Operating instructions

Hydraulic workshop press

- WPP 15
- WPP 20
- WPP 30

WPP 15

WPP 30

WPP SERIES

Imprint

Product identification

Metallkraft

Workshop press	Article number
WPP 15	4001015
WPP 20	4001020
WPP 30	4001030

Manufacturer

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Fax: 0951 96555 - 55

E-Mail: info@metallkraft.de
Internet: www.metallkraft.de

Information about the operating instructions

Genuine operating instructions

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Author: SN

Copyright information

Contents

1 Introduction

You have made an excellent choice in purchasing a METALLKRAFT hydraulic workshop press.

Carefully read the operating instructions prior to commissioning.

They describe correct commissioning, intended use and safe as well as efficient operation and maintenance of your hydraulic workshop press.

The operating instructions form part of the hydraulic workshop press. Keep these operating instructions at the installation location of your hydraulic workshop press. Please also note the locally applicable accident prevention regulations and general safety regulations for the use of hydraulic workshop presses.

Illustrations in this operating manual serve the general understanding and may deviate from the actual design.

1.1 Copyright

1.2 Customer service

Please contact your specialist retailer if you have any questions regarding your workshop press or require any technical information. Your specialist retailer will be happy to support you with specialist advice and information.

Germany:
Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair service:

Fax: 0951 96555-111
E-Mail: service@stuermer-maschinen.de
Internet: www.metallkraft.de

Spare parts orders:
Fax: 0951 96555-119
E-Mail: ersatzteile@stuermer-maschinen.de

We are always interested in information and experiences that arise from the application and can be valuable for the improvement of our products.

1.3 Disclaimer

All data in these operating instructions has been compiled on the basis of the state-of-the-art, valid standards and guidelines as well as our many years of expertise and experience.

The manufacturer shall not be liable for damage in the following cases:

- Non-observance of these operating instructions
- Unintended use
- Deployment of untrained staff
- Conversions at one's own responsibility
- Technical modifications
- Use of unauthorised spare parts

The actual scope of delivery may deviate from the descriptions and illustrations in this document as a result of special variants, optional extras or recent, technical modifications.

The obligations defined in the supply contract shall apply in addition to the general terms and conditions and the manufacturer's general terms and conditions as well as the statutory regulations valid at the time of the conclusion of the contract.

2 Safety

This section provides an overview of all important safety packages for personal protection as well as safe and reliable operation. The sections on individual service life phases contain additional, specifically applicable safety information.

2.1 Legend of symbols

Safety instructions

Safety instructions in these operating instructions have been highlighted with symbols. Safety instructions are indicated by signal terms that express the degree of risk involved.

DANGER!

This combination of symbol and signal term indicates a directly dangerous situation which may cause death or serious injury if not averted.

WARNING!

This combination of symbol and signal term indicates potentially hazardous situations which may cause death or serious injury if not averted.

ATTENTION!

This combination of symbol and signal term indicates a potentially hazardous situation which may cause minor or light injuries if it is not averted.

ATTENTION!

This combination of symbol and signal term indicates a potentially hazardous situation which may cause minor or light injuries if it is not averted.

NOTE!

This combination of symbol and signal term indicates a potentially dangerous situation which may cause material damage or harm the environment if it is not averted.

Tips and recommendations

Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for efficient and reliable operation.

Observe the safety information in these operating instructions to minimise the risk of personal injury as well as material damage and prevent hazardous situations.

2.2 Operator responsibility

Operator

Operators are defined as the persons who operate the machine for commercial or profit-based purposes or provide the machine to third parties for use or application and bear the legal product responsibility in terms of the protection of users, staff or third parties during operation.

Obligations of the operator

If the machine is used for commercial purposes, opera-tors are subject to the legal stipulations in terms of occupational safety. For this reason, the safety instructions in these operating instructions as well as the safety, accident prevention and environmental protection regulations valid at the installation location must be complied with. In this process, the following shall apply in particular:

- Operators shall obtain information about valid occupational safety regulations and determine additional hazards as part of a risk assessment which result from the specific operating conditions at the machine's installation location. Said risk assessment shall be reflected in operating instructions for machine operation.
- During the entire machine operating time operators must check whether the operating instructions they created meet current standards and adapt the operating instructions where necessary.
- Operators shall clearly manage and specify the responsibilities for installation, operation, trouble-shooting, maintenance and cleaning.
- Operators must make sure that all persons handling the machine have read and understood these operating instructions. Operators must also regularly train staff and notify of the hazards.
- Operators shall provide staff with the required protective equipment and wearing the required protective equipment shall be mandatory.

Operators shall also be responsible for maintaining the machine in a technically perfect condition. For this rea-son, the following shall apply:

- Operators shall make sure that the maintenance intervals described in these operating instructions are complied with.
- Operators shall regularly check that the safety equipment is fully functional and complete.

2.3 Operating staff qualification

The different tasks described in these operating instructions require different levels of skills in terms of the qualifications of operating staff working with the machine.

WARNING!

Risk from inadequately qualified persons!

Inadequately qualified persons are unable to assess the risks when handling the machine, thus putting themselves and others at risk of severe or fatal injuries.

- All work must be carried out by qualified persons only.
- Keep inadequately qualified persons away from the work area.

Exclusively persons of whom it can be expected that they reliably complete assigned tasks shall be authorized to carry out any tasks. Persons whose reactions have been impaired shall not be authorized, e.g. drug users, users under the influence of alcohol or medication.

These operating instructions specify the following personal qualifications for the different tasks:

Operating staff

Operating staff has undergone an induction by the operator about the entrusted tasks and potential hazards resulting from improper behavior. Operating staff shall exclusively be permitted to carry out any tasks beyond operation in normal mode if this has been specified in the operating instructions and operators have explicitly entrusted operating staff with the task.

Electrician

Due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, the electrician is in a position to carry out work on electrical installations and to recognize and avoid possible dangers independently.

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

Specialist staff

As a result of specialist training, expertise, experience and skills in terms of the relevant standards and regulations, specialist staff is able to complete the tasks they are entrusted with and independently identify hazards and avert risks.

Manufacturer

Certain work must be carried out by manufacturer specialist staff only. Other staff is not permitted to carry out this work. Contact our customer service to have the work carried out.

2.4 Personal protective equipment

Personal protective equipment is intended to protect the health and safety of persons at work. Staff must wear the personal protective equipment indicated in individual sections of these operating instructions when carrying out the different tasks on the machine.

The personal protective equipment is described in the following section:

Protective goggles

Protective goggles are intended to protect the eyes from flying parts.

Ear protection

The Hearing protection protects ears from hearing damage caused by noise.

Head protection

The industrial helmet protects the head against falling objects and knocking against fixed objects.

Protective gloves

Protective gloves are intended to protect the hands from components with sharp objects as well as fric-tion, abrasion, and deep-cut injuries.

Safety shoes

Safety shoes protect feet from pinching, falling parts and slipping on slippery surfaces.

Protective clothing

Protective clothing is tight-fitting work clothing with-out protruding parts, usually with a low tear resistance.

2.5 General safety instructions

Pay attention to the following:

- Use the protection guards and fix them securely. Never work without protection guard and keep them function-able.
- Always keep the machine and its working environment clean. Ensure adequate lighting.
- The workshop press may not be modified in its design and may not be used for purposes other than those foreseen by the manufacturer.
- Never work under the influence of concentration-disturbing illnesses, fatigue, drugs, alcohol or medicines.
- Keep children and persons unfamiliar with the workshop press away from your work environment.

- Do not pull on the mains lead to pull the plug out of the socket. Protect the cable from heat, oil and sharp edges.
- Disruptions that affect safety have to be eliminated immediately.
- Protect the workshop press from moisture (danger of short circuit).
- Before using the workshop press, make sure that no parts are damaged. Damaged parts must be replaced immediately to avoid danger sources.
- Do not overload the workshop press! You work better and safer in the specified performance range.
- Only use original spare parts and accessories to avoid possible risks and risks of accidents.

2.6 Safety identifications on the workshop press

The following safety identifications have been attached to the workshop press (Fig. 1) which must be observed.

Fig. 1: Safety identifications - 1 Warning sign: Danger high voltage, Pinching hazard for the upper limbs I 2 Prohibition sign: Do not enter I
3 Mandatory signs: Read the operating manual, Pull out the mains plug, wear eye protection, Safety clothing, wear safety shoes

The safety markings and instructions attached to the workshop press must not be removed. Damaged or missing safety markings can lead to malfunctions, personal injury and material damage. They have to be replaced immediately.

If the safety markings are not immediately recognizable and comprehensible, the workshop press must be taken out of operation until new safety markings have been affixed.

3 Intended use

The hydraulic pillar workshop press WPP 15, WPP 20 and WPP 30 is intended for use in mechanical workshops in the automotive and engineering industries. It is ideally suited for pressing and removing bearings, bushes, shafts and bolts as well as for stamping, bending and punching. The hydraulic energy is built up by means of a hydraulic hand pump. The workshop press convinces with its small footprint and easy handling. The table height adjustment takes place on model WPP 30 via a mechanism with winch.

Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.

NOTE!

The improper use, unauthorized modifications or alterations to the workshop press as well as the disregard of the safety regulations or the operating instructions exclude a liability of the manufacturer for resulting damage to persons or objects and cause the warranty to lapse!

WARNUNG!

Danger by misuse!

Misuse of the workshop press can lead to dangerous situations.

- Only operate the workshop press in the power range specified in the technical data.
- Never bypass or override the safety devices.
- Only operate the workshop press in a technically perfect condition.

3.1 Improper use

By observing the intended use, no reasonably foreseeable misuse is possible, which could lead to dangerous situations with personal injury.

3.2 Residual risks

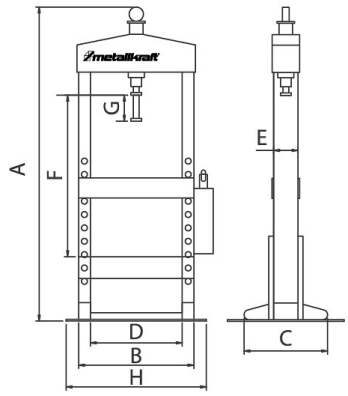
Even if all safety regulations are followed and the machine is used correctly, there are still residual risks listed below:

- There is a risk of injury to the upper limbs (e.g., hands, fingers).
- Danger of falling workpieces.
- During set-up and set-up work, it may be necessary to disassemble the safety guards provided by the customer. This creates various residual risks and potential dangers that every operator must be aware of.

4 Technical Data

Model	WPP 15	WPP 20	WPP 30
Press force	15 t	20 t	30 t
max. load Prism jaw	3,5 t	5 t	7,5 t
Piston stroke [mm]	160	160	160
Stroke traverse path	340 mm	380 mm	450 mm
Dimension and weight			
Clear width [mm]	500	610	710
Max. Installation height [mm]	1000	1000	1000
Depth of the hole frame [mm]	150	150	150
Length [mm]	900	950	1150
width/deepth [mm]	600	600	600
Height [mm]	1890	1900	1980
Weight [kg]	120	140	230

Dimensions



Dimensions in mm	WPP 15	WPP 20	WPP 30
A - Height	1890 mm	1900 mm	1980 mm
B - Width without pump dimensions	620 mm	770 mm	890 mm
C - Depth	600 mm	600 mm	600 mm
D - Clear span	500 mm	610 mm	710 mm
E - Depth of the hole frame	150 mm	150 mm	150 mm
F - Clear height	1000 mm	1000 mm	1000 mm
G - Piston stroke	160 mm	160 mm	160 mm
H - Width with pump dimensions	900 mm	950 mm	1150 mm

Fig. 2: Dimensions workshop press

Equipment

Accessories	Art. no.
6-part punching mandrel set with perforated plate for WPP 20 BK	4102020
6-part punching mandrel set with perforated plate for WPP 30 BK	4102030
6-part punching mandrel set with perforated plate for WPP 50 BK	4102050
Perforated plate for WPP 20 BK	4104002
Perforated plate for WPP 30 BK	4104003
Perforated plate for WPP 50 BK	4104004

Fig. 3: Equipment workshop press

5 Transport, packaging, storage

5.1 Delivery and transport

Delivery

Check the hydraulic workshop press for visible transport damage upon delivery. Immediately notify the haulage company or retailer if you identify damage on the hydraulic workshop press.

Transport

WARNING!

Danger to life!

If the weight of the workshop press and the permissible lifting capacity of the lifting gear are not observed during transport or lifting, the workshop press may tip over or fall.

- During transport and lifting work, pay attention to the weight of the workshop press and the permissible load capacity of the lifting equipment.
- Check lifting gear and load attachment means for perfect condition.

The workshop press may only be loaded and unloaded and transported by qualified specialist personnel.

Transport with crane:

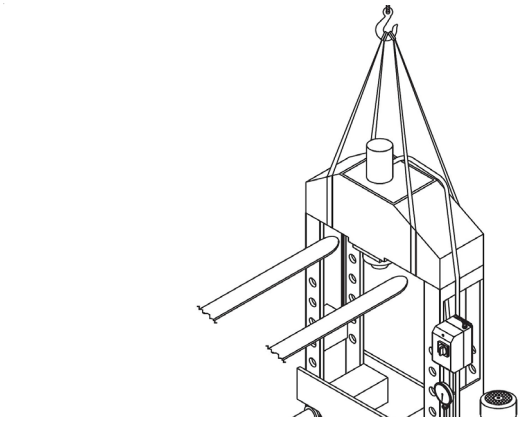


Fig. 4: Transport with crane or forklift

DANGER!

Danger to life due to falling of the load!

Falling loads can cause serious injury or even death.

- Never step under suspended loads.
- Fix loads carefully.
- When leaving the workplace, lower the load.

The workshop press can be placed in a suitable location with a crane. To do this, the workshop press must be attached to the crane in accordance with the regulations (Fig. 4). Transport only with steel cables and hooks designed for the weight of the press. The lifting points intended for transport by crane or forklift must be used on the workshop press. The workshop press must not be rocked during transport by crane.

5.2 Packaging

All packaging materials and packing aids used for the hydraulic workshop press are suitable for recycling and must always be disposed of using material-based recycling systems.

Packaging materials made of cardboard must be shredded and disposed of as part of waste paper recycling.

The foils are made of polyethylene (PE), padding is made of polystyrene (PS). Dispose of these substances at a recycling center or hand them over to the relevant waste disposal company.

5.3 Storage

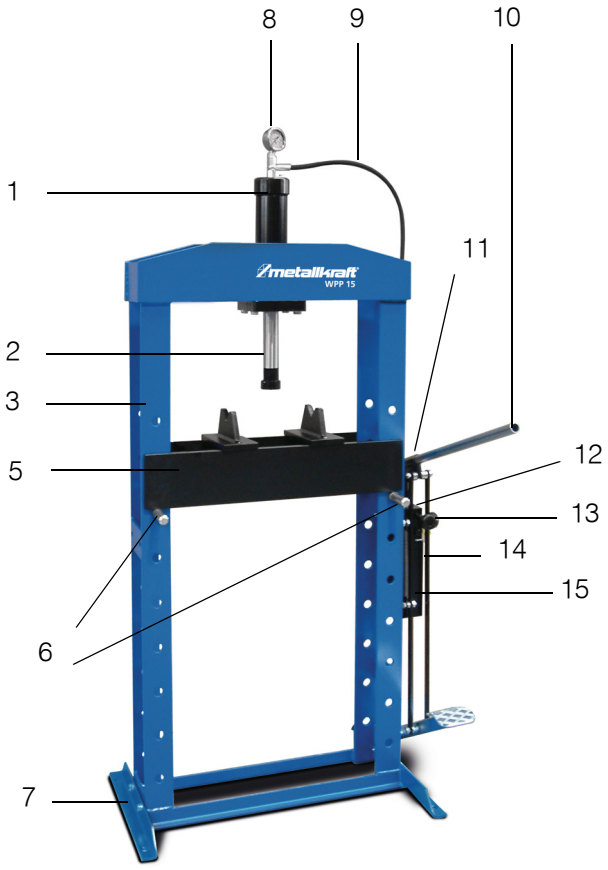
Store the workshop press thoroughly cleaned in a dry, clean, dust- and frost-free environment.

It must not be put down with chemicals in a room. If the machine is stored for a long time, all bare metal parts must be greased against rusting.

Storage temperature range: -10 ° C to +40 ° C

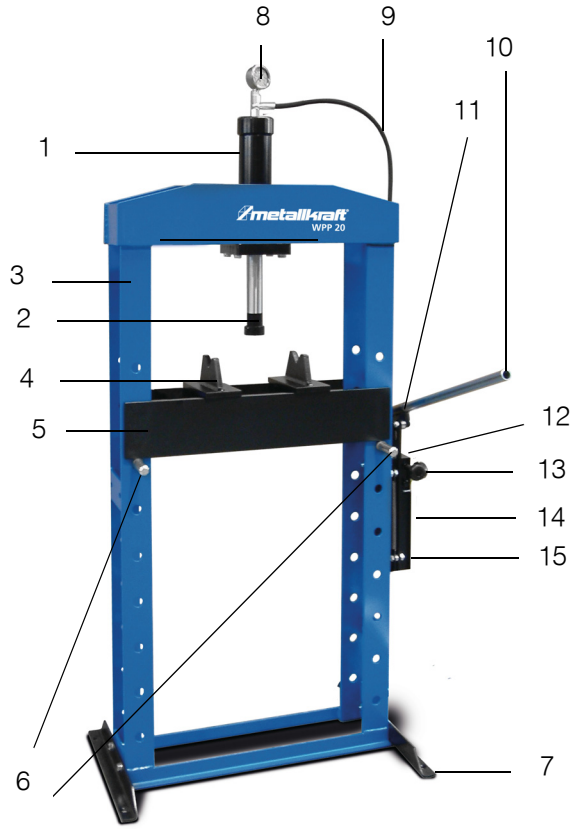
6 Description of the device

Figures in these operating instructions may deviate from the original.



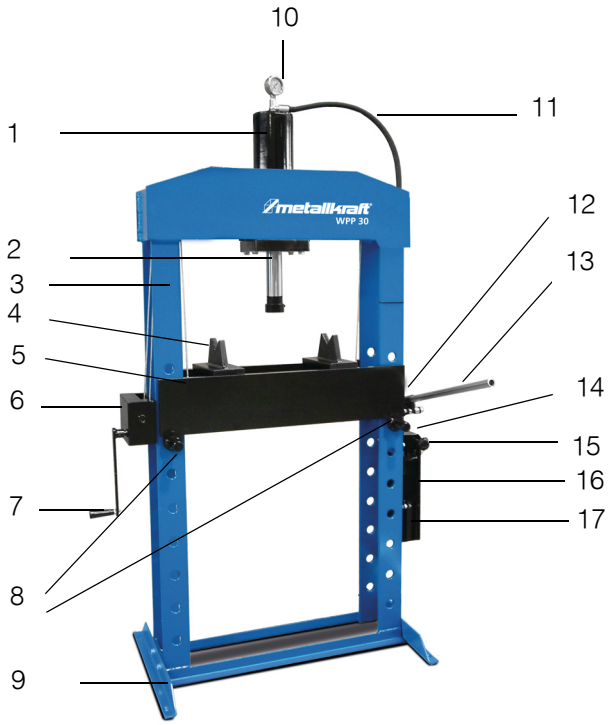
1. Hydraulic cylinder
2. Press ram
3. Machine frame
4. Supporting prism
5. Press table
6. Headed dowel of the press table
7. Machine foot
8. Manometer
9. Connection hose from hand pump to hydraulic cylinder
10. Pump lever, removable
11. Bushing for the pump lever
12. Changeover valve for up an down stroke of the hydraulic cylinder.
13. Adjustment screw for the withdrawal speed
14. Oil filling hole with vent function
15. Oil tank

Fig. 5: Description of the workshop press WPP 15



1. Hydraulic cylinder
2. Press ram
3. Machine frame
4. Supporting prism
5. Press table
6. Headed dowel of the press table
7. Machine foot
8. Manometer
9. Connection hose from hand pump to hydraulic cylinder
10. Pump lever, removable
11. Bushing for the pump lever
12. Changeover valve for up an down stroke of the hydraulic cylinder.
13. Adjustment screw for the withdrawal speed
14. Oil filling hole with vent function
15. Oil tank

Fig. 6: Description of the workshop press WPP 20



1. Hydraulic cylinder, positionable beside
2. Press ram
3. Machine frame
4. Supporting prism
5. Press table
6. Rope winch
7. Crank of the rope winch
8. Headed dowel of the press table
9. Machine foot
10. Manometer
11. Connection hose from hand pump to hydraulic cylinder
12. Bushing for the pump lever
13. .Pump lever, removable
14. Changeover valve for up an down stroke of the hydraulic cylinder.
15. Adjustment screw for the withdrawal speed
16. Oil filling hole with vent function (in the back of the cover)
17. Oil tank

Fig. 7: Description of the workshop press WPP 30

6.1 Scope of delivery

- 2-piece prism set for inserting round material
- Winch for raising and lowering the table (at WPP 30)

7 Assembly and connection

7.1 Installation location

Design the work area around the workshop press in accordance with local safety regulations.

WARNING!

Danger to life due to undersized buildings!

Overloading of ceiling structures leads to serious property damage and bodily injury up to death!

- If the workshop press is placed on a self-supporting building ceiling, the dynamic loads due to the movements must be taken into account - the foundation must bear the workshop press.

NOTE!

Property damage due to uneven ground!

An uneven surface causes deformations within the workshop press. This leads to an inaccurate machining of the workpieces.

- Set up the workshop press on a flat, vibration-free and even surface.

In order to achieve good functionality and a long life of the workshop press, the installation site should meet the following criteria.

- The ground must be level, firm and vibration-free.
- The foundation must not let any lubricant through.
- The installation or working area must be dry and well ventilated and there must be no risk of fire or explosion.
- Do not operate machines that cause dust and chips near the workshop press.
- There must be sufficient space for the operating personnel, for material transport as well as for adjustment and maintenance work.
- The site must have good lighting. (Minimum value: 300 lux, measured at the tool tip). With lower illuminance, additional lighting must be ensured, for example by means of a separate workplace luminaire.
- Working temperature range + 10 ° C to + 50 ° C

Installation of the workshop press

WARNING!

Risk of crushing!

The workshop press can tilt when setting up and cause serious injuries.

- The workshop press must be set up by at least 2 people together.

Wearing safety gloves!

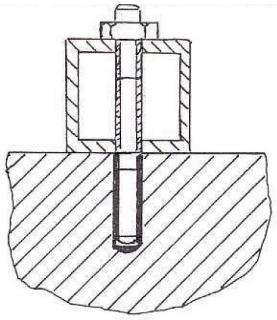
Wear safety shoes!

Wear protective clothing!

Step 1: Check the ground for horizontal alignment. If necessary, compensate slight unevenness.

Step 2: Precisely align the workshop press with a spirit level by adjusting with the foundation screws and shims. Check the exact alignment of the machine at regular intervals (quarterly).

Step 3: Fix the workshop press with ground anchors (for example Fischer FZA or equivalent) on the ground.



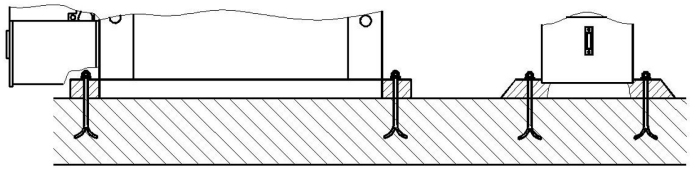


Fig. 8: Anchoring of the workshop press

NOTE!

- After setting up, remove the protective agent from the bare metal parts, which have been applied to protect against rusting.
- Use usual solvents.
- No water, no nitrolic solvents or similar use!

NOTE!

The moving parts must be free from dirt and dust.

- If necessary, lubricate the moving parts as listed in the chapter on cleaning and maintenance.

7.2 Montage

ATTENTION!

Before the first start-up, the following operating points must be executed.

ATTENTION!

Fill up only with suitable hydraulic oil. Do not use brake oil. Do not overfill oil container; an increased amount of oil can cause problems.

The workshop press is delivered ready for use as possible. This means that in the course of commissioning only a few work steps have to be done.

The following points have to be carried out:

- Use the exploitation drawing for the construction of the workshop press.
- Be sure to tighten all screw connections of the assembled press before first use!
- Attach the workshop press with suitable ground anchors in the foundation. Pay attention to the load-bearing capacity of the substrate. Pay attention to the load-bearing capacity of the substrate.
  A tipping over of the press must not be allowed, even if an external force is applied.
- Fill the pump with hydraulic oil and close the inlet opening with the yellow plastic vent plug.

Type of oil: Hydraulic oil with a viscosity of 22 mm^2 / s to 25 mm^2 / s (at 40 ° C)

Oil quantity: 0.9 to 1.2 liters for WPP 15 and 20, 2.3 liters for WPP 30

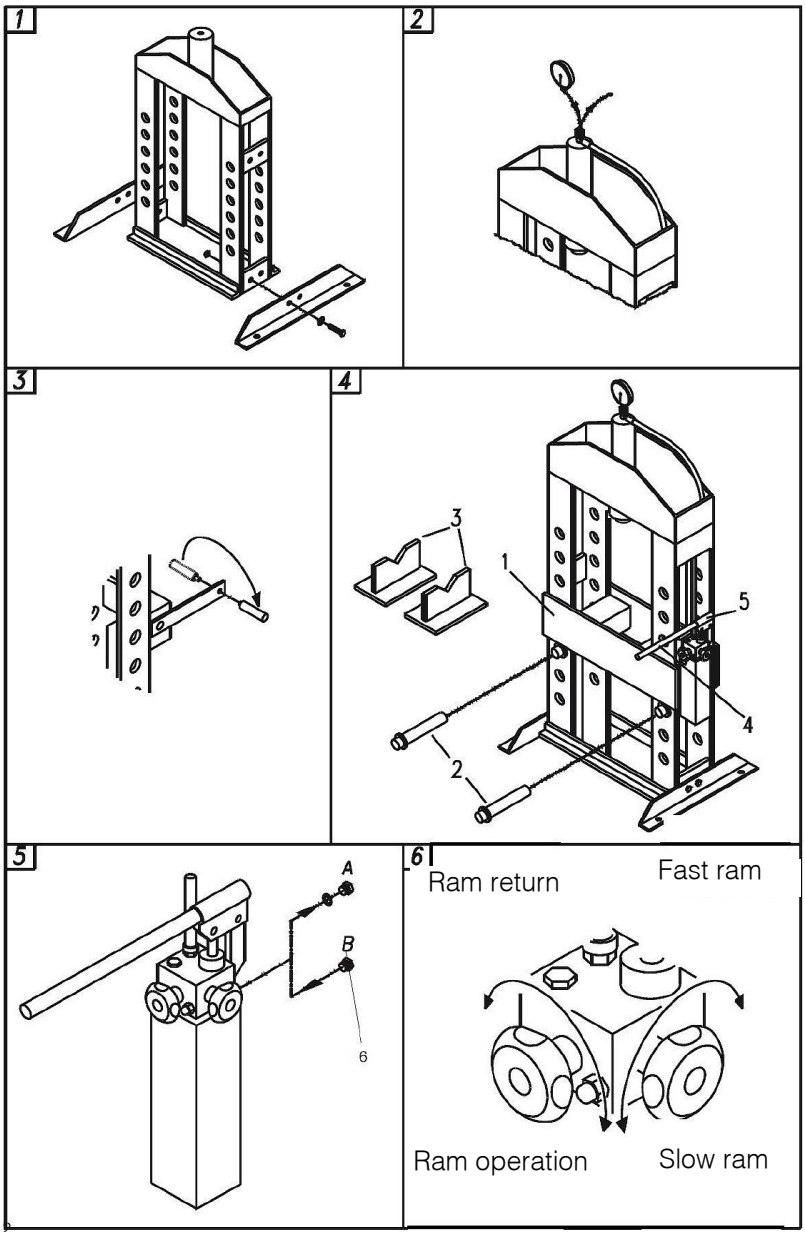


Fig. 9: Assembly

8 Operation

WARNING!

Danger due to insufficient qualification of persons!

Unqualified persons can not assess the risks involved in handling the workshop press and expose themselves and others to the risk of serious or fatal injuries

- All work should only be carried out by qualified persons.
- Keep inadequately qualified persons out of the work area.

WARNING!

Risk of crushing!

The upper limbs must be kept away from the machine when machining the workpiece.

WARNING! DANGER OF EXPLOSION !

Never press containers of highly flammable or explosive substances, aerosols or pressurized containers.

Never press objects made of brittle materials such as concrete or stone.

ATTENTION!

The following rules must be followed.

- Never carry out any work on the workshop press under the influence of alcohol, drugs or medication and / or over-fatigue or concentration-disturbing illnesses.
- The workshop press may only be operated by a trained person.

ATTENTION!

Before you start using the workshop press for the first time, do the following:

- Check all screw connections on the installed workshop press and re-tighten if necessary.
- Fill the tank with hydraulic oil and close the filler hole.
- Remove the air out of the hydraulic system.
- Check the hydraulic lines and connections for leaks.
- Check the electrical wiring and connections.

Wear protective glove!

Wear safety shoes!

Wear protective clothing!

The machine is designed for steel processing and not for processing flammable or harmful substances. The customer is responsible for the choice of the material to be processed. It must also be ensured that the safety of nearby operating personnel is ensured.

The material should meet the following requirements:

- Dry and clean, free of oil.
- The diameter must correspond to the specifications.
- The material should have a degree of hardness throughout.
- Buying high quality material is advisable.
- The surface of the areas to be processed should be smooth.

The following recommendations should be helpful during processing:

- The operator should have a basic knowledge of this type of machine.
- Operators should not wear wide garments, necklaces, rings, etc. to prevent them from being pulled into the running machine.

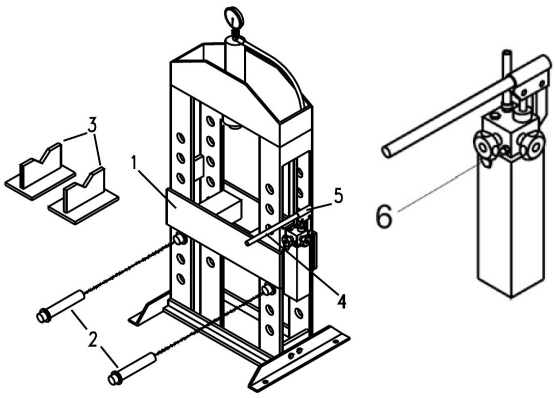
8.1 Set table height WPP 15 and 20

WARNING!

Risk of crushing!

If the press table is not completely resting on the support pin, it can cause bruising. Before adjusting the table height, check that the table is completely resting on the support bolt.

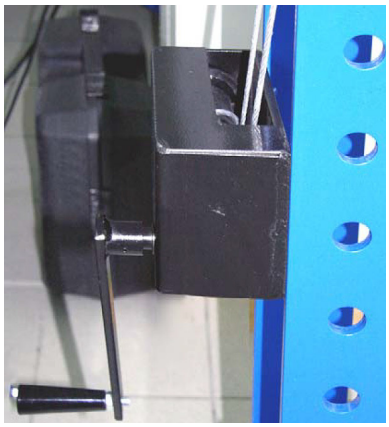
In order to work safely on the hydraulic workshop press, the correct working height of the table must be adjusted by means of the support bolts.



1. Press table
2. Headed dowel
3. Supporting prism
4. Pump lever
5. Cup
6. valve for Up / down movement of the piston

Fig. 10: Adjusting the table height

8.2 Adjusting the table height WPP 30



Step 1: Lift the press table by turning the winch handle clockwise.

Step 2: If the press table is to be lowered, first pull the support bolts out of the stand bores.

Step 3: Bring the table up to the desired height level. Leave room for inserting the support bolts.

Step 4: Insert the support bolts into the stand holes.

Step 5:Turn the crank of the winch counterclockwise and lower the press table down to the support bolts.

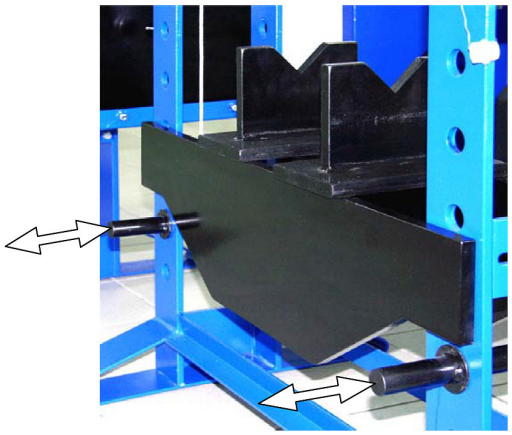


Fig. 11: Positioning the table height WPP 15, 20 and 30

Step 1: Lift the press table with your hands.

Step 2: Pull the support bolt out of the stator holes on the raised side. Hold the press table in his position.

Step 3: Bring the table up to the desired height level. Leave room for inserting the support bolts.

Step 4: Insert the support bolts into the stand holes.

Step 5: Lower the press table onto the support bolts. Check that the table is positioned horizontally.

ATTENTION!

Any work may only be carried out if the press table lies completely on both support bolts and the hand-wheel of the winch is completely free to move. The table must not hang on the ropes.

ATTENTION!

Note the heavy weight of the press table. If necessary, adjust the height of the press table with the assistance of a second person.

ATTENTION!

Never operate the handwheel while the fingers are near the pulley. It is forbidden to remove the support bolts unless the cables are properly attached to the handwheel.

8.3 Set up the workspace

Step 1: Place the support prisms or other support and fixtures adapted to the workpiece on the press table.

Step 2: Place the workpiece in the working or clamping area of the press table. (Fig.12)

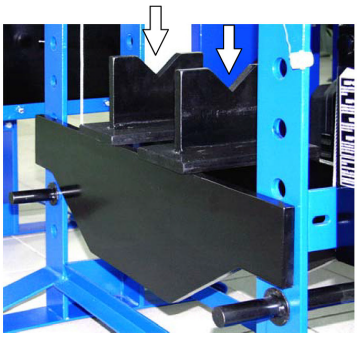


Fig. 12: Adjusting the work area

ATTENTION!

When selecting a workpiece holder, make sure that they are capable of absorbing the maximum press force.

The workpiece holder should be designed to provide the workpiece with sufficient secure support throughout the operation and isn't able not tilt from the press table.

Adjusting the horizontal working position

Align the chuck or workpiece so that its horizontal position is at the operating point of the hydraulic cylinder.

ATTENTION!

For even load distribution, the working point on the workpiece to be pressed should be, if possible, in the center thereof. Make sure that the force is transmitted as centrally as possible.

8.4 Build up the pump pressure

Step 1: Insert the pump lever into the socket provided.

Step 2: Move the diverter valve to the right position to clear the path for filling the hydraulic cylinder.

Step 3: Move the lever up and down to fill the hydraulic cylinder with oil until the press ram contacts the workpiece.

Step 4: Continue pumping to build up the required pressure until the operation is complete.

Fig. 13: Inflating the pump pressure

ATTENTION!

During the pressing process, observe alternately the working area and the manometer in order to prevent possible damage to the press or workpiece due to overloading.

8.5 Retracting the hydraulic cylinder

Move the knob of the diverter valve to the left position to let the hydraulic oil flow independently from the cylinder back into the oil reservoir of the pump.

Setting the retraction speed:

The speed with which the piston moves back in the cylinder can be influenced via the lateral adjustment screw.

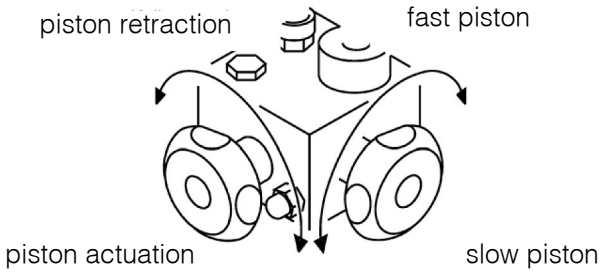


Fig. 14: Setting the cylinder speed

ATTENTION!

The setting of the retraction speed is already preset by the manufacturer. Changes to it are only necessary or permitted after maintenance work or repairs. The adjusting screw is therefore closed by a cover.

9 Cleaning and maintenance

Tips and recommendations

To ensure that the workshop press is always in good operating condition, regular care and maintenance work must be carried out.

WARNING!

Danger due to insufficient qualification of persons!

Insufficiently qualified personnel can not assess the risks associated with repairs to the workshop press and expose themselves and others to the risk of serious or fatal injuries.

- All maintenance work should only be carried out by qualified persons.

DANGER!

Danger for life by electric shock !

There is a danger to life when in contact with live components.

- Always unplug the appliance before cleaning and maintenance.
- Connections and repairs of the electrical equipment may only be carried out by a qualified electrician.

NOTE!

After servicing, maintenance and repair, check that all panels and guards are properly installed on the machine and that there are no tools inside or in the workshop area.

Damaged safety devices and parts must be repaired or replaced by the customer service.

9.1 Cleaning and lubrication of the machine

ATTENTION!

Before starting cleaning and lubrication, be sure to switch off the machine and disconnect the power plug!

Never use solvents to clean plastic parts or painted surfaces. A surface release and consequential damage could occur.

Wearing safety gloves!

Clean the workshop press regularly.

All plastic parts and painted surfaces should be cleaned with a soft, damp cloth and some neutral detergent.

Remove excess grease or spilled oil with a dry and lint-free cloth.

Treat bare metallic work surfaces with anti-rust spray.

9.2 Visual inspection

Interval or operating hours	
daily	Visual inspection for contamination: if necessary clean.
weekly	Visual inspection of the workshop press, in particular of the press table and the support bolts: if necessary, replace damaged components or arrange for repair.
weekly	Visual inspection of the hydraulic components to function and Oil loss (pump, hoses, cylinders, pressure gauges, etc.), visual inspection Hydraulic oil level: If necessary, replace damaged components, top up hydraulic oil if necessary. Moving parts, lubricate piston.
200	Functional test, testing of the entire workshop press for completeness or proper and safe operation: if necessary, arrange repair.

9.3 Lubricating points

Lubrication must be carried out at the following lubrication points according to the maintenance tasks:

Component	Specification	lubircant
Hydraulic hand pump	Press ram Shaft at the diverter valve	grease
Rope winch	Crank bearings, gear box, pulleys	grease

9.4 Service and maintenance / repair

Maintenance and repair work may only be carried out by qualified personnel. If the hydraulic workshop press does not operate properly, contact a dealer or our customer service.

The contact details can be found in chapter 1.2 customer service.

All protection and safety equipment must be reinstalled immediately after completion of repair and maintenance work. It is recommended to have the workshop press cleaned and checked by qualified personnel at least once a year. The hydraulic lines and connections must be checked annually by a specialist. With increased operating times, frequent and increased pressure pulses or strong external influences, the test period is 6 months. After 6 years of operation, the hydraulic lines must be replaced. With increased operating times and requirements, it is recommended to have the lines replaced after 2 years.

9.5 Maintenance tasks

Maintenance interval or operating hours	
200 hours	lubricating the machine
3000 hours	change of the hydraulic oil
if necessary	refill of the hydraulic oil

9.6 Recommended supplies

Lubricant	Specification	Manufacturer / Type	Amount
Hydraulic oil	ISO 32 viscosity from 22 to 25 mm^2/s	OMV HYDRAL 32	0,9 bis 1,2 Liter WPP 15,20 2,3 Liter WPP 30
Grease	ISO XM 2	OMV SIGNUM M 283	if necessary

Maintenance schedule

ATTENTION!

Maintenance and repair work may only be carried out by qualified personnel.

If increased wear is detected during regular checks, shorten the required maintenance intervals according to the actual signs of wear. If you have questions about maintenance work and intervals, contact the manufacturer.

The contact details can be found in chapter 1.2 Customer Service.

If the workshop press does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

All protection and safety equipment must be reinstalled immediately after completion of repair and maintenance work.

Oil change

The screwing on the retracted hydraulic cylinder must be opened to drain the oil.
Then the hydraulic oil can be pumped out and collected at the end of the pipeline.
In case of an oil change or if the hydraulic pump loses oil, it is necessary to refill oil through the filler hole. During the process, the piston must be in the rest position, i.e. fully retracted.

9.7 Disturbances, possible causes and measures

ATTENTION!

If one of the following errors occurs, stop working with the machine immediately.
Before you begin troubleshooting, turn off the machine and unplug the power cord. All repairs or replacement work may only be carried out by qualified and trained specialist personnel.

Disturbance	possible cause	measure
Pump does not work.	1. Overpressure valve open or defective	1. Check valve spring, replace if necessary. 2. Contact the service.
Pressure loss.	1. Air in the cylinder or in the pipes. 2. The filter is clogged.	1. For venting, lift the piston once and lower it. 2. Clean filter, replace if necessary.
The pressure does not reach the maximum value.	1. Too low hydraulic oil level. 2. Too little oil density in the oil circuit. 3.Overpressure valve open or defective. 4. Pump defective. 5. Cylinder connection defective.	1. Add hydraulic oil. 2. Seal or replace lines and connections. 3. Clean pressure relief valve and valve spring, replace if necessary. 4. Repair or replace pump. 5. Repair connection or replace cylinder.

10 Disposal, reusing used machines

In your own interest and to protect the environment make sure that all machine components are exclusively disposed of in as intended and permitted.

10.1 Decommission

Disused devices must be taken out of service immediately in order to avoid later misuse and endangering the environment or people.

- remove all environmentally hazardous processing materials from the used machine.
- if necessary, disassemble the machine into assemblies and components that are easy to handle and suitable for recycling.
- the machine components and processing materials must be disposed of using the intended disposal methods.

10.2 Disposal of electrical equipment

Electrical equipment contains a variety of recyclable materials and environmentally harmful components.

These components must be separated and properly disposed of. In case of doubt, contact municipal waste management.

If necessary, the help of a specialized waste disposal company can be used for the treatment.

10.3 Disposal of lubricants

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the product-specific data sheets.

11 Spare parts

GEFAHR!

Risk of injury caused by the use of incorrect spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorized by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.

11.1 Spare parts orders

Spare parts are available from authorized retailers or directly from the manufacturer. The contact details have been listed in section 1.2 Customer service.

The following key data is required for queries or spare parts orders:

- Device type
- Item number
- Spare parts drawing number
- Position number
- Year of manufacture
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided.

Data on the machine type, item number and year of manufacture is listed on the type plate attached to the workshop press.

Example

The pump lever for the workshop press WPP 15 must be ordered. The pump lever is shown in the spare part drawing 2 with the item number R0188.

Device type: workshop press WPP 15

Item number: 4001015

Spare parts drawing number: 2

Position number: R0188

Order number: **0-4001015-2-R0188**

The order number is made up of the item number (4001015), spare parts drawing number (2), position number (R0188) and one digit of the item number (0).

-The item number must feature a leading 0 (zero).

- Position numbers 1 to 9 shall also feature a leading zero.

The article number of your device:

Workshop press:

WPP 15	4001015
WPP 20	4001020
WPP 30	4001030

11.2 Spare parts drawings

The following drawings are intended to identify the required spare parts in the event of service. If applicable, submit a copy of the parts drawing including the highlighted components to your authorized retailer.

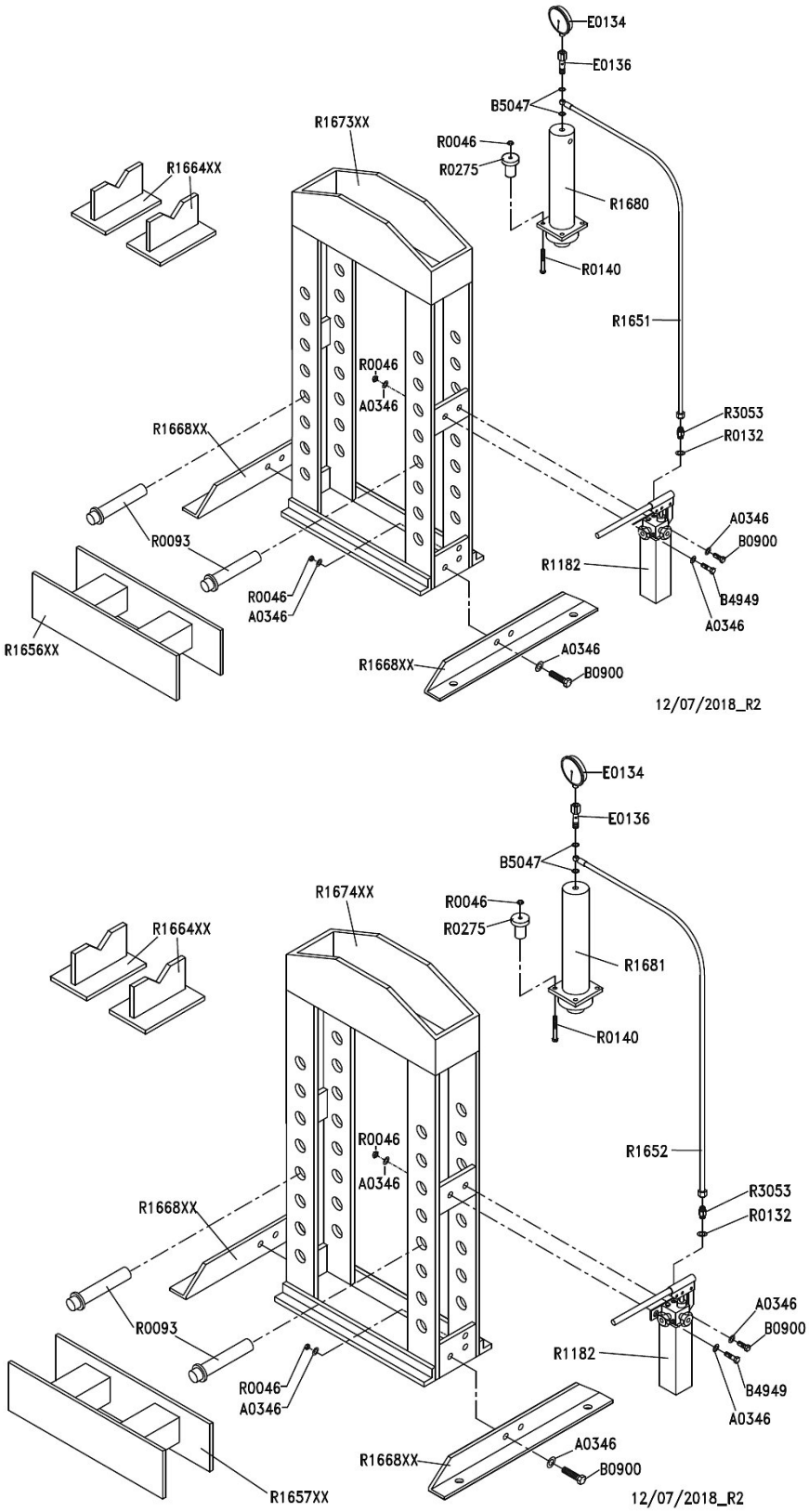
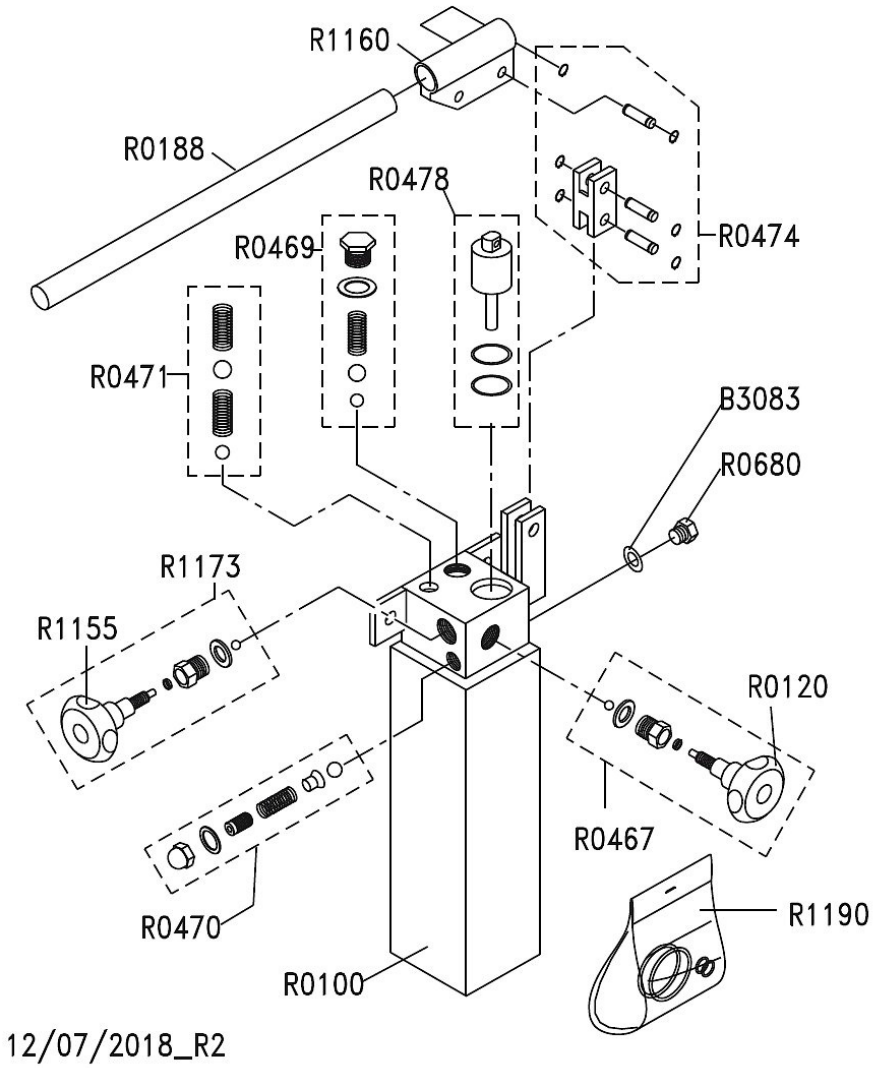
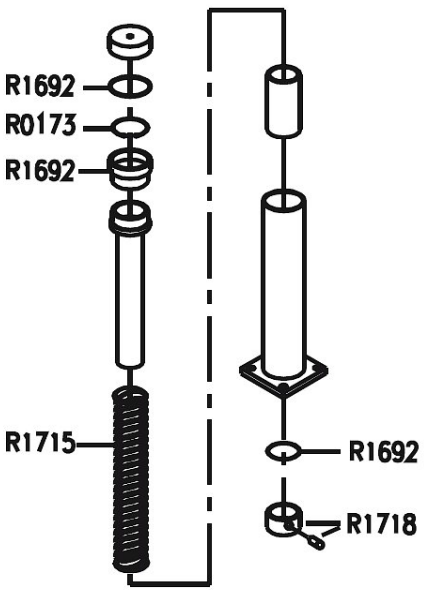


Fig. 15: Spare parts drawing 1 - WPP 15 and 20

R1182



R1680



R1681

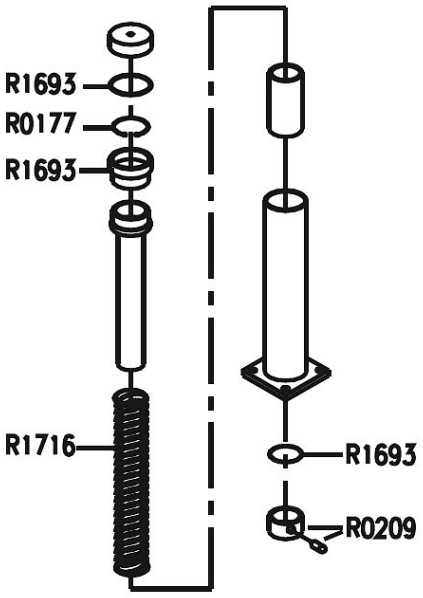


Fig. 16: Spare parts drawing 2 - WPP 15 and 20 Hydraulic

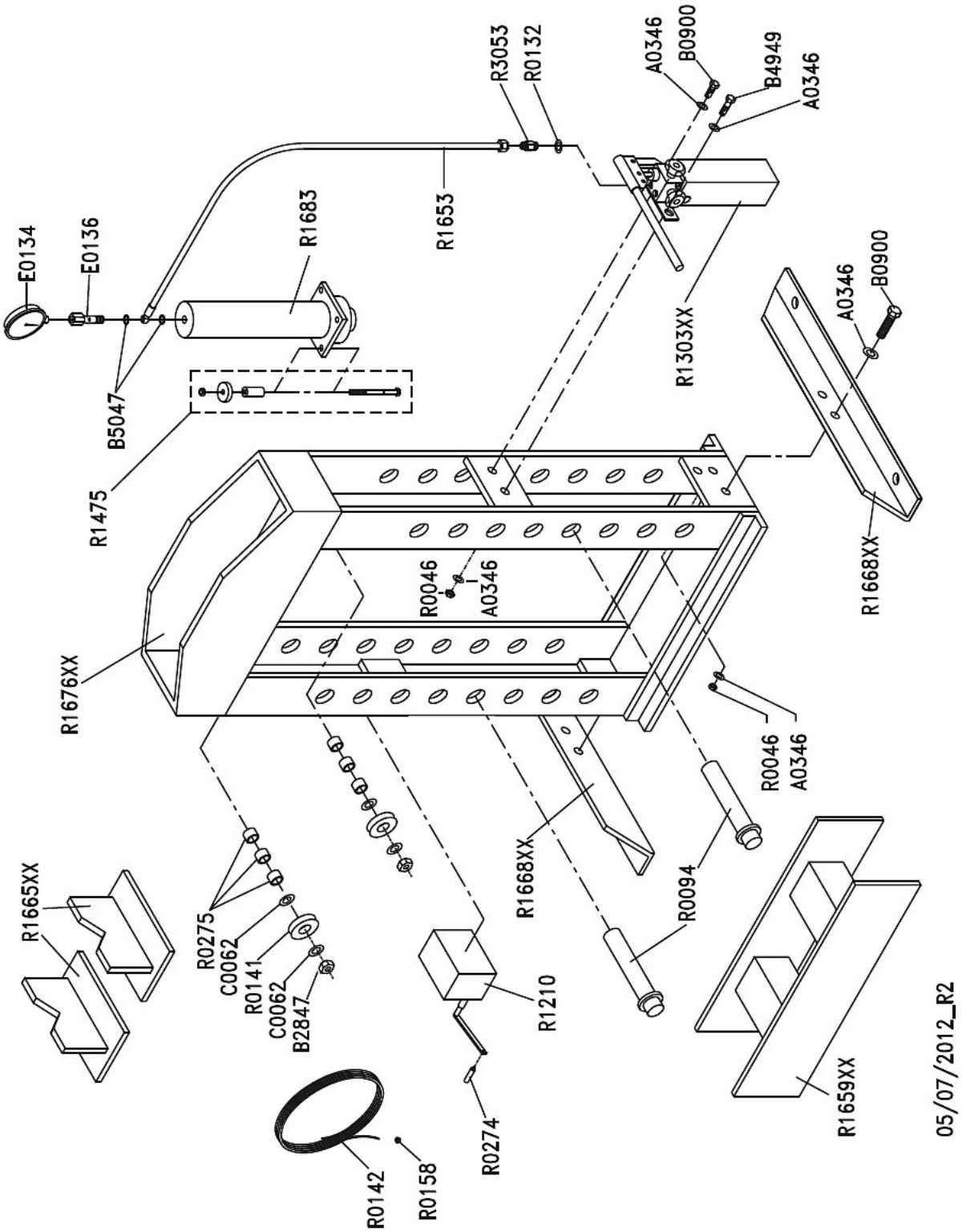


Fig. 17: Spare part drawing 3 - WPP 30

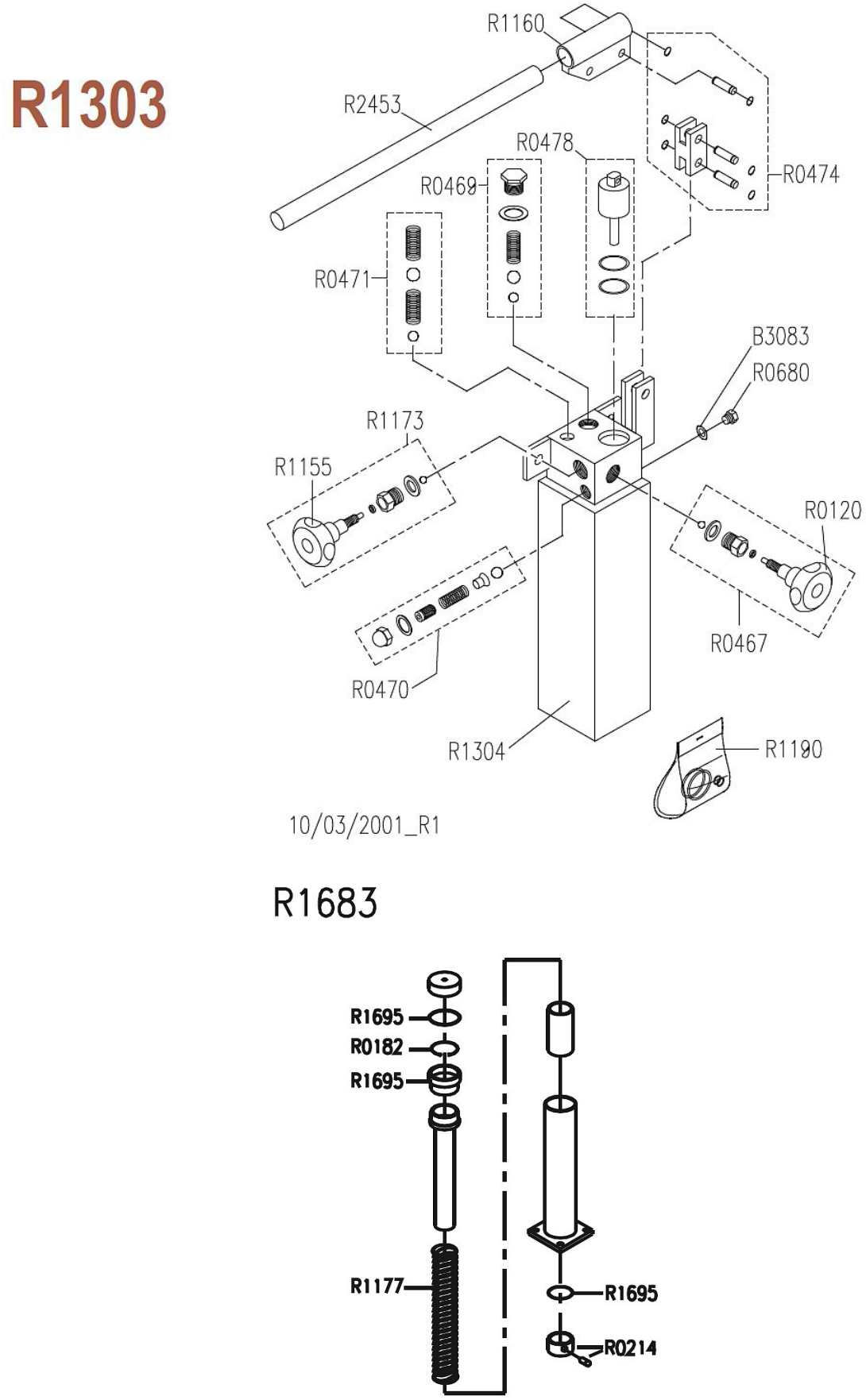
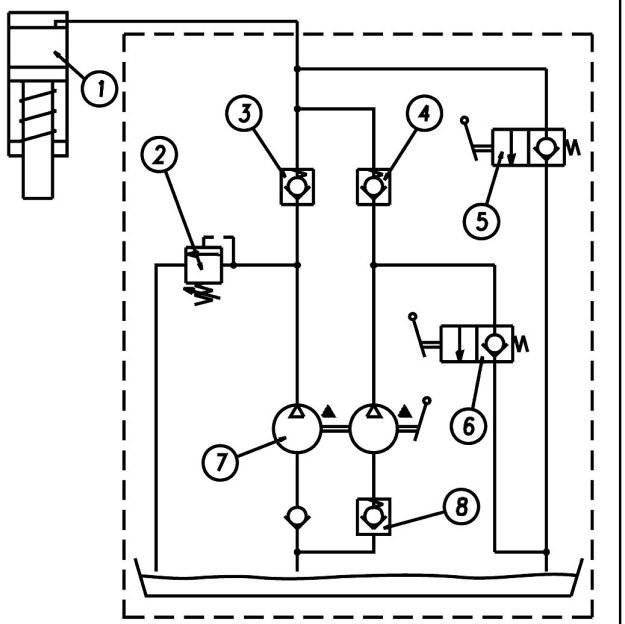


Fig. 18: Spare part drawing 4 - WPP 30 Hydraulic

12 Hydraulic - diagram



Position	Description
1	hydraulic cylinder
2	over pressure valve
3	check valve, return
4	check valve, return
5	drain control valve
6	speed control valve
7	hand pump
8	check valve, suction side

Fig. 19: Hydraulic-diagram WPP 15, 20 and 30

13 EC Declaration of conformity

According to machine directive 2006/42/EC Annex II 1.A

Manufacturer/retailer: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Starße 26
D-96103 Hallstadt

herewith declares that the following product

Product group: Metallkraft® Metallbearbeitungsmaschinen

Machine type: Hydraulic Workshop Press

Designation of machine/ Item number :		
	WPP 15	4001015
	WPP 20	4001020
	WPP 30	4001030

Item number: _____

Year of manufacture: 20____

corresponds, on the basis of its design and construction, as well as the version that we have put into circulation, with the relevant fundamental health and safety requirements of (subsequent) EC guidelines.

Relevant EU directives 2014/30/EU EMC-Directive

The following harmonized standards were applied:

DIN EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
DIN EN 693:2011-11	Machine tools - Safety - Hydraulic presses

Responsible for documentation: Kilian Stürmer, Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 15.04.2016

_____
Kilian Stürmer
Managing Director

CE

14 Maintenance schedule

	Maintenance schedule							WPP			
daily	weekly	40 h	200 h	200 h	if necessary	3000 h	annual				
Cleaning Hydraulic components	Visual inspection of the machine	Function control Press system	Function control If necessary arrange repair	Lubricate machine components	Refill oil , Replacement Hydraulic components	Change hydraulic oil	Safety test, Hydraulic lines	Data	Operating hours	employee	Signature

15 Notes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