



OPERATING INSTRUCTIONS
PLASMA Cutting Device
BARRACUDA 45i/65i/105i/125i

REHM SCHWEISSTECHNIK



1 Safety	4
1.1 Safety instructions (warning notes)	4
1.3 Reasonably foreseeable misuse	6
1.4 Residual risks	7
1.5 Qualification of the staff	7
1.6 General safety instructions	8
1.7 EMC measure	10
1.8 Safety labels on the plasma cutter	11
1.9 Safety data sheets	12
2 Technical Data	13
2.1 Table	13
3 Transport, packaging, storage	15
3.1 Transport	15
3.2 Packaging	15
3.3 Storage	15
4 Installation and connection	16
4.1 Installation conditions	16
4.2 Connection diagram of plasma cutting system	16
4.3 Electrical connection	17
4.4 Compressed air connection	17
4.5 Connection of the plasma torch	17
4.6 Connection of the workpiece	18
5 Description	19
5.1 Operating and control elements	19
5.2 Scope of delivery	22
5.3 Accessories optional	22
6 Operation	23
6.1 Instructions for plasma cutting	23
6.2 Working with the plasma cutting device	24
6.3 Preparations for cutting	25
6.4 Cutting mode	25
7 Troubleshooting	26
7.1 Malfunction table	26
7.2 LED error display	27
8 Care and maintenance	28
8.1 Maintenance of the plasma torch	28
8.2 Maintenance of the plasma cutter	28
8.3 Cleaning the inside of the device	28
9 Spare parts	29
9.1 Ordering spare parts	29
10 Electrical circuit diagrams	30
11 EU Declaration of Conformity	32
12 Appendix	33
12.1 Copyright	33
12.2 Storage	33
12.3 Advice for disposal / Options of reuse	33
12.4 Disposal via municipal collection facilities	34
13 Product follow-up	35

Preface

Dear Customer,

many thanks for purchasing the **REHM**-Plasma cutter.

REHM-Plasma cutters offer the highest level of quality, technically optimal solutions and an excellent price-performance ratio. Continuous further developments and product innovations guarantee state-of-the-art technology and safety at all times.

Before commissioning, please read these operating instructions thoroughly and ensure that you are familiar with the welding device. Make sure that all persons operating the welding device have read and understood the operating instructions beforehand. Keep these operating instructions carefully in the area of the welding device.

Informations

The operating instructions include indications for safety-relevant and proper installation, operation and maintenance of the welding machine. The continuous observance of all notes included in this manual guarantee the safety of persons and of the welding machine.

The manual determines the intended use of the machine and includes all necessary information for its economic operation as well as its long service life.

In the paragraph „Maintenance“ all maintenance works and functional tests are described which the operator must perform in regular intervals.

The illustration and information included in the present manual can possibly deviate from the current state of construction of your welding machine. Being the manufacturer we are continuously seeking for improvements and renewal of the products. Therefore, changes might be performed without prior notice. The illustrations of the welding machine may be different from the illustrations in these instructions with regard to a few details. However, this does not have any influence on the operability of the welding machine.

Therefore, no claims may be derived from the indications and descriptions. Changes and errors are reserved!

Your suggestion with regard to these operating instructions are an important contribution to optimising our work which we offer to our customers. For any questions or suggestions for improvement, please do not hesitate to contact our service department.

If you have any questions after reading these operating instructions or if you cannot solve a problem with the help of these operating instructions, please contact your specialist dealer.

REHM GmbH u. Co. KG Schweißtechnik






BARRACUDA 45i

BARRACUDA 125i

1 Safety

Glossary of symbols

	provides further instructions
	calls on you to act
	listings

This part of the operating instructions

- explains the meaning and use of the warning notes included in these operating instructions,
- defines the intended use of the welding machine,
- points out the dangers that might arise for you or others if these instructions are not observed,
- informs you about how to avoid dangers.

In addition to these operation instructions, please observe




- the applicable laws and regulations,
- the statutory provisions for accident prevention,
- the prohibition, warning and mandatory signs as well as the warning notes on the welding machine.

Always keep this documentation close to the welding machine.

1.1 Safety instructions (warning notes)

Classification of hazards

We classify the safety warnings into different categories. The table below gives an overview of the classification of symbols (ideogram) and the warning signs for each specific danger and its (possible) consequences.

Symbol	Alarm expression	Definition / consequence
	DANGER!	Impending danger that will cause serious injury or death to people.
	WARNING!	A danger that can cause serious injury or death.
	CAUTION!	A danger or unsafe procedure that can cause personal injury or damage to property.
	ATTENTION!	Situation that could cause damage to the drilling machine and product, as well as other types of damage. No risk of injury to persons.
	Information	Practical tips and other important or useful information and notes. No dangerous or harmful consequences for people or objects.

Pictograms indicating concrete dangers



General warning sign



Warning of electrical voltage



Warning of hand injuries



Warning of hot surface



Warning of automatic start-up



Warning of danger on the ground!



Warning of danger of tipping!



Warning of suspended load!



Warning of flammable substances!

Pictograms indicating imperatives / prohibitions



No entry for persons with pacemakers or implanted defibrillators!



Use ear protection!



Follow the instructions!



Pull out the mains plug!



Use eye protection!



Use hand protection!



Use foot protection!



Use protective clothing!

1.2 Intended Use

The BARRACUDA 45i, 65i, 105i and 125i plasma cutters are suitable for arc cutting of steel, stainless steel, aluminium and other conductor materials, using compressed air.

The plasma cutters are designed for professional use and may therefore only be used by qualified personnel, in accordance with these operating instructions.

Part of the intended use is that you

- Observe the operating instructions,
- Comply with the inspection and maintenance instructions.

1.3 Reasonably foreseeable misuse

- Use in areas with hazardous substances, explosion risk or fire hazard.
- Use for heating objects or liquids.
- Use for machining non-metallic products.
- Use for igniting fuels.

WARNING!

This Class A welding equipment is not intended for use in residential establishments where power is supplied by a public low-voltage power supply system. It may be difficult to ensure electro- magnetic compatibility in these areas, due to both conducted and radiated disturbances.



If the plasma cutter is used in any way other than that described under "1.2 Intended use" or modified without the permission of REHM GmbH u. Co. KG Schweißtechnik, the plasma cutter is no longer being used for its intended purpose.

WARNING!

In case of improper use of the device

- **Danger arises for the personnel,**
- **The device and other material assets of the operator are endangered,**
- **The function of the device may be impaired.**



We accept no liability for damage due to improper use.

Any use beyond the intended use or any other use is considered misuse. To avoid misuse, the operating instructions must be read and understood before initial operation.

The operating personnel must be qualified.

Attention!

Modifications and changes to the welding device are prohibited! They endanger people and can lead to damage to the welding device.



The use of the welding device for purposes other than those for which it is intended and the failure to observe the safety regulations or the operating instructions exclude the manufacturer's liability for any resulting damage to persons or objects and invalidate the warranty!

Danger in case of misuse!

Misuse of the welding machine can lead to dangerous situations.

- ➔ Only operate the welding machine in the power range listed in the technical data.
- ➔ Never bypass or override the safety devices.
- ➔ Operate the welding machine only in technically perfect condition.
- ➔ Use only original spare parts.

1.4 Residual risks

Even if all safety instructions are followed and the welder is used according to the instructions, there are still residual risks, which are listed below.

- Eye damage by using defective or unsuitable eye protection.
- Damage to the respiratory tract when inhaling vapours.
- Electric shock if electrical insulation is defective or due to moisture.
- Burns to the upper limbs in the case of use of unsuitable gloves
- Damage to the workpiece if the user is not sufficiently qualified or experienced.

If the welding device is operated and maintained by insufficiently qualified personnel, hazards may arise from the welding device due to incorrect operation or improper maintenance.

INFORMATION!

All persons who have to do with the welding machine must

- have the necessary qualifications,
- follow carefully these operating instructions.



1.5 Qualification of the staff

Target group

These instructions are intended for

- the owners,
- the operators,
- the personnel for maintenance work.

Therefore, the warnings refer to both the operation and the maintenance of the welding machine.

Specify clearly and unequivocally who is responsible for the various activities on the welding machine (operation, maintenance and repair).

Unclear competencies are a security risk!

In these instructions, the following qualifications of the people for the various tasks are named:

Operator

The operator has been instructed by the operator about the tasks assigned to him and possible dangers in case of improper behaviour. The operator may only perform tasks that go beyond operation during normal operation if this is specified in these instructions and the operator has expressly entrusted him with them.

Electrically qualified person

Due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, the electrician is able to carry out work on electrical installations and to independently recognise and avoid possible hazards.

The electrician is specially trained for the working environment in which he works and knows the relevant standards and regulations.

Qualified personnel

Due to their professional training, knowledge and experience as well as knowledge of the relevant regulations, skilled personnel are able to carry out the work assigned to them and to independently recognise and avoid possible dangers.

Trained person

The trained person was instructed by the operator about the tasks assigned to him and possible dangers in case of improper handling.

Authorised persons**WARNING!**

In case of improper operation and maintenance of the welding machine, dangers arise for people, objects and the environment.

**Only authorised persons may work with the welding machine!**

Authorised persons for operation and maintenance are the instructed and trained specialists of the operator and the manufacturer.

The owner must

- train the staff,
- instruct the personnel at regular intervals (at least once a year) on
 - all safety regulations concerning the welding equipment,
 - operation,
 - the recognised rules of technology,
- check the level of knowledge of the personnel,
- document the training/instructions,
- the participation in the trainings/instructions,
- check that the personnel work in a safety-conscious manner and observe the operating instructions.

The operator must

- have completed training on the use of the welding equipment,
- know the function and mode of operation,
- before putting the device into operation
 - have read and understood the operating instructions,
 - be familiar with all safety devices and regulations.

1.6 General safety instructions

Only put the device into operation under the following conditions:

- The technical condition of the device is flawless.
- The device is used for its intended purpose.
- The operating instructions are observed.
- All safety devices are present and active.

Eliminate malfunctions or let them be eliminated immediately. In case of malfunctions, stop the unit immediately and secure it against unintentional or unauthorised switching on.

PLEASE OBSERVE THE FOLLOWING:

- Observe the accident prevention regulations of the trade association responsible for your company or other supervisory authorities!
- Check the cutting device for externally visible damage and defects before putting it into operation. Defects and damage must be repaired immediately.
- Protect the plasma cutter from moisture.
- Never use the plasma cutter in environment
 - containing unknown substances.
 - with a risk of explosion or fire.
 - with poor ventilation.
 - which are wet or damp.
- Never work under the influence of diseases that impair concentration, overtiredness, drugs, alcohol or medication.
- Keep the air inlet and outlet openings clear.
- Do not use aggressive cleaning agents to clean the unit.
- Repairs may only be carried out by qualified persons.
- Only use original spare parts and accessories.



Electrical voltage

- Do not touch any parts that are under voltage.
- Isolate yourself from the workpiece to be cut and from the ground; wear insulating gloves and clothing.
- Wear insulating gloves and clothing.
- Do not work with damaged or badly connected cables or with loose pliers cables.
- Keep work clothes and body dry.
- Do not lean the body against the workpiece to be cut.
- Protect the supply system with a thermo-magnetic switch of suitable rating, if possible near the generator.
- Do not use the machine if any of its components or guards have been removed.
- Make sure that the supply system is properly earthed.
- Make sure that the plasma cutter is always securely positioned so that it cannot fall down. Use a drop safety device when working at high altitudes.
- Always switch on the plasma cutter only when all cables are correctly connected.
- Make sure that all accessories are correctly connected and always ensure that the ground connection is correct.

Risk of explosion

- Make sure that there are no ignitable materials near the work area.
- Pay attention to flammable gas mixtures in the work area (ventilation and exhaust).
- Never cut tanks containing flammable or ignitable materials.
- When cutting aluminium, be aware that hydrogen atoms are stored in the aluminium when using water cutting tables and underwater plasma cutting. Trapped hydrogen can cause explosions.
- Replace compressed air lines that are damaged or show signs of damage.
- Keep pressure reducers in good working order.
- Do not cut in environments with dust, gas or explosive fumes.



Risk of fire

- Make sure that there are no flammable, ignitable materials near the working area.
- Have suitable extinguishing agents ready.
- Avoid the spread of open fire due to sparks, slag and glowing material.
- Make sure that fire protection devices are located near the work area.



Burns

- Protect their bodies against burns and ultraviolet radiation by wearing fireproof protective clothing (gloves, headgear, shoes and masks, etc.).
- Moving parts or thermal parts can damage their bodies or cause harm to other people.
- Keep the plasma torch away from your own body and that of other people.
- Make sure there are first aid materials near the work area.
- Replace the viewing window of the mask if it is damaged or unsuitable for the welding work to be carried out.
- Wait until the machined parts have cooled down before handling them.
- The arc throws spatter and sparks. Always wear oil-free protective clothing, such as leather gloves, non-impact trousers and high heels. Cover hair with a cap.



Wearers of pacemakers

- Magnetic fields from high voltage circuits can affect the function of pacemakers.
- Persons wearing vital electronic devices of this type must consult the doctor before being in areas where such plasma cutting devices are present.

**Radiation**

- Plasma radiation can damage the eyesight and cause burns. Plasma radiation produces strong ultraviolet and infrared light.
- The cutting arc generates radiation that can injure the eyes and cause skin burns; use appropriate protective devices.

**Danger from vapours and gases!**

- Plasma cutting produces gases that are hazardous to health:
Avoid inhaling harmful substances.
- Provide sufficient ventilation, extraction or, if necessary, breathing air supply.
- The type of fumes and gases produced is determined by the base material, coating, etc.
- Ideally, use cutting tables with extraction.
- Cleaning agents containing chloride can form phosgene gases (poison gas) during plasma cutting. Before cutting, make sure that there is no residue on the workpiece surface.
- Read and understand the operating instructions of the filler material manufacturers and carefully read the safety data sheets.

**Electromagnetic interference**

- The plasma generator complies with the standards for electromagnetic interference emission and is suitable for use in industrial environments.
- It must be taken into account, that the following disturbances may occur and in these cases appropriate measures must be taken.
 - Data transmission systems
 - Communications
 - Control
 - Safety devices
 - Calibration and measuring equipment

**1.7 EMC measure**

- In the special situation, the specified area may be affected, the standard of radiation limit value has been complied with (eg: the device, which is easy effected by electromagnetism, is used at the installation location, or there is radio or TV near the installation location). In this condition, the operator should adopt some appropriate measures to remove interference.
- According to the domestic and international standards, the ambient devices' electromagnetism situation and anti-interference ability must be checked:
 - Safety device
 - Power line, Signal transmission line and Data transmission line
 - Data processing equipment and telecommunication equipment
 - Inspection and calibration device



The effective measures avoid the problem of EMC::

- Power source:
 - Even though the power source connection meet rules, we still need to take additional measure to remove the electromagnetic interference (eg: Use the right power filter).
- Length of welding cable:
 - Keep the cable length as short as possible.
 - Lay out the unit cables next to each other and place them with sufficient distance to other cables.
- Ground connection of work-piece.
- Shielding, when necessary:
 - Shield the ambient equipment
 - Shield the entire welding device

1.8 Safety labels on the plasma cutter

NOTE:

Damaged or missing safety symbols on the plasma cutter can lead to incorrect operation resulting in personal injury and damage to property. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.



Observe the following:

- The instructions on the safety label on the unit must be followed under all circumstances. If the safety labels fade or become damaged during the life of the appliance, new labels must be attached immediately.
- From the time when the signs are not immediately recognisable and comprehensible at first sight, the unit must be taken out of operation until the new signs are attached.



Fig.1-1: Safety labels on the plasma cutting machine

Symbol 1: Electric shock

An electric shock can be fatal. Touching live parts can cause serious shocks or burns. Ensure that all parts are connected correctly and that the earth connection is correct. Ensure that there is always insulation between your body and the workpiece and avoid any contact of live parts with bare hands. Wear dry, insulating protective clothing during welding and never operate the machine with the housing open.

**Symbol 2: Welding spatter**

Welding spatter can cause fire and explosions. Do not weld near flammable materials or on containers containing flammable material.

**Symbol 3: Arc of light**

Arcs pose a particular danger to the eyes and skin. Always wear a welding helmet with a suitable welding filter and appropriate protective clothing such as welding gloves during welding.

**Symbol 4: Fumes and gases**

Welding produces fumes and gases that are hazardous to health. Try to keep your head as far away from the fumes as possible during welding. Provide adequate ventilation, exhaust or a breathing air supply to keep them out of the air you breathe.

**1.9 Safety data sheets**

Safety data sheets on hazardous goods can be obtained from your specialist dealer or by calling +49 (0)951/96555-0.

Specialist dealers can find safety data sheets in the download area of the partner portal.

2 Technical Data

2.1 Table

Parameter	BARRACUDA 45i	BARRACUDA 65i	BARRACUDA 105i	BARRACUDA 125i
Length x Width x Height	490x150x290 mm	740x260x484 mm	740x260x484 mm	740x260x484 mm
Weight (with torch)	8,1 kg	26,5 kg	32,1 kg	32,4 kg
Supply voltage	110/230V	400V	400V	400V
Phase(s) / Current type/ Mains frequency	1 / AC / 50/60 Hz	3 / AC / 50/60 Hz	3 / AC / 50/60 Hz	3 / AC / 50/60 Hz
Input current	31,8 A (110V) / 20 A (230V)	16,7 A	27,3 A	34,1 A
Required generator output	>4,8 kVA	>12,5 kVA	>18,9 kVA	>25 kVA
Mains plug	16 A	16 A	32 A	32 A
Connection cable length	4 m	4 m	4 m	4 m
Degree of protection	IP21S	IP21S	IP21S	IP21S
Insulation class	H	H	H	H
Standard	EN 60974-1:2012, EN 60974-10:2014 / CE			
EMC class	A	A	A	A
Open circuit voltage	328 V (110V) / 327 V (230V)	297 V	387 V	387 V
Working temperature	-10~40 °C	-10~40 °C	-10~40 °C	-10~40 °C
Adjusting range plasma	20-30 A (110V) / 20-40 A (230V)	20-65 A	20-100 A	20-120 A
Duty cycle plasma	35% (110V) / 50% (230V)	90%	60%	60%
Voltage at 100% duty cycle 40°C Plasma	88 V (110V) / 92 V (230V)	104 V	106 V	118 V
Current at 100% DC 40°C Plasma	20 A (110V) / 30 A (230V)	61 A	65 A	95 A
Power consumption plasma	4,8 kVA	7,8 kVA	11 kVA	17,5 kVA
Torch type (connection)	ErgoCut S65 (Euro central- connection)	PlusCut 85 (Trafimector)	PlusCut 105 (Trafimector)	PlusCut 105 (Trafimector)
Air consumption	100 l/min	250 l/min	250 l/min	250 l/min
Working pressure	4,0 bar	5,0 bar	5,0 bar	5,0 bar
Power factor	0,99 cos phi	0,65 cos phi	0,78 cos phi	0,7 cos phi

Cutting capacities plasma cutting BARRACUDA

Machine/ Torch	Unalloyed Steel (Fe)		Aluminium (Al)		Stainless steel (CrNi)	
	parting cut	quality cut	parting cut	quality cut	parting cut	quality cut
BARRACUDA® 45i ErgoCut S65	20 mm	15 mm	18 mm	16 mm	20 mm	15 mm
BARRACUDA® 65i PlusCut 85	30 mm	25 mm	22 mm	20 mm	30 mm	25 mm
BARRACUDA® 105i PlusCut 105	45 mm	35 mm	36 mm	30 mm	45 mm	35 mm
BARRACUDA® 125i PlusCut 105	50 mm	40 mm	40 mm	35 mm	50 mm	40 mm

3 Transport, packaging, storage

3.1 Transport

After delivery, check the plasma cutting device for visible transport damage. If you discover any damage to the plasma cutting device, report it immediately to the transport company or dealer.

3.1.1 Transport instructions

Improper transport, installation and commissioning may cause accidents and may result in damage or malfunctions of the Plasma cutter for which we do not grant any liability or warranty.

Transport the scope of delivery to the installation site secured against shifting or tipping with a sufficiently dimensioned industrial truck or a crane.

WARNING!

Serious to fatal injuries due to machine parts falling over and off the forklift truck or the transport vehicle. Observe the instructions and information on the transport box.



Observe the total weight of the plasma cutter. The weight of the machine is specified in the "Technical data". When the plasma cutter is unpacked, the weight of the device can also be read on the type plate.

Only use means of transport and load lifting equipment that can take the total weight of the plasma cutter.

WARNING!

Serious to fatal injuries due to damaged or insufficiently load-bearing hoists and load slings that tear under load.



Check the lifting gear and load slings for sufficient load-bearing capacity and perfect condition.

Attach the loads carefully. Never step under suspended loads!

3.1.2 General risks during internal transport

WARNING!

Secure the plasma cutter against tipping over, rolling away and falling down. Employees must be outside the danger zone, the reach of the load.



Warn employees and point out the hazard to employees.

Plasma cutters may only be transported by authorised and qualified persons. Dangerous spots, unevenness and faults must be inspected before transport. The removal of hazardous points, imperfections and unevenness at the time of transport by other employees leads to considerable hazards.

During transport, act responsibly and always consider the consequences. Refrain from daring and risky actions.

3.2 Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). Deliver these substances to a collection point for recyclable materials or to the waste disposal company which looks after your region.

3.3 Storage

The plasma cutter must be stored in a closed, dry and well ventilated area. It must not be exposed to moisture or intense sunlight.

4 Installation and connection

4.1 Installation conditions

- Height above sea level: ≤ 1000 m
- Operating temperature range: $-10 \sim +40$ °C
- Relative humidity under r 90%

The device was designed for use in roofed rooms and must be installed in a dry environment. The ambient air in which the plasma cutter is used should have a temperature below $+40^{\circ}\text{C}$ and low humidity. The ambient air must be free of dust, acids, salts or concentrations of iron or metal powders.

Make sure there is enough free space in front of the unit so that the controls can be easily reached and seen. Position the unit so that the air inlet and outlet are not obstructed (minimum distance to the wall 40 cm). Do not cover the unit. Make sure that no metal parts, dust or other foreign bodies can enter the unit.

The housing ensures the protection of the electrical components against external influences as well as against direct contacts. It has different degrees of protection against the ingress of solid bodies and water depending on the situations in which they may be used. The degree of protection is indicated by the letters IP followed by two digits: The first digit indicates the degree of protection against solid bodies and the second the degree of protection against water.

The environmental conditions must be appropriate for protection class IP21!

1. Digit	Description	2. Digit	Description	Additional field	Description
2	Protect against solid objects over 12 mm e.g. hands, large tools	1	Protected against vertically falling dripping water	S	when moving parts are at a standstill

NOTE:

Position the welding device so that the air inlet and outlet are not obstructed. The specified duty cycle of the power units can only be achieved with sufficient ventilation (see "Technical data"). Make sure that no grinding chips, dust or other metal parts can enter the unit.



4.2 Connection diagram of plasma cutting system

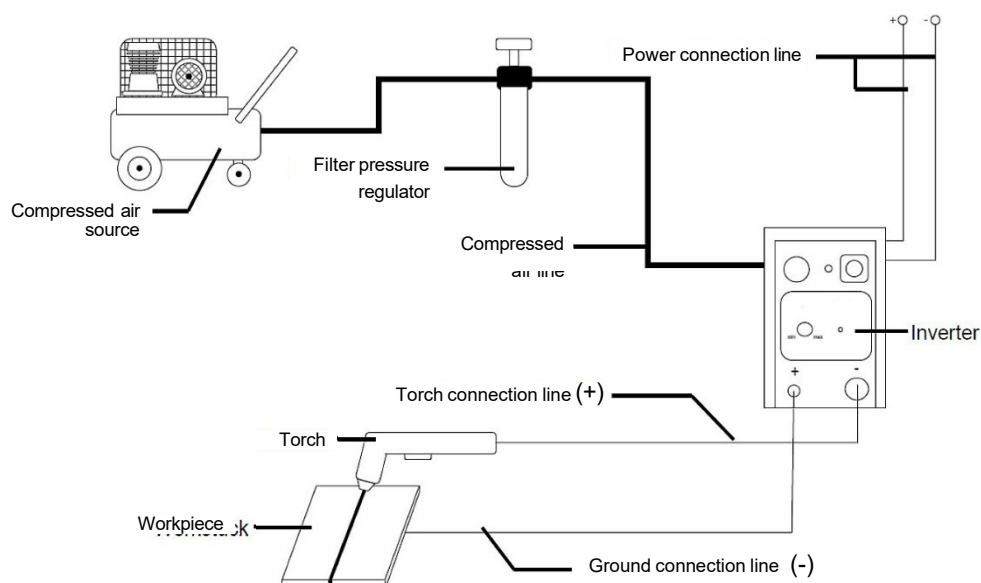


Fig.4-1: Connection diagram

4.3 Electrical connection

DANGER! Electrical voltage!

Connection to the mains and maintenance must be carried out in accordance with VDE regulations! Defective or damaged parts on the torch or hose assembly must be replaced immediately!



Check that the voltage indicated on the type plate corresponds to the nominal voltage of your voltage network.

- The device may only be used with sockets and extension cords with earthing contact plugs that have been installed by an authorised specialist.
- The fuse protection of the supply lines to the mains sockets must comply with the regulations. According to these regulations, only fuses or circuit breakers corresponding to the cable cross-section may be used.
- Overprotection may result in a line fire or damage to the building.
- Before plugging in the mains plug, the mains voltage selector switch must be set to zero.

Use of extension cables

If possible, avoid use of extensions! For some applications, extension cable must be used to reach the workplace. To ensure full performance, the following table must be observed, in which the cross-sections of the conductors are given as a function of length.

Length of extension cable	Minimum cross section of the cable
10 Meter	2,5 mm ²
20 Meter	4,0 mm ²
30 Meter	6,0 mm ²

NOTE:

If the length deviates from this, the cross-section must be adjusted proportionally.



4.4 Compressed air connection

Connect the compressed air source to the filter pressure regulator located at the rear of the unit. Make sure that there is no water, condensation or oil in the compressed air. If this is the case, additional filtration, such as a dehumidification filter, is necessary. The recommended operating pressure is 5.0 bar with an air requirement of 250 l/min. For the plasma cutter BARRACUDA 45i, 4.0 bar with an air requirement of 100 l/min and for the plasma cutter BARRACUDA 65i, 105i and 125i 5.0 bar with an air requirement of 250 l/min.

To flush the system, please press the compressed air test button (Fig. 5-3).

4.5 Connection of the plasma torch

BARRACUDA 45i

Insert the plug of the torch into the corresponding plug-in coupling. Make sure that the spring of the plug matches the groove of the plug-in coupling. Use the mandrel provided to press the safety catch (arrow, Fig. 4-2) on the right-hand side of the coupling. Now turn the union nut of the plug clockwise until it is tightened.

To release the torch, press the safety catch on the right-hand side of the coupling with the mandrel provided and turn the union nut of the plug counterclockwise until the plug can be pulled out.

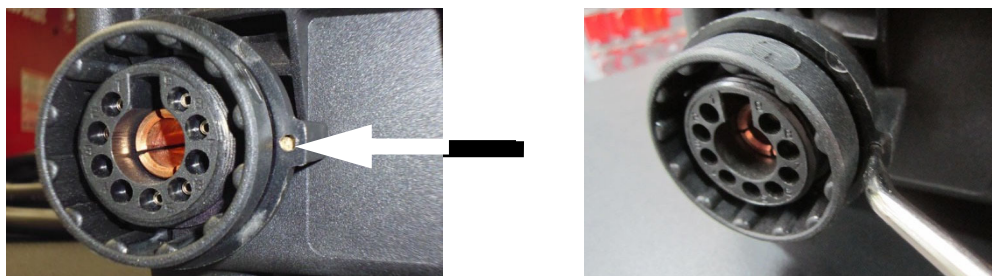


Fig.4-2: Connection of the torch

BARRACUDA 65i, BARRACUDA 105i, BARRACUDA 125i,

The plasma cutting unit is equipped with a "Trafimector" (Fig. 4-2) for connecting the plasma torch. To connect a suitable plasma torch, insert the plug of the torch into the corresponding plug-in coupling. Make sure that the arrow of the plug is aligned with the groove of the plug coupling. Turn the plug half a turn to the right to secure it.

To release the torch, pull the safety catch at the beginning of the plug backwards and turn the torch half a turn to the left.



Fig.4-3: Disconnect the torch connection

4.6 Connection of the workpiece

ATTENTION:

Do not connect the earth clamp to the part of the material to be removed!!



In welding, the plasma cutting device must be connected to the workpiece via an earth clamp in order to obtain the closed circuit required for welding. The workpiece clamp of the earth connection cable should be connected in the immediate vicinity of the cutting point in order to achieve the highest possible degree of efficiency. Make sure that the transition at the contact point is bare metal.

DANGER! Electrical voltage

Please make sure that the current cannot flow through chains of hoists, crane ropes or other electrically conductive parts. Ensure that the earth cable is connected to the workpiece as close as possible to the welding location. Ground connections made at remote points reduce efficiency and increase the risk of electric shock and „stray“ currents..



5 Description

5.1 Operating and control elements.

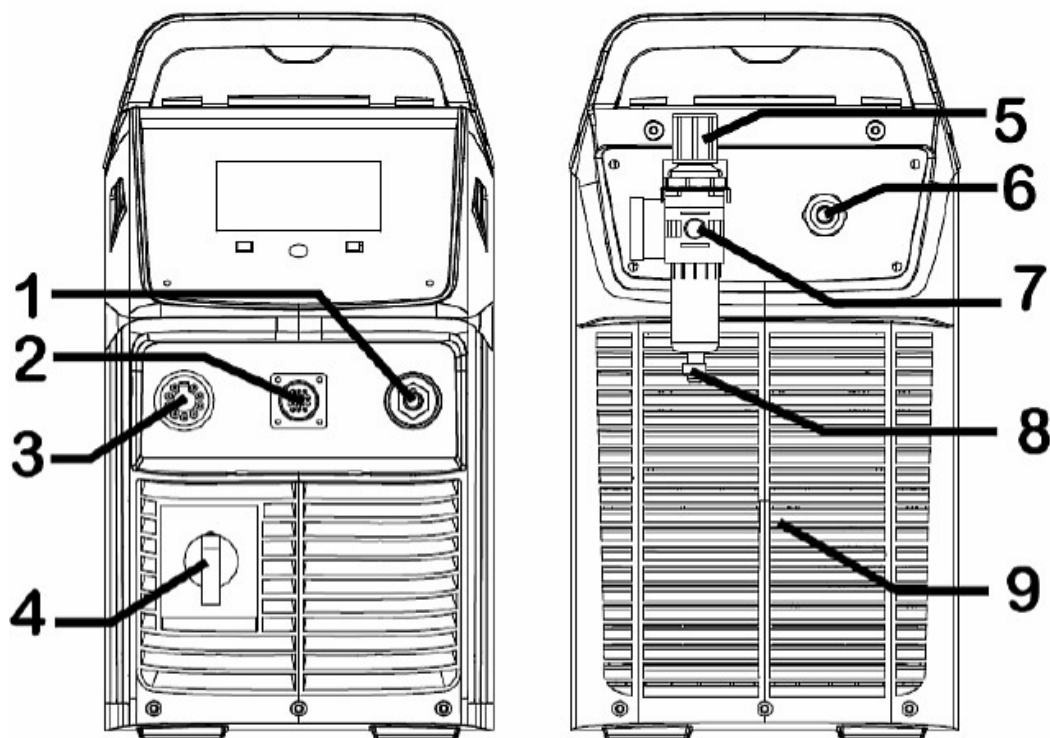


Fig.5-1: Description of device BARRACUDA 125i

	Designation		Designation
1	„-“ - Cable connection for connection to the workpiece	2	Voltage divider connection 14 pins (123 CNC only)
3	Cutting torch connection	4	ON/OFF switch
5	Compressed air regulator	6	Mains cable connection
7	Compressed air connection	8	Filter drain valve
9	Ventilation		

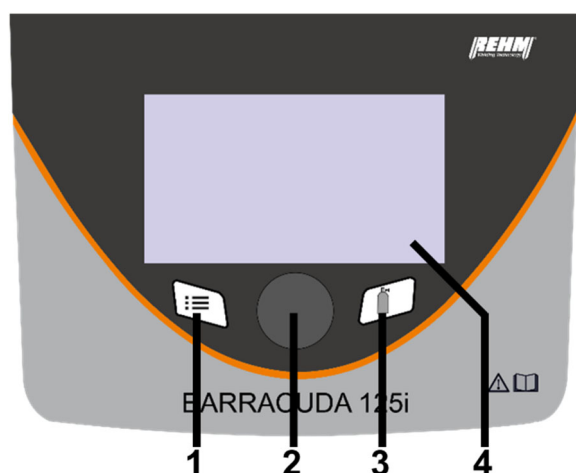


Fig.5-2: Control panel BARRACUDA 65i, 105i, 125i

	Designation
1	Cutting mode button MODE
2	Cutting current regulator
3	Compressed air test button
4	On-screen display for cutting current, cutting mode and error codes

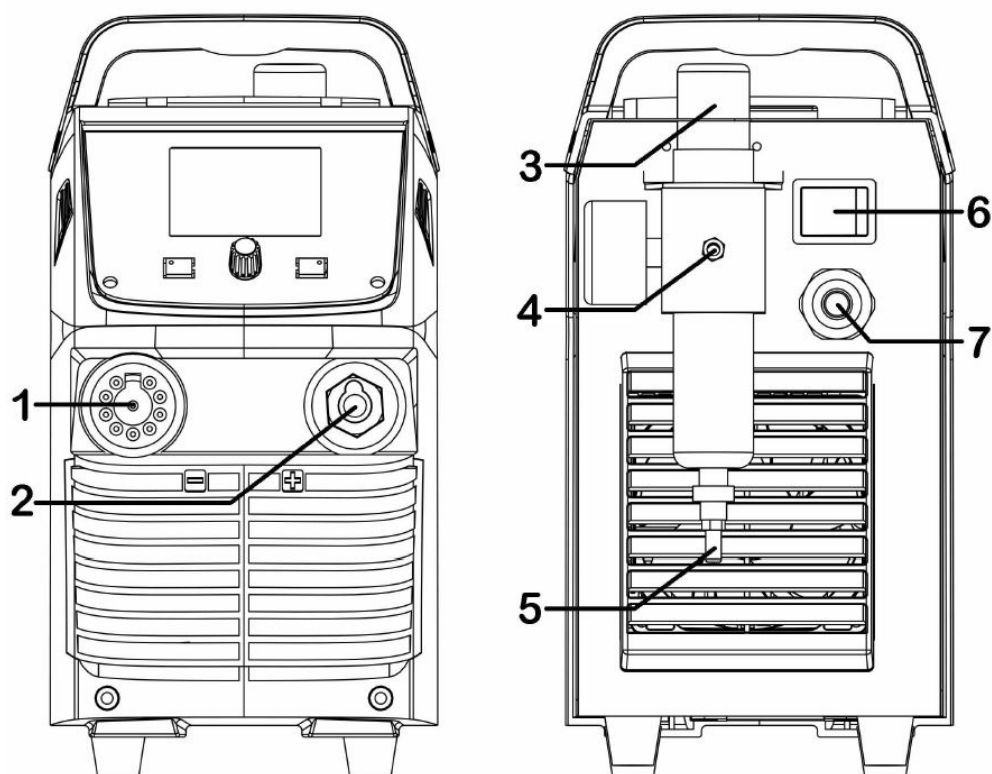


Fig.5-3: Description of device BARRACUDA 45i

	Designation		Designation
1	Cutting torch connection	2	„-“ - Cable connection for connection to the workpiece
3	Compressed air regulator	4	Compressed air connection
5	Filter drain valve	6	ON/OFF switch
7	Mains cable connection		

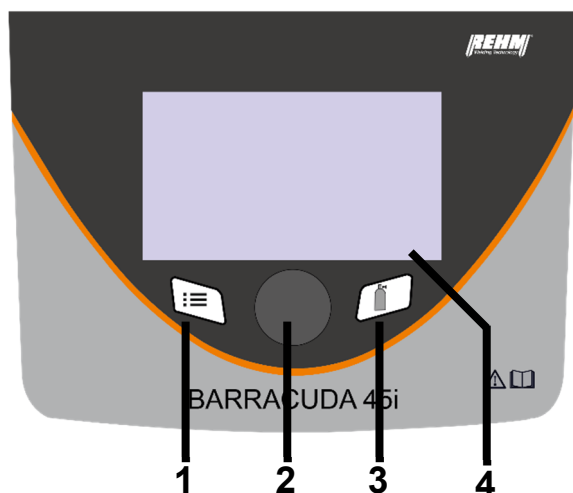


Fig.5-4: Control panel BARRACUDA 45i

	Designation
1	Cutting mode button MODE
2	Cutting current regulator
3	Compressed air test button
4	On-screen display for cutting current, cutting mode and error codes

Cut mode button

→ Press the cutting mode button MODE to select the cutting mode.

2T operating mode:



In this operating mode, the torch button is pressed down to start the cutting operation and held until the end of cutting.. Releasing the torch button ends the cutting process as well as the breaking of the arc.

This operating mode is recommended for short, alternating cutting operations.

4T operating mode:



The torch button can be released after igniting the cutting arc, the cutting arc remains. Pressing and releasing the torch button again ends the cutting process as well as the breaking of the arc.

In this operating mode, fatigue-free operation of the torch is possible over a longer period of time.

Grid Cutting:



Interrupted cuts, such as cutting perforated sheets, gratings, etc., can only be carried out in the operating mode. The function sequence corresponds to the sequence of operating mode 2 T up to the start of the hole.

Reaching the beginning of the perforation:

- Interruption of the cutting current
- The pilot arc stays

Reaching the end of the perforation:

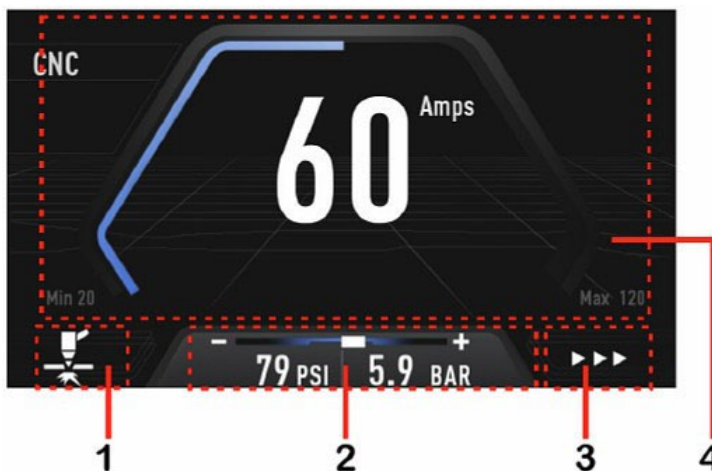
- The cutting arc is ignited when the material comes into contact again

Gouging (only BARRACUDA 105i and 125i):



Depending on the desired penetration depth, hold the torch at an appropriate angle and move it forward, in the direction of the molten material. Through the plasma pressure, the liquid metal is blown out of the joint..

Description of screen display



	Designation
1	Cutting mode display
2	Air pressure display during operation
3	Work status display. Colour change of the icon.
4	Display for current cutting current and max. cutting current

Fig.5-5: Screen display

Error code display on the display



In case of malfunctions, error codes are displayed on the screen. For example, if there is insufficient ventilation of the plasma cutter or insufficient compressed air flow, an alarm symbol "E12 Low pressure! Please check the air pressure and push the air test button" appears on the screen.

5.2 Scope of delivery

BARRACUDA® 45i	BARRACUDA® 65i	BARRACUDA® 105i	BARRACUDA® 125i
1x Earth cable 4 m	1x Earth cable 4 m	1x Earth cable 4 m	1x Earth cable 4 m
1x Plasma torch ErgoCut S65, 6 m, with Euro central connection	1x Plasma torch PlusCut 85, 6 m incl. Trafimector connection	1x Plasma torch PlusCut 105, 6 m incl. Trafimector connection	1x Plasma torch PlusCut 105, 6 m incl. Trafimector connection

5.3 Accessories optional

Artikel-Nr.	BARRACUDA®	45i	65i	105i	125i
7766790	Plasma circle cutting kit ErgoCut S65	X			
7766780	Plasma circle cutting kit PlusCut 85-105			X	
7660860	Torch plasma ErgoCut S65, 6 m	X			
7660870	Torch plasma PlusCut 85, 6 m		X		
7660871	Torch plasma PlusCut 85, 12 m		X		
7660880	Torch plasma PlusCut 105, 6 m			X	
7660881	Torch plasma PlusCut 105, 12 m			X	
7766787	Wear part kit plasma ErgoCut S65	X			
7766754	Wear part kit plasma PlusCut 85		X		
7766755	Wear part kit plasma PlusCut 105			X	

6 Operation

- Check the correct input voltage. Power connection 400 V AC 3-phase or 230 V 1-phase.
- Ensure a stable mains supply
- Insert a mains stabilisation module (if necessary).

ATTENTION:

Continuously falling below the required input voltage can damage the device.



- Connect the plasma cutter to the power supply.
- Connect the compressed air line to the filter pressure regulator at the back of the plasma cutter and connect the earth cable to the workpiece.
- Switch on the plasma cutter with the ON/OFF switch on the front of the unit.
- Press the compressed air test button and regulate the air pressure with the compressed air regulator to 3.5 to approx. 6 bar.
- Adjust the cutting current with the cutting current regulator. The plasma cutter is now ready for operation.

6.1 Instructions for plasma cutting

- If the alarm display appears during the cutting process, the torch button must be released immediately until the alarm has ended. After the cause of the alarm has been eliminated, work can be continued.
- During the compressed air test function, the torch button is deactivated.
- The torch connections must not be removed during the cutting process.
- After prolonged use of the electrode and nozzle, the surfaces oxidise and the electrode and nozzle must be replaced. The alarm light indicates wear of the electrode and nozzle.
- In the compressed air post-flow phase, it is possible to press the torch button for a long time to maintain the arc. As soon as the torch button is pressed and released quickly, the compressed air supply stops. Afterwards, it is possible to press the button for a long time to restart the unit.

6.2 Working with the plasma cutting device

ATTENTION:

Always wear protective clothing when working and make sure that other persons in the area are not put at risk by the UV radiation of the arc.



Never touch the front part of the torch (nozzle, electrode, outer guard).

- The cut is made by positioning the nozzle to within 2 mm - 3 mm of the workpiece to be cut. Keep the torch tilted so that the molten metal cannot get onto the nozzle when the cutting arc is ignited. When the button is pressed, the ignition arc jumps onto the workpiece. Slowly aim the torch until the workpiece is perforated and then make the cut.
- To start the cut for material thicknesses greater than 2 mm or 3 mm, perforate the material with another tool, e.g. by drilling or by starting at the edge of the workpiece. For smaller material thicknesses, it is possible to start in full material using the inclined torch technique.
- Maintain a medium, steady speed during the cut. Use a leading angle of 5° - 15° in the cutting direction. Figure 6-4 point 3 gives the results of an incorrect cutting speed.

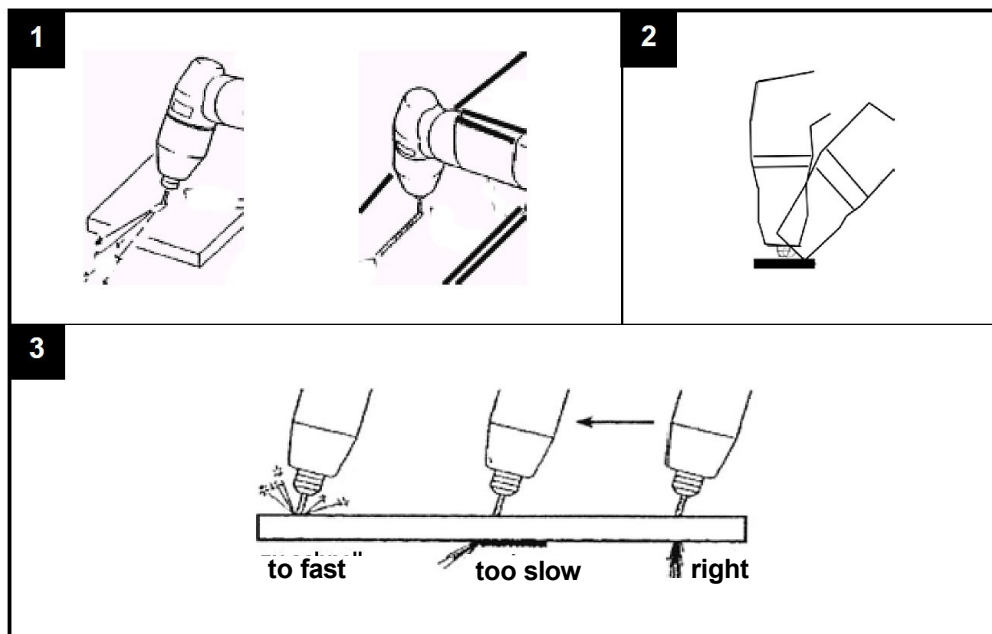


Fig.6-1: Working with the plasma cutting device

6.3 Preparations for cutting

Switch on

The plasma cutter is equipped with a Euro CEE mains plug for 3x400 V three-phase current.

- Insert the plug into a socket
- Press the main switch to start up the plasma cutter.
The green POWER ON indicator light shows that the appliance is ready for operation.

Adjusting compressed air - gas test

The pressure or flow rates for cooling and cutting air must be adjusted to suit the torch being used. Incorrectly adjusted gas pressure leads to a reduction in the cutting quality, higher wear and, under extreme conditions, can lead to the destruction of the torch. The required air pressure must be set using the adjustment knob provided on the control panel.

To do this, turn the function selector switch to the "GASTEST" position and pull the blue adjustment knob upwards. Turn in this position until the pressure indicated on the pressure gauge corresponds exactly to the required air pressure. Then push the knob down again to lock it. This secures the setting against unintentional adjustment. Then switch the function selector switch back to the 2- or 4-stroke function to change to cutting mode.

Select the cutting current

The required current depends mainly on the type of material to be cut and the material thickness. The stepless cutting current adjustment of the plasma cutter enables optimal adaptation to the respective cutting tasks.

ATTENTION!

If the current is set too high, the nozzle and torch electrode will wear more. If the current is set too low, there is either no material penetration or it is too slow.



Nozzle selection

The appropriate plasma nozzle must be selected according to the set cutting current. A nozzle that is too large reduces the cutting performance, a nozzle that is too small leads to increased wear due to thermal overload.

For correct nozzle selection, the application ranges of the different nozzle diameters are shown on the cutting current setting scale.

6.4 Cutting mode

In order to achieve optimum cutting quality, the required cutting current, the appropriate nozzle and the corresponding cutting speed must be selected according to the type of material to be processed and the workpiece thickness.

When cutting **thin sheet metal**, you get better cutting quality with the torch set close to the workpiece.

The cutting of **thick sheet metal** requires a higher cutting power. Therefore, cutting must be done with torch distance. You will find the corresponding spacers in the accessories programme.

In manual cutting mode, the quality of the cut and the wear of the torch components depend, in addition to the factors already mentioned, on the user's ability to handle the plasma torch.

Press the torch trigger and guide the torch with the pilot arc to the starting point of the cut.

After ignition of the cutting arc, pull the torch over the workpiece at a constant speed. The optimum cutting speed is achieved when the cutting jet exits the kerf at an angle of approx. 100° to the cutting direction.

The pilot arc should not be ignited unnecessarily as this leads to higher wear of the torch components.

For straight cuts, it is recommended to use a stop rail for lateral guidance. For the most even and jerk-free torch guidance possible, the use of a guide carriage is recommended.

7 Troubleshooting

ATTENTION:

Only qualified personnel authorized by us may maintain and repair the plasma cutting device!
Always turn off the device when troubleshooting.



7.1 Malfunction table

Malfunction	Possible cause	Solution
Plasma torch does not start	<ol style="list-style-type: none"> 1. No power supply 2. Air supply does not have sufficient volume or too little pressure 3. Clamp not attached to the workpiece. 4. No gas flow but lamp is on. 	<ol style="list-style-type: none"> 1. Connect the power supply and switch it on 2. Check air supply 3. Connect the clamp to the workpiece or welding table 4. Connect gas / increase pressure
LED control lam (torch and pressure) flashes	<ol style="list-style-type: none"> 1. Protective cap is not installed 2. Electrode is not mounted correctly 	<ol style="list-style-type: none"> 1. Install protective cap 2. Set the electrode correctly
Temperature display lights up after a few minutes	<ol style="list-style-type: none"> 1. Air flow is blocked 2. Fan is blocked 3. Device is overheated 4. Input voltage too high 	<ol style="list-style-type: none"> 1. Check air flow 2. Check fan replace if necessary 3. Cool down the device for 5 minutes 4. Reduce input voltage
Sparks spray upwards instead of downwards.	<ol style="list-style-type: none"> 1. Material is not cut 2. Torch too far away from the material 3. Material not properly grounded 4. Cutting speed too fast 	<ol style="list-style-type: none"> 1. Increase current 2. Reduce the distance to the workpiece 3. Check connections 4. Reduce speed
Slagging	<ol style="list-style-type: none"> 1. Cutting speed too high 2. Cutting nozzle damaged 3. Wrong air pressure 	<ol style="list-style-type: none"> 1. Reduce the cutting speed 2. Replace the cutting nozzle 3. Correct the air pressure
Arc stops during the cutting process	<ol style="list-style-type: none"> 1. Cutting speed too low. 2. Air pressure too high 3. Voltage too low 4. Grounding cable disconnected from workpiece 	<ol style="list-style-type: none"> 1. Increase the cutting speed 2. Lower the air pressure 3. Increase the tension 4. Connect grounding cable to workpiece or welding table
Insufficient penetration	<ol style="list-style-type: none"> 1. Cutting speed too high 2. Cutting nozzle damaged. 3. Wrong air pressure. 4. Workpiece too thick. 5. Cutting current too low 	<ol style="list-style-type: none"> 1. Reduce the cutting speed 2. Replace the cutting nozzle 3. Correct the air pressure 4. Choose the right material thickness 5. Increase the cutting current
Cutting arc unstable / flickering	<ol style="list-style-type: none"> 1. Nozzle damaged or electrode worn 2. Water in the air supply 	<ol style="list-style-type: none"> 1 Replace damaged electrode or nozzle 2. Install air filter or additional filters
Short service life of the consumable materials	<ol style="list-style-type: none"> 1. Wrong air pressure 2. Dirty compressed air 3. Ignition arc too long 	<ol style="list-style-type: none"> 1. Correct air pressure 2. Install the filter system 3. Check air supply
Fuse triggers during operation	<ol style="list-style-type: none"> 1. Too weak extension cable selected 	<ol style="list-style-type: none"> 1. Use high power extension cables
Poor ignition	<ol style="list-style-type: none"> 1. Consumption materials damaged 2. Ground cable connected incorrectly 3. Wrong air pressure 4. Torch damaged 	<ol style="list-style-type: none"> 1. Use undamaged materials. 2. Connect ground cable correctly 3. Correct air pressure 4. Replace torch

Malfunction	Possible cause	Solution
Poor quality of the cut	<ol style="list-style-type: none"> 1. Current set too low 2. Cutting speed too high 3. Too much humidity in the torch 	<ol style="list-style-type: none"> 1. Increase current 2. Reduce cutting speed 3. Check filter and replace if necessary
After the torch has been actuated, the pilot arc does not switch to the cutting arc.	<ol style="list-style-type: none"> 1. Inaccurate connection between torch and power supply 2. Ground cable not connected to the workpiece 3. Defective components within the machine 4. Defective torch 	<ol style="list-style-type: none"> 1. Create a stable connection 2. Connect the dimension cable to a clean and dry area of the workpiece. 3. Call qualified personnel 4. Call qualified personnel
Arc switches off during operation	<ol style="list-style-type: none"> 1. Power supply unit is overheated 2. Gas pressure too low 3. Close the electrode 	<ol style="list-style-type: none"> 1. Let the power supply cool down (5 min.) 2. Check gas pressure increase if necessary 3. Replace the electrode
Unit switched on, but torch does not work	<ol style="list-style-type: none"> 1. Torch incorrectly connected 2. Workpiece clamp missing 3. Defective torch 	<ol style="list-style-type: none"> 1. Check connections 2. Connect the workpiece clamp 3. Replace torch
Power lamp and temperature lamp on but no gas flow	<ol style="list-style-type: none"> 1. Air flow is blocked 2. Defective components 3. Device is overheated 4. Fan is blocked 	<ol style="list-style-type: none"> 1. Check air flow 2. Replace components 3. Let the unit cool down (5 min.) 4. Check and rectify the condition

7.2 LED error display



Alarm display E01-Overheat in case of insufficient ventilation of the welding unit or overheating of the unit. After the unit has cooled down, the alarm disappears and the unit can be restarted.



In case of insufficient ventilation of the welder or insufficient compressed air flow, an alarm symbol "E12 Low pressure! Please check the air pressure and push the air test button" appears on the screen. After eliminating the cause of the alarm, the unit can be restarted.



If the phase is missing, the alarm display "E10 Missing phase" appears on the screen. Have the electrical connection set up by a qualified electrician.



If there is insufficient contact (connection) of the torch to the cutter or if the torch is defective, the alarm display "E30 Cutting torch disconnection" appears on the screen. Check the torch connection or the torch.

8 Care and maintenance

Regular and careful maintenance of the device is a precondition for a long service life, good working conditions and maximum productivity of the plasma cutting system. Ensure that maintenance work is carried out regularly.

Warning! Danger in case of insufficient qualification of persons:

Insufficiently qualified persons cannot assess the risks to the user caused by improper repair work on the cutting equipment and expose themselves and others to the risk of serious injury.



Have all maintenance work carried out only by persons qualified to do so.

Before carrying out any maintenance work, switch off the plasma cutting system and wait at least 5 minutes until the unit has cooled down.

After care, maintenance and repair work, check that all covers and guards are properly refitted to the plasma cutter. Damaged guards and unit parts must be repaired or replaced by the customer service department.



8.1 Maintenance of the plasma torch

Excessive consumption of spare parts is caused by damp compressed air, by an incorrect start in full material or by too high a cutting speed.

- The electrode is replaced when a crater of 1 mm - 1.5 mm forms in the centre.
- The nozzle is replaced if the central hole is damaged, widened or oval.
- The diffuser is replaced when one of the ends carbonises.
- The nozzle holder must be replaced if the insulation is worn.

8.2 Maintenance of the plasma cutter

The maintenance intervals are a recommendation by REHM GmbH u. Co. KG Schweitechnik for normal standard requirements (e.g. single-shift operation, use in clean and dry environment). The exact intervals are determined by your safety officer.

Task	Interval
Cleaning the inside of the device	depending on operating conditions
Function test of the safety devices by operating personnel	Daily
Visual inspection of the plant, especially the torch hoses	Daily
Have connection cables checked by qualified personnel	Half-yearly
Have the complete plasma cutting device checked by qualified personnel.	Yearly

8.3 Cleaning the inside of the device

If the plasma cutting device is used in a dusty environment, the interior of the device must be cleaned at regular intervals by blowing or vacuuming. The frequency of this cleaning depends on the respective operating conditions. Only use clean, dry air or a vacuum cleaner to blow out the unit.

NOTE:

Always disconnect the device from the power supply before carrying out maintenance work or replacing components of the plasma cutter.



If maintenance and repair work is carried out on this unit by persons who are not authorised to carry out this work, then the warranty claim against the supplier expires.

9 Spare parts

Risk of injury due to the use of incorrect spare parts!

The use of incorrect or faulty spare parts can be dangerous for the operator and cause damage and malfunctions.



REHM GmbH u. Co KG Schweißtechnik accepts no liability and provides no guarantee for damage and operating faults as a result of failure to observe these operating instructions. Only use faultless and suitable tools, original spare parts or series parts expressly approved by REHM GmbH u. Co KG Schweißtechnik for repairs.

Use of non-approved spare parts will invalidate the manufacturer's warranty.

Information about technical customer service

Repairs which fall under the warranty may only be carried out by technicians who are authorised by us to do so. Only use original spare parts.

9.1 Ordering spare parts

The spare parts can be obtained from the specialist dealer.

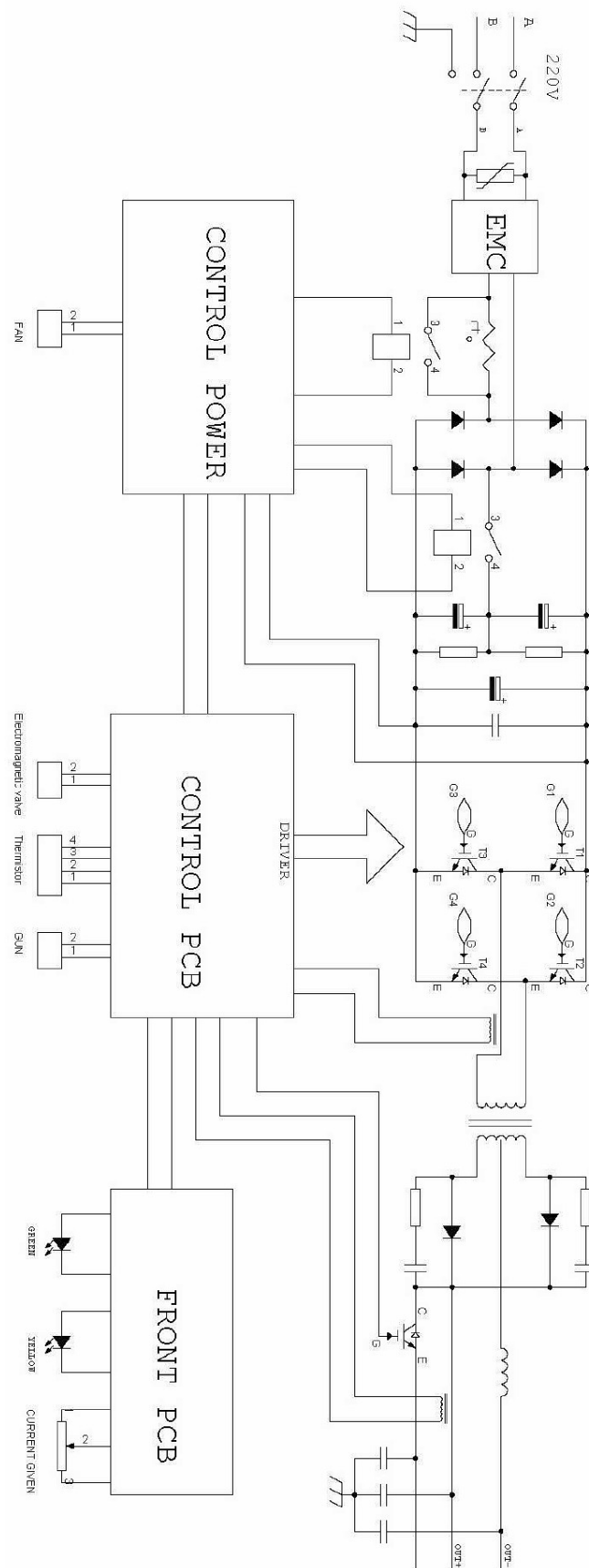


Fig.10-2: Electrical circuit diagram BARRACUDA 45i

11 EU Declaration of Conformity

For the following products

The manufacturer / distributor REHM GmbH u. Co KG
Ottostraße 2
73066 Uhingen

Product group: Plasma cutting device

Type designation: Plasmaschneidgerät

Product designation: BARRACUDA 45i
BARRACUDA 65i
BARRACUDA 105i
BARRACUDA 125i

is hereby confirmed to comply with the essential protection requirements laid down in Council Directive **2014/ 30/EU** (EMC Directive) on the approximation of the laws of the Member States relating to electromagnetic compatibility and Directive **2014/35/EU** relating to electrical equipment designed for use within certain voltage limits.

The above mentioned products comply with the provisions of these directives and meet the safety requirements for arc welding equipment according to the following product standards:

The following harmonized standards were applied:

EN 60 974-1:2012	Arc welding equipment - Part 1: Welding power sources
EN 60 974-10:2014	Arc welding equipment - Part 10: Electromagnetic compatibility (EMC) requirements

According to EU Directive 2006/42/EC Article 1. Directive 2006/42/EC Article 1, the above products fall exclusively within the scope of Directive 2014/35/EU concerning electrical equipment designed for use within certain voltage limits.

Name and address of the person authorised to compile the technical file:
Rolf Stumpp, REHM GmbH u. Co KG., Ottostraße 2, 73066 Uhingen



Rolf Stumpp (Geschäftsführer)

Uhingen, den 01.08.2022

12 Appendix

12.1 Copyright

The contents of this manual are protected by copyright. Their use is permitted within the scope of use of the unit. Any other use is not permitted without the written consent of the manufacturer.

We register trademark, patent and design rights to protect our products, insofar as this is possible in individual cases. We emphatically oppose any infringement of our intellectual property.

Subject to technical changes without notice.

12.2 Storage

ATTENTION!

Incorrect and improper storage can damage and destroy electrical and mechanical components.

Only store the packed or already unpacked parts under the intended environmental conditions.

Contact your dealer if the device and accessories need to be stored for longer than three months and in environmental conditions other than those specified.



12.3 Advice for disposal / Options of reuse

Please dispose of your equipment in an environmentally friendly manner, by not placing waste in the environment but in a professional manner.

Please do not simply throw away the packaging and later the disused plasma cutting device, but dispose of both in accordance with the guidelines laid down by your city council/local authority or by an authorised disposal company.

12.3.1 Decommissioning

CAUTION!

Immediately decommission used machines in order to avoid later misuse and endangering of the environment or of persons.

- Remove batteries and accumulators, if present.
- If necessary, dismantle the plasma cutter into manageable and recyclable assemblies and components.
- Dispose of the components of the appliance in the appropriate manner.



12.3.2 Disposal of new device packaging

All used packaging materials and packaging aids from the machine are recyclable and generally need to be supplied to the material reuse.

The packaging wood can be supplied to the disposal or the reuse.

Any packaging components made of cardboard box can be chopped up and supplied to the waste paper collection.

The films are made of polyethylene (PE) and the cushion parts are made of polystyrene (PS). These materials can be reused after reconditioning if they are passed to a collection station or to the appropriate waste management enterprise.

Only forward the packaging materials correctly sorted to allow direct reuse.

12.3.3 Disposal of the old device

INFORMATION

Please take care in your interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and admitted way.



Please note that the electrical devices comprise a variety of reusable materials as well as environmentally hazardous components. Please ensure that these components are disposed of separately and professionally. If in doubt, consult your municipal waste disposal company. If appropriate, call on the help of a specialist waste disposal company for the treatment of the material.

12.3.4 Disposal of electrical and electronic components

Please make sure that the electrical components are disposed of professionally and according to the statutory provisions.

The device is composed of electrical and electronic components and must not be disposed of as household waste. According to the European Directive regarding electrical and electronic used devices and the implementation of national legislation, used power tools and electrical machines need to be collected separately and supplied to an environmentally friendly recycling centre.

As the machine operator, you should obtain information regarding the authorised collection or disposal system which applies for your company.

Please make sure that the electrical components are disposed of professionally and according to the legal regulations. Please only throw depleted batteries in the collection boxes in shops or at municipal waste management companies.

12.4 Disposal via municipal collection facilities

Disposal of used electrical and electronic components

(Applicable in the countries of the European Union and other European countries with a separate collecting system for those devices).



The sign on the product or on its packing indicates that the product must not be handled as common household waste, but that it needs to be disposed of at a central collection point for recycling.

Your contribution to the correct disposal of this product will protect the environment and the public health. Incorrect disposal constitutes a risk to the environment and public health. Material recycling will help reduce the consumption of raw materials. For further information about the recycling of this product, please consult your District Office, municipal waste collection station or the shop where you have purchased the product.

13 Product follow-up

We are required to perform a follow-up service for our products which extends beyond shipment.

We would be grateful if you could inform us of the following:

- Modified settings
- Any experiences with the geared drill which might be important for other users
- Recurring malfunctions.

REHM GmbH u. Co KG Schweißtechnik
Ottostraße 2
73066 Uhingen
Tel: +49 (0) 7161 3007-0
E-Mail: rehm@rehm-online.de

Rehm GmbH u. Co. KG Schweißtechnik
Ottostraße 2 | 73066 Uhingen | Germany

Tel.: +49 (0) 7161 3007-0
Fax: +49 (0) 7161 3007-20

E-Mail: rehm@rehm-online.de
Internet: www.rehm-online.de