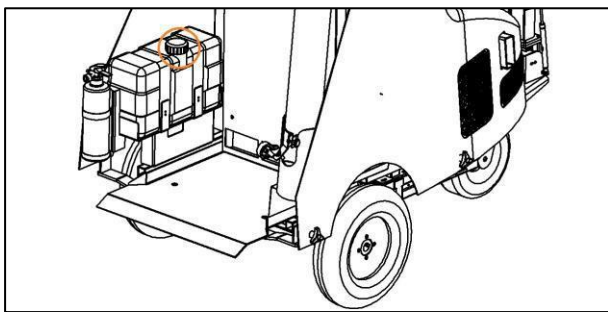
Risk of explosion.

- Refuel only with the engine off.
- Only use the fuel stated in the engine operating instructions.
- Do not refuel in closed environments.
- Do not smoke or use naked flames.
- Make sure that the fuel does not come into contact with hot surfaces.

Turn off the engine.

If present, remove the waste container from the back side of the machine (see next paragraph).

Unscrew the tank cap.



Top up with suitable fuel (see engine use and maintenance manual)

Fill the tank up to 2.5 cm below the top edge of the filler neck.

Eliminate any spilled fuel and close the tank cap.

4.2 Control interventions

For the execution of the following controls refer to the chapter entitled "Care and maintenance".

Check the motor oil level.

Check the level of fuel tank.

Check the level of the hydraulic oil.

Empty the waste container.

4.3 Positioning the Waste Container

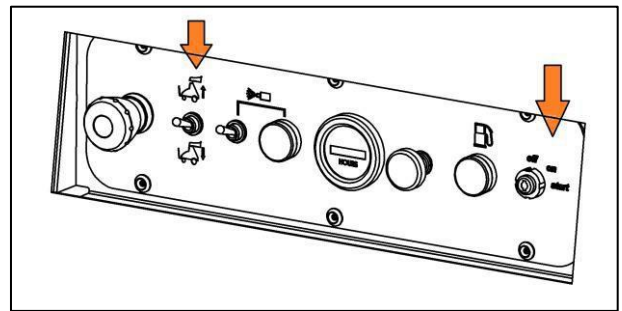
WARNING



The waste container must be positioned with the engine off.

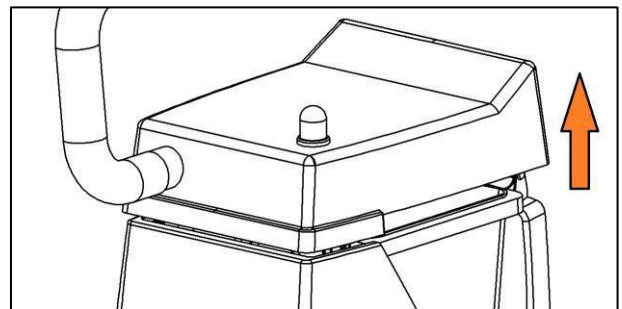
To insert and remove the waste container according to DIN EN 840-1, lift the suction head.

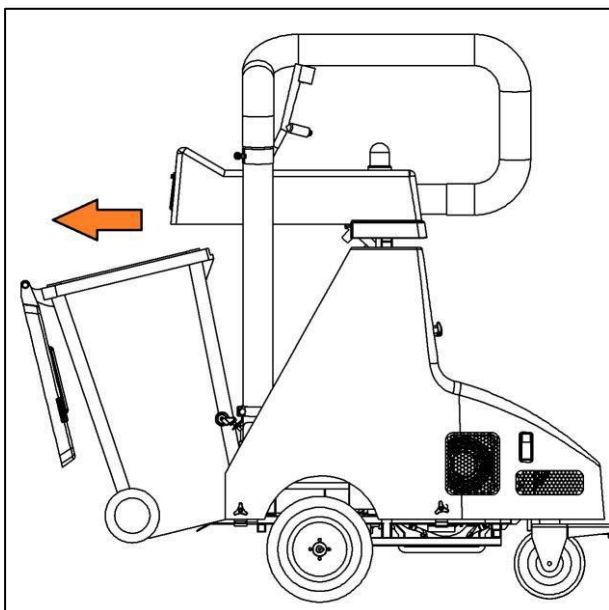
Press the specific switch on the dashboard to move the head.



The head can only be enabled electrically with the ignition key ON.

The head cannot be lifted or lowered with the engine running. The engine can only start if the head is properly fit on the waste container. In any case the waste container must be positioned with the engine off.





When positioning the waste container underneath the suction head, check that the gasket fits tight on the edge of the container.

5 Operation

WARNING



Even though the machine has an isolation system of the vibrations produced by the engine, stresses transmitted to the hand and arm of the operator through the steering column cannot be eliminated completely.

Prolonged use may cause vascular problems in the hands.

Generalised times of use cannot be established, since they are subject to several factors:

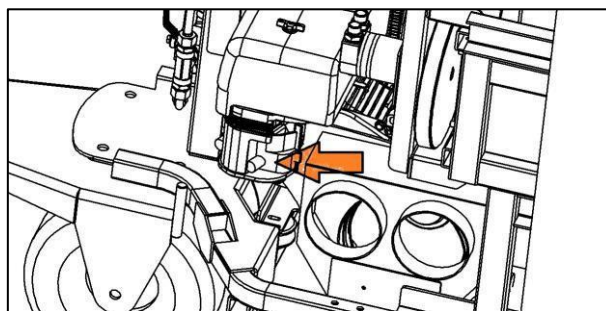
- ❖ Predisposition to insufficient blood circulation.
- ❖ Low ambient temperature.
- ❖ Grip excessively tight.

We recommend use interrupted by pauses instead of continuous.

We recommend a medical examination in case of regular and continuous use or if phenomena like tingling of the hands and cold fingers occur repeatedly.

5.1 Starting the machine

Open the fuel cock before starting the machine. This can be reached through the bottom open part of the bonnet.



Push the cock lever to ON.

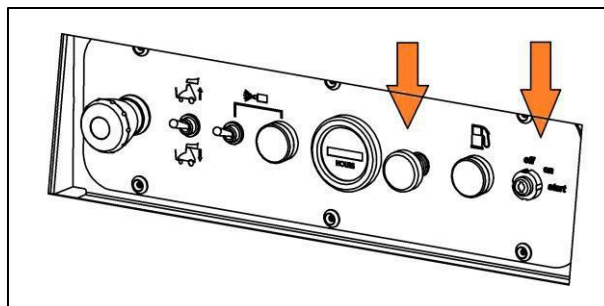
Make sure that the steering column is in neutral, that is locked in the centre position. The engine does not start with the steering column in this position.

Pull the Starter knob on the dashboard next to the ignition key.

Turn and hold the ignition key in the START position for no more than 5 seconds.

When the engine has started, put the Starter knob back in position.

If the engine does not turn on the first try, wait at least 10 seconds before operating the Starter again.



WARNING



You do not need to adjust the engine rpm. The rotation speed is adjusted and preset at the factory.

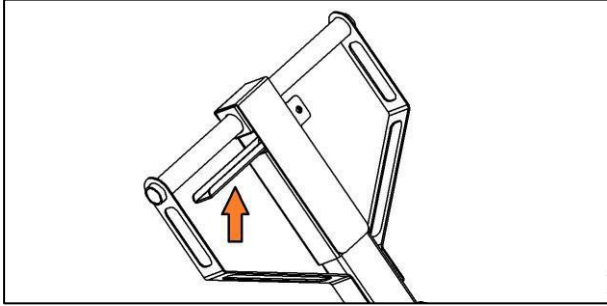
Do not change speed by intervening on the carburetor of the engine. This could compromise the smooth and safe operation of the machine.

The flashing light and the hour counter are activated when the engine is running.

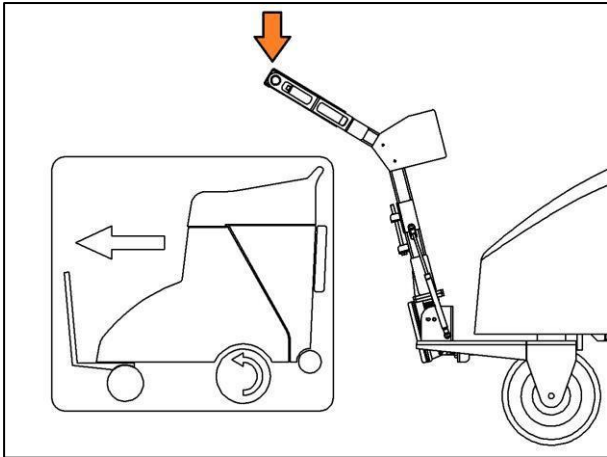
If the fuel level is at a minimum, the red light between the ignition key and the starter knob goes on.

5.2 Driving

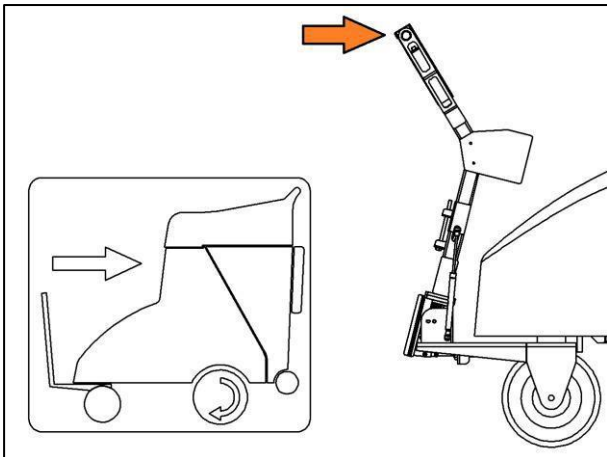
Pull the unlock lever and carefully move the steering column forward or backward.



Pulling the steering column towards you moves the machine forward.



Pushing the steering column towards the bonnet moves the machine in reverse.



If the steering column is outside of the central position, the unlock lever can be released.

You can set the speed infinitely variable from the steering column.

WARNING



Do not abruptly deactivate the steering column as it could damage the hydraulic system.

Direct the appliance in the desired direction by turning the steering column to the right or to the left, at the same time pushing it forward or backward to adjust speed.

If you release the steering column, it goes back automatically to the middle locked position. The machine stops and remains braked.

HAZARD



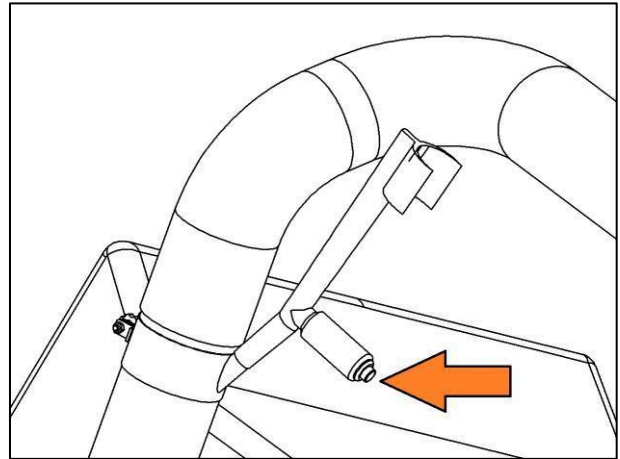
Do not attempt to pass over fixed obstacles higher than 50 mm.

5.3 Suction

During use, empty the waste container at regular intervals or replace it with an empty one.

Remove the suction hose from the support and hold it by the handle.

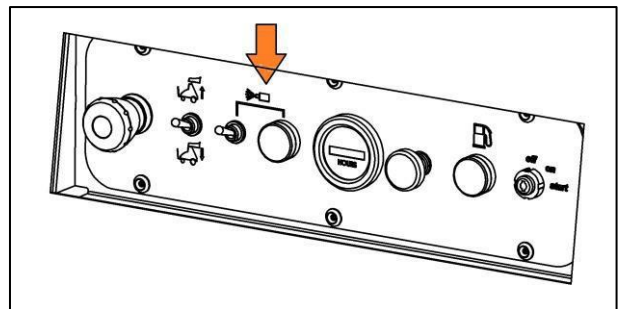
Press the button on the handle to start the intake flow. The suction fan stops when released.



Put the suction hose back into the support when vacuuming is finished.

5.4 Dust Removal

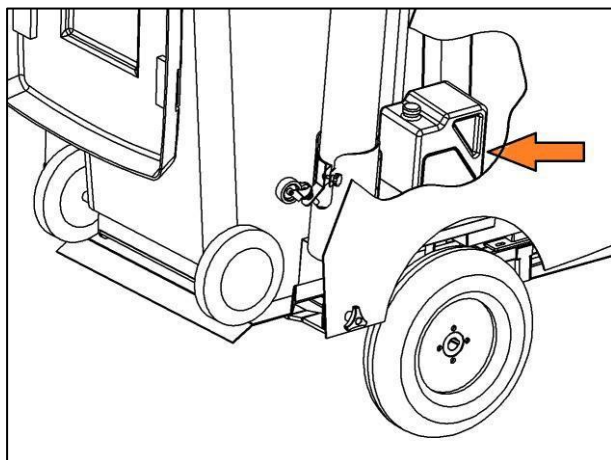
The dust removal function is enabled from the switch on the dashboard. The green light indicates activation of the function.



Each time the suction button is pressed, a nozzle inside the suction head sprays a small amount of water for about three seconds. The duration of dispensing depends on how much the

suction button on the handle of the suction hose is pressed.

At regular intervals, fill the tank on the suction hose support with water.

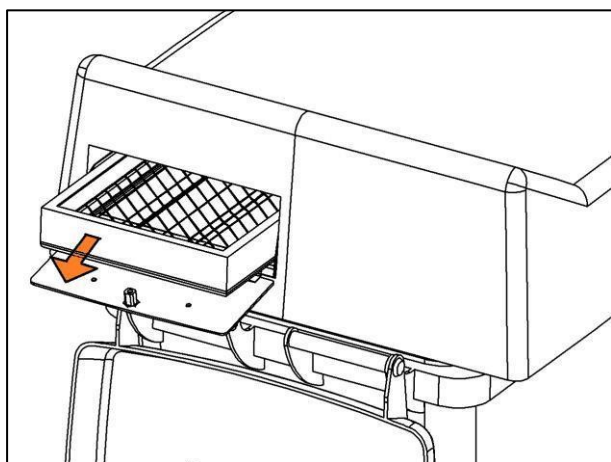


5.5 Cleaning the Filter

When there is a decrease in suction power, clean or replace the filter.

Open the filter door on the rear of the suction head.

Remove the filter and clean it with compressed air and by shaking it or replace it if the filtered material is excessively dirty.



5.6 Stopping

The machine can be stopped by releasing the steering column and causing it to go to the locked position.

The engine continues to run.

Turning ignition key to OFF and removing it also stops the engine.

WARNING



If none of the previous actions stops the machine, press the red emergency button on the dashboard.

If the appliance is not used for a long period of time, proceed as follows:

- Place the appliance on a level surface.
- Lock the drive by releasing the steering column.
- Fill the fuel tank and close the petrol cock.
- Change the motor oil.
- Turn the ignition key to OFF and remove it.
- Unscrew the spark plug and put about 3 cc of oil in the spark plug housing bore. Rev up the engine a few times without the spark plug. Screw on the spark plug.
- Clean the unit inside and outside.
- Store it in a sheltered and dry place.
- Disconnect the battery.
- Charge the battery every 2 months or so.

5.7 Transport

HAZARD



Respect the weight of the appliance during transport.

HAZARD



For transport on vehicles secure the appliance according to directives in force so that it cannot slip or tip over.

Ensure the immobility of the appliance by locking it with belts and ropes.

The ropes must pass through the tubes of the machine frame protruding at its bottom.

Secure the wheels with wedges.

The appliance cannot be lifted by belts. Use a ramp to load and unload the appliance, using its own drive.

6 Care and Maintenance

6.1 General Warnings

Before cleaning and servicing the appliance or replacing components, turn it off and remove the ignition key.

Make sure all engine and transmission parts have stopped. After stopping the engine always wait 5 seconds.

Before carrying out any maintenance or repair, let the appliance cool down sufficiently.

Never touch hot components such as the drive motor and exhaust deflector.

When working on the electrical system, disconnect the battery.

Repairs may only be performed by authorised service centres or by experts in this field who are familiar with all relevant safety regulations.

6.2 Cleaning

WARNING



Do not clean the appliance with a high pressure water jet (risk of short circuit or other electrical failures).

HAZARD



Wear a dust mask and safety goggles.

Remove the machine bonnet to clean the inside. Clean with a jet of compressed air.

The outside of the appliance should be cleaned with a soft cloth and a mild detergent. Do not use aggressive cleaning agents.

6.3 Maintenance frequency

WARNING



The operating hours counter indicates the maintenance intervals.

The following maintenance operations are to be carried out by the customer:

Daily maintenance:

- Check the motor oil level.
- Check the level of the transmission oil.
- Check operation of all control parts.
- Clean the gasket on the suction head.

Weekly maintenance:

- Make sure there are no fuel leaks.
- Check the air filter.
- Check that the moving parts move perfectly.

Maintenance every 100 working hours:

- Check the tightness of the fuel pipes.
- Change motor oil (first change after 20 hours of operation).
- Check the spark plug.
- Check the battery acid level.
- Check the tension, the wear and the operation of transmission belts (poly-V).

WARNING



All servicing and maintenance to be undertaken by the customer must be performed by a qualified technician.

The following maintenance operations are to be carried out by customer service:

- Perform the first inspection after 20 hours.
- Maintenance every 100 working hours.

To keep the warranty valid, during the warranty period, all servicing and maintenance must be carried out by authorised *Ing. O. Fiorentini S.p.A.* Service.

6.4 Battery maintenance

HAZARD



Risk of explosion.

Never place tools or similar objects on the battery, on the terminals and on the connections of the battery cells. If conductive it could cause a short circuit resulting in ignition of the electric arc.

Provide adequate ventilation during charging to ward off possible explosive gases produced by the battery.

Always follow the instructions of the battery charger.

The machine is equipped with two 12-volt starting batteries connected in series, type *YUASA YB16* or *FIAMM FB16B*.

For safety reasons, the appliance's starting batteries are shipped dry.

Generally the local dealer activates the batteries. If this has not been done, they must be activated.

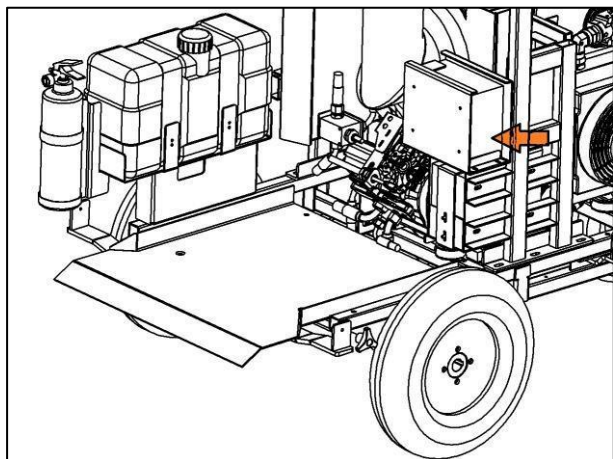
Completely extract the batteries from the appliance.

Lift the suction head.

Extract the waste container.

Remove the engine and rear bonnet.

The battery holder is now visible.



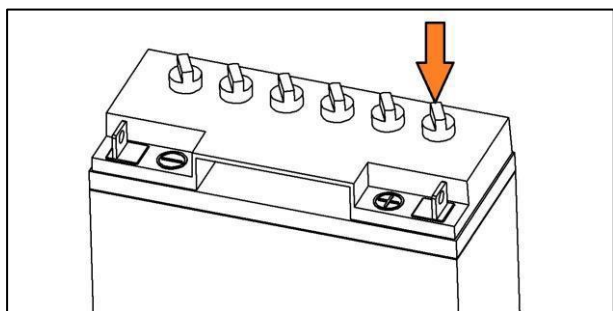
Disassemble the battery holder.

Disconnect the battery from the electrical system by removing the cables from the battery terminals.

Remove them from the support by removing the clamps.

The batteries must be activated with the acid supplied.

Place the batteries on a horizontal plane, unscrew and remove the top caps and vent plug.



Slowly pour the acid into each hole until it reaches the *UPPER LEVEL*.

Never fill up to the top edge of the battery cover: acid spills could occur.

Place the caps on the holes and allow the battery to rest for about 30 minutes to allow the activation of the plates. Press or tighten the top caps all the way and leave the vent plug open.

If the voltage of the battery is below 12.7 Volts charge it with an appropriate battery charger.

Refer to the user manual of the battery charger.

Remember that the two batteries are connected in series and that the rated voltage of the system is 24 Volts.

Periodically recheck (4-6 months) the levels of acid and optionally restore them to *UPPER LEVEL* using distilled water suitable for use with Lead batteries.

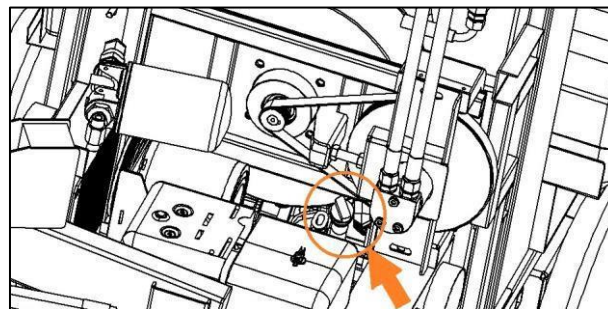
6.5 Motor oil

The engine is equipped with a safety system which prevents start-up if the oil level is below the minimum allowed.

Do not check the oil level before 5 seconds have passed since stopping the engine.

Remove the engine bonnet.

Remove the oil dipstick, recognisable by the yellow end.



Clean the dipstick and put it back into the slot. Check the level at the next extraction. If necessary, add oil.

See the technical specifications for the type of motor oil.

To change motor oil, in any case remove the oil dipstick.

Unscrew the oil drain plug at the bottom of the engine. Collect the used oil in a suitably sized tray placed under the machine.

When all the oil has drained, screw the drain plug back on and fill with motor oil.

Close the oil filler hole.

Wait at least 5 minutes.

Check the motor oil level.

6.6 Air Filter

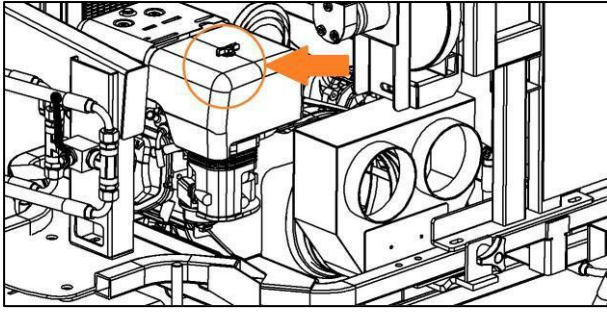
Remove the engine bonnet.

Unscrew the wing nut.

Remove the filter cartridge, check it and clean it.

Insert the clean cartridge or a new cartridge into the suction container.

Tighten the wing nut.



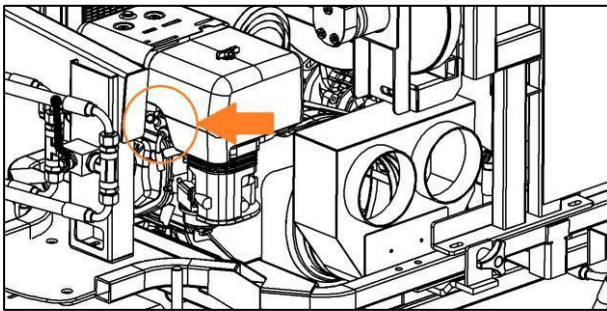
6.7 Spark plug

Detach the spark plug connection.

Unscrew and clean the spark plug.

Screw the clean or a new spark plug.

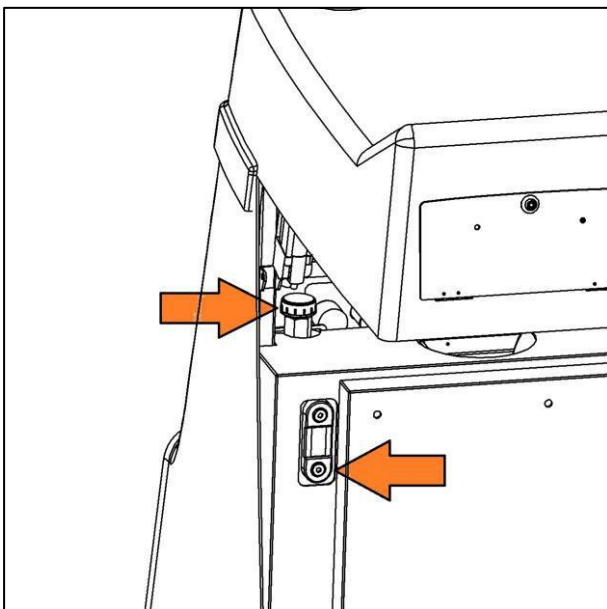
Apply the spark plug connection.



6.8 Hydraulic Oil

Extract the waste container.

This way the hydraulic oil level and filler cap remain visible.



Top up if the level is not correct.

See the technical specifications for the type of hydraulic oil.

Every 500 hours of operation, replace the filter cartridge in the hydraulic circuit.

It is possible to completely empty the hydraulic circuit through two plugs on the bottom of the tank.

6.9 Transmission Belts

The machine has three poly-V transmission belts. One for the intake fan, one for the pump unit and the third for the dynamo-starter motor and battery charger.

Periodically (approximately 300 hours of operation) check belt tension and adjust if necessary.

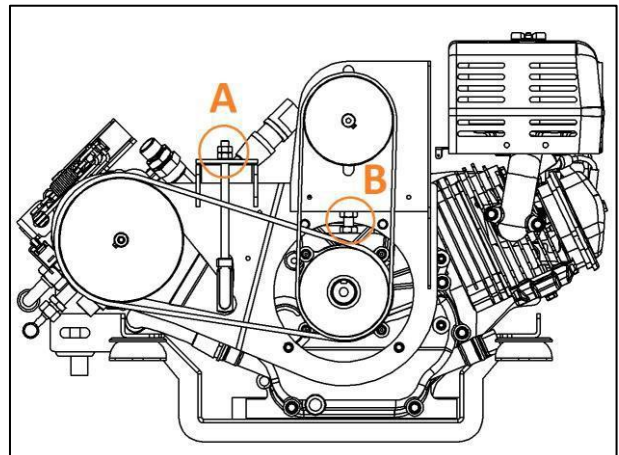
HAZARD



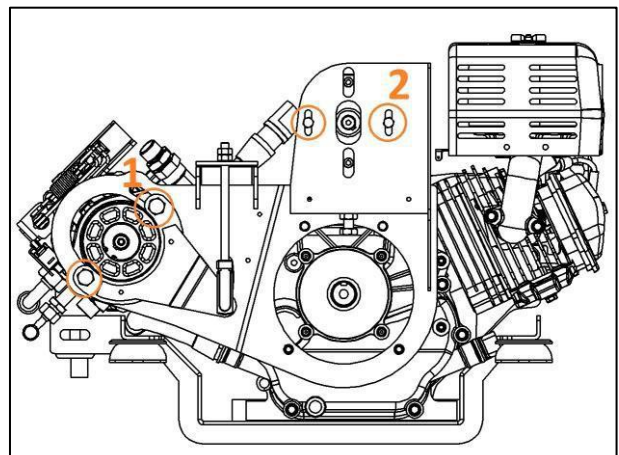
Risk of injury and damage.

A belt tension meter should be used.
Incorrect belt tension can lead to rapid wear or sudden breakage of the component, with possible damage to the machine and dangerous projection of parts of the belt.

The belt tensioners A and B act respectively on the belts of the pump unit and engine dynamo.



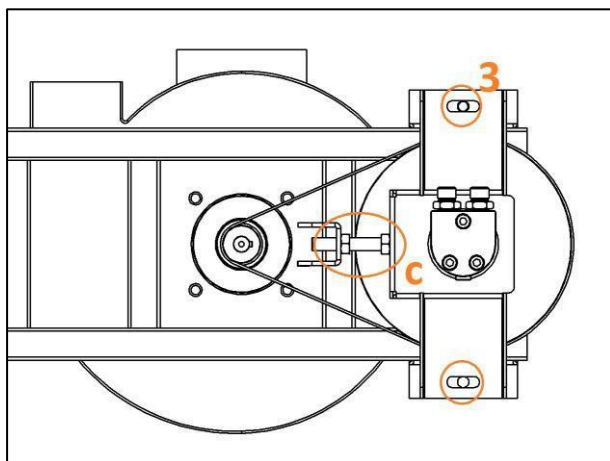
In order to adjust the tension of the belts, you must first slightly loosen the screws 1 and 2 and then loosen the lock nut of the belt tensioning mechanism.



For clarity of representation, the figure shows screws 1 and 2 without the pulleys and belts mounted. Of course you must unscrew them without removing them.

The tension can be adjusted by screwing or unscrewing the belt tensioner. Once you have found the optimal value, retighten the screws 1 and 2 and the lock nut.

Similarly, the belt tensioner C and screws 3 allow you to adjust the fan belt tension.



The correct belt tension values are:

- **Fan. 390 Newton per branch.**
- **Pumps. 300 Newton per branch.**
- **Dynamo. 65 Newton per branch.**

7 Disposal



All packaging is recyclable. The packaging must not be disposed of with household waste, but brought to relative collection centres.

Discarded appliances contain valuable recyclable materials and must be brought to relative collection centres. Batteries, oil, and similar substances must not be released into the environment. Therefore please dispose of your discarded appliances using separate collection systems.

8 Warranty

The Ing.O.Fiorentini S.p.A. general terms conditions also apply to the warranty.

The manufacturer cannot be held responsible in any way for damage resulting from unauthorised modifications made to the appliance, from the use of unsuitable brushes and accessories and after use of the device other than that intended.

9 Accessories and Spare Parts

Only use accessories and spare parts approved by the manufacturer. Original accessories and spare parts guarantee that the appliance can be used safely and without problems.

ING. O. FIORENTINI S.p.A.

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10 Troubleshooting

FAILURE	REMEDY
The appliance does not start.	Refuel.
	Open the fuel cock.
	Check the fuel system and connections.
	Check the general fuse, replace if necessary.
	Low battery. Recharge the battery.
	Check and clean the spark plug, replace it if necessary.
	Inform the assistance service.
The engine runs irregularly.	Clean or change the air filter.
	Check the fuel system and connections.
	Inform the assistance service.
The engine is running, but the appliance does not start.	Check proper functioning of the steering column.
	Check the hydraulic drive disengagement lever.
	Inform the assistance service.
The engine is running, but the machine moves very slowly.	In subzero temperatures, have the appliance heat up for 5 minutes before using it.
	Inform the assistance service.
Insufficient suction power.	Check the gasket on the suction head.
	Check and clean the suction head filter.
	Empty the waste container.
	Inform the assistance service.

11 Technical Specifications

General Machine Data		
Length x Width x Height	mm	1850 x 900 x 1600
Weight without load	kg	350
Total permitted weight	kg	450
Maximum forward speed	Km/h	6
Maximum slope allowed	%	30
Volume of waste container	l	240
Protection rating	--	IPX3
Engine		
Model	--	Honda GX 270
Displacement	cc	270
Maximum power at 3600 RPM.	Kw/Hp	6.3 / 8.4
Maximum torque at 2500 RPM.	Nm	19.1
Fuel tank capacity	l	10
Starter battery	--	2x12 = 24V / 20Ah
Fuel consumption at full power	l/h	2.2

Types of Oil		
Engine SAE10W30 – API SJ	l	1.1
Hydraulic circuit AGIP OSO-46	l	12
Tyres		
Front dimensions	mm	2 x Ø260x85
Front wheel pressure	bar	Full rubber
Rear dimensions	--	8" – 3.50
Rear wheel pressure	bar	Full rubber
Suction System		
Filtering surface standard version	m ²	0.23
Filtering surface fine dust version	m ²	3
Maximum negative pressure	hPa	22.5
Maximum flow rate	l/s	470
Environmental Conditions		
Temperature	°C	0..40
Humidity, non-condensing	%	0..90
Steering Column Vibrations	m/s ²	0.5
Suction Tube Vibrations	m/s ²	0.2
Noise emission at 3 meters	dB(A)	87

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