



WARRANTY CARD
OPERATING
INSTRUCTIONS

H IG1000

INSTRUCTIONS FOR USE OF THE POWER PACK:

Home

Thank you for purchasing a Hahn & Sohn GmbH 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 doubts, contact Hahn & Sohn GmbH or an authorized regional representative of Hahn & Sohn GmbH 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 Card 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

revision 1.0 of 20.7.2021

Table of Contents

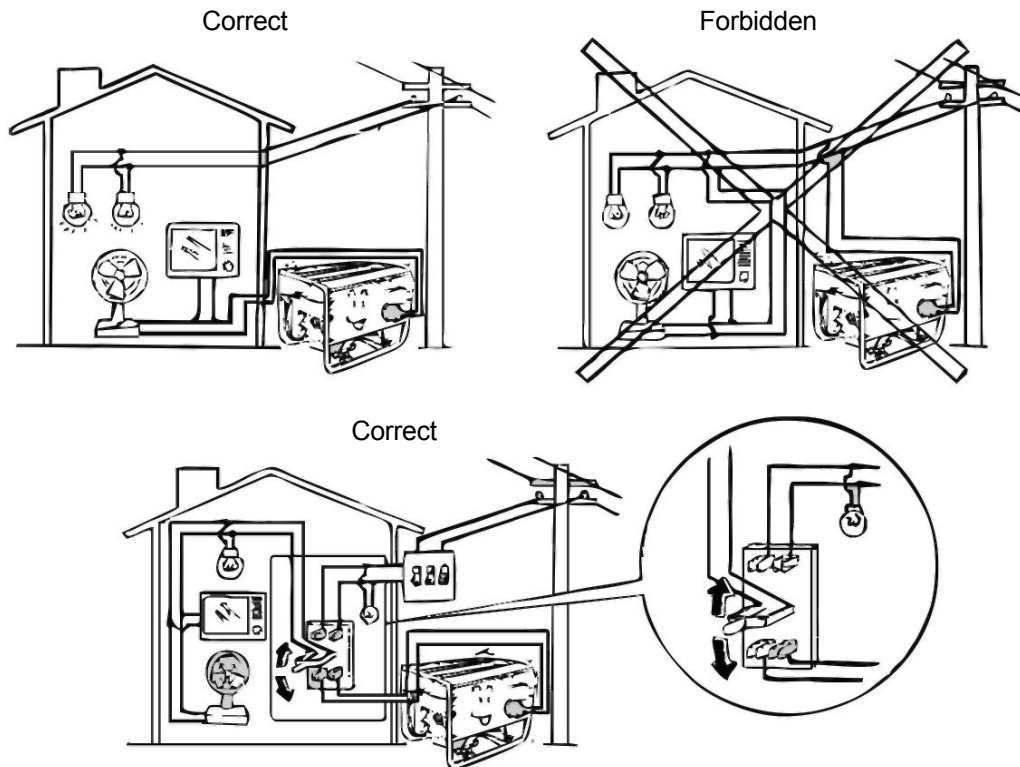
Home.....	1
Table of Contents	2
1. Safety instructions	3
2. Construction of the aggregate.....	5
3. Before commissioning	11
4. Functions of the power plant	12
5. Service	15
6. Storage.....	21
7. Troubleshooting	22
8. Technical data.....	24
9. Electrical diagram.....	25
10. Declaration of conformity	27
Warranty Card	27

1. Safety instructions



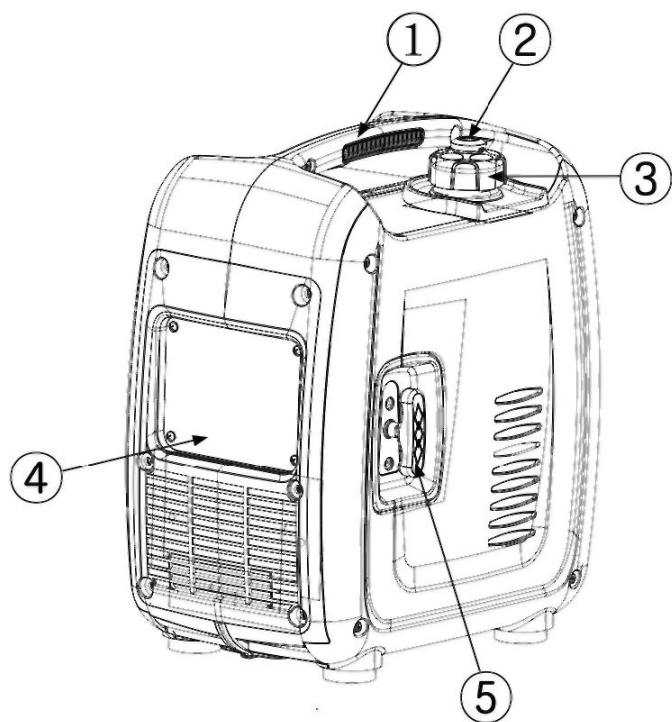
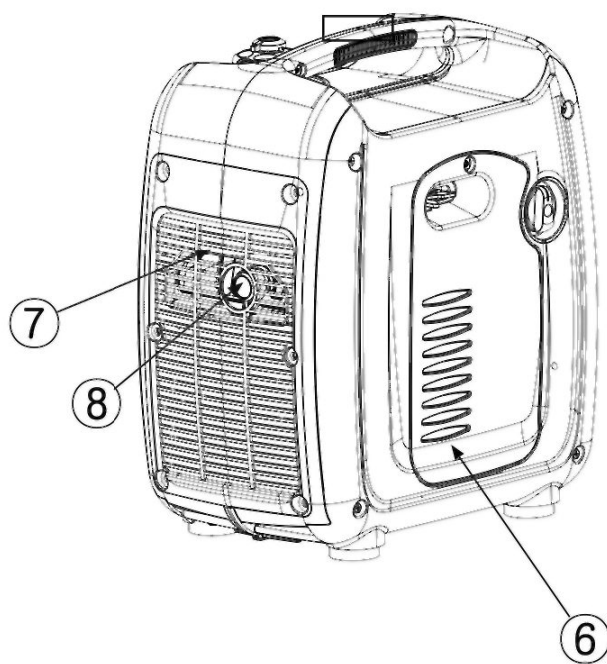
It is to read the operating instructions before putting the power pack into operation for the first time!

1. Only persons of legal age may operate the equipment.
2. When working with the equipment, it is necessary to follow the instructions in the operating instructions and the applicable OSHA, PO and state regulations.
3. If you have any doubts concerning the operation and/or commissioning of the power unit, please contact an authorised representative of Hahn & Sohn GmbH.
4. Place the power station on a stable, level surface.
5. The work area must be tidy and properly lit. A powder extinguisher and emergency lighting must always be available near the power station.
6. Store the power pack in a dry, well-ventilated place. Do not breathe in the exhaust fumes produced during operation - poisoning can be fatal.
7. Working equipment must not be left unattended and unauthorised persons must not be in the vicinity.
8. Do not operate the equipment near explosives, flammables, gases, dust, open flames. It is forbidden to store fuel tanks near the power plant. In the event of a fuel leak, shut down the power unit immediately and take it to an authorized service center for repair.
9. The device must be located at least 1 m away from walls and other equipment.
10. Do not touch rotating elements while the machine is in operation.
11. Using the power tool in high humidity conditions, near water tanks or sprinklers, and operating the power tool with wet hands can cause electric shock.
12. If the generator is to be connected to the building's emergency power supply, the wiring must be carried out by a person with the appropriate electrical certificate.



14. Keep the power unit out of the reach of children, animals and unauthorised persons.
15. If the power pack is stored outdoors, check the condition of the equipment before each use. Dirt and ice can cause malfunctions in the power unit, short circuits in the electrical components and, as a result, electric shock.
16. Refuelling of fuel into a switched on device is strictly forbidden. Stop the equipment before refuelling.
17. Do not operate the power unit in the event of a fuel spillage. Remove the spilled fuel and wipe the splashed area dry.
18. Do not smoke or use open flames near tanks.
19. Do not place any objects on the working equipment.
20. During operation, some elements of the device (exhaust, muffler, engine) heat up to high temperatures. Do not touch hot elements while the power unit is running or immediately after it has stopped.
21. Do not overload the power pack, overloading can cause damage.

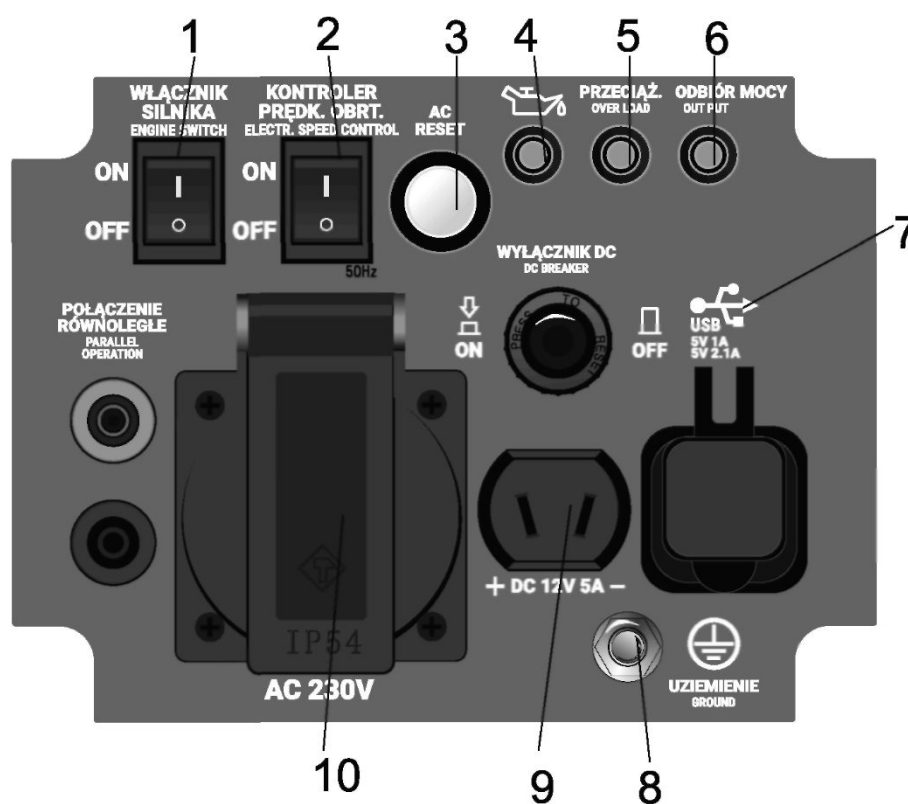
2. Construction of the aggregate



- 1 - Handle
- 2 - Fuel plug valve
- 3 - Fuel plug
- 4 - Control panel

- 5 - Handle for manual starter
- 6 - Side cover
- 7 - Rear cover
- 9 - Silencer

2.1 Control panel layout



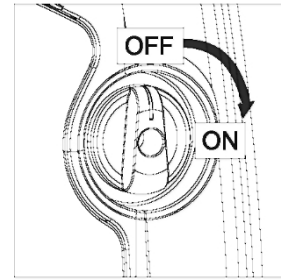
- 1 - Engine switch
- 2 - Speed controller
- 3 - AC reset
- 4 - Oil level indicator
- 5 - Overload indicator light
- 6 - Power indicator light
- 7- DC switch DC)
- 8 - Grounding clamp
- 9 - DC socket
- 10 - AC power socket

2.2 Check

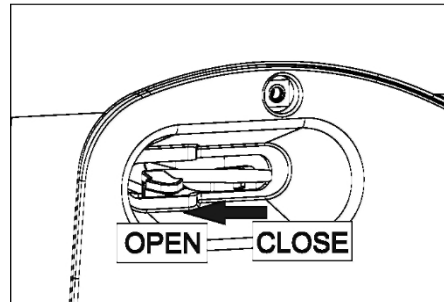
2.2.1 Fuel tap actuator

If the fuel tap control is in the ON position, the engine can be started.

If the fuel tap control is in the OFF position, the engine cannot be started.



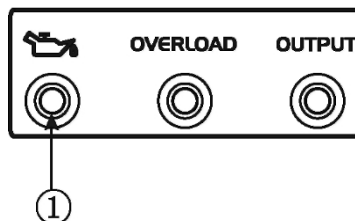
2.2.2 Choke lever



The choke is used to ensure an adequate fuel mixture during a cold start. Slowly move the lever to the "OPEN" position before starting the engine.

The choke is not needed when starting a warm engine.

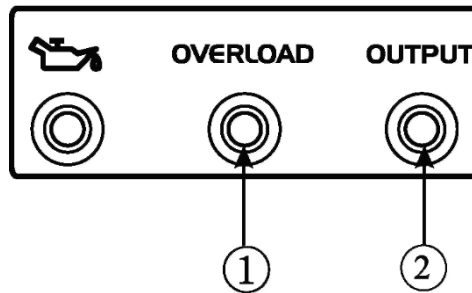
3.2.2 Oil warning light



If the low oil light is , the engine will automatically stop. The engine cannot be started until the oil is topped up.

TIP: If the engine has stopped or cannot be started, turn the fuel tap control to the ON position and pull the hand starter handle. If the light is flashing, it means the oil level is insufficient, oil needs to be replenished.

2.2.4 Power pack overload light



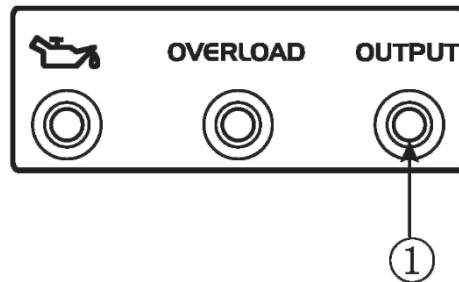
The overload indicator light (1) will illuminate if an overload occurs and the inverter unit overheats or the voltage at the AC outputs increases. The circuit fuse will then activate, interrupting current production (motor continues to run, AC indicator light (2) will go out, overload indicator light (1) - red will be on).

Procedure:

1. Switch off all appliances and stop the engine.
2. Reduce the load on appliances.
3. Check air inlet clearance.
4. Start the engine again.

TIP: The overload indicator light may illuminate for a few seconds after connecting a device that has a higher starting current. This situation is not a malfunction, but may cause damage to the inverter.

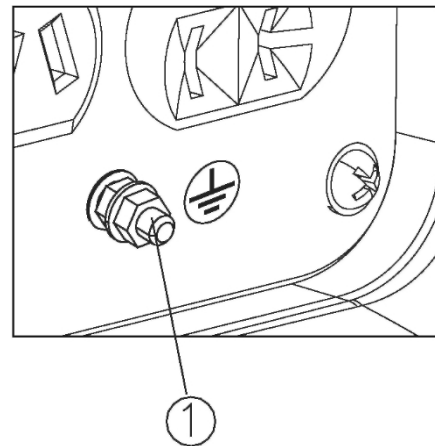
2.2.5 AC indicator light (green)



The light will come on when the engine starts if the voltage parameters are correct.

2.2.6 Earthing

Connect the ground to terminal (1) on the power pack.
Always ground the power pack before working.



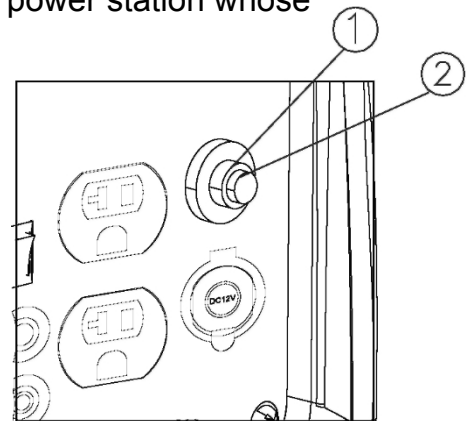
2.2.7 DC circuit breaker (DC)

The circuit breaker switches to the "OFF" position automatically at the moment of connecting electrical appliances to the power station whose the current does not exceed the rated current.

For the following use of the device, switch off the protection by pressing the "ON" button.

"ON"- There is voltage in the socket

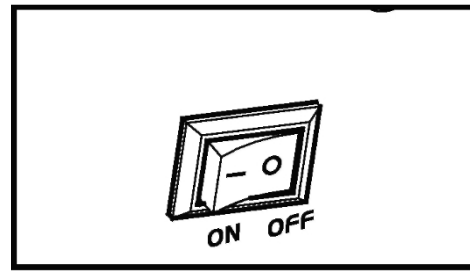
"OFF"- There is no voltage in the socket



Reduce the load on appliances below the rated output of the generator when the DC protection trips. If the fuse trips repeatedly, stop the equipment immediately and contact authorized service.

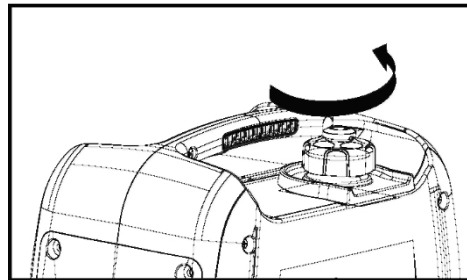
2.2.8 Power switch

To switch on the power pack, turn the switch to the "ON" position. To switch the power unit off, turn the switch to the "OFF" position.



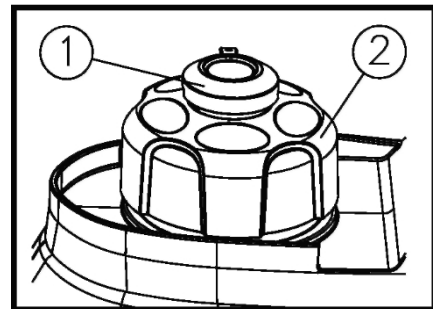
2.2.9 Fuel plug

Unscrew the fuel plug .



2.2.10 Fuel plug valve

The fuel plug (2) is equipped with a valve (1) for venting the tank. The valve must be in the "ON" position for fuel to flow into the engine. When not using the motor, switch the valve to the "OFF" position.



3. Before commissioning

3.1 Checking the fuel level



Gasoline is flammable and toxic. Refuel only in a well-ventilated area with the engine stopped. Do not use fire near petrol.



Be careful not to fill too much fuel - the fuel must not be all the way to the tank filler neck. Tighten the fuel filler plug and wipe up any fuel spillage.



Store petrol out of reach of children and animals.

The recommended fuel is unleaded petrol Pb95/E5. If the fuel level is low, top up to the upper level. Do not use any additives. Do not mix petrol with engine oil or diesel fuel. Avoid all contamination of the fuel, especially water and sand.

The fuel tank has a capacity of 2.5 litres.

3.2 Checking the oil level

Using poor quality or worn oil can shorten the life of the equipment. Using equipment with insufficient oil can cause serious damage to the equipment.

Recommended oil: SAE15W-40 Oil
tank capacity: 0.31 litres

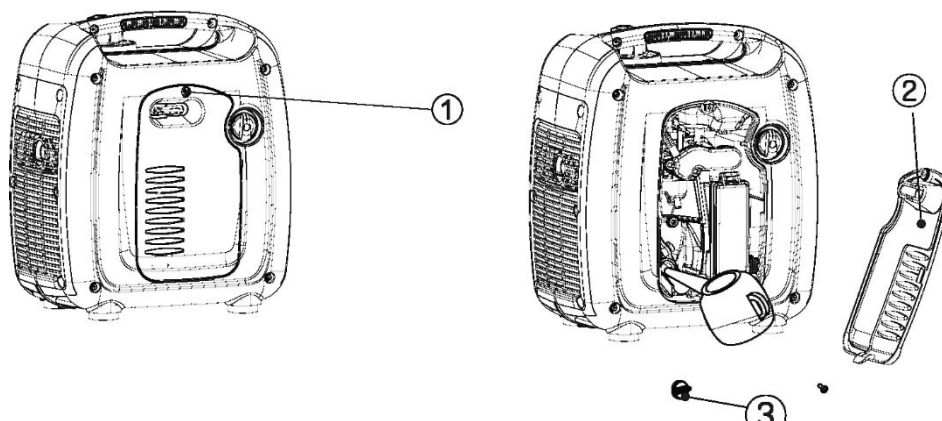
Stop the engine, wait for the engine to cool down and stand the machine on a level surface before adding oil.



Change the oil regularly

For changes:

1. Unscrew the covers (1) and remove the cover (2).
2. Unscrew the oil filler plug (3).
3. Top up with the correct oil.
4. Screw in the plug and reinstall the cover.



 If any element of the equipment is not working , it must be repaired before it can be put into operation.

4. Functions of power station

 Do not connect appliances to the power pack before starting the engine. Remember to top up fuel and engine oil and check the condition of the equipment before putting it into operation.

The power unit can be used with the rated load in  normal climatic conditions: ambient temperature 25°C, barometric pressure 100 kPa, relative humidity 30%. The power output of the power plant varies according to temperature, altitude (lower air pressure at higher altitudes) and humidity. The power output of the power plant decreases if the temperature, humidity and altitude are higher than for normal climatic conditions. Never use the power pack in enclosed rooms.

4.1 Commissioning the power plant

1. Turn the fuel plug valve to the "ON" position.
2. Turn the fuel selector switch to the "ON" position.
3. Move the choke lever to the "CLOSE" position.
4. Pull the hand starter handle vigorously.



Grip the power pack bracket to prevent it from tipping over during starting.

5. Wait for a while before connecting appliances.

Starting the engine in ESC mode:

To use the power unit in this mode, turn the switch to the "ON" position before the engine warms up.

If the ambient temperature is more than 5 degrees Celsius, the engine will run for 3 minutes until it warms up. If the ambient temperature is less than 5 degrees Celsius, the motor will run for 5 minutes until warm up.

4.2 Switching off the power unit

1. Switch off the connected appliances.
2. Switch ESC to "OFF" mode.
3. Disconnect the appliances.
3. Turn the fuel tap control to the "OFF" position.
4. After the engine has cooled down, turn the fuel plug valve to the "OFF" position.

4.3 - DC wiring



Make that the connected devices are switched off.

Check the equipment, especially the plugs

Make that the power pack is not overloaded when the appliances are connected.

Make sure the power pack is properly grounded.

1. Start the engine.
2. Switch ESC to ON.
3. Connect the device to the AC power outlet.
4. Make the AC indicator light is on.
5. Switch on the connected electrical equipment.

Most motor-driven equipment has higher than rated electrical parameters during start-up. When connecting several electrical appliances, connect the appliance with the highest starting current first and the appliance with the lowest starting current last.

4.3 Using

The following table shows the performance of the device when used alone.

AC				DC 
Effect	1	0.8 - 0.95	0.4 - 0.75 (efficiency 0.85)	
1 kW	≤1, 000 W	≤ 800W	≤ 400W	Rated voltage 12 V Rated current 8 A



Make sure that the total load on the power pack is not greater than its output. Otherwise, the power pack may be damaged.

5. Service

The following table (on the next) lists the mandatory checks and inspections for the power unit. Compliance with these recommendations will extend the life of the equipment and protect against loss of warranty. Failure to follow the recommendations in the table may result in loss of warranty.



If the power unit is frequently operated under high loads or at high temperatures, an oil change is recommended every 25 hours of operation.



If the engine frequently operates in dirty, dusty or aggressive environments, it is recommended to clean the filter every 25 hours of operation.



Perform servicing according to the operating time or the engine hour meter, whichever comes first.



If you miss a service, do it as soon as possible.



Stop the engine before starting any servicing work. Place the machine on a level surface and remove the spark plug to prevent the machine from starting.



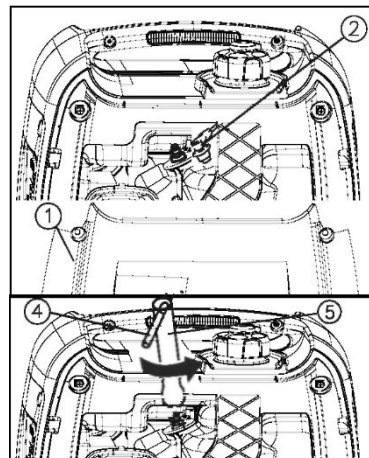
Always carry out service work in a well-ventilated area.

-		Interval	First month or 20 mth	Every 6 months or 100 mth	Every 12 months or 300 mth
Engine oil	Control - completion	X			
	Replacement		X	X	
Gear oil (if any)	Checking the oil level	X			
	Replacement		X	X	
Fuel filter elements	Check	X			
	Cleaning		X		
	Replacement			X	
Drainage container	Cleaning				X
Spark plug	Inspection - adjustment				X
	Replacement	Once a year or every 250 mth			
Spark Catcher	Cleaning			X	
	Check - adjustment				X
Valve clearances	Check - adjustment				X
Fuel tank and fuel filter	Cleaning				X
Fuel lines	Cleaning	Every two years (replace if necessary)			
Engine head and piston	Cleaning*	Engine capacity less than 225 cm 3 - every 250 mth Engine capacity greater than 225 cm 3 - every 125 mth			
* these items must be repaired by an authorized dealer unless the owner has the appropriate tools					

5.1 Checking the spark plugs

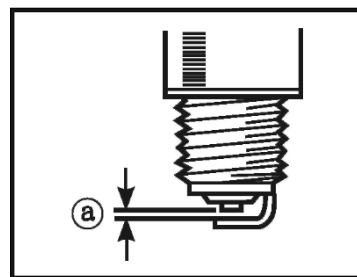
Spark plugs are an important part of the engine and should be checked regularly.

1. Remove the cover (1)
2. Remove the ignition cable end with a tool (2)
3. Remove the spark plug using the spark plug wrench (4).
4. Check the carbonisation status of the spark plug. If carbon is visible, clean the spark plug.



5. Check the electrode spacing using a pair gauge. The distance should be about **0.6 - 0.8 mm**.

6. Screw in the spark plug, fit the cable end and the cover. Spark plug tightening torque is 12.5 Nm



 Type of spark plugs: A5RTC

5.2 Carburettor adjustment

Carburettor adjustment should be carried out by an authorised dealer or other professional service.

5.3 Changing the engine oil (see also 3.2)

Do not change the oil immediately after stopping the engine. The oil is hot and can cause burns.

1. Place the power pack on a level surface and turn the fuel tap control to the "OFF" position.
2. Remove the screws and cover.
3. Remove the oil filler plug.
4. Place the container for the used oil under the engine. Tilt the power pack and drain all the oil.
5. Fill the power pack with new oil.



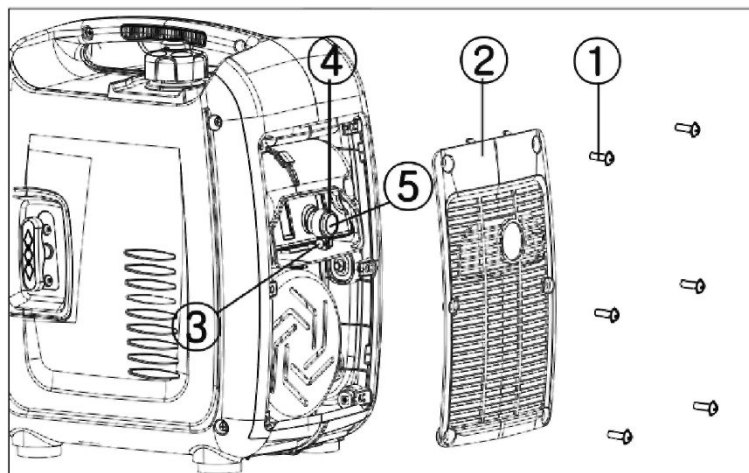
Remember to top up the oil on a flat surface. Do not tilt the power pack while refilling the oil.

6. Wipe up any spilled oil.
7. Fit the oil filler plug.
8. Replace the cover and screw in the screws. **Recommended oil:**
SAE15W-40 Oil tank capacity: 0.3 litres

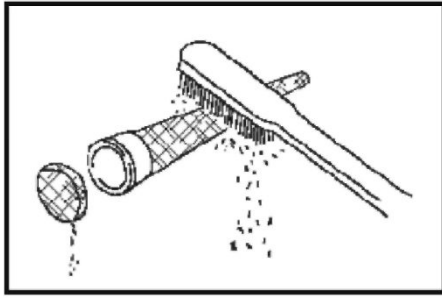
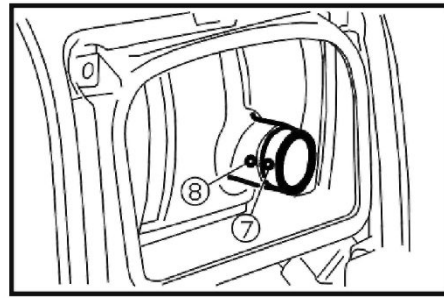
5.4 Silencer panel and spark arrestor

Do not touch the silencer immediately after stopping the engine, as it heats up and can cause burns.

1. Unscrew the screws (1) and remove the shock absorber cover (2).
2. Loosen the screws (3) and remove the muffler sleeve (4), muffler panel (5) and spark arrestor.
3. Remove the carbon from the muffler panel and spark arrestor with wire brush. If damaged, replace them.



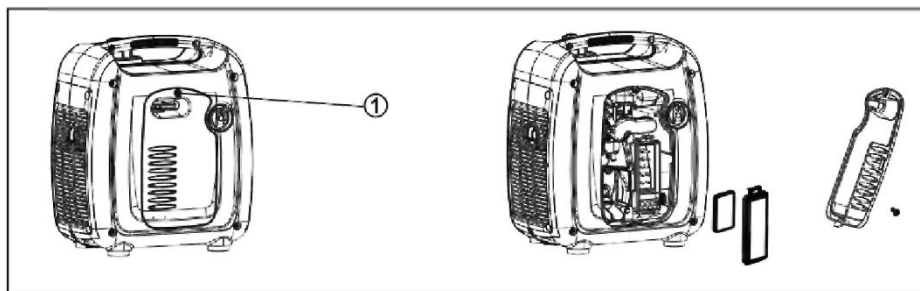
Use a soft wire brush to prevent damage to the spark arrestor and muffler panel



4. Place the spark arrestor (7) in the muffler hole (8).
5. Reinstall the spark arrestor, muffler panel, muffler sleeve and muffler cover.

5.5 Air filter

1. Unscrew the screws (1) and remove the cover.
2. Unscrew the screws and remove the air filter cover (2).

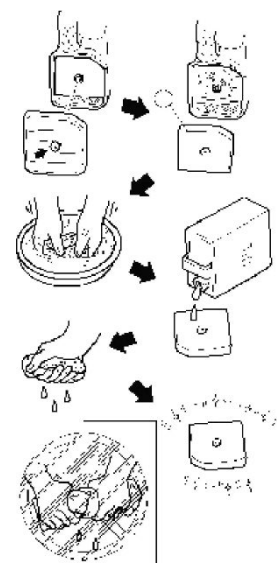


3. Remove the foam.
4. Clean the foam in solvent and dry.
5. Moisten with oil and squeeze out the excess. Do not wring the foam to avoid damaging it.



6. Reinstall the foam.
- Make sure the filter fits properly and no false air is drawn in.

7. Replace the filter cover and screw in the screws.
8. Replace the power pack cover and screw in the screws.

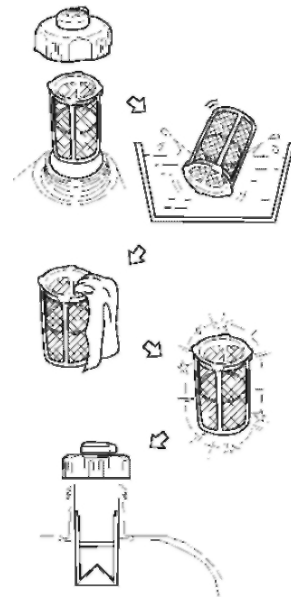


5.6 Fuel filler neck filter



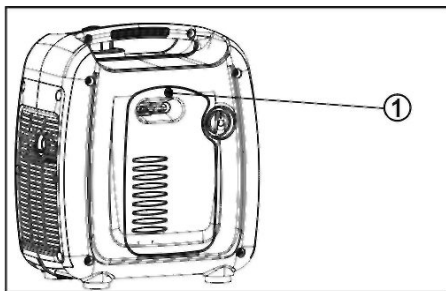
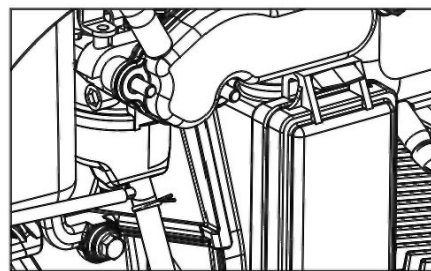
Never use fuel near sources of fire.

1. Unscrew the fuel filler plug and remove the filter.
2. Clean the filter in petrol.
3. Wipe the filter and put it back on.
4. Screw in the filler neck plug.



5.5 Fuel filter

1. Unscrew the covers (1) and remove the cover.
2. Pull the cover up and pull the hose out of the tank.
3. Remove the fuel .
4. Clean the fuel filter in petrol.
5. Dry the filter and place it back in the tank.
6. Install the hose and brackets. Open the fuel tap to check for leaks.
7. Replace the cover and tighten the screws.



6. Storage

Long-term storage of equipment requires measures to prevent damage to the power pack.

6.1 Fuel discharge

1. Stop the engine and switch the fuel tap to the "OFF" position.
2. Unscrew the fuel filler plug and remove the filter. Drain the fuel into a suitable container. Refit the filter and plug.
3. Wipe any fuel spillage from the engine.
4. Start the engine and let it run until it stops spontaneously after the remaining fuel has been consumed.



Do not carry out these activities near a source of fire and combustibles.



Do not connect any appliances to the power pack.

5. Unscrew the screws and remove the cover.
6. Drain the fuel from the carburettor after loosening the drain screw on the carburettor float chamber.
7. Turn the fuel tap control to the "OFF" position.
8. Tighten the screws.
9. Replace the cover and tighten the screws.
10. Switch the fuel tap control to the "OFF" position after the engine has cooled down completely.

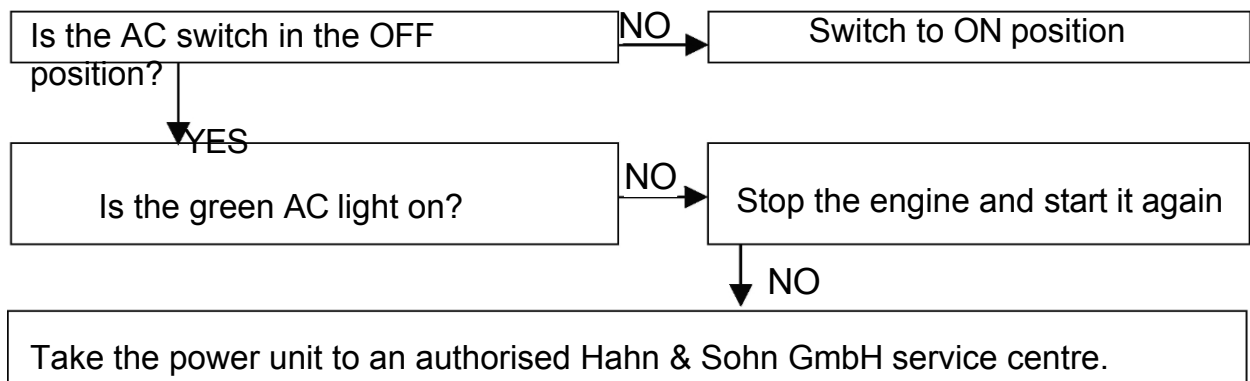
6.2 Engine

Do the following to protect the engine against corrosion.

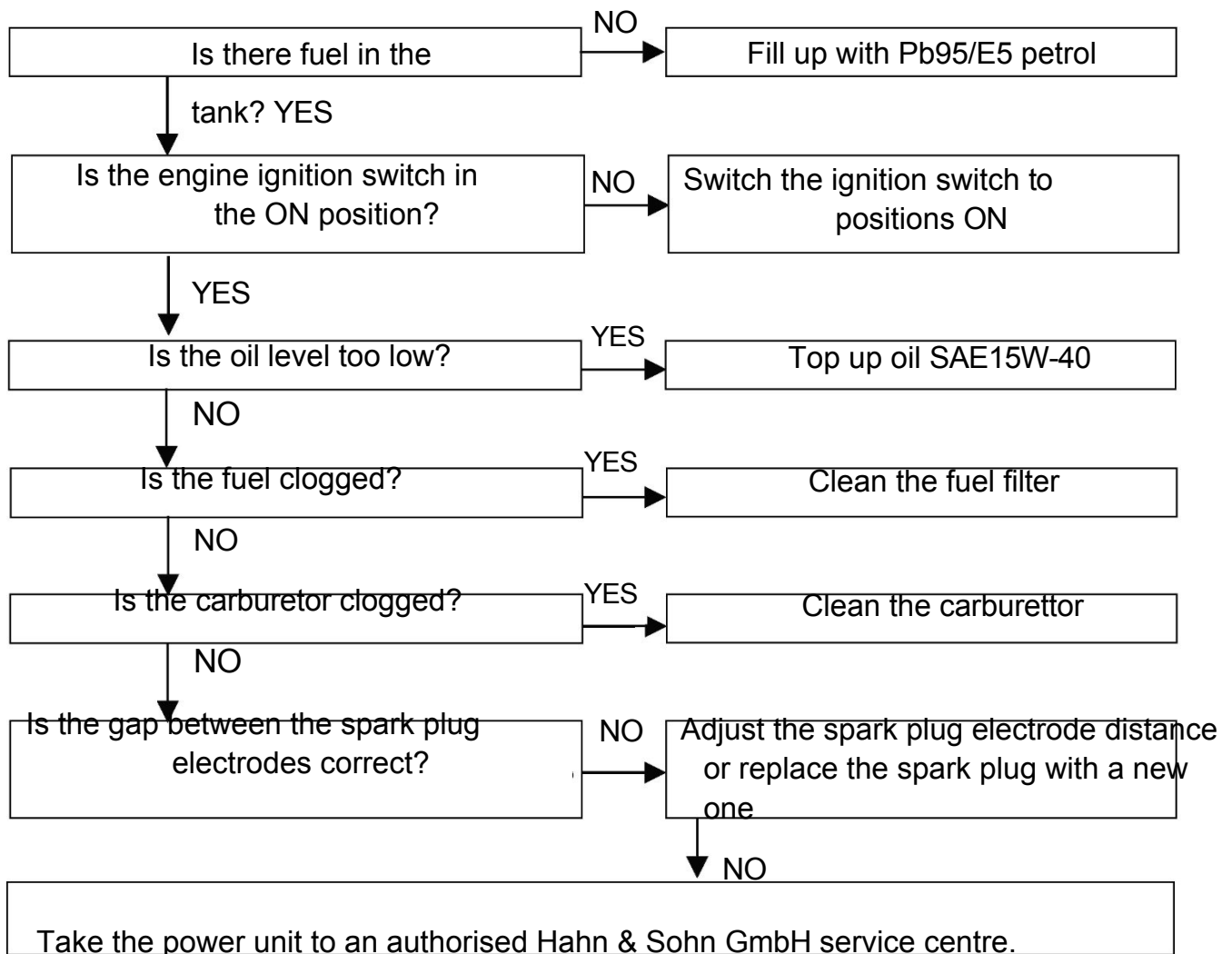
1. Remove the spark plug. Pour about a tablespoon of SAE 5W40 oil into the spark plug hole. Refit the spark plug. Pull on the hand starter so that the oil covers the cylinder walls.
2. Slowly pull on the hand starter handle until you feel resistance.
Leave it in this position.
3. Clean the power pack and leave in a dry, well-ventilated, covered place in vertical position.

7. Troubleshooting

7.1 Motor starts but does not produce current



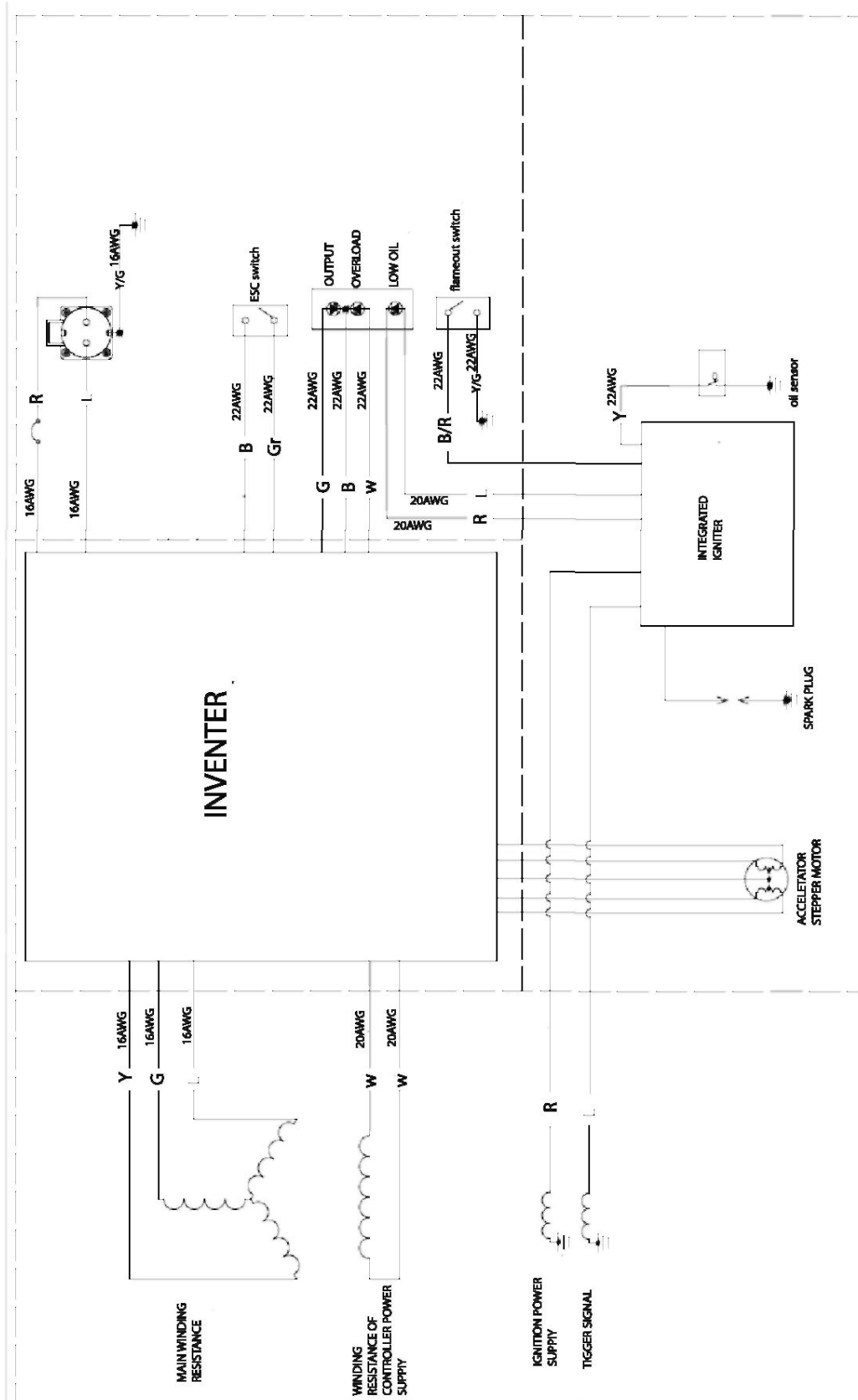
7.2 The power plant cannot be started.



8. Technical data

Aggregate	Type		soundproof, inverter
	Frequency	Hz	50/60
	Voltage	V	110/120/220/230/240
	Rated power	W	1000
	Effect		1
	Fuel tank volume	l	2/5
	DC output	V/A	12/5
	Overload protection (DC)		NOT
Engine	Type	1-cylinder, 4-stroke, spark-ignition, OHV, air-cooled	
	Stroke volume	cm ³	60
	Operating time (at rated power)	h	4
	fuel tank volume	l	031
	Spark plug model		A5RTC
	Starting		Manual
Physical parameters	dimensions (l x w x h)	mm	380x240x420
	Dry weight of the power plant	kg	13

9. Electrical diagram



10. Declaration of conformity

EC declaration of

Declaration of conformity
number:
01/105756/2022



Updated on:
25/01/2022

Manufacturer:	Hahn & Sohn GmbH Auf der Schanze 20 93413 Cham
Notified person: Address of the notified person:	INTERTEKDEUTSCHLAND GMBH Stangenstraße 1, 70771 LEINFELDEN-ECHTERDINGEN Germany 0905

Device type

Electric power

Model/Type:

plant H IG1000

Measured sound power level:	85.95 dB/A
Guaranteed sound power level:	88 dB/A

Hahn & Sohn GmbH, Auf der Schanze 20 93413 Cham declares on its own responsibility that the equipment to which this declaration relates meets the requirements of the German Code of Laws:

- no. 263 Coll. pos. 2202 of 21.12.2005
- No. 199 Coll. pos. 1228 of 21.10.2008 No.
- 806/2016 SB. of 2.6.2016
- No. 2016 Coll. pos. 542 of 13.4.2016
- 2020 Coll. pos. 1339 of 04.08.2020
- Noise Emissions Directive 2000/14/EC, as amended
(conformity assessment according to Annex III)
- Machinery Directive 2006/42/EC Low Voltage Directive
2014/35/EU
- Electromagnetic Compatibility Directive 2014/30/EU Exhaust
Emissions Directive 2016/1628/EU

*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

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

In Cham on 25.01.2022

VEDOUČÍ ODDĚLENÍ
TECHNICKÉ DOKUMENTACE

Ing. Richard Janovský
VEDOUČÍ ODDĚLENÍ
TECHNICKÉ DOKUMENTACE



WARRANTY SHEET

The equipment is subject to warranty if purchased from Hahn & Sohn GmbH or an authorized regional representative of Hahn & Sohn GmbH. The warranty is for 12 months or 500 motor hours from the time of purchase. The warranty applies exclusively to manufacturing and material defects. 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 . 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 warranty provider: Hahn
& Sohn GmbH**

Auf der Schanze 20

93413 Cham

Tel. +490 9944 890 9 896

Mob. +490 163 02 44 737

E-Mailinfo@hahn-profis.de

Web www.hahn-profis.de

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

- engine oil and air filter changes 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, but no later than 6 months from the date of purchase. Others 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, service stamp, must be made in the "Inspections, Adjustments, Checks" section of the Warrantor'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 under 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 guarantee does not exclude, limit or suspend the rights of the buyer arising from the regulations on liability for defects in the sold item.

.....

.....

.....

.....

INSPECTIONS, ADJUSTMENTS AND CHECKS

DESCRIPTION OF INSPECTION AND ADJUSTMENT REPAIR SCOPE OF WORK	NUMBER OF WORKS. HOURS	DATE SIGNATURE OF THE SERVICE TECHNICIAN

INSPECTIONS, ADJUSTMENTS AND CHECKS

DESCRIPTION OF INSPECTION AND ADJUSTMENT REPAIR SCOPE OF WORK	NUMBER OF WORKS. HOURS	DATE SIGNATURE OF THE SERVICE TECHNICIAN



Central distributor and warranty provider

Hahn & Sohn GmbH

Auf der Schanze 20

93413 Cham

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

www.hahn-power.de

**Hahn a syn s.r.o. Lelkova
186/4,**

747 21 Kravaře

www.hahn-power.cz