Simply Air Compact Skid

User Manual



Introduction

We would like to thank you for purchasing the Simply Air Compact vacuum excavator.

This user manual will familiarize you with how to operate this machine safely.

This machine meets modern requirements and safety standards and may only be operated by personnel trained in the use of this equipment.

It is essential that all users of the Simply Air Compact vacuum excavator read this manual and follow the instructions before operating the machine.



Important Safety Instructions

- Keep hands, feet, and clothing away from moving parts.
- Always wear appropriate personal protective equipment (PPE).
- Do not modify or remove any parts of the machine.
- Switch off the machine before performing maintenance on the Simply Air vacuum excavator.

This machine produces a high vacuum. Avoid any contact with people or animals, as this may result in serious injury or death by suffocation.

Never use this machine in a manner inconsistent with its intended design.

This machine uses compressed air. The excavation tool may cause objects to become airborne. Flying objects can cause injury and/or property damage. Keep all non-essential personnel away from the work area.

All information and instructions, especially safety instructions, must always be strictly observed.

We accept no liability for accidents and/or damage resulting from improper use or failure to follow the instructions in this manual.

Do not operate this machine without first being informed of the instructions in this manual. Only authorized personnel may operate the equipment.

General Information

This manual contains important safety information and optional instructions for your Simply Air Compact vacuum excavator. Read and understand this manual before operating the equipment. Failure to do so may result in serious personal injury or property damage.

Keep this manual with the machine at all times for future reference.
If you sell this device, you must provide this manual to the new owner.
A replacement copy of this manual is available via info@vwairproducts.nl

Images, instructions, and specifications in this manual are subject to change.
VW Air Products reserves the right to modify products at any time.
Contact your Simply Air Compact dealer for the latest information.

Transporting the Machine

- Ensure all components are properly secured.
- Switch off the compressor engine and release the air pressure.

Service and Maintenance

- Ensure the machine is always in good condition.
- Safety devices must always be installed and tested.
- Inspect the machine daily before use.
- Do not use imitation parts.
- Use only original Simply Air replacement parts.
- Perform regular maintenance intervals.

Working with the Machine

Before using the vacuum system, the operator must be trained in vacuum excavation and cable locating.

Before excavation, we recommend:

- Check all compressor fluid levels.
- Check all vacuum hoses and tools for blockages and damage.
- Check all filters and clean or replace if necessary.

⚠ **WARNING: DO NOT USE without a filter system unless you are suctioning water only!**

- Check all safety devices and ensure proper PPE is worn.
- Submit a KLIC notification and verify utility drawings for cable and pipeline locations that must be exposed.
- If excavations take place near or on public roads, notify local authorities regarding traffic regulations and safety measures.
- Know the type of material you are excavating.
- Be aware of local regulations for disposing of liquid material and/or sludge.
- Ensure a safe disposal location or plan for material collected in the tank.

⚠ **WARNING: Do NOT vacuum hazardous or highly flammable materials with this system.**

Consult regulations regarding hazardous material classifications.

Vacuum Excavation

Vacuum excavation is the process of removing wet or dry material using an airflow. This is done using vacuum tools.

Before starting excavation on site:

- Position the vacuum unit as level as possible.
  (The Bucket and Compact CW are attached to the crane using the quick coupling.)
- Apply the compressor parking brake.
- Install necessary traffic safety measures.
- Start the compressor and allow the engine to warm up.
- Use appropriate PPE.
- Connect the vacuum hose to the tank.
- Connect the compressor hose to the venturi.

If an additional hose is required between the compressor and Simply Air unit, use the correct air hose with proper locking connections. Short suction hose lengths are recommended to reduce blockages.

When the suction hose is connected, open the valves on the compressor and the venturi to start the vacuum.
Close the air valve on the venturi or compressor to stop suction.

If the soil is contaminated, a special filter must be installed.
If you suspect the material being vacuumed is contaminated, stop immediately and have a sample taken.
Keep hoses and vacuum tools away from your face and body.

When suctioning liquids, material will move more quickly into the collection tank/bucket.
This technique is also effective for deeper vertical distances.

The tank/bucket is equipped with a **float system**. When the liquid level reaches tank capacity, the float restricts airflow to prevent overfilling.
However, we cannot guarantee that no liquid will enter the filter.

When suctioning dry materials, the float system will not activate.
Stop suctioning when you notice little material is being collected or when the vacuum gauge indicates a high vacuum level.

When finished:

- Switch off the compressor and remove the key.
- Store all tools and hoses safely before leaving for the disposal site or next location.

Emptying the Tank / Bucket

Before starting vacuum operations, establish a disposal plan and location for the collected material unless it will be reused on site.

- Open the bottom lid using the locking mechanisms and discharge the collected material.
- Clean the tank if necessary and close the lid.
- The black lever opens the bottom lid.





Air Filter

The air filter must be cleaned once per day.
Do not clean by blowing it out, as it may contain contaminated materials.
Reinstall the cleaned air filter once it is dry (preferably).
Damaged air filters must be replaced immediately.

The unit must not be operated without an air filter element, unless suctioning water only.

Cleaning Machine and Hoses

All tools and hoses must be cleaned before storage.
Debris and sand in the tank and hoses will reduce performance.
Always clean the machine and hoses after finishing vacuum operations.
The lever can be used to secure the lid after opening. en tips
Maintenance and Tips

- Check filters daily.

Cleaning the filter bag:

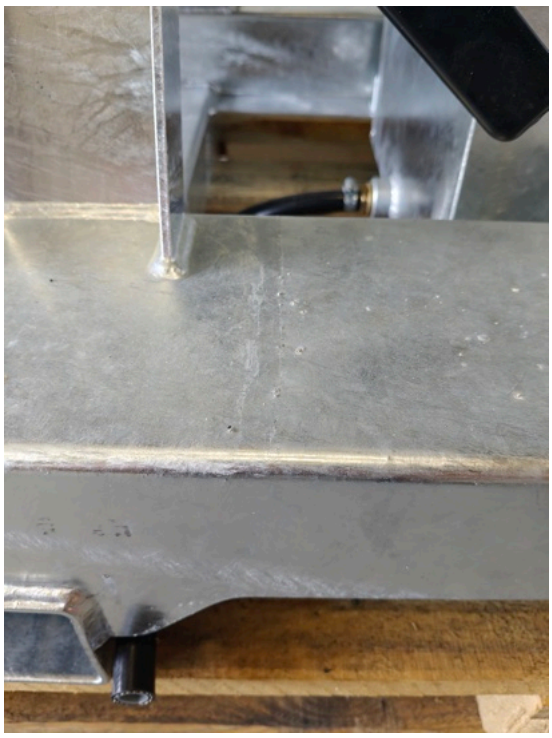
- Unlock the top lid by lifting the toggle clamp (Fig. 1).
- Remove the lid with the filter bag from the tank (Fig. 2).
- Check the bag for damage or defects.
- Clean if necessary or replace with a factory-recommended filter bag.
  (For contaminated soil, a specialist-approved filter is required.)

Fig. 1:



Fig. 2:

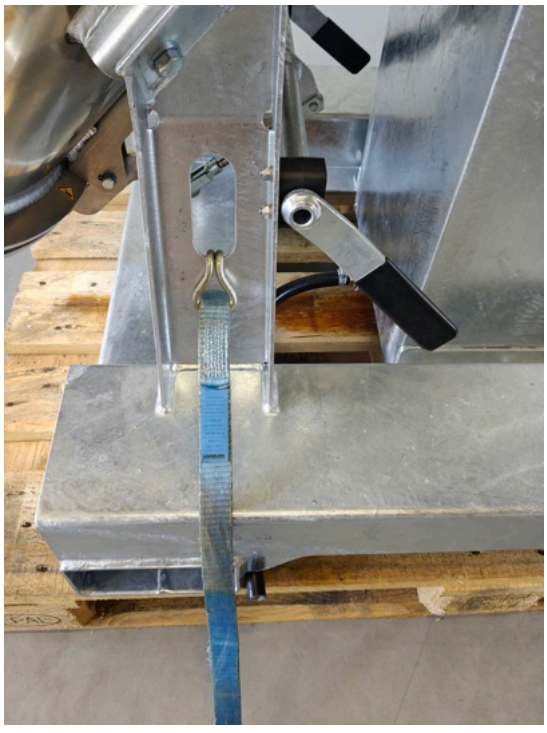




During operation of the Simply Air Compact Skid, moisture will be extracted from the air and discharged through the black hose.

Securing the Simply Air Compact Skid

Use the oval holes in the frame to secure the skid.
Front: 1 hole
Rear: 3 holes





Connecting the Suction and Compressor Hose

- Connect the suction hose with Perrot coupling to the suction inlet of the machine (Fig. 8).
- Connect the compressor air hose to the machine valve and attach the safety cable (Fig. 9).
- Start the compressor and open the valve on the compressor, then open the valve on the machine.



Fig. 8:



Fig. 9:

Balance Arm

To reduce the weight of the suction hose, a balance arm is installed.
Insert the balance arm as shown in Fig. 10 and use the supplied sling to position the suction hose as desired (Fig. 11).



Fig 10

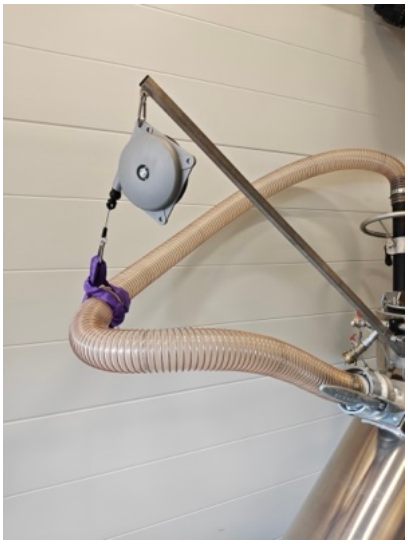


Fig 11

Crushing Hazard

There is a risk of crushing when opening and closing the lids.
Be careful not to trap yourself between the lid and the machine (Fig. 13 and Fig. 14).

Fig. 13:



Fig. 14:



LIMITED WARRANTY

The manufacturer warrants its products to be free from defects in material and workmanship for a period of 12 months from the date of delivery or shipment from the factory.

The manufacturer is not liable for damage resulting from installation, improper storage, unauthorized repairs, product modification, negligence, misuse, or use inconsistent with the product design.

This warranty does not apply to parts not supplied by the manufacturer.

Claims for material or workmanship defects must be submitted in writing to the manufacturer within ten days of discovery.

The manufacturer may either send a service technician or return the product to the factory at the buyer's expense for inspection. After notification of the defect, the manufacturer will return goods to the buyer.

If material or production defects are confirmed, the product will be replaced or repaired at the manufacturer's discretion, free of charge except for transportation costs.

The buyer is responsible for all maintenance, including lubrication, cleaning, replacement of parts, minor adjustments, and inspections.

If the Machine Has Poor Suction

1. Tank is full – empty the tank.
2. Suction pipe/hose is blocked – remove blockage.
3. Venturi is frozen – temporarily bypass the aftercooler.
   (The venturi may freeze at low temperatures due to cold compressor air. If the compressor is equipped with an aftercooler, it may need to be switched off during cold periods.)