



**SPITZNAS**  
CUSTOMIZED POWER SOLUTIONS

# Hydraulic Sabre Saw

**Type 5 1219 0010**

ATEX and Underwater Tool



Illustration can differ from the original

## Operation and Maintenance Manual

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## Signal Word and Symbol Definition

The signal words and symbols used in the technical documentation (safety instructions, operating booklet, etc.) have the following meaning:



**WARNING – Read the operation and maintenance manual**

It is imperative to familiarize with this operation and maintenance manual and its safety instructions before starting your SPITZNAS machine. Stick to the operating processes and avoid accidents due to improper use of the machine.



This symbol has the following meaning:

**DANGER** – Indicates an **immediate danger**, which causes serious injuries to any person or even death, if not avoided.

**WARNING** – Indicates a **threatening danger**, which can cause serious injuries to any person or even death, if not avoided.

**CAUTION** – Indicates a **danger or unsafe procedure** which can cause injuries to any person or material damages, if not avoided.

**NOTICE** – Indicates a **potentially dangerous situation** which can cause damage to the product or its surroundings, if not avoided.



**WARNING – explosive atmosphere**

Air and flammable substances can mix and result in an explosive atmosphere. In areas exposed to explosion hazards, supplementary instructions and directives apply. Observe the safety instructions of the employer as well.



**WARNING – explosive material**

Caution should be exercised when working with explosive material or in its surrounding area.



**PROHIBITION – No naked flame, fire, or ignition source and no smoking**

Prevent from fire and explosion hazards, which can be caused by naked flame, open ignition source or by smoking.



**Eating and drinking forbidden** – The prohibition sign forbids the consumption of food.



**REQUIREMENT – Observe the instruction**

Ensure that the operation process is adhered to and avoid accidents and expensive break down times due to improper use of machines, devices and tools.

By using the mandatory sign you refer to the adherence of operation instructions.



**NOTICE** – Gives recommendations and important hints for handling the product


**IMPORTANT** – Indicates application advice and other particularly useful information.

This symbol has the following meaning:

**REMARK:**

In each case the used symbol does not replace the safety text. The text must always be read fully. In some cases other symbols will be used with the signal words.

## Technical Specification

Operating pressure	90 – 140 bar
Volume flow	22 – 50 l/min
Power	1.5 kW
Number of strokes	1500 1/min
Stroke of saw blade	28 mm
Weight approx.	6 kg
Hydraulic connection motor	M18x1.5
Hydraulic connection hose set	Flat-Star A250-OM/OF-1/2" BSP
Hydraulic fluid	Hydraulic oil
Hydraulic circuit	Open circuit
Oil filtering	ISO purity degree 20/18/13
Temperature of oil	- 34 °C to + 82 °C
Viscosity of oil	> 13 centistokes
Sound pressure level $L_{pA}^{(1)}$	76 dB (A)
Vibration <sup>(2)</sup>	2.7 m/s <sup>2</sup>
ATEX Classification	 II 2G c T5
<sup>(1)</sup> Remark: Measurement acc. to DIN EN ISO 15744	Measurement uncertainty K: 3 dB (A)
<sup>(2)</sup> Remark: Measurement acc. to DIN EN ISO 28927-8	Measurement uncertainty K: 1.5 m/s <sup>2</sup>

The performance specifications are guide values only, they depend basically on the application, the working pressure and the accessories used.

## Intended Use

**SPITZNAS machines are designed for industrial use only.**

Only trained, skilled personnel are allowed to operate the machine.

The hydraulic sabre saw is designed for cutting pipes and profiles made of:

- metal, plastic, fibre glass, hard rubber, wood, etc.,

for the special application areas:

- old building renovation,
- fitting of sanitation/pipe repair,
- car body building,
- pipe construction,
- in all areas difficult to reach and in areas exposed to explosion hazards.

## Improper Use

Any use deviating from the intended use as described is considered to be improper use.

- Working without personal protection equipment.
- Using the machine in an inadmissible area.
- Cutting self-flammable material.

## Product Description

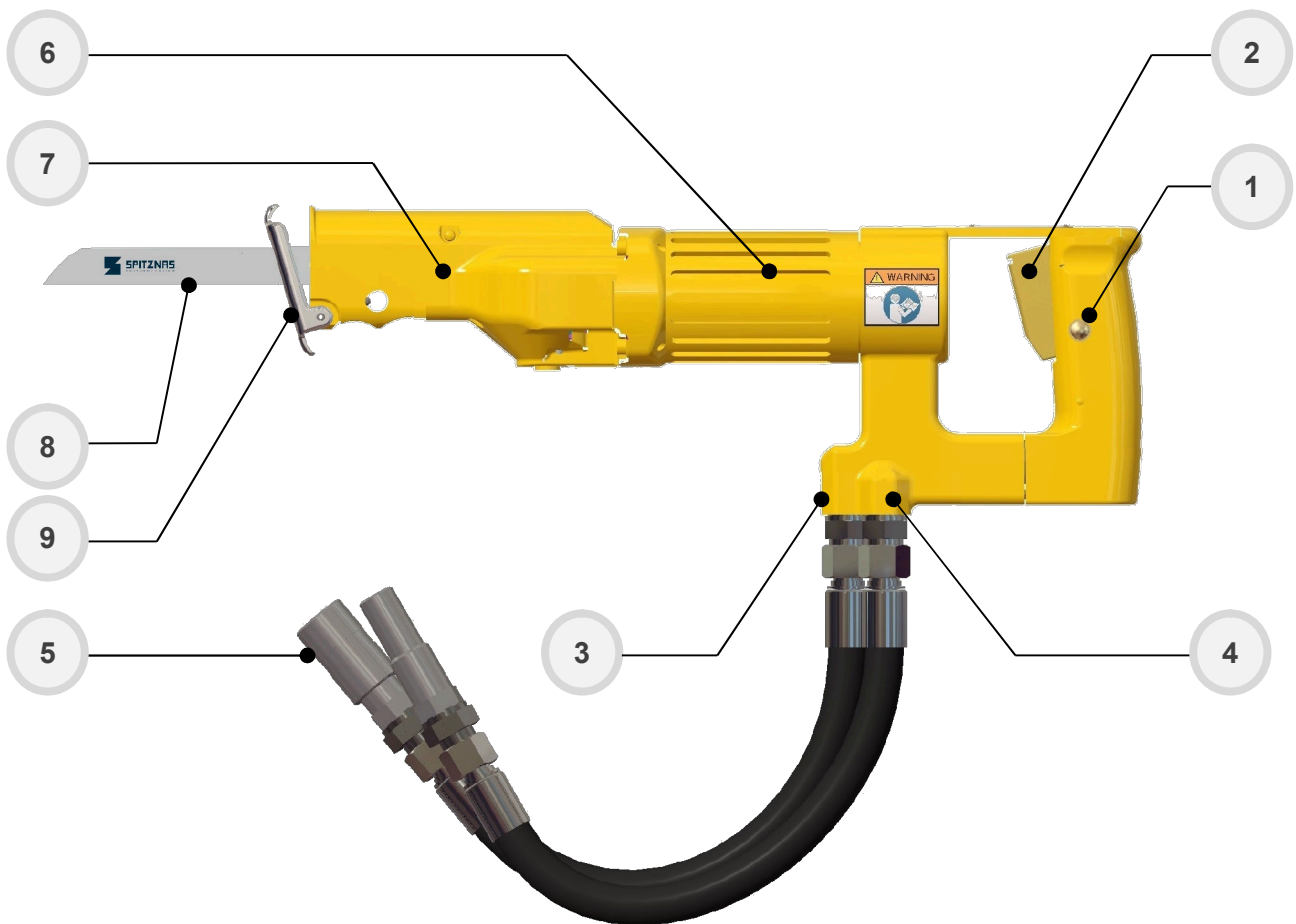


Fig. 1

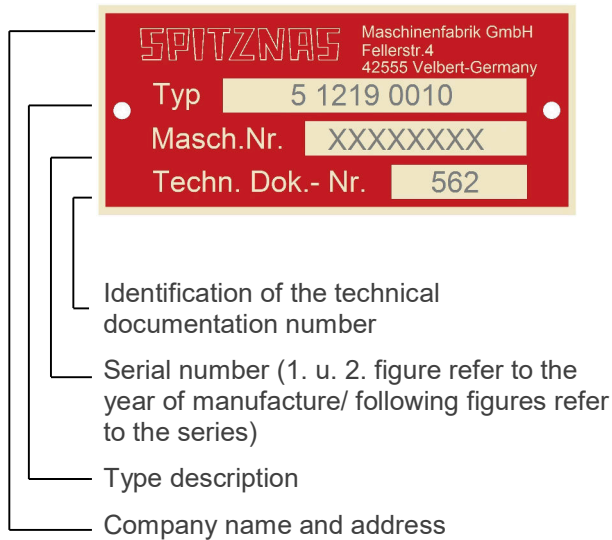
1 Release button  
2 Valve trigger  
3 Pump connection (P)

4 Tank connection (T)  
5 Hydraulic hose set  
6 Hydraulic motor

7 Gear head  
8 Saw blade  
9 Support shoe

## Identification

### Type sign



### Explanation of ATEX Identification



#### Specification

**Specification** for prevention from explosion (ATEX)

#### Machine group II

Explosive atmospheres e. g. Industry

#### Category 2

High level of safety

#### Ex-Atmosphere G

Gas, vapor and mist

#### Explosion protection c

Constructional safety

#### Temperature class T

Surface temperature limit

450°C

300°C

200°C

135°C

100°C

85°C



T1

T2

T3

T4

T5

T6

## Installation

### Hydraulic system requirements

The following is required for an optimum performance of the hydraulic sabre saw:

- Provide a volume flow of 22 to 50 l/min at an operating pressure of 90 to 140 bar,
- the system should not have more than 17 bar back pressure,
- the hydraulic system should have sufficient heat rejection capacity to limit the maximum oil temperature to 60 °C at the maximum expected ambient temperature.

It is recommended:

- That filter elements are sized for a volume flow of at least 114 lpm for cold temperature startup and for maximum dirt holding capacity,
- the hydraulic system should have a minimum of 10 to 25 micron of full-flow filtration.

### Connecting the hydraulic supply to the hydraulic sabre saw

The machine is designed for an open circuit.

Check:

- The circuit type (open circuit or closed circuit), before connecting the machine,
- that all hose couplings are clean, before connecting the hoses,
- that there are no signs of leakage,
- that the machine is clean and dry,
- that all assembly parts and fixing elements are firmly fixed, respectively tight.

The recommended hose size is from 12 mm to 16 mm for the inner diameter and between 15 and 30 m for the length. Always connect the return hose first and disconnect it at last (see fig. 2).

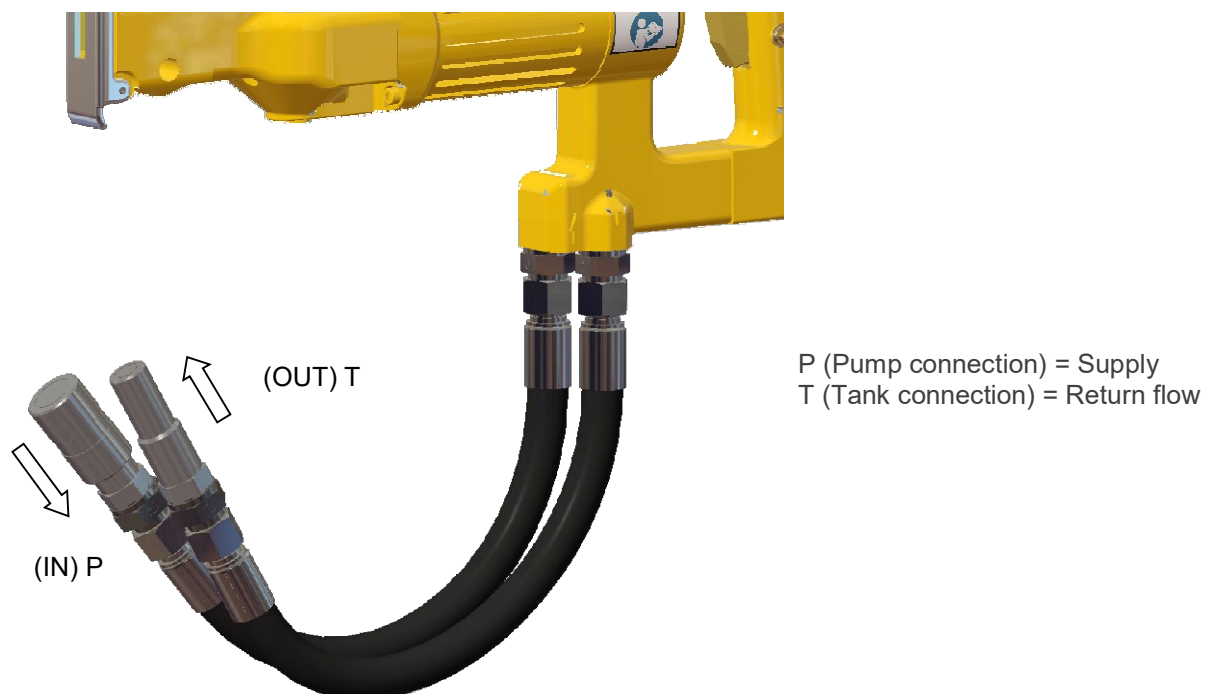


Fig. 2



## Startup

The size of the saw blade depends on the material of the work piece (refer to accessories on page 17). During cutting, the saw blade has to be cooled, respectively lubricated, with water, drilling emulsion, oil or cutting paste.

### Mounting the saw blade



**WARNING** – Disconnect the machine from hydraulic supply before mounting the saw blade.

Observe the following for mounting the required saw blade to the saw:

- Loosen socket head screw item 1 (see fig. 3),
- insert the saw blade to its stop,
- securely tighten the socket head screw item 1 (see fig. 4).

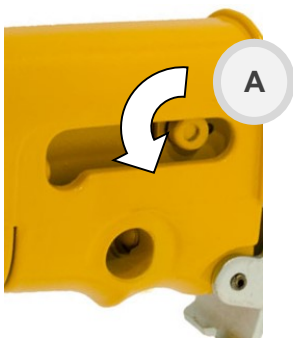


Fig. 3

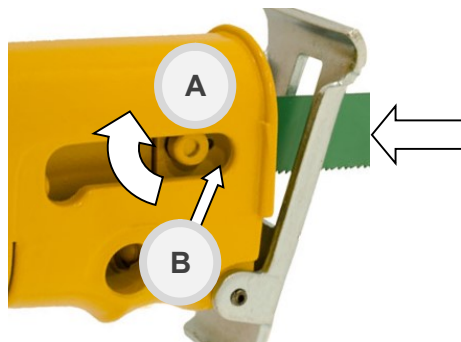


Fig. 4

**Notice:** The center pin item B is not designed to hold the saw blade. This function is performed by the clamping action of the socket head screw item A. Replace the screw, if it cannot be securely tightened any more.

Do not lubricate the blade clamp.



**Important**– Before cutting an assembly, make sure that no electric lines of this assembly are damaged or cut. If they are energized, there is danger to life due to electrocution.

### Cutting

- Follow all safety precautions.
- Install the correct saw blade, see „Mounting the saw blade“.
- Connect the machine to the air supply (blow out the hose before connecting).
- Actuate the hydraulic supply.
- Actuate the valve (ref. to fig. 5).
- Start cutting.
- Cool sufficiently the saw blade.

### Plunge cutting

The sabre saw can also be used for plunge cutting:

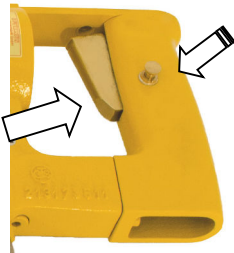
- Wood, plywood, wall boards and plastic material.
- Mark clearly line of cut on the work piece.
- Place the tip of the saw blade on the cutting point, while resting the saw on the lower edge of the support shoe.
- Start the saw and plunge the saw blade in the material while cutting carefully (see fig. 7).
- Press the support shoe against the material to be cut.

**Notice:** Do not use plunge cutting for metal sheet.

Useful tips: refer to fig.6



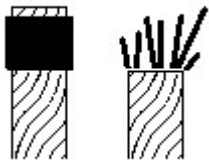
Start and stop



Press or release

Fig. 5

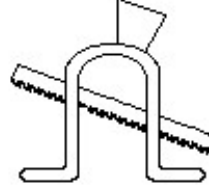
Steel wire  
Use of sticky tape  
with without



prevents from splicing

Fig. 6

Profile  
Use of wedge



prevents from pinching

Plunge cutting



Fig. 7

### Sawing metal

When cutting angle iron, H-beam, I-beam, tubes, pipes etc., start the cut on the surface where the greatest number of teeth will contact the work. Useful tips: Select thoroughly the length of the saw blade (see fig. 8 and 9). (Length of blade (free hand cutting) = max. section + 30 mm.)



Fig. 8

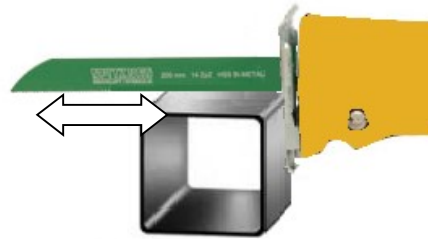


Fig. 9

### Procedure for handheld cutting

For straight or curved cutting, place the support shoe on the work piece and start the saw.

Use only sharp and faultless blades. Take care to cut at a uniform feeding speed. This will reduce the risk of accidents and wear on blade and saw. Always keep the connecting line (hydraulic hose) towards the rear of the saw.

### Nach Beendigung des Sägevorgangs

- Shut valve, shut hydraulic supply and disconnect hydraulic hose.
- Clean saw.
- Inspect machine for damages.

## Underwater Use

### Before underwater operation

Ensure that:

- All hydraulic hoses are properly connected,
- the machine is tested for leakage and for the functioning of all parts.

Notice: Keep in mind that 10 meter water depth corresponds to 1 bar.

When working in greater depths match the diameter of the supply and exhaust hose appropriately.

### After underwater operation

- Clean and dry the machine with compressed air.
- Spray all moving parts with multi-oil-spray: Spitznas reference no. 9 9902 0120 (or similar).

## Basic Safety Instructions



### **Read operation instructions/safety instructions!**

Before working on or with the tool, read the safety instructions and follow the instructions during operation.

Do not modify the machine or the machine tools and accessories after receipt. Any constructive changes or modifications need the manufacturer's acceptance and have to be in compliance with the safety instructions. Use the machine only for its determination. Consider the technical data of the equipment and the ambient temperatures. Pay attention to labels, restrictions of use and special instruction notes on the machine tools and the machine itself. Check regularly that the type plate and symbols on the machine are legible. If necessary, contact the manufacturer to replace them. Only operators with technical knowledge, trained by authorized responsible technical personnel, may install, adjust, operate, transport and store the machine.

## Employer's Obligations

Generally, the employer is responsible for the faultless condition/operation of the machine and the adherence to the safety regulations. The machine is designed and manufactured according to the state of the art and the recognized safety rules and regulations. However, using it, there is still a risk of accidents to the operator or third parties or damage to the machine or other objects. All current regulations and specifications, which apply to the site of operation in regards to accident prevention, installation of electrical and mechanical systems as well as radio interference must be considered.



### **IMPORTANT** - The employer must make sure that...

- risk assessment is carried out for the specific risks, which can occur due to any operation of the machine,
- the function of the safety equipment is regularly checked,
- the safety symbols and safety notes on the machine/ device and the operating instruction booklet are considered,
- the safety instructions and the operating instruction booklet are available completely and in legible condition on site with the machine.

The employer is obliged to allow personnel to work on the machine only, who:

- Are familiar with the basic work environment safety rules and accident preventing regulations. Also, those persons must have been instructed in the correct use of the machine,
- have read and understood the safety and warning notes in the operating instruction booklet as well as all the other documentation pertaining to the machine,
- have been tested at regular intervals in regards to their safety-conscious operation.

### **Safety-conscious working**

Additionally to the safety instructions in this manual and the intended use, the following safety regulations have to be considered:

- Accident prevention instructions, safety and operation regulations,
- explosion protection directives,
- safety regulations for the operation with hazardous material,
- effective norms and laws.

## Operator's Obligations

All persons who are assigned to work with the machine are obligated to:

- Pay always attention to the basic safety and accident preventing regulations,
- read always and follow the safety and warning notes in the operating instruction booklet.

## Explanation of Symbols for Protective Equipment and for Accident Prevention



**Use protective clothes** – Protective clothes are necessary for diverse applications, e.g. protection against chemicals, heat and cold. Provide appropriate protective clothes to your staff and identify this requirement by convincing signage.



**Use head protection** – Keep staff and visitors from head injury. Provide enough safety helmets and identify the obligation for using safety helmets by appropriate mandatory signs.



**Use eye protection** – whether goggles, laser safety goggles or etc. – identify areas where eye protection has to be used, by appropriate mandatory signs.



**Use ear protection** – Capsule hearing protectors or hearing protectors have to be used for ear protection, depending on the sound intensity at the work place. Provide appropriate ear protection and identify the obligation for using ear protection by appropriate mandatory signs.



**Use foot protection** – Foot injuries by vehicles, objects, hot material or hazardous substances can be avoided by appropriate protective shoes. Equip your staff with appropriate protective shoes and identify those requirements properly.



**Use hand protection** – Identify convincingly the safety requirement „Use hand protection“ by a gloves sign, respectively a gloves symbol.



**Use respiratory protection** – Ensure that the specified protection equipment is available and that it is used. Identify by mandatory signs, where and when respiratory masks are required.

### Danger Zones

Operational condition ----- Life phase	Normal function	Malfunction	Improper use	Expected use
Transport	Transport of the machine in an inoperable condition	Drop of the machine	Transport of the machine in an operable condition	unknown
Startup	Equip the machine with designated saw blade	unknown	The machine is equipped with inappropriate tools	unknown
Operation	Machine works only with actuated valve  Machine moves the saw blade	Machine runs without intended actuation  Machine does not move the saw blade	Valve is blocked in actuated position  unknown	unknown
Maintenance	Regular cleaning	Breakdown of the machine	unknown	unknown
Hazard notes regarding the hydraulic powerpack: refer to the manufacturer				

## Safety Instructions for Prevention of Workplace Hazards



**WARNING** – The following applies unless otherwise stated in the machine's operating instructions booklet:

The machine is not insulated to protect against an electrical power surge.



**CAUTION** – risk of injury!

Hands may be crushed, seized or otherwise injured. Keep your hands away from areas which are marked with this symbol.



**CAUTION** – risk of injury!

Remove all sources of danger which could lead to slipping, tripping or falling (e.g. slippery surface, hoses, cables). Keep the work area clean and tidy.



**PROHIBITION** – Eating, drinking and smoking are forbidden during operation.



**WARNING** – Explosion hazard!

Operate the machine only according to the intended use. The machine is designed for the use in areas exposed to explosion hazards as well. The generation of heat and –eventually- sparks is characteristic for cutting. Therefore cool continuously.

Consider the following:

- Valid local explosion protection directives.
- Technical specification of the machine.
- Markings on the machine.
- Avoid the generation of sparks.
- When operating the machine, do not push or beat against other material and hold the machine firmly and safely by hand, respectively fix it in a clamping device.
- Do not slide the machine over the ground.
- If heat generation exceeds the specified surface temperature, the machine has to be stopped instantly.  
It may be re-started only after having eliminated the cause for the fault.
- The work area and the other close working areas should always be protected from sparks.
- Flammable and explosible material has to be removed from the work area before starting work. Among others, this relates to dust deposits, cardboard, packing material, textile, wood and wooden splints, but also flammable fluids and gas.
- All dust deposits in and on the machine have to be removed regularly.
- Consider that there must not be any flammable dusts at the place where the machine is operated. The non-availability of an explosive gas-and- air-mixture has to be checked with a gas detector (not contained in the scope of delivery).



Ensure adequate lighting.

Be extra careful in unfamiliar surroundings. There is a risk of hidden hazards such as electric lines or other supply lines. Make sure when operating the machine that no electrical cables, gas pipes or similar could be damaged. Use suitable and personal protective equipment.

## Safety Instructions for Prevention of Hazards caused by Hydraulic



**WARNING** – Hydraulic can cause severe injury. Before working on the tools (e.g. installation, changing accessories or machine tools, prior to a long standstill, maintenance, etc.) depressurize hydraulic equipment.

**CAUTION** – Risk of injury by whipping hydraulic hose.  
Check hydraulic hoses, connection components and fittings regularly for any damages and proper fixture.

When connecting / disconnecting the machine to / from the hydraulic supply, please pay careful attention not to actuate the valve while doing so. Never remove a pressurized hydraulic hose. Always switch the power supply off first and then depressurize the machine.

The maximum operating pressure according to the technical specification must not be exceeded. A pressure regulator should be installed, which regulates the pressure before it reaches the machine. Never direct a hydraulic hose at yourself or anyone else. Do not carry or pull the machine at the hydraulic hose.

## Safety Instructions for Prevention of Operating Hazards

Before starting work make sure that the hands are protected against impacts, crushing, hits, cuts, abrasions and heat. The operating and maintenance personnel must be physically able to handle the bulk, the weight, the power and/or the torque of the machine. Do not use the machine if you have taken any medication or drugs, after drinking alcohol or with any other constraints on your vision, reaction time or judgment. Work in the best possible position so that you can react with both hands to any normal or unexpected movements of the machine. Maintain a balanced body position and secure footing in order to avoid improper strain and to be able to support the reaction torque of the machine.

Additionally, observe the following:

- Operate the machine only after having carefully read the operation manual.
- If the machine shows any signs of abnormal operation and performance, work must be stopped instantly and the machine has to be serviced or repaired.
- Do not employ the reciprocating saw by excessive force. Its performance is better and safer, if it works at the specified speed.
- Before using the machine, all parts or protective devices should be carefully checked to make sure they are working correctly and fulfil the designated function.
- Damaged or malfunctioning protective devices and valves to be replaced or repaired by qualified personnel.

## Safety Instructions for Prevention of Entanglement Hazards



**CAUTION** – Loose clothing, personal jewellery (e.g. necklace), scarves/ ties, long hair or gloves can get caught up in the machine tool or accessories and thus cause severe injuries (lack of breath by throttling, abrasions, skin injuries and/ or cuts and lacerations).



**Wear suitable, close fitting work clothing!**

Wear a hair net, if you have long hair.

When handling the machine, jewellery, necklaces, etc. have to be removed or are forbidden, respectively.

## Safety Instructions for Prevention of Noise Hazards



**Always wear hearing protection** – This refers to the operator, as well as to any other person within the vicinity of the machine. Observe the instructions of the employer and of the professional association.

During operation high noise levels can cause permanent hearing problems such as tinnitus (ringing, buzzing, whistling or humming in the ears), hardness of hearing or even deafness.

## Safety Instructions for Prevention of Vibration Hazards

Vibrations can cause damage of nerves and blood vasculares in hands and arms, therefore observe the following hints:

- Wear warm clothing and keep your hands warm and dry when working in cold conditions. Exercise hands and fingers regularly.
- Use stands and/or weight balancers, if possible.
- When using a support (e.g. stand) make sure the machine is securely fixed. If no support is used, hold the machine with light but safe grip in order to support the tool's reaction torque. The tighter the grip the greater the risk of vibrations.
- Mount the machine tools as described in the operating instruction booklet in order to avoid high vibrations.
- Stop work immediately, if you feel any numbness, tingling, pain or whitening of fingers or hands. Inform the employer and consult a doctor.

## Safety Instructions for Prevention of Dust and Fume Hazards



**Wear respiratory protection** - Use respiratory protection as instructed by your employer and as required by occupational health and safety regulations. Potentially generated or disturbed dust and fumes in the working environment or from using the machine can cause illness (e.g. cancer, birth defects, asthma and/ or dermatitis).

- Carry out risk assessment regarding dust and fume hazards and implement appropriate measures.
- Keep the working place clean.
- Keep in mind that working in certain materials may create dust and fumes causing a potentially explosive atmosphere.

Remark: Some material may have toxic coatings.

Please pay particular attention to avoid skin contact and breathing in, when working with those materials. Always use a protective mask. Ask your material supplier about special safety instructions and stick to them.

## Safety Instructions for Prevention of Projectile Hazards



**Wear impact-resistant safety goggles** – This refers to the operator, as well as to the persons within the vicinity of the machine. Assess and determine the grade of protection required depending on the individual case. The risks to others should also be assessed at this time.



**On overhead work, wear a safety helmet.** If a work piece, accessories, inserted tools, or the tool itself breaks, there is danger from high velocity projectiles.

- Check all parts for damages before using the machine.
- Replace damaged parts immediately.
- When working on brittle material make sure that you are protected against harmful splinters.

## Safety Instructions for Prevention of Accessory Hazards

Use only machine tools, accessories and consumables, which are recommended by the manufacturer. Make sure choosing the correct size and the correct type. Use only accessories, which are in proper condition.



**CAUTION** – Injury due to carelessness!

If the machine is fixed to suspension equipment make sure that it is secure. Never hang the machine onto the supply line.



- Separate the machine from any external energy source before changing the machine tool or any accessory.
- Avoid direct contact with the machine tool during and after use as it can be hot or sharp.
- Wear protective gloves when changing a tool or an accessory!

Notice: Defective/ inappropriate gloves can lead to injury. Wear only proper hand protection, adapted to the work place requirements.



**WARNING** – Explosion hazard!

When operating the machine in areas exposed to explosion hazards, use only accessories, respectively devices, which are ATEX approved and/or specified.

## Safety Instructions for Prevention of Transport Hazards



**ATTENTION** – Improper Transport, injury due to parts falling down!  
Damage of the machine!

- Separate the machine from any external energy source before transportation. Check that the machine is undamaged and in proper condition.
- Never carry the machine at the supply line.



Wear worker's protective shoes!

## Service and Maintenance

Basic Safety Instructions:



**WARNING** – Maintenance and repair work on hydraulic equipment.

Hydraulic can cause severe injury. Observe legal regulations. Take precautions for persons and environment. Additionally, observe the following:

- Secure the machine against unintentional starting and let the machine cool down to the ambient temperature
- Protection against tipping, tumbling or falling down when assembling/ disassembling the machine/parts.

**CAUTION** – Skin exposure to hazardous dusts may cause severe dermatitis. Dust at the work place can be raised during the maintenance procedure and can be inhaled. Clean the machine and the work place before maintenance work.



**WARNING** – Danger of explosion! Generation of sparks during maintenance work!

Consider local safety regulations. Avoid use of force when disassembling and assembling the machine. Always do maintenance work outside hazardous medium.





**PROHIBITION** - Eating, drinking and smoking are forbidden during maintenance and repair work



**NOTICE** – Use only **original SPITZNAS spare parts**, in order to avoid damages. Otherwise you risk a decrease in machine performance and an increase in maintenance work. Check the adherence to the technical specifications according to the operation manual after each maintenance work.

**IMPORTANT** – There is no warranty for damages and liability is disclaimed, if **non-original spare parts** are used.

### Maintenance Instruction

Generally, hydraulic machines need little maintenance. If these rules are followed, the machine will have the expected durability and high reliability.

Service life and performance of the machines are decisively determined by:

- The purity degree of the hydraulic oil,
- the lubrication conditions and maintenance,
- the **regular control of the hydraulic filter/ the hydraulic fluid**, as well as the **regular checking of the machine with regards to external damages**.

Disassembly and re-assembly of the machine have to be executed by qualified staff only. Incorrect assembly can lead to danger of accident for the operator and to defects on the machine. Furthermore we recommend giving the hydraulic sabre saw a general overhaul by the supplier once a year. After completing maintenance and repair work and before restarting production make sure that...

- all materials, tools and other equipment which are required for maintenance or repairs have been removed from the work area of the machine,
- any fluid leaks have been removed,
- all safety devices on the machine have proper function,
- fixtures of screw connections are tight,
- removed covers, screens or filters were reinstalled.

The employer ensures that all maintenance, inspection and assembly work is done by authorized and qualified experts.

## Disassembly- Re-assembly

### Maintenance and repair

Disassembly and re-assembly should be done according to the exploded views, respectively the sectional drawings (see repair instruction). All work regarding disassembly and re-assembly, have to be executed by SPITZNAS or skilled staff only.



**DANGER** – Working with the machine without appropriate preparation and disregarding of instructions. Shut down the machine properly and let it cool down to the ambient temperature.



**NOTICE** – Special instructions apply for the repair of explosion-proof machines. Retrofits or modifications of the machine can affect the explosion protection.

Therefore, they need the manufacturer's acceptance. The explosion-proof machine is designed in the type of protection „c“, constructive safety. All work executed on the machine, influencing the explosion protection, e.g. repairs with mechanical machining, require an approval of an authorized expert or have to be done by the manufacturer. The internal structure must remain unmodified.

## Storage

Unused machines and machine tools should be kept in a dry, closed room.

Keep them free from damaging influences such as damp, frost or large temperature fluctuations as well as mechanical damage. Always store the machine in a way that important machine instructions, e.g. on stickers and signs, are legible.

**NOTICE** – Always connect the loose ends of the hoses with each other, if possible.

## Disposal

Dispose of machine and worn out/defective machine tools according the local/national regulations. Fully disassemble the machine for the necessary disposal. Separate materials according to local environmental specifications. Dispose environmentally hazardous greasing, cooling or cleaning agents in order to avoid environmental contamination.

## Environmental Regulations

When working on or with the equipment, it is imperative to observe all legal requirements in regards to waste-disposal and proper recycling. In particular during installation, repair and maintenance work, water damaging agents, such as



- lubricating grease and oil,
- hydraulic fluid,
- coolant,
- solvent containing cleaning agents

must not leak into the ground or reach the sewage system.

These materials must be stored, transported, contained and disposed of in suitable containers!

## Troubleshooting

The following table shows possible problems and their causes:

	Problem	Cause	Remedy
a	Sabre saw does not start	Not connected to hydraulic supply.	Connect and open the hydraulic supply line
b	Low stroke rate	Operating pressure too low Hose diameter too small Volume flow too low Back pressure too high	Increase operating pressure Choose larger hose diameter Increase volume flow Reduce back pressure
c	Stroke rate too high	Operating pressure too high Flow rate too high	Consider max. operating pressure acc. to technical specification Reduce flow rate
d	Sabre saw comes to a stop during cutting	Feeding pressure too high  Blunt saw blade Unsuitable saw blade	Reduce feeding pressure  Replace saw blade (new) Replace saw blade (appropriate for the cut) Increase operating pressure to 6 bar
e	Centre pin shears off, saw blade cannot be adequately clamped	Clamp screw worn/ hexagonal socket wrench worn	Replace clamp screw/ hexagonal socket wrench
f	Other problems		Contact authorized expert company

We ask you to send the machine to the manufacturer, if necessary.

## Warranty and Liability

Unless otherwise specified, our „General Sales Terms” apply. Warranty and liability claims in regards to persons or equipment damages are invalid, if one or more of the following causes apply:

- Improper use of the machine,
- improper assembly, startup, operation or maintenance of the machine,
- operation of the machine with defect safety devices or improperly fixed or non-functioning safety and protection devices,
- not considering of the instructions in the operating instruction booklet concerning transport, storage, assembly, startup, operation, maintenance and setting up of the machine,
- independent structural alterations or settings on the machine beyond the intended purpose,
- inadequate supervision of wear parts,
- improperly carried out repairs, inspections or maintenance,
- catastrophic cases due to foreign objects, acts of god or other reasons which are beyond our control.

## Scope of Delivery

Check, if the scope of delivery is complete:

1 Operation and Maintenance Manual, 1 hydraulic sabre saw, accessories, if applicable

## Accessories

Overview: Saw blades:

Order no.	Length in mm	Tooth pitch in mm	Application and materials, etc.
9 2505 0020	280	2.5	Wood with nails, steel, non-ferrous metal, alu up to 5.0 mm, plastics, stainless steel
9 2505 0040	280	4.0	Wood, plastics, fast and rough cuts
9 2505 0060	100	0.7	high-strength steel, non-ferrous metal, alu up to 1.5 mm, steel plates up to 5.0 mm
9 2505 0080	150	1.2	Non-ferrous metal, alu up to 3.0 mm, pipes and profiles from 1.5 mm
9 2505 0100	150	2.5	Wood with nails, steel, non-ferrous metal, alu up to 5.0 mm, plastics, stainless steel

Overview: Clamps

Order no.	Description
5 1217 9500	Clamp up to 100 mm for rectangular cuts
5 1217 9910	Clamp for pipes up to 150 mm diameter
5 6035 9400	Clamp for pipes up to 200 mm diameter

## Declaration of conformity

as defined in the European Union Machine Directive 2006/42/EC and in the  
EU-ATEX-Directive 2014/34/EU for usable machines

We, the company  
SPITZNAS Maschinenfabrik GmbH, Fellerstraße 4, 42555 Velbert–Langenberg,  
declare that the following product

Description: Hydraulic Sabre Saw  
Model: **5 1219 0010**

in the version supplied by us, complies with the European Union Machine Directive  
2006/42/EC and the EU-Directive 2014/34/EU (ATEX – group II, category 2, G c T5).  
Applied harmonized norms are:

DIN EN ISO 12100  
DIN EN ISO 11148-12  
DIN EN 1127-1  
DIN EN 13463-1  
DIN EN 13463-5

According to section 13 (1) b) ii) of the Directive 2014/34/EU the technical documentation is  
deposited under reference No. 557/Ex-Ab 2235/14 at the following office:

TÜV Rheinland Industrie Service GmbH  
Moltkeplatz 1, 45138 Essen  
(Registration No. 0035  
for the scope of  
the Directive 2014/34/EU)

Name of the authorized person for documentation: Mr. Simon Witt  
Address of the authorized person for documentation: see manufacturer's address  
42555 Velbert, 20.04.16



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# Tools for the Specialist