



# BRAST

## BRAST petrol inverter power generator BRB-IS-4000



Original instruction manual | Original instructions for use  
Original operating instructions

**Important: This manual was autotranslated using google translate for moppelshop.com customers. It can contain missing words or wrong translated parts. The reference manual for the product is the paper printed manual in german language that you received when buying the generator.**

# CE



Warning notice

Follow all safety precautions in this instruction manual to ensure safe use. Improper use can result in serious injury.

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## Introduction

So that you can enjoy your new device for as long as possible, we ask you to read the operating instructions / instructions for use and all safety instructions carefully before using it.

Keep the instructions for use so that you can recall the functions and operation of the device at any time. As part of constant product development, we reserve the right to implement technical changes that serve to improve our products.

Illustrations may therefore vary.

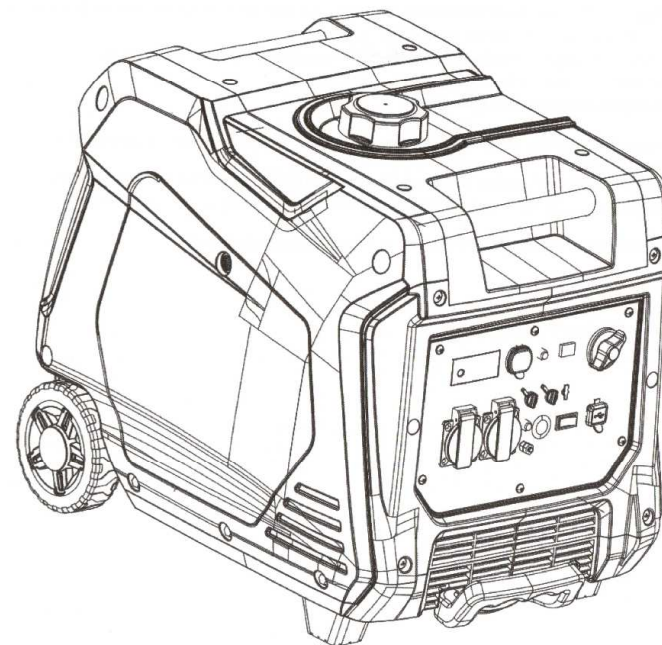
Please only give the device to people who have carefully read these operating instructions.

Please follow the care and maintenance instructions carefully to ensure the optimal service life of the device and safe handling.



Please contact us if you have any questions about the product.

## 1 overview

### 1.1 Overview



## 1.2 Introduction to the product

	Warning notice Please follow the safety instructions carefully to avoid injuries. Improper handling can result in serious injury.
	Warning notice The exhaust fumes from this device contain chemicals that can cause cancer, birth defects and other illnesses.
<b>A</b>	Warning Only use the device for its intended purpose. Improper use can lead to serious injuries or, in the worst case, personal injury or death.

## 1.3 Handling the operating instructions

### 1.3.1 Operator requirements

The operator must have read and understood the operating instructions carefully before use.

Before use, familiarize yourself with the controls and how to handle the device correctly. Follow all safety instructions listed in the operating instructions.

Behave responsibly towards other people. The operator is responsible for accidents and dangers to third parties.

#### Qualification:

Apart from detailed instructions on how to use the device by a knowledgeable person or thorough study of the operating instructions, no further qualifications are required.

#### Minimum age:

The device may only be operated and operated by people over the age of 16.






#### Physical constitution:

People with limited physical, sensory or mental capabilities should not operate the device unsupervised.



Do not consume intoxicants before or during use of the device.

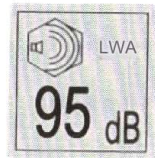
### 1.3.2 Explanation of symbols/pictograms

Some or all of the following safety symbols/pictograms may appear on this device to be appropriate. Please note the symbols and their meanings as they are on indicate precautionary measures that concern your safety.

	Danger! Do not expose the generator to rain, moisture, snow, or standing water while it is in use. Protect it from extreme weather conditions. Moisture or ice formation can cause a short circuit or malfunction. Never use the power generator to operate medical devices. Caution!
	Do not inhale exhaust fumes. These can cause symptoms of poisoning.  Warning: Do not use the device indoors or outside near windows, doors or fans. Risk of inhaling toxic gases! Danger!
<b>A</b>	Hot surfaces: risk of burns. Do not touch!
	Be careful, electricity! Do not use the generator when it rains; <ul style="list-style-type: none"> <li>- Do not touch the generator during operation if it is damp. Not if the connection cables are damaged. Not near very</li> <li>- conductive materials, e.g. steel. Not if you want to use unearthed extension cables; Only connect power tools if they</li> <li>- are double-insulated or 3-phase Not if it is not grounded Not if connected devices are overheated or damaged, if the output drops sharply or if sparks, flames or smoke come out of the generator</li> </ul>
	Danger of explosion! Gasoline is highly flammable. Allow the engine to cool for 15 minutes before refueling; turn it off first. Please be sure to avoid open flames and sparks. Smoking prohibited. Wear eye protection. Only fill the petrol tank with petrol. Do not overfill the tank.
	Fire danger! Gasoline is highly flammable. Allow the engine to cool for 15 minutes before refueling; turn it off first.  Please be sure to avoid open flames and sparks. Smoking prohibited. Wear eye protection. Only fill the petrol tank with petrol. Do not overfill the tank.  Only use the generator on a flat surface. Otherwise, oil or gasoline can leak and catch fire!



	Read the operating instructions carefully before use. When carrying out maintenance and repair work, pull out the spark plug connector and read the operating instructions carefully. Safety regulations must be read before use!
	



Guaranteed sound power level

## 2 safety instructions

### 2.1 General safety precautions



#### Warning notice

The machine generates a very weak electromagnetic and electrostatic field. This field may cause interference with some pacemaker models. To avoid the risk of serious injury or death, people with pacemakers should consult their doctor and the manufacturer before using the device. People with a pacemaker must not touch the live parts of the ignition system when the engine is running. **RISK OF DEATH!**



#### Warning notice

Never make any modifications to the device! In particular, refrain from dismantling or modifying protective devices on the device.

Changes to the device and the motor can be life-threatening for you and those around you.

Maintain engine settings and do not over-rev the engine!

#### A

##### Warning

Read all safety warnings and instructions carefully!

Keep all safety instructions and applications carefully.

For your own safety, wear sturdy shoes, long pants, protective gloves and appropriate work clothing.

Never use when people, especially children, or animals are unsupervised nearby.

#### A

##### Warning notice

When carrying out work such as maintenance, replacement, refueling, removing foreign bodies or even when not in use, directly on the device:

Switch off engine!

Wait until the device has cooled down!

## 2.2 Special safety instructions for this device



Read the operating instructions carefully before using the device!

A

Never modify the generator yourself!

A

Disconnect all consumers from the generator before starting it.



Do not operate the generator if it vibrates excessively, if the engine speed changes suddenly, or if the engine misfires frequently.

A

Never start the engine in closed rooms! Otherwise, dangerous carbon monoxide can accumulate. This also applies when windows or doors are open.

A

Always make sure you have a secure footing.



Do not expose the device to rain. Do not use the power tool in damp or wet environments.

A

Switch off the engine before refueling!



Remove the spark plug connector before maintenance, cleaning or repair work. This will prevent unintentional starting.



After repair and maintenance work, reattach the protective and safety equipment to the device.



Make sure the machine is in safe operating condition, especially checking the fuel system and the tank cap for leaks.



Make sure the mounting nuts and bolts are securely tightened. Replace damaged or worn machine parts with new original spare parts.



Clean the engine cooling fins from any dirt.



Keep the machine clean and replace damaged stickers if necessary.



Minimum age for operating the device: 18 years (exception: 16 years when using the device as part of vocational training under the supervision of an instructor).

The prerequisite for using the device is detailed instructions from a knowledgeable person. Furthermore, no special qualification is required for use.



In any case, the owner or operator is responsible for any accidents or risks to third parties or their property.

A

Never refuel the machine in an enclosed space or with the engine running and wait until the engine has completely cooled down before refueling. You should also allow the machine to cool completely before storing it in an enclosed space.



Keep your face and body parts away from the hot and rotating parts of the machine. Turn off the machine when not in use. Switch off the engine when stopping, servicing or repairing the machine.



The machine and fuel must be stored in a safe place, away from any sources of fire (such as sparks or flames) and out of the reach of children.



If repairs are necessary, always only contact an authorized service center.

A Never

start the machine in a closed room.

A

Before starting and using the machine, ensure that it is in perfect and safe condition! The place of use where the machine is to be used must always be carefully examined before work.

### 2.3 Special safety instructions for using the engine

The performance achieved by a petrol engine depends on a number of factors and does not have to correspond to the gross performance. The causes of this possible deviation include, for example, the external conditions of use (weather, humidity, temperature, etc.), differences between the individually produced engines, the accessories used (air filter, cooler, carburettor, exhaust, etc.), the respective fueling and usage limitations.

#### 2.3.1 Topping up fuel

The engine must always be switched off before filling.

Always open the tank cap carefully so that the existing excess pressure can slowly reduce.

When working with the device, high temperatures can occur on the housing. Therefore, allow the machine to cool down before refueling.

The fuel could ignite and cause serious burns.

Be careful not to fill the tank with too much fuel. If you spill fuel, remove the fuel immediately and clean the device.

Close the screw cap on the fuel tank well to avoid loosening due to vibrations during work.

#### A

Read the entire user manual before starting the engine! Failure to follow the instructions contained herein could result in serious or even fatal accidents.

#### A

The operator must be specially trained for this. People not skilled in handling It is strictly forbidden to carry out any repairs on the engine to carry out.

#### A

The engine of this product emits harmful exhaust fumes. This can have a carcinogenic effect or lead to reproductive disorders.



The carbon monoxide produced by the engine is colorless, odorless and toxic. The Inhaling this gas can cause nausea, unconsciousness and even death have.

For this reason:

- Start and operate the engine only in open terrain!

Never start the engine in a closed room - not even with the doors and windows open.



Starting the engine produces sparks that can ignite nearby flammable gases. This can lead to fires or explosions.

For this reason:

Never start the engine if natural gas or propane/butane gas is stored or leaking in the area.

Compressed starting fluids produce flammable vapors. Do not use these with the machine.

Gasoline is highly explosive and flammable and produces flammable fumes. To avoid serious injury or even death that can occur as a result of fires and explosions, be sure to follow the following instructions:

#### 2.3.2 When starting the engine

#### A

Make sure that the exhaust muffler and the fuel tank cap are on are in their usual places.

#### A If

fuel has been spilled, wait for it to evaporate before starting the engine.



The kickback of the starter cable pulls your hand towards the device faster than you can release it. There is therefore a risk of fractures, skin abrasions and tendon strains.

Therefore:

When starting the engine, pull the cable slowly and carefully until you feel resistance. Then tighten strongly and quickly.



Before starting the engine, it must be freed from any external load.



Heat is generated during operation. Especially parts of the engine, like the Exhaust mufflers are extremely hot during operation. Touching hot parts can cause serious burns. Combustible materials, such as leaves, dry grass, sticks, wood, etc. can catch fire.

For this reason:

- Always allow the exhaust muffler to cool down. Do not touch hot parts before the engine has completely cooled down.

- Remove combustible material in the work area and thoroughly clean the machine in the area of the silencer of all potentially combustible foreign objects.

**A**

Before storing or repairing the device:

- For devices with electric start: Remove the starter battery.

### 2.3.3 When operating the machine



Never tilt the engine or system so that gasoline can escape. Do not simply turn off the engine by closing the carburettor.

### 2.3.4 When transporting the machine



The machine may only be transported when the fuel tank is empty or with the fuel valve closed.

### 2.3.5 Storing petrol/the machine with a full fuel tank



Never store the machine/fuel near cooking stoves, hot water boilers or other systems with pilot burners. The same applies to all other possible sources of ignition - gasoline vapors can ignite.

## 2.4 Workspace



Provide good lighting. An inadequately lit work area promotes accidents.



Never operate a gasoline-powered device in an area where explosions can occur. There is a high risk of explosion, especially if there are flammable liquids, gases or dust near the work area.

**A**

Children and other bystanders must always maintain a safe distance while operating gasoline-powered equipment!

## 2.5 Operator Safety



Use common sense when operating gasoline-powered equipment! Be alert and concentrate on operating the device.



Never use the device if you are tired or under the influence of drugs, alcohol or medication!



Even a brief moment of inattention while operating a power/petrol tool can cause you to lose control. This can result in serious and even life-threatening injuries.



Before you switch on the device: Remove any adjustment tools or wrenches! If there are metal objects in the machine (especially on the rotating parts) or still plugged in when it is switched on, serious injuries to the operator or those standing by can occur.



Make sure you have a firm footing and secure balance. In order to enable safe control of the device in unexpected situations, it is also important that you do not overdo it.

## 2.6 General information on the use of petrol-powered devices

**A**

Do not exert force on the device. Make sure the tool is suitable for your use. The right tools get the job done better, faster and safer. The intended use, which corresponds to the purposes for which the device was developed, enables operation at the intended values and safe functioning.



If the main switch does not work, DO NOT use the device! The following applies to every petrol device: If control of the ON/OFF switch cannot be guaranteed, operation is dangerous and the device must be repaired.



Switch the machine off completely before making any adjustments to the device, changing parts or filling/draining petrol. This way you can avoid the device starting accidentally.

**A**

Store the machine out of the reach of children and do not allow anyone who is not familiar with working with gasoline tools and has read these instructions, work with the device. Gasoline and electrical appliances are dangerous if you use them be used by unqualified persons. Supervise children and provide them Make sure you don't have access to the device. Children are never allowed to use the device play.



Gasoline devices require regular maintenance. Pay particular attention to incorrect fastening of moving parts, possible breakages and damage that could affect the function of the machine.





Never work with a damaged petrol appliance, but have it repaired BEFORE use. Many accidents can be traced back to unmaintained or poorly maintained gasoline appliances.



Use the device for its original purpose. Using the gasoline device for purposes other than those intended by the developers may result in dangerous situations and serious injury.

**A**

This device is not intended for use by people with limited physical, sensory or mental capabilities. Nor should children or people who lack experience and knowledge of operating power tools be allowed to use the machine. An exceptional case is to use it under constant supervision by a person responsible for your safety, provided that you have previously received precise instructions on how to use the device.

## 2.7 Avoiding accidents and what to do in an emergency

**A**

To be prepared, you must ALWAYS have at least the following things ready:

- Adequate fire extinguisher (foam extinguisher)

- A first aid kit that is fully equipped and ensures emergency care for the operator and one other person. The first aid kit must be quickly and easily accessible. Above all, it is important to ensure that there is sufficient supply of bandages for flesh or cuts. Material removed from the first aid kit must be refilled immediately.

- Access to a telephone/cell phone or other means of quickly alerting emergency services in an emergency.



When requesting help, provide the following information:

1. Location of the accident
2. Type of accident
3. Number of injured
4. Nature of injury



Never work alone! There must always be another person nearby who is able to provide first aid.

**A**

The accompanying person must be positioned so that they are at a safe distance from the workplace, but at the same time have an unobstructed view of it and the machine operator.



Only work in places from which the emergency services can be called quickly and which are also accessible to the emergency services!

**A If**

an injury occurs despite all these measures, always follow the principles of first aid! Keep the injured person calm and protect them from possible further harm.



Direct contact with fuel or oil should be avoided.

Make sure that no gasoline or oil comes into contact with your eyes. If your eyes come into contact with fuel or oil, immediately rinse your eyes thoroughly with clean water. If your eyes or skin become irritated, consult a doctor immediately!

**A**

In the event of fire: safety comes first! In the event of fire, remove it from the machine immediately to ensure your own physical integrity. Use a foam fire extinguisher to fight fires and prevent fire from spreading. Contact the fire department immediately! Stay calm! If you panic, it could cause a larger fire or more serious damage.

## 2.8 Residual risks

**A**

Even if the device is used correctly and as intended, not all risks of use can be ruled out.

Residual risks include:

Risks arising from direct contact with parts under voltage or indirect contact due to technical errors.

Risk of burns/injury from contact with hot parts or materials and Heat sources.

Noise Risk: Possible hearing loss/deafness and other noise-related physical Symptoms and disorders such as loss of consciousness, balance disorders, etc.

Risks associated with contact with harmful fluids, gases, Dust, mist and smoke, inhalation of emissions, etc.

There is a risk of fire and explosion if fuel is spilled.

Exposure risk. Especially when the intended use is ignored the ergonomic intention reflected in the design of the machine (especially the control panel as well as the weight distribution of the machine), it can lead to unnatural

Stress and unhealthy postures occur. This includes the risk of one unnatural strain on the hand-arm system.

Risk of an unexpected increase in speed due to a technical error.

Danger of a sudden, unexpected engine start.

Risk of loss of control as a result of a technical control failure, a defect in the operation or an unfavorable positioning of the operator in relation to the machine.

Risk that the machine can no longer be switched off even if all user instructions are observed and under the best external conditions, e.g. because the switch-off device cannot be reached or because of the strength of the controls.

Risk of malfunction in machine controls, loose handle, operator position or markings and controls.

Risk of objects being thrown out and liquids being splashed.

The generator generates electricity. Misuse can result in electric shock.

## 2.9 Intended use

The device is suitable for applications intended for pure operation on 230V, 12V and 5V DC. It generates electrical energy as part of a grid replacement operation.

The device may only be used within the specified limits for voltage and power.

It must not be connected to the energy distribution systems (e.g. public power supply).

The power generator is not designed for commercial use.

Be sure to observe the restrictions in the safety instructions.

The machine may only be used according to its intended purpose. Any further use beyond this is not intended. The user/operator and not the manufacturer are liable for any damage or injuries caused as a result.

## 3 Scope of delivery and functional overview

### 3.1 Scope of delivery

Included in the delivery are:

Power generator

Oil fill funnel

12V car charging cable for 12V 8A connection for charging an external 12V car battery

230V power supply for 12V starter battery for charging the internal starter battery

Remote control with start/stop button Tools

(spark plug wrench, screwdriver)

operation manual



**ATTENTION:** When delivered, the device does NOT contain any operating materials such as oil and gasoline! Before commissioning, it is essential to fill 4-stroke engine oil into the oil tank provided, otherwise engine damage will occur for which the manufacturer is not liable!

We recommend that, if possible, you always transport the device in an upright position, taking care not to let it fall over. Otherwise oil can get into the cylinder, combustion chamber or air filter, which can lead to starting difficulties.

1. Carefully remove the product from the box.

2. Make sure all parts are included and check all parts for any damage. If any part is damaged or missing, please contact your dealer.

3. BEFORE you throw away the packaging material, check whether there is still any part in the packaging.

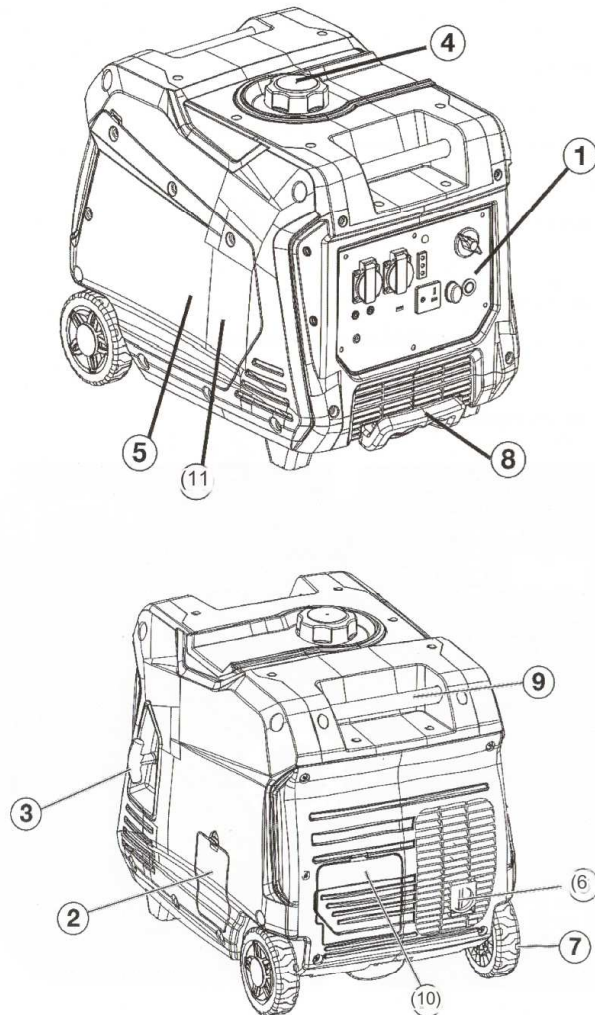
4. Packaging (especially small parts and plastic such as plastic bags, sealing clips, etc.) can be a source of danger for children because they can be inhaled or swallowed. THEREFORE: Never leave it within the reach of children.

5. Disposal must be carried out in accordance with the guidelines and regulations applicable in your country.

6. Plastics are an environmental burden. Therefore, be careful that there are no plastic parts or bags or plastic containers enter the environment.

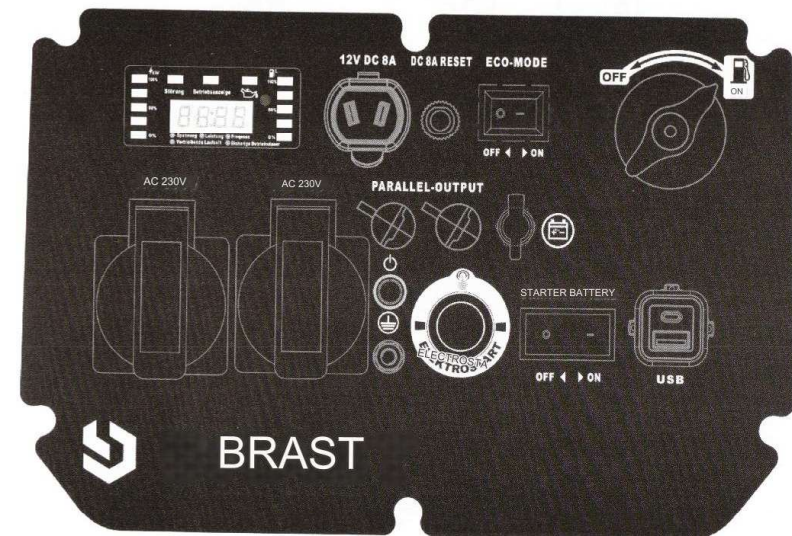
7. Do not use the device if you have any doubts about it must be in perfect working order, but in this case let it through Authorized service center, please contact our customer service.

### 3.2 Functional overview

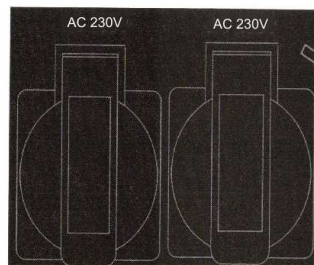


- 1 control unit with connections, LED display and electric start (similar to illustration)
- 2 Cover for the oil filling
- 3 pulley start
- 4 fuel tank with lid
- 5 engine cover; Access to engine, air filter, spark plug and carburetor
- 6 mufflers with exhaust and spark arrester
- 7 transport wheels
- 8 telescopic transport handle
- 9 handle
- 10 Starter battery cover
- 11 Automatic Choke; is activated automatically when starting

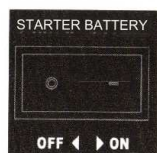
to 1: Control unit with connections:







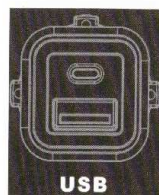
2x 230V sockets



On (ON)/Off (OFF) switch for the internal starter battery; When the switch is turned on, the battery indicator light will light up when the battery is charged. If the light does not light up despite the ON switch, the battery is empty and needs to be charged (see Chapter 6.10.1)



Electric start to start the device electrically at the push of a button. To do this, the starter battery must first be switched on. Pressing it again switches off the generator



2x USB ports (1x USB-A, 1x USB-C, both fast chargers)



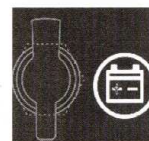
Indicator light for electric start and remote control start



Parallel connections for connecting a 2nd power generator



12V connection e.g. for connecting and charging a 12V car battery (12V charging cable included)



Charging connection for starter battery (230V power supply included)

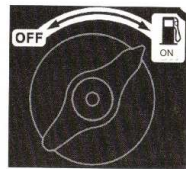


Fuse/reset button for the 12V DC 8A port. Is triggered when a consumer that is too powerful is connected here and the power generator is overloaded or there is a short circuit in the system. The generator continues to run, but no longer produces electricity. In this case, switch off the 12 consumer and disconnect it from the generator. Push the fuse back in. Connect less powerful consumers (see also Chapter 5.1)

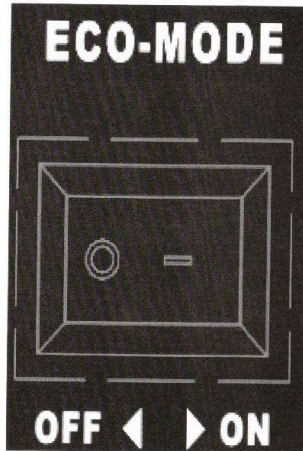


Ground connection to ground the generator with a ground cable (not included).





Fuel Control Switch ON/OFF: Turns off or turns on fuel supply to the engine.

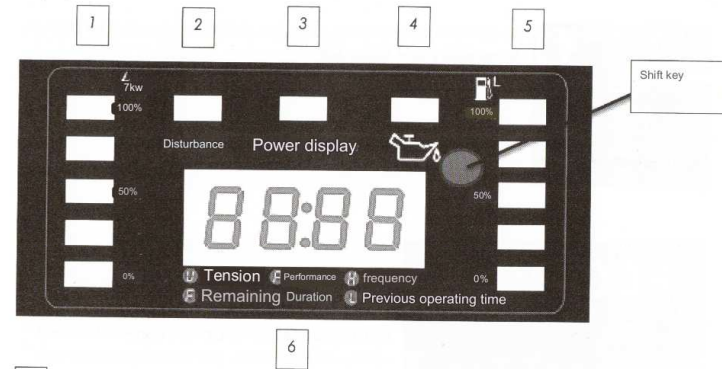


Eco mode: When ON, allows the motor speed to always be optimally adapted to the amount of electrical energy required by the connected consumer. The power generator automatically regulates the speed according to the required power. This means less fuel is consumed and fewer exhaust gases are released.

The fuel saving mode is not suitable for applications where consumers need energy very quickly.

If several consumers with high power requirements are connected, set the ECO switch to the OFF position to avoid voltage fluctuations.

Display:



1

% kW: Shows the utilization of the power generator in %. Attention: Do not overload the generator by connecting too many and/or too powerful consumers. The maximum continuous load of this device is 3,500 watts (=3.5kW). Add up the watt information on the respective nameplate of the connected consumers to check whether the maximum limit of 3,500 watts is exceeded. If exceeded, damage to the device can occur, for which the manufacturer does not accept any warranty!

2

Fault/overload indicator: This lights up when the generator is overloaded or there is a short circuit. To protect the generator, the fuse is automatically triggered; the generator continues to run, but no longer generates electricity. If it lights up, please switch off all consumers and disconnect them from the power generator. If the 12V connection is overloaded, then press the 12V fuse; if the 230V connection is overloaded, switch the generator off and on again. The fault display must now have gone out. Check the wattage of the consumers you want to connect.

3

Operation indicator: Lights up when the generator is in operation.

4

Low oil indicator: Lights up when the oil level is too low. To protect the engine, the generator automatically switches off or cannot be started if the oil level is too low. Be sure to top up with OIL!

5

Petrol tank display: Shows the filling level of the petrol tank in %.

6

LED display: You can display the generated voltage (U), power in kW (P), frequency (H), remaining running time (F) (depending on the petrol tank level) or the previous operating time (L). Switch between the different displays by pressing the orange Shift key several times.



## 4 Before commissioning

## 4.1 General

**! DANGER**

**Starting a gasoline generator indoors can result in death within minutes!**

The exhaust gases contain the poison carbon monoxide, which can neither be seen nor smelled.

 <p>Never use in the house or garage, even if doors and windows are open!</p>	 <p>Use outdoors only, at least 1.5m away from doors, windows, fans and combustible materials</p>
--	--

Please be sure to follow the safety instructions in Chapter 2!



## Warning notice

Before each use, check the device thoroughly for the strength and fit of the individual parts, especially screw and plug connections, as well as any protective devices. Check moving parts for smooth movement.

The device must not be used if safety devices are defective or it is damaged. Replace wearing parts regularly and replace defective or worn parts immediately.

For any repairs and cleaning, read the Cleaning/Maintenance chapter carefully.



For safety reasons and to extend the life of your machine, it is very important to check the condition of the device BEFORE starting the engine. Before starting the engine, make sure that any problems have been corrected by you or an authorized service dealer.



**WARNING!** Failure to correct a problem prior to use or improper maintenance may result in malfunctions that could result in serious injury or even death.



Only use the generator when no electrical devices are connected! Unplug all connected consumers, including extension cables. Otherwise damage to the devices could occur, for which the manufacturer does not accept any warranty!



Do not place the generator on its muffler/exhaust. Do not transport it while it is in use!



## 4.2 Connecting the starter battery

### Attention! To avoid

electric shock: Always connect the positive terminal cable to a battery first when connecting it.

If you want to disconnect a battery, always disconnect the negative pole cable first. Never connect

the negative pole cable to the positive pole of a battery! Never connect the positive

pole cable to the negative pole of a battery! Never touch both battery terminals at

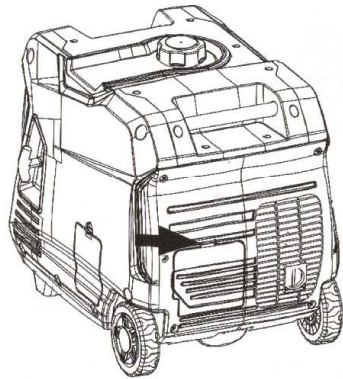
the same time or connect them with a metal!

Always use insulated or non-conductive tools when installing a battery.

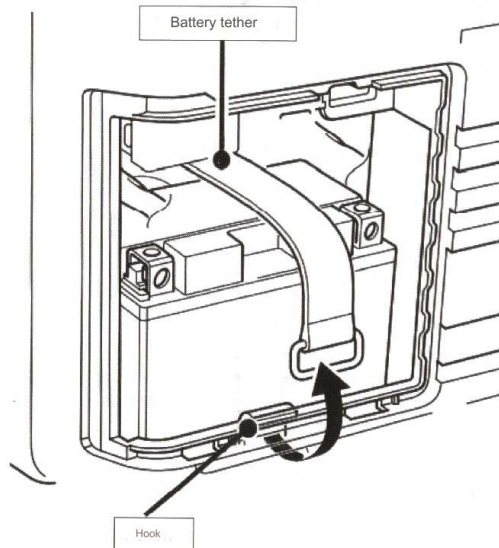
In order to be able to start the generator at the push of a button with electric start or via remote control, the starter battery must first be installed. In addition, the auto choke only works if the starter battery is installed.

This is already present in the corresponding battery compartment.

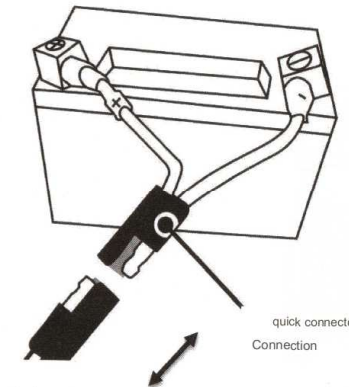
Open the battery compartment cover on the back of the generator (see arrow).



Check that the battery tether strap is properly seated and hooked.



Remove the protector protecting the connectors and connect the quick connector connectors as shown below.



Close the battery compartment again.

The starter battery is already pre-charged upon delivery. The starter battery is also automatically charged while the generator is in operation. You can also charge the battery (without having to remove it) via the corresponding charging port on the generator using the included charging cable (see also chapters 3.2 and 6.10.1).

#### 4.3 Setting up the remote control

So that you don't lose the remote control, we recommend that you clip it onto the cable handle or the control unit.

The remote control requires 2x CR 2016 batteries (included).

The range of the radio remote control is up to 30m; However, this decreases increasingly as the battery performance decreases.

The remote control is already connected/synchronized with the generator at the factory. At

Using a replacement remote control or possibly after changing the battery

The remote control must be reconnected/synchronized with the generator.

To do this, please proceed as follows:

1. Set the starter battery switch on the generator to ON (see also 3.2)
2. Press the electric start button (see also 3.2) on the generator for 10 seconds, until the control lamp (see chapter 3.2) flashes green
3. Press the ON button on the remote control. The remote control is now connected to the generator, the indicator light stops flashing/goes out.

#### 4.4 Grounding

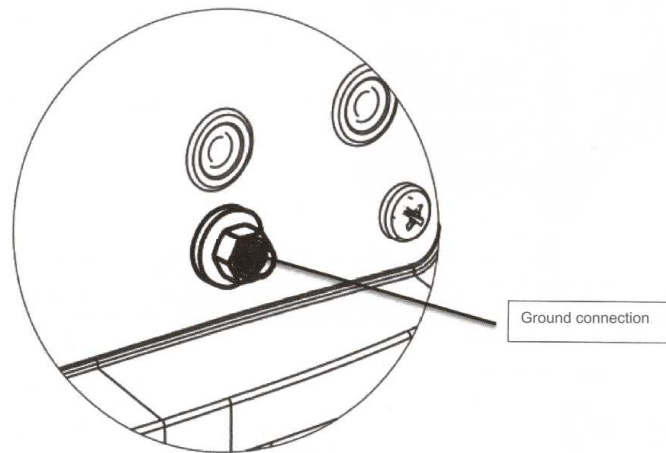
The neutral conductor of the generator is floating.

The ground connection is connected to the frame of the generator, the non-live metal parts and the ground connections of the individual connection sockets.

Before using the grounding terminal, consult an electrician to determine whether it is necessary to ground the generator via the grounding terminal for your intended use.

If grounding is indicated, always ground the generator using the designated connection by connecting it to a suitable grounding source. We recommend connecting a copper wire with a ground spike (both not included) and inserting the ground spike into suitable soil.

The grounding wire is connected to the connection shown below (see also Chapter 3.2) between the lock washer and the nut, then tighten the nut.



#### 4.5 Filling with engine oil and checking oil level

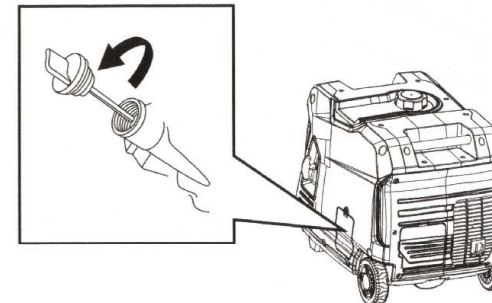
**!** The engine oil is not included. Before starting for the first time, be sure to fill the engine with the required amount of oil, otherwise damage to the engine will occur, for which the manufacturer does not accept any warranty! Do not exceed the recommended amount of oil!

Use 4-stroke engine oil SAE 10W-30 (more information in Chapter 6.5.1).

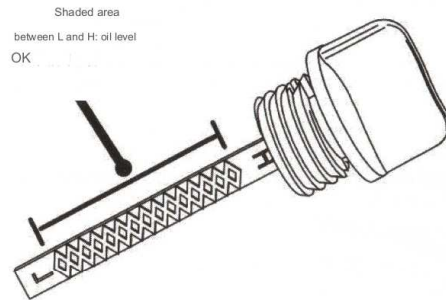
Open the cover for the oil filling (see arrow below and chapter 3.2).



Open the oil filler plug with dipstick and fill up the oil using the included filler funnel. Check the oil level regularly while filling as there may be some oil left in the tank from the factory to avoid overfilling the tank. The oil level is good if oil is visible within the hatched area of the dipstick (between L = Low and H = High).







Do not overfill the tank, otherwise oil can leak out of the closed lid and damage the engine. If overfilled, drain oil.

Then screw the oil dipstick back in and close the oil cover.

Always ensure that the device has enough oil filled, otherwise damage to the engine may occur.

**Warning notice**

Never top up with oil while the generator is in operation! Switch off the generator beforehand!

Before adding oil, make sure the oil has cooled down for a few minutes after turning off the generator. Otherwise it can happen that hot oil sprays out of the tank under pressure after opening the lid and can cause burns.

#### 4.6 Fill in fuel (petrol).

**Warning notice**

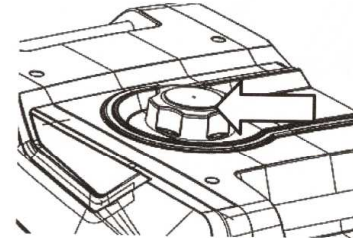
Gasoline is very flammable. Avoid smoking or handling open flames or sparks near fuel. It is also important to ensure that the engine is stopped and cooled down before adding fuel. A flat floor outside should be chosen for this purpose; then the engine should be started at least 3 m away from the refueling point.

Invisible, highly flammable vapors can escape from the fuel system. Therefore, flames, cigarette butts or other forms of fire should be avoided near the gasoline.

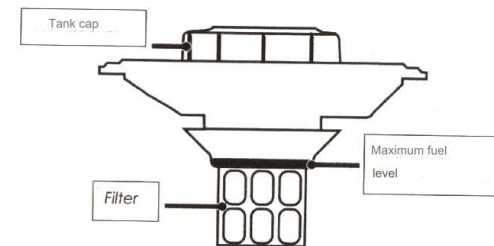
Use unleaded gasoline (octane rating of 90 or higher) with no more than 10% ethanol admixture. When using lower octane and/or higher gasoline Ethanol content can cause engine damage. In this case it expires Manufacturer's warranty.

Proceed as follows when refueling:

1. Stop the engine.
2. Unscrew the fuel tank cap (see arrow and chapter 3.2) counterclockwise and remove. Place the cap in a dust-free place.



3. If necessary, clean the tank cap and its surroundings from dirt impurities.
4. Fill the fuel tank with gasoline up to the limit as shown.



5. Allow some air to allow the fuel to expand as it heats up. Avoid overfilling the tank.
6. Close the fuel tank cap securely and tightly until you hear a click. Carefully remove any fuel splashes on and around the device.

**Warning notice**

Refuel in a level outdoor area.

Before starting the engine, move the device at least 3 meters from the refueling location.

Avoid any spark or lighting of a flame until the gasoline vapors in the area have completely dissipated. Do not smoke!

Never fill with petrol when the device is running or is still hot. If the machine has already been in operation, switch off the ignition and allow the engine to cool down completely.



Be careful not to spill fuel when refueling. The fuel can damage some paints and plastics. Damage that occurs in this way is not covered by the warranty.

Never use old or stale gasoline and keep the machine's tank clean and free of contaminants (dirt, water, etc.).



The fuel may only be stored in containers/canisters specifically designed for this purpose.

Never remove the fuel tank cap while the engine is running or add gasoline while the engine is running. Never fill the tank while the machine is still hot.

If gasoline has been spilled, move the machine away from the spill area and do not start the engine until any remaining gasoline on the machine has completely evaporated. Open flames should be avoided under all circumstances. Stop the engine and secure the ignition key.

If you want to tilt the machine (for example to carry out maintenance work or to drain oil), first remove the fuel from the tank.



Refueling with fuel must never take place in closed rooms. Allow the engine to cool down for at least 15 minutes before refueling.

Do not use fuel older than 14 days. Old fuel massively increases the risk of carburettor damage.

## 5 Commissioning

### 5.1 Continuous and maximum performance and avoidance of overload

#### 5.1.1 General

Do not overload the generator, this can damage the generator and the connected devices.

Make sure that the power generator can provide both sufficient continuous power (=rated power, stated on the nameplate) and sufficient starting power (maximum power for starting currents) of ALL connected consumers at the same time.

#### 5.1.2 Connection calculations for continuous and maximum power

You can connect consumers directly via the 2x230V sockets, 12V connection and the two USB ports. However, you can also connect extension cables that are equipped with several 230V distribution sockets to which you can connect several consumers to the 230V sockets on the generator. In any case, the following applies: The power generator can provide a total continuous output of 3,000 watts and a short-term maximum output (for higher starting currents) of 4,000 watts.

The watt information on the nameplate of a consumer corresponds to the continuous power (= nominal power). Volts x Amps = Watts; 1kW = 1,000 watts.

However, many consumers require higher starting power when starting, even if usually only for milliseconds. Ohmic consumers do not pose a problem; their starting current is between 1 and 1.2 compared to the information on the nameplate. However, inductive consumers can have starting currents that are between 1.5 and 8 times the value on the nameplate. It is therefore essential that you determine the higher starting power required by your consumers from their operating instructions or by asking the manufacturer.

Ohmic consumers have no moving parts (e.g. kettles, hotplates, light bulbs and heaters). Inductive consumers have moving parts (electric motors e.g. hammer drills, circular saws, chainsaws, compressors, pumps and high-pressure cleaners).

To determine whether the power generator can provide the required currents for the consumers to be connected, add up all the wattage information on the nameplates for the continuous power and take into account the determined starting currents for the required maximum power of the power generator.



Damage to the power generator caused by connecting too many and/or too powerful consumers is excluded from the manufacturer's warranty! Please note that this power generator has a short-term maximum output of 4,000 watts.

The following table shows corresponding examples of the continuous power and maximum power required by starting currents of various consumers. They only represent examples and do not replace precise research into the consumers you intend to connect to the power generator.

consumer	Continuous performance	Starting current factor	Required starting current
impact drill	600W	1.2	720W
Fridge Freezer	200W	3.5	700W
Electric stove	2.500W	1	2.500W
TV	300W	1	300W
Radio	200W	1	200W
Electric lawnmower	1.500W	3.5	5.250W
Hedge trimmer	700W	1.5	1.050W
washing machine	3.000W	3.5	10.500W

Purchasing a starting current limiter for inverter generators (so-called soft starters) may make sense for you, especially if you plan to connect very powerful consumers with high starting currents to the power generator. This starting current limiter limits/reduces the starting currents by reducing the voltage when switching on, which also reduces the current consumption and is simply connected/plugged in.

#### 5.1.3 Overload with tripping of the fuse

Connecting consumers with higher outputs than the power generator can provide leads to overloading and, to protect the power generator, triggering the internal fuse. The power generator then continues to run, but no longer produces electricity. In addition, the "Fault" (overload) indicator lights up and the operating indicator goes out. In this case, switch off all consumers and disconnect them from the generator. If the 12V connection is overloaded, push the 12V fuse back in; if the 230V connection is overloaded, switch the generator off and on again. The fault light must now go out. Reduce the number and/or strength of the new consumers.

#### 5.1.4 Connection sequence of consumers

By paying attention to the following points, you can increase the lifespan of your generator.

Always start the generator without any electrical devices being connected!

Always connect the consumer with the highest wattage first. Allow the generator a few seconds to stabilize.

Now connect the second consumer with the second highest power, etc.

#### 5.1.5 Connecting extension cables

Always connect only 3-pole, grounded and undamaged outdoor extension cables. Damaged extension cables can be life-threatening.

#### 5.2 Checklist before starting

**A** Carbon monoxide is a poisonous gas. If inhaled it can cause unconsciousness and even death. Avoid breathing in carbon monoxide. Avoid areas or actions where this cannot be guaranteed.

Before starting the engine, please go through the following checklist every time:

- Filled with oil and oil level OK?
- Filled with petrol?
- Is the generator located outdoors on level, dry ground with sufficient clearance in accordance with safety regulations?
- No electrical devices connected?
- ECO switch on OFF?

#### 5.3 Auto Choke

This generator is equipped with an automatic auto-choke system that enables an optimally coordinated starting process. Regardless of how you want to start the engine, for Auto-Choke it is necessary that the starter battery switch is set to ON and that the starter battery is at least partially charged (guaranteed at the factory).

#### 5.4 Running-in time for initial commissioning

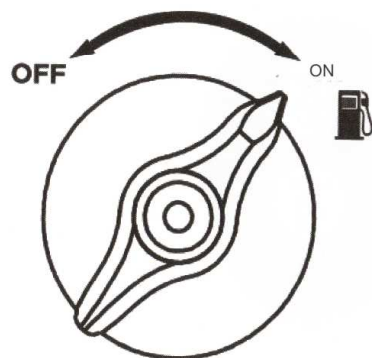
When using the generator for the very first time, we recommend that you only run the generator at a continuous load of approx. 50% (approx. 1750 watts) for the first 5 hours of operation.

Vary the load occasionally to allow the stator windings to heat and cool and the piston rings to settle.

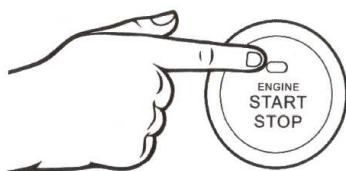
## 5.5 Start options

### 5.5.1 Starting the engine with electric start

1. Go through the checklist from Chapter 5.1.
2. Make sure that you have connected the internally installed starter battery properly (see Chapter 4.2), the battery is charged and the starter battery switch (see Chapter 3.2) is set to ON. As soon as the switch is set to ON, the corresponding battery indicator light lights up.
3. Set the fuel control switch to the ON position (see also chapter 3.2)



4. Press the electric start button (see chapter 3.2) for 1-2 seconds and then release it. The engine starts. The indicator light from chapter 3.2 lights up green.



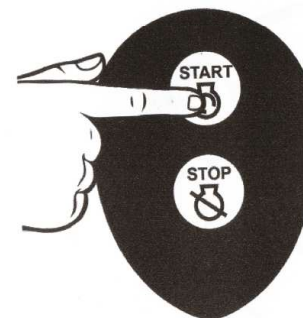
5. Connect electrical devices (consumers), but do so in compliance with the restrictions listed in Chapter 5.7.

### 5.5.2 Starting the engine via remote control

The starter battery must also be connected and charged when starting with the remote control for the automatic choke to work.

Follow the same steps 1-3 as described in Chapter 5.4.1 Electric start.

Step 4: Press the "ON (Start)" button on the remote control for about 1-2 seconds until the engine starts. The indicator light lights up green.



- Connect electrical devices (consumers), but do so in compliance with the restrictions listed in Chapter 5.7.



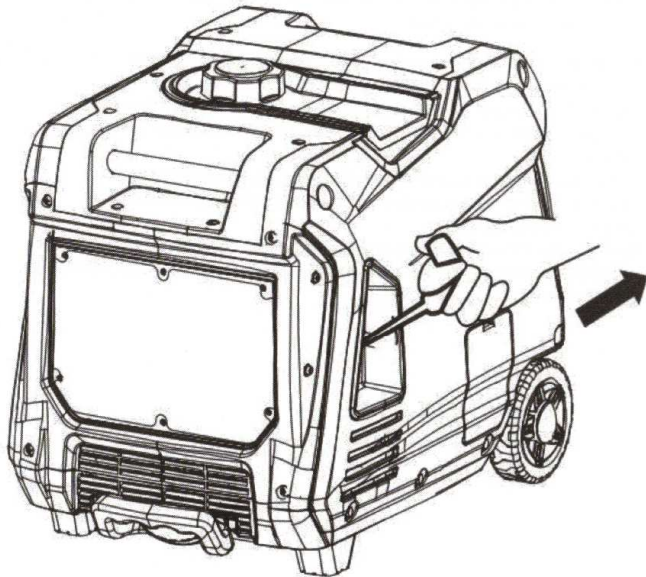
### 5.5.3 Starting the engine via pulley start

The starter battery must also be connected and charged when starting manually with a cable pull for the automatic choke to work.

Follow the same steps 1-3 as described in Chapter 5.4.1 Electric start.

Step 4: Slowly pull out the cable handle (see arrow) until you feel resistance. Then pull the cable firmly so that the engine starts. Then, guide the cable back carefully and do not let it snap back to avoid injury.

Repeat the process if the engine does not start immediately.



Connect electrical devices (consumers), but do so in compliance with the restrictions listed in Chapter 5.7.

### 5.6 ECO-Mode

Your generator is equipped with an energy saving mode (ECO mode) to minimize fuel consumption and exhaust gases and reduce noise. In this mode, the power generator adapts the engine speed to the power requirements of the connected consumers.

Only switch on the ECO mode once the generator has warmed up slightly during operation.

Do not switch on ECO mode if you have connected another BRAST petrol generator BRB-IS-4000 in parallel.

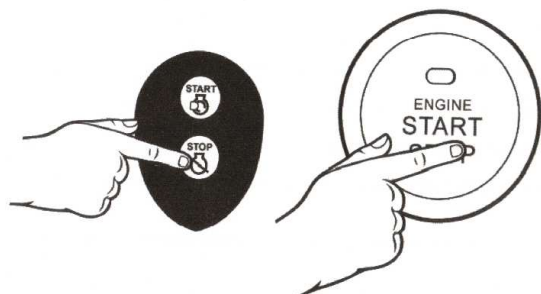
Only use ECO mode if you have not connected any very powerful electrical devices. If you want to operate the generator at maximum power for a longer period of time, switch ECO mode to OFF.

1. Always start the generator in ECO mode (OFF) until the generator has warmed up slightly.
2. Then press the ECO mode switch (see also chapter 3.2) to ON.
3. If no consumer is connected, the generator now runs at idle speed
4. As soon as you connect a consumer, the engine speed of the generator is increased to such an extent that just enough electricity is generated for the consumer
5. If you want to run the generator at the highest speed for maximum power generation regardless of the connected devices, switch the ECO mode button to OFF.

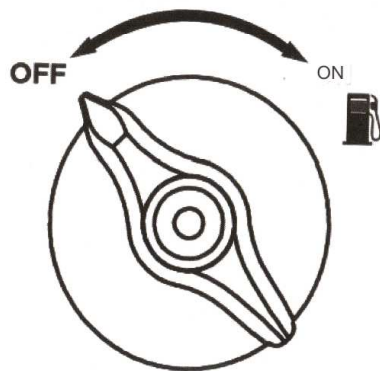
### 5.7 Switching off the engine

To switch off the generator, please proceed as follows:

1. Switch off all connected consumers and disconnect them then from the power generator
2. Let the generator continue to idle for a few minutes
3. Press the OFF (Stop) button on the remote control or press the electric start button



4. Set the starter battery switch to OFF
5. Set the fuel control switch to the OFF position



In an emergency, when you need to turn off the generator quickly, simply turn the fuel control switch to the OFF position.

### 5.8 Parallel operation of 2 generators

You can operate 2 BRAST petrol generators BRB-IS-4000 in parallel by connecting them to each other at the parallel connections with the appropriate coupling cable (not included).

Maximum power for parallel operation is 8,000 watts. Continuous power for parallel operation is 7,000 watts.

Otherwise, comply with all provisions and descriptions of this user manual



Only connect 2 power generators when they are switched off.

When connecting the cables, the parallel ports must be OFF.

Never connect 2 different power generators together.

All consumers must be switched off and separated from the power generators before you switch on the power generators.

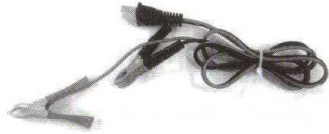
Make sure that the ECO mode is always set to OFF on both generators during parallel operation.

Always plug the red parallel connection cable into the red connection and the black cable into the black connection.

Always start one generator first, wait for the operating indicator to light up and then the other.

### 5.9 Charging a 12V car battery

The generator can charge a 12V car battery using the integrated 12V connection and the included 12V charging cable. To do this, proceed as follows:



1. Clean the terminals of the battery to be charged with a wire brush.
2. Start the generator and make sure the 12V 8A reset fuse is pushed in.
3. Take the 12V battery charging cable included in the delivery (see picture) and connect the terminal of the red cable to the positive pole of the battery to be charged
4. Connect the clamp of the black cable to the negative terminal of the battery to be charged
5. Set the ECO mode switch to OFF, the battery will now be charged
6. Measure the density of the battery's cell fluid with a hydrometer. If this is between 1.26 and 1.28, the battery is fully charged. Important: Check the density at least once per hour to avoid overcharging.



Never remove the charging cable terminals during charging! Sparks could occur that could ignite battery gases.

Never charge the battery indoors.

Never smoke while charging.

Always wear safety glasses while charging. Batteries contain acid. Avoid contact with skin, eyes or clothing. In case of contact, wash the affected area with water for about 15 minutes and seek medical attention immediately.

If you have drunk acid, drink plenty of water or milk and search see a doctor immediately.

## 6 Maintenance, cleaning and repairs

### 6.1 General information



Before carrying out maintenance work on the device:

1. Always stop the engine.
2. Wait until all rotating parts have stopped, pull out the spark plug connector and disconnect the negative cable from the negative terminal of the starter battery.
3. Be sure to allow all parts to cool before beginning any maintenance work.
4. Avoid skin contact with oil and gasoline by wearing protective equipment. If contact occurs, wash your skin with soap and water.
5. Perform maintenance work only in a well-ventilated area. Gasoline and gasoline vapors are highly flammable and can ignite under certain conditions.
6. Carry out regular maintenance work to ensure that the power generator functions without danger. Failure to maintain the machine and repair identified defects as well as the use of defective spare parts may result in machine failure. This can result in serious injury or even death.



Only have repair work carried out by qualified specialist personnel.

### 6.2 Avoiding possible damage

- Before starting work: Allow the machine to reach operating temperature. After finishing work, let the engine idle for a few more minutes.
- Always switch off the engine when you are not using the machine. When working with the machine, do not overload its capacity.
- If unusual vibrations or noises occur, follow the instructions in this manual.

### 6.3 Maintenance tips

- Careful handling and regular cleaning of the device ensure long-term functionality and performance.
- Replace safety and warning labels when necessary.
- Nuts and screws must always be tightened to ensure safe operation of the machine.
- Remove all contamination and excess oil from the engine, exhaust and fuel tank to avoid any potential hazards.
- Always ensure that the ventilation slots are clean and not blocked. Replace worn or damaged parts. Only use original spare parts.

#### 6.4 Maintenance intervals


The following maintenance intervals must be carried out according to the table. These are just a guideline. When the power generator is subjected to heavy use, the need for maintenance increases and the intervals shorten.

Maintenance parts	Before each start-up	After 25 hours of operation or after 1 month of oil change	Oil change after 50 hours of operation or every 6 months	After 100 hours of operation or every 6 months	After 300 hours of operating or 1x/year
Engine oil	oil level check		months		
cooling grid	Check and clean				
Air filter	Check		Clean		Replace
ignition candle				Check and clean	Replace
Spark-catcher				Check and clean	



 Always follow the inspection and maintenance recommendations and schedules provided in this manual.



 Failure to follow the maintenance schedule and intervals could result in serious injury or even death. ALWAYS follow the procedures and indicated actions in these instructions for use.

### 6.5 Engine oil

### 6.5.1 Suitable engine oil

Only use 4-stroke engine oil (and never 2-stroke oil!), depending on the ambient temperature with the following specification:

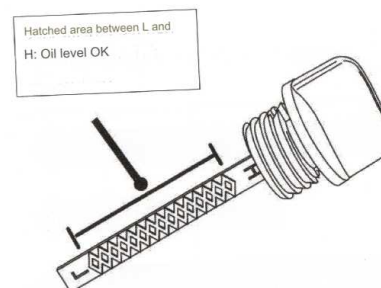
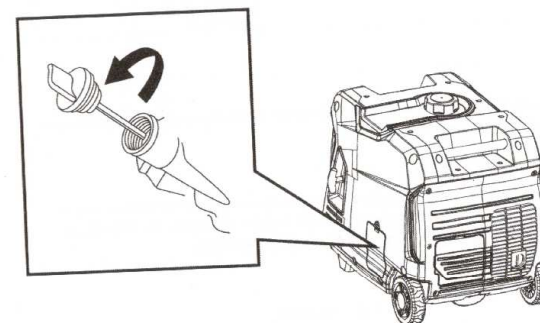
		10W-30						
5W-30						10W-40		
5W-30 Synthetic								
°F	-20	0	20	40	60	80	100	120
°C	-28.9	-17.8	-6.7	4.4	15.6	26.7	37.8	48.9

Any other specification may result in increased wear and shorter engine life lead.

### 6.5.2 Check oil level and fill in oil

Check the oil level on a flat surface before each use.

1. If the generator is still in operation, switch it off and allow it to cool down for several minutes.
2. Open and remove the cover for the oil filling (see chapters 3.2 and 4.5).
3. Clean the filling point and surrounding area as well as the oil dipstick with a damp cloth.
4. Open the oil filler plug with dipstick
  - a. The oil level is OK if oil is visible within the hatched area of the dipstick (between H = High and L = Low)
  - b. If the oil level is too low, add engine oil between L and H using the filler funnel provided. Check the oil level regularly while filling. Don't overfill! If overfilled, drain oil.



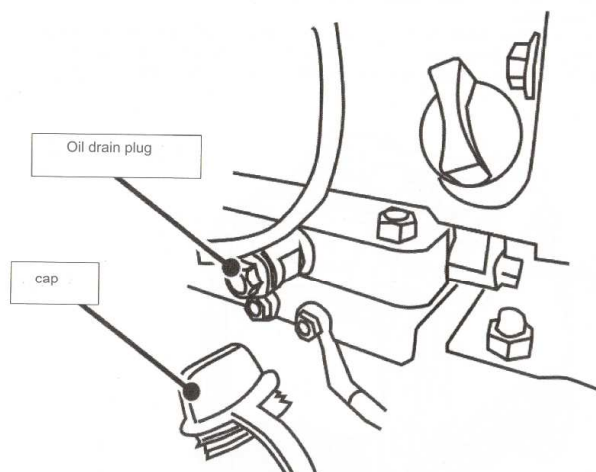
5. Screw the dipstick back in and close the cover.



### 6.5.3 Oil change

Carry out oil changes at the intervals listed in Chapter 6.4 to avoid engine damage to avoid. If you operate the generator under extreme conditions, change the oil more often.

1. Turn off the engine and allow it to cool for several minutes. Change the oil while it is still a little warm.
2. Remove the spark plug cap from the spark plug.
3. Open and remove the cover for the oil filling (see chapters 3.2 and 4.5).
4. Remove the oil dipstick and clean it and the area around the filler opening with a cloth.
5. Place an oil pan or other suitable container under the oil drain plug.
6. Remove the oil drain plug cap and open the oil drain plug with a 10mm wrench.



7. Allow the oil to flow into the collection container.
8. Close the drain plug and replace the cap.
9. Fill fresh oil into the tank according to 6.5.2.
10. Used oil is hazardous waste that must not be disposed of in household waste or the sewer system. Dispose of the used oil in accordance with legal regulations. Ask your community about this.

### 6.6 Air filter



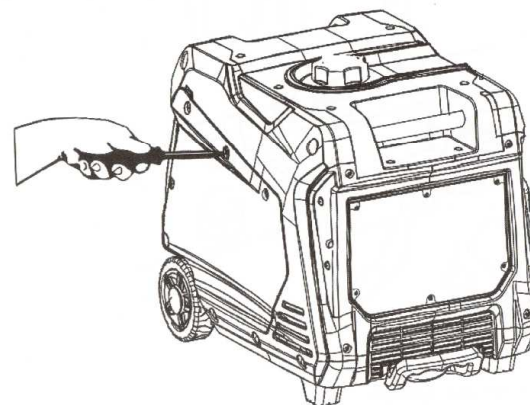
Never use gasoline or other flammable substances to clean the air filter. Only use mild household soap to clean the air filter.

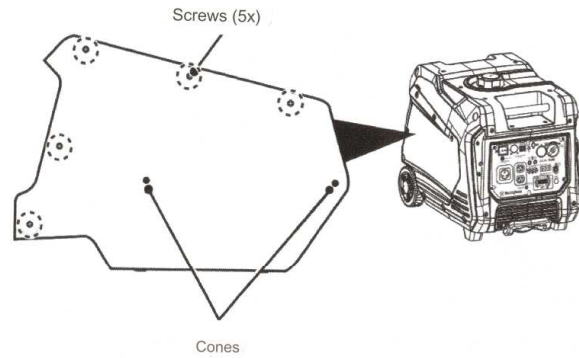
If you operate the engine without an air filter or with a damaged air filter, dirt will enter the engine. This causes the engine to wear out more quickly. Damage that can be attributed to a failure to change the air filter is not covered by the manufacturer's warranty.

If the filter is frayed, torn or otherwise damaged, it must be replaced. Also note the replacement interval according to Chapter 6.4.

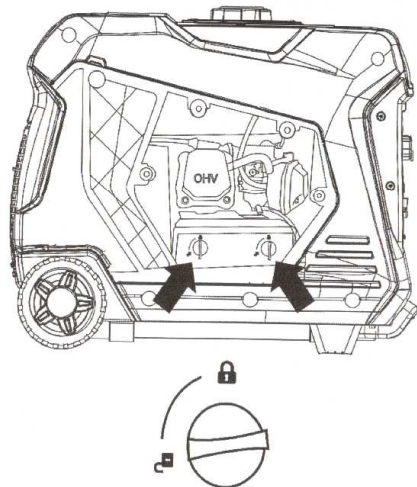
Clean the air filter every 50 hours of operation or every 3 months. The frequency must be increased if you operate the generator in a dusty environment.

1. Switch off the generator and wait a few minutes for the engine to cool down.
2. Remove the engine cover (see also chapter 3.2) to gain access to the air filter by first loosening the 5 screws and then pulling the cover straight out with both hands to avoid damaging the two pins.





3. Turn the two knobs a quarter turn to the left as shown to open the filter cover and access the air filter



4. Remove the air filter element.

5. Clean the air filter element with lukewarm, soapy water and then squeeze it out carefully. Never twist or pull on the filter element!



6. Rinse the filter element with clean water and gently squeeze it again until it is dry.

7. Dip the air filter in fresh engine oil and squeeze out excess oil. Too much oil in the air filter leads to smoke when starting the engine.

8. Place the filter element where you previously removed it.

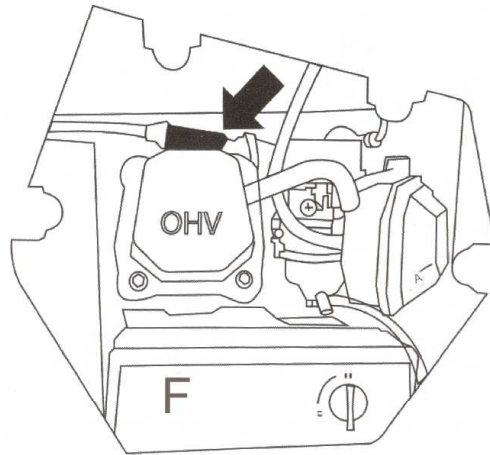
9. Attach the filter cover again and close it by turning the two knobs a quarter turn to the top right.

10. Close the engine cover.

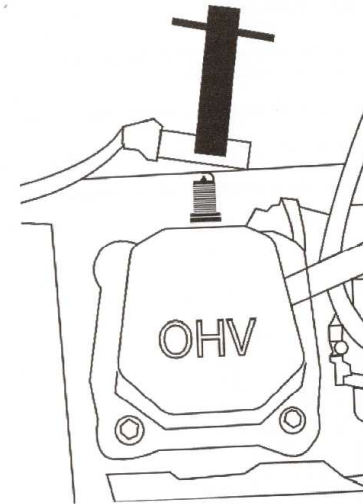
#### 6.7 Spark plug

The spark plug must be checked and cleaned every 100 operating hours or every 6 months or replaced every 300 operating hours or after 1 year.

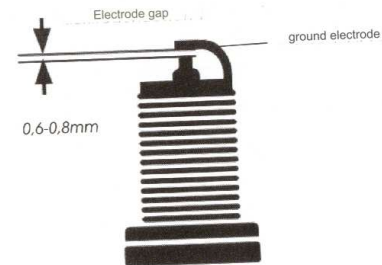
1. Switch off the generator and let it cool down on a flat surface for a few minutes.
2. Remove the engine cover (see description chapter 6.6) to gain access to the spark plug.
3. Remove the spark plug cap by pulling it away from the spark plug. Now the upper part of the spark plug can be seen.



4. Clean the area around the spark plug with a stiff brush to prevent dirt from falling into the cylinder when unscrewing it.
5. Use the included spark plug wrench to unscrew the spark plug. You should work carefully so as not to damage the thread in the cylinder head. If necessary, contamination in the thread can also be removed with a cloth.



6. Place a clean rag over the resulting hole so that no dirt can get into the engine.
7. Inspect the spark plug for damage, heavy wear, heavy contamination. If inspection reveals a defect, replace the spark plug.
8. Measure the correct electrode gap of 0.6-0.8mm with a spark plug gauge. If this is different, correct the distance by carefully bending the ground electrode.



9. Only use suitable spark plugs recommended in these instructions. Unrecommended candles can cause engine damage.

Torch	Champion	Bosch	Autolite
F7RTC	N9YC	W7DC	52

10. Screw the old, tested or new spark plug back in by hand until no more rotation is possible/it rests on the sealing ring
11. After the spark plug is seated on the sealing ring, tighten with a spark plug wrench.
- Installing a new spark plug: Tighten an additional 1/2 turn with the spark plug wrench when the spark plug rests on the gasket.
  - When reinstalling the original spark plug: Tighten only 1/8-1/4 turn when the spark plug rests on the gasket.
12. Insert the spark plug cap onto the spark plug and close the engine cover.



A loose or loose spark plug can become extremely hot and damage the engine.

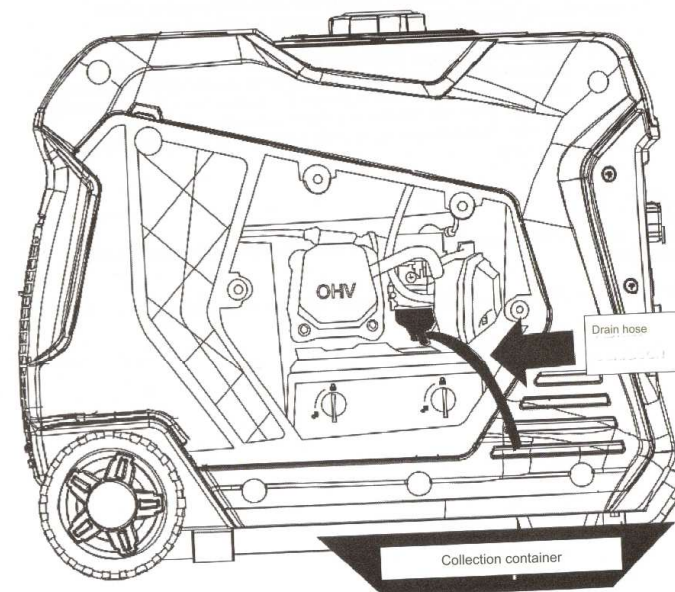
Overtightening the spark plug will damage the threads in the cylinder head.

## 6.8 Draining/replacing fuel (petrol)

### 6.8.1 Draining fuel from the carburetor pan

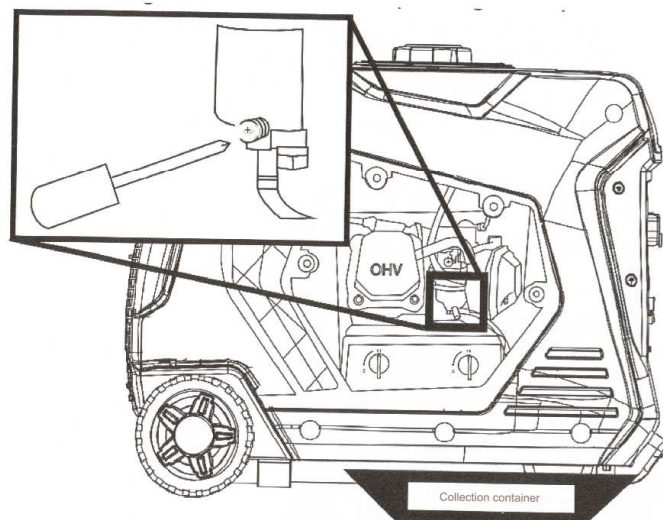
If you want to drain the fuel from the carburetor pan, please proceed as follows:

- Switch off the generator and wait a few minutes for the engine to cool down.
- Remove the engine cover (see description in chapter 6.6) to gain access to the carburetor.
- Route one end of the clear drain hose (see arrow) outside the generator into a collection container provided.





4. Loosen the fuel drain screw using an appropriate screwdriver until fuel flows through the drain hose.



5. Drain the gasoline and close the drain screw again. Dispose of the used gasoline as hazardous waste in accordance with legal regulations. Ask your community about this.

6. Close the motor cover again.

#### 6.8.2 Emptying the fuel tank

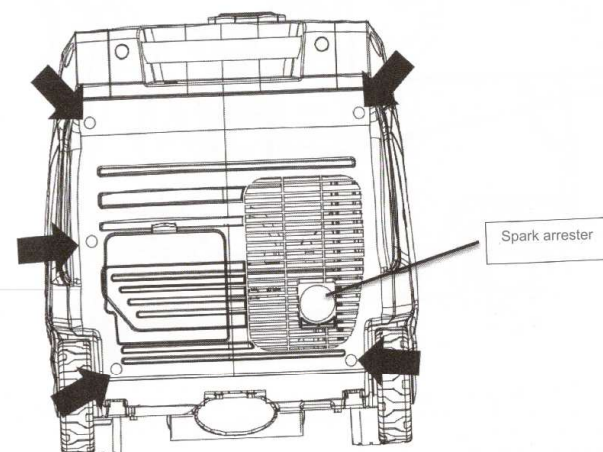
If the gasoline in the fuel tank is older than 6 months, it needs to be replaced.

1. Switch off the generator and wait a few minutes for the engine to cool down.
2. Remove the spark plug cap.
3. Open the gasoline tank cap and remove the filter by squeezing it slightly while removing it from the tank.
4. Use a hand pump (not included) and pump gasoline from the tank into a container provided. DO NOT use an electric pump! Danger of fire!
5. Replace the filter and close the tank cap.
6. Reattach the spark plug cap and start the generator until the last remaining gasoline in the tank is used up and the generator turns off.
7. Now store the generator in accordance with Chapter 7 or refill with fresh gasoline.

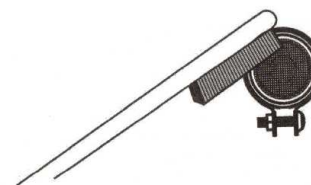
#### 6.9 Cleaning the spark arrester

Clean the spark arrester according to the maintenance interval table, chapter 6.4 to avoid reduced engine performance.

1. Turn off the generator and wait a few minutes for the engine and exhaust to cool down.
2. Place the generator on a level surface.
3. Remove the 5 screws with a screwdriver and muffler cover.
4. Remove the spark arrester with a screwdriver.



5. Clean the carbon residue on the surface of the spark arrester with a wire brush. If it is damaged, it must be replaced.



## 6.10 Starter battery

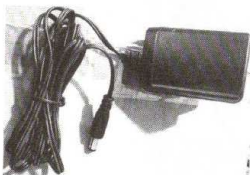
### 6.10.1 Charging the starter battery

The starter battery is automatically charged within 30-60 minutes while the generator is in operation.

If you set the starter battery button to ON (see Chapter 3.2) and the battery indicator light does not light up, the starter battery is empty and needs to be charged.

If you do not use the generator for a long period of time, we recommend that you charge the starter battery once a month overnight via the charging port provided (see Chapter 3.2) using the 230V power supply supplied (see picture).

To do this, plug one end of the included power supply into the charging port of the generator and the other end into a 230V socket. The starter battery does not need to be removed for this. Never charge the starter battery this way for longer than 8 hours to avoid overcharging.



### 6.10.2 Replacing the starter battery (see also chapter 4.2)

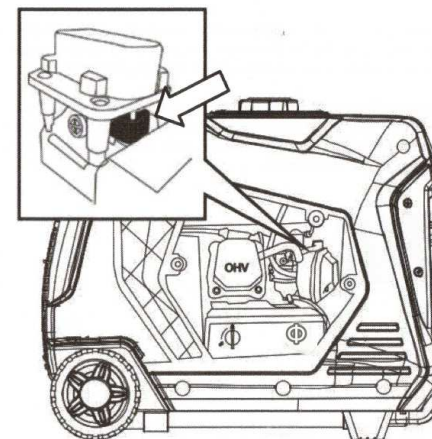
1. Disconnect the spark plug connector
2. Open the battery cover
3. Open the battery tether that holds the battery in place 4. Disconnect the quick connect connector and remove the old battery
5. Remove the cable connectors (white negative terminal cable and red positive terminal cable) from the terminals of the old battery
6. Connect the white negative pole cable to the negative pole of the new battery and the red positive pole cable to the positive pole of the new battery and turn it inside out the rubber sleeves over the connections
7. Insert a new battery and connect it using the quick connect connector
8. Close the battery compartment
9. Install the spark plug cap onto the spark plug
10. Dispose of the old battery in accordance with the statutory hazardous waste regulations. Regulations. Ask your local municipality about this.

Model	YT5AL
volt	12
Uh	6.5

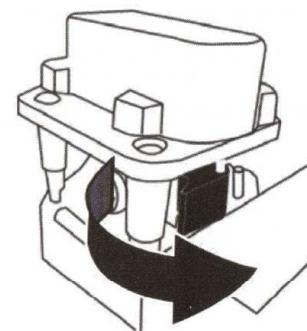
## 6.11 Manually adjust the choke

If the starter battery is discharged or disconnected, the choke can be adjusted manually.

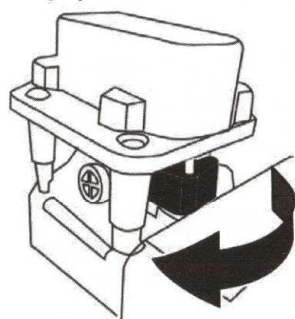
1. Remove the engine cover.
2. The small black choke control is located above the carburetor.



3. To close the cold start choke, use a screwdriver to properly press the black knob on the front of the generator.



4. Start the generator, the choke should be opened via the starting process. If it doesn't, open it manually.



#### 6.12 Cleaning the generator

Clean the generator after each use, especially the ventilation grilles from dirt and blockages, to ensure that the engine does not overheat.

#### 6.13 Engine adjustments



Never change the rated speed of the motor in any way!

Your engine was tuned at the factory. Failure to comply with the engine speed limit may be dangerous to your safety and the safety of others.

Any manipulation or change of the engine setting will void the warranty.

#### 6.14 Repairs



Before carrying out any work, switch off the engine, wait until all rotating parts have stopped and pull out the spark plug connector.

Never store the machine indoors with gasoline in the tank, as gasoline fumes could potentially ignite or explode from open flames or sparks.

Only have repair work carried out by qualified specialist personnel.

Please contact our customer service regarding this. We will be happy to help you quickly and unbureaucratically.

## 7 Storage and transport

### 7.1 Storage



Never store the generator in an enclosed or poorly ventilated area where fumes may come into contact with an ignition source such as stoves with pilot lights, kettles, dryers, gas appliances, or sparks from an electrical appliance when the gas tank is full. Danger of explosion and fire! If in doubt, drain the petrol and store it in suitable containers.



Gasoline in the tank only lasts 1-2 months, then it corrodes and can cause damage to the engine or prevent the generator from starting. If stored for a longer period of time, add a stabilizing additive to the gasoline to extend its shelf life. However, it is best to drain the gas.

#### 7.1.1 Fuel storage

- Only store fuel in special petrol cans, which can be stored for several months
- If contaminated gasoline is used, there is a risk that the engine will run irregularly or be damaged.

#### 7.1.2 Storage of the machine

Drain the gasoline and let the engine idle for a few minutes to remove any remaining fuel from the carburetor.

Perform an oil change.

Loosen the spark plug cap and remove the spark plug. Pour 1 teaspoon of motor oil into the opening and place a clean cloth over it. Now slowly pull the starter cable several times. This means the oil is evenly distributed throughout the engine and protects the cylinder from corrosion.

Replace the spark plug.


The device should be in a horizontal position in a location that is not accessible to everyone. stored in a cool and dry place. In addition, the device is protected from open

Protect against flames and other heat sources. Children and unauthorized persons should have access be refused.


Clean the generator and pay particular attention to the cooling fins and the Air filter eight.

Check all visible parts carefully for any damage, which is a safe could affect reuse.

7.2 Transport with telescopic handle



The fuel tank must be empty. Gasoline fumes or spilled fuel can ignite.



IF TRANSPORTED IN A VEHICLE: Before transport, the generator must be switched off and the engine must be completely cooled down.

Switch off the engine as soon as you remove the device from the work surface.

Always transport the device horizontally and never tilt it when the tank is full.

When transporting the machine, secure it upright and secure it against tipping over. It must be secured against slipping using tension straps on the transport vehicle.

Make sure that the machine does not hit any obstacles during transport or that they could fall onto the machine. Do not place any objects on the machine or lean anything on the machine.

You can cover smaller distances with the help of the telescopic handle and the wheels. To do this, press the locking button and pull the telescopic handle completely out. To retract it, please proceed in reverse order. Never use the telescopic handle to lift the generator! Never place the generator upside down or on its side.



Longer transport distances should be well packed in the original box.

8 Technical data

Gasoline engine displacement	224 cm³
Gasoline engine type	4-stroke, OHV, single cylinder, air cooled
Gasoline engine performance	6,12PS (4,5kW)
Max. power generation (maximum power)	4,000W
Continuous current generation (rated power)	3,500W (4.76HP) at 3,600rpm
Fuel	Super unleaded
Engine oil	SAE 10W-30
Fuel tank	12l
Oil tank	0.6 liters
Protection class	IP23M
Maximum installation height (TNN)	1000m
Weight	48kg
Dimensions	62x44x51cm
connections	2x 230V/50Hz/15,2A 1x12V/8A 1x USB-A 5V/3,0A 1xUSB-C 5V/3,0A Starter battery charging connection
Starter battery	12V, 6,5Ah
Running time with full fuel tank:	
- Without consumers	21 hours
- 50% occupancy	12 hours
- 100% utilization	6 hours
volume	
- Without consumers	58dB
- 50% occupancy	65dB
- 100% utilization	71.5dB



**9 Service****9.1 Errors and Troubleshooting**

Problem	Possible Cause	Solution
The engine is running, but no electricity is being generated	12V fuse is tripped (reset button). The malfunction indicator lamp lights up	Switch off and remove the consumer from the 12V connection, press the 12V fuse button back in and connect weaker consumers. Check whether the malfunction indicator lamp has gone out.
	The internal 230V fuse has tripped and the fault indicator lamp lights up	Switch off and remove consumers from the 230V connection. Switch the generator off and on again. Connect weaker consumers. Check whether the malfunction indicator lamp has gone out.
	The consumer's plug is not completely plugged into the generator	Check whether the pickup's power plug is fully plugged in
	Defective consumer power cord	Replace power cord
	Defective consumer	Connect any consumer that you know is working to check whether it is running on the generator
	Defective power generator	Contact our customer service
Engine will not start	No gas in the tank	Fill in petrol
	Starter battery switch is set to OFF	Set switch to ON
	Fuel flow is interrupted	Clean the fuel aisles
	Dirty air filter	Clean or replace air filter
	Oil warning indicator/low oil level prevents the Power generator starts	Check oil level and top up oil
	Spark plug connector is not correctly installed	Check the fit of the spark plug connector
	engine flooded; Spark plug is wet with gasoline	Wait 5 minutes. Switch Set starter battery to OFF. Pull the cable firmly several times. If the  If the generator still does not start, remove and dry the spark plug.

	Starter battery is empty	Charge the battery
	Choke is partially open or closed due to weak starter battery	Adjust the choke manually
	Spark plug is defective/not working properly	Check spark plug and replace if necessary
	Dirty or clogged spark arrester	Check and clean spark arrester
	Gasoline is too old	Drain and replace gasoline
The power generator suddenly switches off	No gas in the tank	Fill in petrol
	Oil warning indicator has automatically switched off the generator.	Check oil level and top up oil
	Gasoline is too old	Drain and replace gasoline
	Dirty air filter	Clean or replace air filter
The engine speed is not constant, but constantly changes	Dirty air filter	Clean or replace air filter
	Power generator overloaded	Switch off some consumers and uninstall them
	The connected consumers have fluctuating voltages	No action required

**9.2 Disposal**

At the end of its life, do not dispose of this product with normal household waste. Take the product to a recycling collection point for electrical and electronic equipment. The symbol on the product, the operating instructions or the packaging indicates this. Improper disposal will be punished in accordance with the guidelines applicable in your country. Gasoline and oil are hazardous waste. Please dispose of it in the prescribed manner.

### 9.3 Contact

If you have any questions about this item, please contact our customer service:

Bon Mercato GmbH BRAST  
Customer Service Schertlinstr.  
17 D-81379  
Munich

The quickest and easiest way to reach us is by email. These will be answered as quickly as possible on weekdays. Email: [service@brast24.de](mailto:service@brast24.de)

For further BRAST products, product and repair videos as well as spare parts, please visit our website:

[www.brast24.de](http://www.brast24.de)

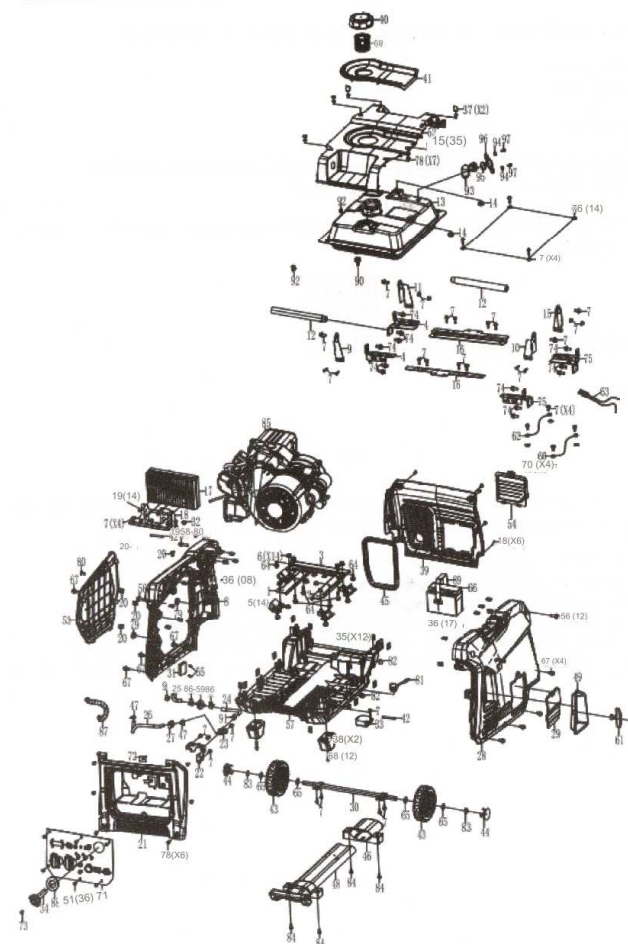


### 9.4 Spare parts

Visit our shop [www.brast24.de](http://www.brast24.de) to order spare parts. Here you can purchase the currently available spare parts.

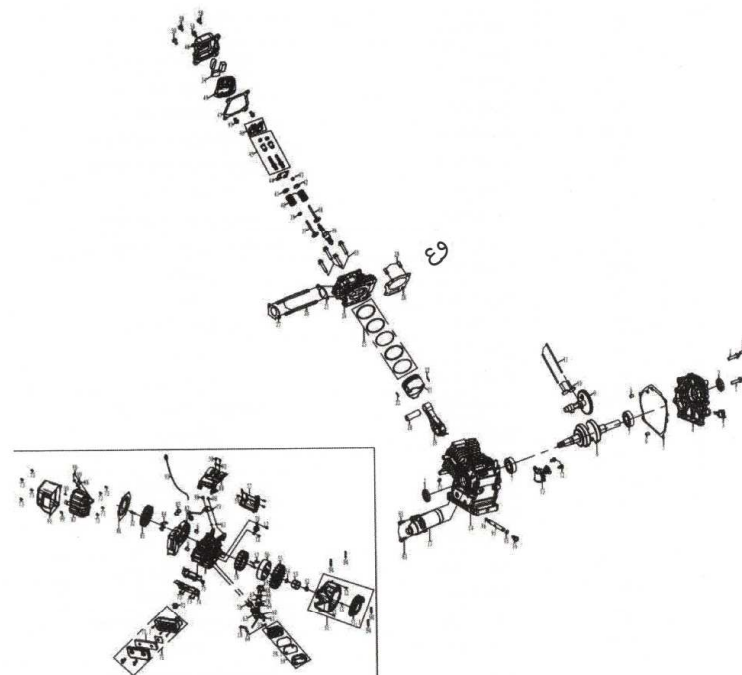
If you cannot find the spare part you need in our online shop, simply write us an email to [service@brast24.de](mailto:service@brast24.de). We will then be happy to create an order for you manually. Please provide us with the item number of the spare part listed below. You are also welcome to send us a photo of the spare part you need. We do not have numbers in stock that are not listed in the exploded drawing. These would first have to be ordered or removed from a device. This may lead to longer delivery times.

### 9.4.1 Machine spare parts



exploded view Number	item number	Item name
85	1004257414	Motor
28,29,49,56,67	1004257415	Right cover
53	1004257416	Engine cover
57	1004257417	base plate
39,54	1004257418	Silencer cover
54	1004257419	Starter battery cover
17	1004257420	Inverter module
33	1004257421	DC voltage regulator
29	1004257422	Oil filling cover
66,89	1004257423	battery pack
43	1004257424	Rad
44	1004257425	Radabdeckung
30	1004257426	axis
87	1004257427	Hose
46,48,84	1004257428	Telescopic transport handle
81	1004257429	Oil cap
38	1004257430	Stand
7	1004257431	Fuel control switch
34	1004257432	ground wire
	1004257433	remote control
52,41,78,35,37	1004257434	Top cover
71,73,34,88,51	1004257435	Control unit
69	1004257436	Wiring harness control unit
58,59	1004257437	Filter
	1004257438	Fuel drain plug
	1004257439	Oil fill funnel
	1004257440	230V power supply

## 9.4.2 Engine spare parts



Exploded view number	item number	Item name
36	1004257401	spark plug
79	1004257402	ignition coil
60-70,78,18,33	1004257403	Carburettor + gaskets
17	1004257404	Starter
	1004257405	Gasoline tank
71	1004257406	Air filter unit
59	1004257407	Cavity resonator unit
51	1004257408	Pull starter
93	1004257409	Temperature sensor
50,77	1004257410	Wind cover
50,92,80	1004257411	Obere Windabdeckung
13	1004257412	Oil sensor
3	1004257413	Oil dipstick

10 EC declaration of conformity

We hereby declare,

Bon Mercato GmbH, Schertlinstrasse 17, 81379 Munich, Germany,

that the device described below due to its design and construction as well as in  
the relevant, fundamental statements that we have placed on the market

Meet the safety and health requirements of the EC directives.

If the devices are changed without our consent, this declaration becomes invalid.

Machine name: BRAST petrol inverter power generator

Engine number: DH225  
Model Number: BRB-IS-4000  
Item number: 1004257001

Relevant EC directives:

2014/30/EU

2006/42/EC

2000/14/EC, extended by 2005/88/EC

Applied harmonized standards:

EN 55012:2007+A1

EN 61000-6-1:2007

EN ISO 8528-13:2016

EN ISO 3744:1995

Emissions no.:

e24\*2016/1628\*2016/1628SRA1/P\*0022\*00  
95 dB (A)

Guaranteed sound power level LwA:

Date/manufacturer signature: December 7th, 2022



Information about the signatory: Raoul Uwe Braun, Managing Director

Authorized representative for technical documentation:

Raoul Uwe Braun, Bon Mercato GmbH, Schertlinstr. 17, 81379 Munich