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**WARRANTY CARD  
OPERATING  
INSTRUCTIONS**

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**DRUCKMASCHINEN  
HDE9000SA  
HDE9000SA3  
HDE9000EA3**

# INSTRUCTIONS FOR USE OF THE POWER PACK:

## Home

Thank you for purchasing a Hahn & Sohn brand power generator and congratulations on making the right choice!

The power unit has been designed and manufactured in accordance with the safety requirements of the European Union. Use it according to the instructions in the operating manual and the safety regulations in force in the workplace. Failure to follow the above instructions may cause accidents, injuries, destruction of the equipment. In case of any doubt, contact Hahn & Sohn GmbH or an authorized Hahn & Sohn regional representative before putting the equipment into operation.

Please also read the Warranty Card, which contains the most important obligations of the user. Compliance with the instructions in the manual and the Warranty Certificate will ensure long and trouble-free operation of the engine and prevent loss of warranty.

Pay particular attention to the following messages:



warns of the likelihood of an accident, even fatal, and equipment failure if instructions are not followed.



additional information, instruction

**The manual contains information current as of the date of printing. It may vary slightly from the appearance of the device and its parameters due to the continuous development of the product and the introduction of improvements. The user is obliged to draw attention to these differences.**

## INITIAL GUIDE

version 1.2 of 10.12.2021

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# **1. Safety instructions**

1. Read this manual carefully before putting the unit into operation and keep it for future reference or contact your dealer.
2. Familiarise yourself with the design of the unit before putting it into operation.
3. It is forbidden to allow children to operate the unit. Never allow persons without proper training or persons under the influence of alcohol or other intoxicants to operate the equipment.
4. Prevent unauthorised persons from accessing the site, especially small children and animals.
5. The use of the unit must comply with the safety conditions and the provisions of this manual.
6. Observe local regulations when working with the equipment.
7. If during operation the operator detects any damage to the equipment, he must immediately interrupt the operation of the equipment - switch off the aggregate. Damage to the equipment must be reported and the equipment marked as damaged.
8. The unit produces dangerous carbon monoxide during operation - avoid inhaling it to prevent poisoning. Even small amounts of carbon monoxide can cause death. Do not use the generator in enclosed rooms without proper ventilation.
9. Do not lift or tilt the unit while working.
10. It is forbidden to put hands, feet or any objects into the rotating elements of the machine.
11. Observe all possible safety precautions while working.
12. The unit must be switched off before refuelling or any work associated with cleaning or maintenance of the equipment.
13. Do not store the machine near sources of heat or sparks, e.g. radiator, stove, etc.
14. Pay particular attention to the equipment installed. It can also be dangerous. Before connecting the unit, read the operating instructions of the machine that will power the unit.
15. Wear protective clothing and goggles and appropriate safety footwear when working with the equipment.
16. Persons renting the equipment are obliged to familiarize themselves with these operating instructions.

17. Place the aggregate on a flat surface.
18. Do not allow too much fuel in the tank - there must be no fuel in the tank neck.
19. The engine is very hot during work and remains hot for some time after the work is finished. Do not touch the engine if it is hot, there is a risk of burns.
20. Allow to cool before moving or bringing into rooms to prevent burns or fire.
21. Ground the unit before use
22. Do not use the device in the rain.



To prevent fire, determine the type and model of the unit before refuelling. If petrol is pumped into a diesel generator set, it may be damaged. Make sure that you only refuel with Diesel (MN) fuel. Shut down the genset before refueling. If fuel spills on the unit, wipe it thoroughly before putting it into operation. Do not keep the unit near fuels or other flammable substances.



Risk of electric shock. Do not remove the unit covers. All work must be carried out by qualified persons.



Exhaust fumes are harmful to health, use extra caution. Do not start the unit in enclosed rooms or rooms without proper ventilation. If you must start the unit in an enclosed room, make sure the room is well ventilated.



Be careful to avoid injury. Do not touch moving parts while the unit is in operation. If the unit is installed on the machine, remember to cover the belts.



Watch out for hot parts of the unit. The silencer and casing of the unit are very hot during operation and shortly after shutdown. Pay particular attention and do not touch these parts as there is a risk of burns.

Other safety instructions:

- Do not use the aggregate after consuming alcohol.
- Make sure you are in a safe environment

## 2. Construction of the aggregate



- 1 - Electrical switch starting
- 2 - Low oil level light
- 3 - Air heater
- 4 - Display switch
- 5 - Differential switch

- 6 - Electrical sockets
- 7 - Grounding clamp
- 8 - DC12V/8,3A
- 9 - Fuel gauge
- 10 - Filler neck stopper
- 11 - Damper panel cover

### 3. Before commissioning

To ensure the safety and longevity of the unit, it is important to spend sufficient time checking the overall condition of the unit. Ensure that any fault, even minor, has been rectified before commissioning. In the event of a problem that is not described in these instructions, contact Hahn & Sohn GmbH service.



Unprofessional servicing of the equipment and neglect of malfunctions can cause the unit to malfunction, which can lead to accidents and damage to the unit. Always carry out an inspection before each commissioning.

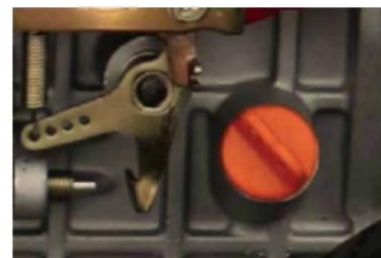
#### Check the overall appearance of the unit

- Check the underside of the unit and areas underneath for signs of oil or fuel leaks.
- Remove excessive dirt.
- Check for visible damage.
- Check that all covers and guards are fitted correctly.
- Check that all screws are in place and tightened.

#### Checking the oil level

To check the oil level in the engine, do the following:

1. Unscrew the oil filler plug and wipe the oil dipstick.
2. Insert the dipstick into the engine (without screwing it in).
3. Pull out the dipstick and check the oil level. If the oil level is low, top up to the correct level with the correct oil.



Running the unit with the wrong oil can cause shortened engine life and serious damage to the engine, which is not covered by the warranty.



**When changing the oil, the oil filter must also be changed (if the unit is equipped with one).**

## Grounding of the aggregate

1. Insert a 2 cm copper wire into the ground near the aggregate.
2. Plug the free end of the wire into the panel (to the ground terminal)



The unit must be earthed, otherwise there is a risk of electric shock.



Wiring must be carried out by a professional operator. Incorrect wiring can result in electric shock and fire.

## Checking the fuel level

1. Make sure the unit is on a level surface.
2. Unscrew the plug.
3. Slowly and carefully pour in the fuel. The fuel level must not be above the upper limit.
4. After screwing in the plug, wipe the fuel off the engine thoroughly.



Fuel is flammable, avoid contact with sources of fire or high temperature. Such a situation may result in fire or explosion.



## Installing the battery

The unit must be equipped with a battery, which is not included in the manufacturer's delivery.

The unit must be equipped with a 12V battery with dimensions 196.85x133.35x184.15 mm with a minimum CCA of 300.



The accumulator may be smaller and have a higher CCA.

The battery compartment is located behind the metal plate under the electrical panel.

Battery installation method:

1. Connect the end of the red cable to the positive terminal of the battery.
2. Connect the end of the black cable to the negative terminal of the battery.
3. Insert the battery into the battery box.

## 4. Putting the unit into operation

Before putting the unit into operation, check the oil and fuel levels and the unit is equipped with a battery and properly grounded.

For commissioning the unit:

1. Check that no equipment is connected to the unit.
2. Switch the switch to the "ON" position (Fig. 1)
3. Switch the switch to the "RUN" position (Fig. 2)
3. Insert the key and turn to the "start" position (Fig. 3).
4. If the engine does not start, repeat step 3. NOTE: After several attempts, refer to the Troubleshooting Guide.
5. Wait for a while before connecting electrical to the unit.



Fig. 1.

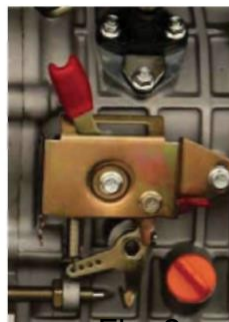


Fig. 2.



Fig. 3.

## **Sucking**

The intake is used to deliver an enriched fuel mixture during engine start-up. The intake can be opened and closed manually. Pull the rod in the "CLOSED" direction to add mixture for cold start.

## **5. The work of the aggregate**



Connect only undamaged devices. Connecting damaged devices may cause electric shock.



Immediately turn off the device and disconnect any devices that are malfunctioning, slow, or have suddenly stopped working. Check to see if the problem is due to a faulty equipment connection or an overload of the unit.



Only use the unit outdoors.



Leave a clear space around the unit to ensure adequate ventilation.

### **5.1. Using alternating current**

AC-powered electrical devices may be connected in accordance with their power requirements.

Rated power - maximum continuous power of the aggregate

Maximum power - maximum short-term power of the aggregate.

The total input power of the equipment connected to the unit must not exceed the rated output of the unit. To calculate the total input power, the input power of the individual devices must be added together. Do not connect devices whose rated power is higher than the rated power of the genset. Select the equipment to be connected so that the sum of their rated outputs does not exceed the rated output of the genset.

The rated power of the device should be indicated in the instructions, if not, calculate this information as the product of current and voltage.

$$\text{Power [W]} = \text{Voltage [V]} \times \text{Current [A]}$$

Connecting the device:

1. Wait for a while before connecting electrical to the unit.
2. Make sure the devices are switched off.
3. Connect the device to the appropriate inputs (230/12V).
- 3 Switch on the devices starting with those that have the highest power input.



Do not connect devices requiring 60 current.

## 5.2 Using DC current



The DC output is only for charging 12V car batteries. Do not use the unit to start the car.



Failure to follow the procedures can cause the battery to explode and cause serious injury to persons in the vicinity. Keep the battery away from sources of heat, fire, sparks and flammable substances.

To properly connect the battery to a DC outlet:

1. Connect one of the charging wires to the positive terminal of the battery and the to the negative terminal.
2. Connect the free end of the positive wire to the positive output of the unit.
3. Connect the free end of the negative wire to the negative output of the unit.
4. Switch on the unit.
5. First disconnect the wires from the power pack and then from the battery.



Batteries generate explosive hydrogen during charging. Batteries contain acid that can cause corrosion. Do not use fire near the battery during and shortly after charging.

Always wear goggles and gloves when charging the battery.



In case of skin contact with acid, wash the area thoroughly with water.

In case of eye contact with acid, flush eyes and seek immediate medical attention.

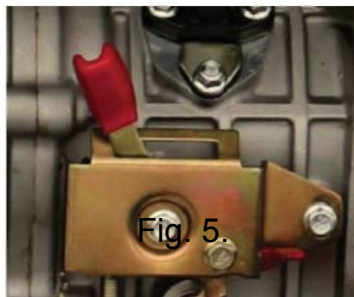


✓ In the case of ingestion acid drink large quantity of milk and seek immediate medical attention.

## 6. Shutting down aggregate

To switch off the aggregate:

1. Switch off and disconnect all devices connected to the unit.
2. Switch the switch to the "OFF" position (Fig. 4).
3. Leave the unit on for a while to allow the temperature to stabilise.
4. Switch the switch to the "Stop" position (Fig. 5).
5. Turn the key to the "OFF" position (Fig. 6).



unit will get hot during operation, let it cool down.



Leaving the fuel in the tank for a long time can cause problems when starting later. Do not store the unit with fuel in the tank.



## 7. Regular inspections and maintenance

Proper maintenance is essential for safe and trouble-free operation of the equipment.



Never carry out maintenance while the equipment is working or immediately after it has stopped. Wait for the equipment to cool down. Keep sources of fire and combustibles away from the equipment.



Improper maintenance and unresolved problems can cause unit failures that can result in fatal or serious injuries.

### 7.1 Recommended checks and inspections

Always carry out the inspection at a given interval or after a given number of hours worked		Every time you use	Every month or 20 hrs.	Every three months or 50 hours.	Every six months or 100 hours.	Every year or 300 hrs.
Engine oil	Level control	X				
	Replacement		X		X	
Air filter	Check	X				
	Replacement		X		X	
Fuel filter plug	Cleaning				X	
Fuel tank	Level control fuel	X				
	Cleaning					X

### 7.2 Cleaning the aggregate

Use the unit in a clean and cool place. If the aggregate is dirty, clean it with a dampened towel.



Never clean the unit under running water, water can penetrate and cause short circuiting or corrosion.

Never use petrol to clean the unit.

### 7.3 Checking the oil level

It is important to check the oil level in the crankcase before each use. To check the oil level:

1. Make that the aggregate is switched off and is standing on a level surface.
2. Unscrew the stopper/plug.
3. Wipe the dipstick with a dry cloth.
4. Insert the gauge inside (do not screw), then remove. The oil must be visible on the dipstick. If the oil is not visible on the dipstick or is at the very end of the dipstick, an oil refill is required.

### 7.4 Oil change\Oil top-up

To drain the oil:

1. Place a container under the unit to catch the oil.
2. Unscrew the drain plug located under the crankcase.
3. Drain the oil from the unit into the container provided.
4. Screw in the drain plug.



Never dispose of used oil in municipal waste or on the ground. Dispose of the oil in an appropriate container. If you are unsure, contact your waste collector.



Recommended oil: SAE 20W-40

To top up the oil:

1. Make sure the unit is on a level surface.
2. Unscrew the oil filler plug (Fig. 7).
3. Using a funnel, pour the appropriate amount of oil into the cabinet. The oil must reach the bottom edge of the filling hole.

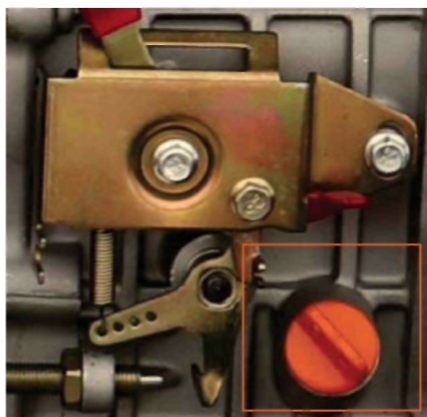


Fig. 7.

### **7.5 Replacing the air filter**

Routine air filter checks are essential for the proper functioning of the carburetor. Check that the filter is not excessively clogged. The filter may require more frequent cleaning when operating in dusty environments.

To clean the fuel filter:

1. Remove the aggregate panel.
2. Unscrew the wing nut.
3. Remove the foam filter.
4. Clean with warm water and common detergents, rinse and dry the filter thoroughly. Dampen the filter with a small amount of engine oil.
5. Reinstall the filter.

### **7.6 Emptying the fuel tank.**

It is recommended that long-term storage of the unit be with an empty fuel tank.

To empty the tank:

1. Switch the fuel injection to "OFF".
2. Remove the built-in fuel filter.
3. Place the fuel container under the tank.
4. Switch the fuel injection setting to "ON" and drain the fuel.
5. Switch the fuel injection to "OFF".
6. Reinstall the built-in fuel filter.
7. Store the discharged fuel in an appropriate place.

For long-term storage, the fuel must also be removed from carburettor.

To empty the carburettor, switch the fuel injection switch to "OFF" with the engine running. The engine when the carburetor runs out of fuel.

## 7.7 Replacing carbons

1. Remove the damper cover (Fig. 8).
2. Remove the double silencer (Fig. 9).
3. Remove the rear panel (Fig. 10).
4. Find and replace the carbon (Fig. 11,12,13).



Fig. 8.



Fig. 9.



Fig. 10.



Fig. 11.



Fig. 12.



Fig. 13.

## 8. Transport and storage

If you are planning transport or long-term storage, you need to:

- Let the aggregate cool down. A hot aggregate can burn a person or ignite other objects.
- Empty the fuel tank.
- Move the fuel injection switch to the "OFF" position.
- Do not cover the ventilation openings.
- Store the unit in a cool, dry place.

Storage time	Recommended procedure
less than a month	There is no procedure for storage
1-2 months	Refuel with fresh fuel
2 months - 1 year	Empty the fuel tank
more than 1 year	Empty the fuel tank



## 9. Troubleshooting

Important: If problems persist, contact your dealer.

Symptoms	Cause	Solving the problem
Engine won't start	The engine switch is in the "OFF".	Switch the switch to the "on".
	There's no fuel.	Refuel.
	Low oil level.	Top up or change the oil.
	The unit is standing on an uneven surface.	Place the aggregate on a flat surface.
	The spring-loaded decompression lever closed the exhaust valve.	Open the top panel. Press the lever, install the panel. Start the engine.
	There is dirty and/or old fuel in the fuel tank.	Change the fuel.
The engine is running but there is no voltage at the sockets	The fuse is in the "off" position.	Switch the fuse to the "on" position.
	The RESET button is in the "off" position.	Switch the RESET button to the "on" position.
	Faulty wiring.	Use other wires.
	Connecting the damaged facility.	Disconnect the device and connect another.
	Loose wiring and/or wiring behind the controller panel or at the end of the aggregate.	Tighten the clamp nuts
	The carbon or AVR is worn or damaged.	Check that they are connected at both ends of the rotor. Replace if necessary.
The aggregate runs but does not power all outlets	The unit is overloaded	Unplug connected devices
	Short circuit on one of the devices	Disconnect damaged or short-circuiting equipment.
	The air filter is clogged	Clean the air filter

## 10. Technical data

Model	HDE9000SA	HDE9000SA3	HDE9000EA3	HDE9000EA
Type of jacket	Printed from		Open	
Number of phases (power factor cosφ)	~1 (cosφ 1.0)	~3 (cosφ 0.8)		~1 (cosφ 1.0)
Rated frequency	50 Hz			
Rated power	6.0 kVA/6.0 kW	7.5k VA/6.0 kW		6.0 kVA/6.0 kW
Maximum performance	7.0 kVA/7.0 kW	8.75 kVA/7.0 kW		7.0 kVA/7.0 kW
Rated current	26.0 A	10.8 A		26.0 A
Rated voltage	230 V	400/230 V		230 V
Fuel tank volume	15 l			
Overall dimensions	920x540x720 mm		760x500x650 mm	
Net weight	130 kg		100 kg	
Engine type	DIESEL, 1-cylinder, 4-stroke, OHV, air-cooled			
Stroke volume	498 cm3			
Power (at )	8.0 kW 3000 rpm)			
Revolutions	3000-3600 rpm			
Starting	electric		manual+ electric	
Wiring	12V			

# EC declaration of conformity

Declaration of conformity

01/105453/2021  
01/105453/2021



Updated on:

01/10/2021

He issued a declaration of conformity: Address of the issuer of the declaration of conformity:	<b>Pezal Product Line Sp. z o.o.</b> <b>Hahn &amp; Sohn GmbH</b> <b>Auf der Schanze 20 93413 Cham</b>
Notified person: Notified person's address: Notified person's number:	<b>TUV Rheinland LGA Products GmbH S.R.L. (</b> <b>Tillystraße 2, 90431 Nürnberg, Germany</b> <b>0197</b>

Device type

Power plant HDE9000

EA-EA3 - open (single, three phase)

SA-SAS - closed (single, three phase)

Model/Type:

Measured sound power level:	<b>95,2 dB/A</b>
Guaranteed sound power level:	<b>97 dB/A</b>

Hahn & Sohn GmbH, Auf der Schanze 20 93413 Cham, declares on its own responsibility that the equipment to which this declaration relates complies with the requirements specified in the Collection of Laws:

- no. 263. poz 2202 Coll. of 21.12.2005
- No. 199. poz 1228 Coll. of 21.10.2008
- No. 806/2016 Coll. of 2.6.2016
- No 542/2016 SB. of 4.2016
- No. 2020 pos. 1339 Coll. of 04.08.2020
- Noise Emissions Directive 2000/14/EC, as amended by 2005/88/EC (conformity assessment according to Annex VI)
- Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EU
- Electromagnetic Compatibility Directive 2014/30/EU
- Exhaust Emissions Directive 2016/1628/EU

## USED STANDARDS:

EN ISO 3744:2011; ISO 8528-1:2005; ISO 8528-5:2005; ISO 8528-13:2016; EN 12601:2011  
EN ISO 3744:2011, ISO 8528-1:2005, ISO 8528-5:2005, ISO 8528-13:2016, EN 12601:2011

Thanks to the above compliance, the products have been put into circulation on the European Union market

Person authorised to prepare and produce technical documentation: **Ing. Richard Janovský**

**ul. Młaki Szlak 52, 80-717 Gdańsk,**

The EC Declaration of Conformity is no longer valid if the equipment is modified, rebuilt or used in a manner contrary to the instructions for use.

In Cham on 1.10.2021

VEDOUcí ODDĚLENÍ  
TECHNICKÉ DOKUMENTACE  
  
Ing. Richard Janovský  
VEDOUcí ODDĚLENÍ  
TECHNICKÉ DOKUMENTACE



## WARRANTY SHEET

The equipment is subject to warranty if purchased from Hahn & Sohn GmbH or an Authorized Hahn & Sohn Regional Representative. The warranty is for 12 months or 500 motor hours from the time of purchase of the equipment. The warranty covers manufacturing and material defects only. The warranty does not include:

- *mechanical damage due to improper operation,*
- *Repairs not carried out professionally or repairs carried out non-original spare parts,*
- *damage due to the use of unsuitable oils and fuels, such as oils, filters, belts, batteries, etc.*

In the event of equipment failure, it must be delivered to the place of purchase or to the Service Centre. The cost of transporting the equipment to the place of purchase or to the Service Centre shall be borne by the Customer.

If you have any questions, please contact:

**Service centre of the provider: Hahn & Sohn GmbH**

Auf der Schanze 20  
93413 Cham

Tel. +490 9944 890 9 896

Mob. +490 163 02 44 737

E-Mail [info@hahn-profis.de](mailto:info@hahn-profis.de) Web

[www.hahn-profis.de](http://www.hahn-profis.de)

Regular inspections and checks are a condition of the warranty, including:

- exchanges motor oil a air filter by as recommended by the Warrantor:
- oil checks and top-ups daily or max. every 8 hours of operation,
- oil and air filter change after 20 hours of operation, no later than 6 months from the date of purchase. Next within the warranty period every 100 hours, but no later than 6 months from the date of the last service recorded in the Warrantor's authorized service network.

The warranty provider reserves the right to refuse a claim in the event that oils other than mineral SAE 20W40 are used during the warranty period. Documentation of the above inspections, including a record of oil types, with the service stamp must be made in the "Inspections, Adjustments, Checks" section of the 's Operator's Manual or Service Manual each time.

Performing any repairs during the warranty period outside of an authorized service will void the warranty.

## **NO SILICONE OR OTHER ADDITIVES IN FUELS AND OILS!**

In the case of an accepted claim, the warranty is extended by the repair period. Claims without presentation of this warranty certificate including proof of purchase will not be accepted.

Our services and supplies do not include:

- installation, handover for use and training in the scope of operation and servicing of the equipment,

*The warranty provider undertakes to rectify the fault reported warranty within 30 days from the date of delivery of the equipment.*

*Failure to collect the equipment from the warranty provider's service department within a period of more than three months from the date of notification of acceptance shall entitle the customer to storage charges. The warranty does not exclude, limit or suspend the rights of the buyer under the regulations on liability for defects in the product sold.*

.....  
Type of  
device

.....  
Device ID No.

.....  
Quality Control / Inspection  
No.

.....  
Date of sale (signature, date and seller's stamp)

**INSPECTIONS, ADJUSTMENTS AND CHECKS**

DESCRIPTION OF INSPECTION AND ADJUSTMENT  REPAIRS  SCOPE OF ACTIVITIES	NUMBER OF WORKS. HOURS	DATE   SIGNATURE OF THE SERVICE TECHNICIAN

### INSPECTIONS, ADJUSTMENTS AND CHECKS

DESCRIPTION OF INSPECTION AND ADJUSTMENT  REPAIRS  SCOPE OF ACTIVITIES	NUMBER OF WORKS. HOURS	DATE   SIGNATURE OF THE SERVICE TECHNICIAN



**Central distributor and warranty provider**

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Auf der Schanze 20

93413 Cham

**Tel: +490 9944 890 9 896**

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