Operating instructions
Hydraulic rescue equipment

RESCUE RAMS

RZ 1-850, RZ 2-1290, RZ 3-1640
RZT 2-600, RZT 2-775, RZT 2-1170, RZT 2-1500
RZT 2-1500 XL, RZT 3-1310 XL

8142530

CE

Tested according to
EN 13204-2012 and
NFPA 1936:2010

ISO 9001:2008

WEBERRESCUE SYSTEMS

www.weber-rescue.com

Table of Contents

1 General

1.1 Information regarding the operating instructions

These operating instructions provide important information for using the rescue rams. Compliance with all of the safety and handling instructions specified is a condition for safe work.

Furthermore, adhere to the local accident prevention guidelines and general safety regulations for the region in which the devices are used.

The instruction manual should be read carfully before starting work! It is part of the product and must be kept in a place that is known and accessible to personnel at all times.

This documentation contains information for operating your equipment, irrespective of the equipment type. For this reason you will also find explanations which do not refer directly to your equipment.

All information, technical data, graphics and diagrams contained in these operating instructions are based on the most up-to-date data available at the time of writing.

In addition to read through the operating instructions we also recommend that you be trained and instructed on handling the rescue equipment (possible applications, application tactics etc.) by our qualified trainers.

1.2 Explanation of symbols

Warnings

Warnings are marked by symbols in this operating manual.
The individual instructions are introduced by signal words that express the severity of the hazard.

It is essential to comply with the instructions in order to prevent accidents, injuries and damage to property.

DANGER!
... indicates an imminently dangerous situation that can result in death or serious injury if not avoided.

WARNING!
... indicates a potentially dangerous situation that can result in death or serious injury if not avoided.

CAUTION!
... indicates a potentially dangerous situation that can result in minor or light injuries if not avoided.

ATTENTION!
... indicates a potentially dangerous situation that can result in material damage if not avoided.

Tips and recommendations

NOTE!
... highlights useful tips and recommendations, as well as information for efficient, trouble-free operation.

1.3 Limitations of liability

All information and instructions in this operating manual have been compiled in keeping with applicable standards and guidelines, the current state of technology, and our many years of knowledge and experience.

The manufacturer assumes no liability for damage due to:

- Failure to comply with the operating manual
- Unintended use
- Assignment of untrained personnel
- Unauthorised modifications
- Technical changes
- Use of non-approved replacement parts
- Use of non-original replacement parts

The actual scope of delivery can vary from the explanations and graphic representations provided in this manual in the case of special versions, or due to technical changes.

1.4 Copyright

NOTE!
Further information, images and drawings can be found on our homepage. www.weber-rescue.com

1.5 Warranty conditions

The warranty conditions can be found as a separate document in the sales documentation.

1.6 Customer service

Our customer service department is available to you for technical information.

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NOTE!
When contacting our customer service department please state your equipment‘s designation, type and production year.
These details can be found on the equipment type plate.

2 Safety

This section of the operating manual provides a comprehensive overview of all the important safety aspects for optimal protection of operating personnel, as well as for safe and trouble-free operation.

Significant hazards can occur if the handling and safety instructions in this manual are not complied with.

2.1 Intended use

The hydraulic rescue rams are designed and tested exclusively for the appropriate designated purposes described here. All other activities are fundamentally prohibited.

Rescue ram (RZ 1-850, RZ 2-1290, RZ 3-1640, RZT 2-600, RZT 2-775, RZT 2-1170, RZT 2-1500, RZT 2-1500 XL, RZT 3-1310 XL)

- All of the rescue rams are designed as one-man devices and may therefore be operated by one person only.
- The devices serve exclusively to push steering columns, vehicle roofs and other obstacles upwards and to push vehicle parts out of the way.
- In addition, they can be used to brace, stiffen and pull.
- The chain set is to be used exclusively for pulling.

WARNING!

Improper use can be dangerous!

Any improper or unintended use of the devices can be hazardous!

Therefore, make absolutely sure that:

» The devices are used only for the applications stated above.

» All other information on proper use of the devices in Chapter 5 (Possible applications) is observed.

2.2 Responsibility of the customer

In addition to the health and safety instructions in this operating manual, one must adhere to the safety, accident prevention, and environmental protection guidelines for the region in which the equipment is used. Particularly applicable in this regard:

- The customer must be familiar with the applicable health and safety provisions and in a hazard analysis identify other hazards that may exist at the equipment‘s installation site due to the special working conditions.
- The customer must clearly regulate and specify responsibilities for installation, operation, maintenance and cleaning.
- The customer must ensure that all personnel who handle the equipment have fully read and understood the operating manual.
- In addition, at regular intervals, the operator must train personnel and inform them of the hazards of working with the equipment.

Moreover, the customer is responsible for ensuring that the equipment is always in technically faultless condition. Consequently, the following applies:

- After each use, and at least once a year, a visual inspection of the equipment must be carried out by a trained individual (according to GUV-G 9102 or country-specific guidelines).
- Every three years, or if you have doubts about the safety or reliability of the equipment, functional testing and stress testing must be carried out (according to GUV-G 9102 or country-specific guidelines).

2.3 Operating personnel

The following qualifications are cited in the operating instructions for the various activity areas:

- Trained individual
  is informed through training offered by the customer about the tasks assigned to him and the possible dangers of improper conduct.

- Specialist
  is someone who, due to specialised training, skills and experience, as well as knowledge of the applicable stipulations by the manufacturer, is capable of executing the tasks assigned to him or her and of independently recognising possible hazards.

WARNING!
Inadequate training can result in injuries!

Improper handling of the equipment can lead to serious injury or material damage.

Therefore, make absolutely sure to:

» allow particular tasks to be carried out only by the persons stated in the relevant chapter of this manual.

» When in doubt, call in specialists immediately.

NOTE!
The equipment may not be used by personnel who have consumed alcohol, taken medication or drugs!

2.4 Personal protective gear

Wearing personal protective equipment (PPE) is essential to minimise the risks to operating personnel when working with the hydraulic rescue devices.

It is essential to wear the following protective clothing for all work:

Protective work clothing
Tight-fitting work clothing with tight sleeves and no protruding parts must be worn when working. It mostly serves to protect against entanglement by moving equipment parts.

Safety shoes
Steel-toed safety shoes must always be worn as protection against heavy falling parts and from slipping on slick surfaces.

Work gloves
Work gloves must be worn when working with the equipment to provide protection from sharp edges and shards of glass.

Helmet with face shield
A helmet with face shield must be worn for protection against flying or falling parts and shards of glass.

Protective goggles
Protective goggles must also be worn in addition to the face shield in order to protect the eyes from flying objects.

The following must also be worn for certain work:

Ear protectors
In addition to the basic protective equipment, ear protectors must also be worn to protect your hearing.

2.5 Specific hazards

The hazards arising from the risk analysis are listed in the following section.

Follow the safety instructions listed here and the warnings in the other sections of this manual to minimise potential health hazards and avoid dangerous situations.

Electricity

DANGER!
Danger of fatal electric shock!

There is an imminent life-threatening danger if live parts are touched. Damage to insulation or to specific components can pose a fatal hazard.

Therefore:

- If the insulation is damaged, immediately disconnect the power supply and arrange for repairs.
- Allow only qualified electricians to work on the electrical equipment.
- For all work on the electrical equipment, it must be disconnected from the power source, and it must be checked that the device is de-energised.
- Prior to maintenance, cleaning and repair work, the power supply must be switched off and secured to prevent it from being switched back on again.
- Do not bypass or disable fuses.
  When changing the fuses, ensure that they have the correct amperage.
- Keep moisture away from live parts.
  This can lead to a short-circuit.

Noise

WARNING!
Noise can damage hearing!

The noise occurring in the work area can cause severe hearing damage.

Therefore:

» You should also wear ear protectors when carrying out certain noise-producing tasks.

» Do not stay in the hazardous area longer than necessary.

Hydraulic power

WARNING!
Hydraulic power hazard!

Serious injury can result due to the released hydraulic forces and escaping hydraulic oil.

Therefore:

» Constantly monitor the device during the work procedure and set down if necessary.

» Inspect the hose lines and devices for damage after every use.

» Avoid skin contact with the hydraulic oil (wear protective gloves).

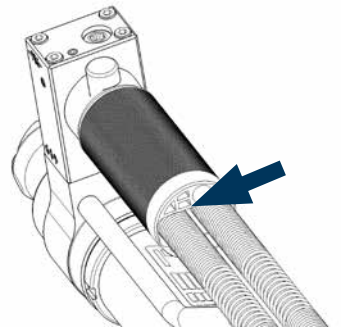
» Immediately remove the hydraulic oil from wounds and consult a doctor.

2.6 Safety devices

Safety valve for SKS couplings

If the return line is not correctly coupled such that the oil cannot return then a safety valve integrated into the control handle actuates in order to protect the equipment and the operator. This causes hydraulic oil to seep harmlessly from the end of the handle.

Move the switching valve on the hydraulic power unit immediately to the „0“ position and connect the coupling parts together correctly.



2.7 Behaviour in the event of danger or accidents

Preventive measures

- Always be prepared for accidents
- Keep first aid equipment (first aid kit, blankets, etc.) at hand
- Familiarise personnel with accident alarms, first aid gear, and emergency equipment
- Keep entryways clear for emergency vehicles

In the event of an accident

- Shut down equipment immediately
- Initiate first aid measures
- Get people out of the danger zone
- Inform the responsible parties at the site of the incident
- Notify a doctor and/or the fire brigade
- Clear entryways for emergency vehicles

2.8 Signage

The equipment bears the following symbols and instructional signs.
They refer to the immediate vicinity in which they are affixed.

Comply with the operating manual
Do not use the marked equipment until you have read the operating manual.

Hand injury warning
When working with the equipment, take care to avoid hand injuries through trapping or sharp edges.

WARNING!
Danger of injury due to illegible symbols!

Over time, stickers and symbols on the equipment can become soiled or otherwise illegible.

Therefore, make absolutely sure to:

» Keep all safety, warning and operating information on the device easily legible.

» Replace damaged signs and stickers immediately.

3 Technical data

3.1 Rescue rams single-stage

RZ 1-850

RZ 2-1290

RZ 3-1640

	RZ 1-850	RZ 2-1290	RZ 3-1640
Length	530 mm	750 mm	1100 mm
Width	79 mm	79 mm	79 mm
Height	190 mm	190 mm	190 mm
Weight	11.7 kg	16.4 kg	19.4 kg
Pressing force*	137 kN	137 kN	137 kN
Pulling force*	26 kN	26 kN	26 kN
Starting length	530 mm	750 mm	1100 mm
End length	850 mm	1290 mm	1640 mm
Nominal pressure	630 / 700 bar	630 / 700 bar	630 / 700 bar
EN class	R 137/320-12	R 137/540-17	R 137/540-20
ID No.	5933803	5933781	5933765

* per EN 13204

3.2 Telescopic rescue rams

RZT 2-600

RZT 2-775

RZT 2-1170

RZT 2-1500

	RZT 2-600	RZT 2-775	RZT 2-1170	RZT 2-1500
Length	300 mm	395 mm	540 mm	650 mm
Width	88 mm	88 mm	88 mm	88 mm
Height	355 mm	200 mm	200 mm	200 mm
Weight	9.3 kg	11.5 kg	14.9 kg	17.7 kg
Pressing force*	189/99 kN	189/99 kN	189/99 kN	189/99 kN
Pulling force*	-	-	-	-
Starting length	300 mm	395 mm	540 mm	650 mm
End length	600 mm	775 mm	1170 mm	1500 mm
Nominal pressure	630/700 bar	630/700 bar	630/700 bar	630/700 bar
EN class	TR 189/165-99/135-9	TR 189/210-99/170-12	TR 189/360-99/270-15	TR 189/470-99/380-18
ID No.	5935934	5931401	1050149	1050041

RZT 2-1275 XL

RZT 2-1500 XL

RZT 3-1310 XL

	RZT 2-1275 XL	RZT 2-1500 XL	RZT 3-1275 XL
Length	557 mm	650 mm	480 mm
Width	109 mm	109 mm	109 mm
Height	221 mm	221 mm	221 mm
Weight	18.7 kg	20.9 kg	17.2 kg
Pressing force*	269/130 kN	269/130 kN	269/130/45 kN
Pulling force*	-	-	-
Starting length	575 mm	650 mm	480 mm
End length	1275 mm	1500 mm	1310 mm
Nominal pressure	630/700 bar	630/700 bar	630 / 700 bar
EN class	TR 269/370-130/332-19	TR 269/445-130/407-21	TR 269/326-130/285-45/219-17
ID No.	2823519	5932025	5934133

* per EN 13204

3.3 Operating conditions

The permissible temperature range of the rescue rams is between -20°C and +80°C. Reliable operation cannot be guaranteed outside of this range.

Underwater operation

The rams can also be used under water. Do not exceed the maximum submersion depth of 40 metres with this. At this depth the water pressure still has no influence on the hydraulic pressure in the equipment and the hoses.

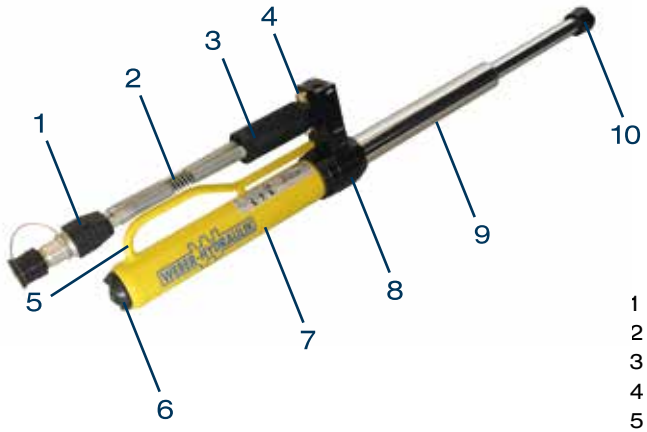
NOTE!
After underwater use in saltwater, the equipment must be completely disassembled and cleaned. With fresh water complete cleaning is sufficient.

3.4 Type plate

On all rescue rams, the type plate is located on the body. It shows the serial number, production date, nominal pressure and device designation.

4 Structure and function

4.1 Overview



1 Coupling
2 Hoses
3 Control handle
4 Pushbutton
5 Handle
6 Pressure plate (bottom)
7 Body
8 Guide piece
9 Piston rod
10 Pressure plate (top)

4.2 Brief description

Hydraulic rescue rams are specially designed rescue equipment for pushing bodywork parts out of the way. They are used for rescuing trapped or enclosed accident victims.
Driven by a hydraulic power unit it is possible to push up steering columns, vehicle roofs and other obstacles with rescue rams.

The rescue rams are a supplement to the spreader and are used, for example, when the travel of the spreader arms is no longer sufficient.
The speed of movement of the ram is controlled by the greater or lesser degree of force applied to the pushbutton on the handle. The maximum pushing force is only applied when the pushbutton is fully depressed.

4.3 Hydraulic supply

Power units and pumps

Only WEBER-HYDRAULIK power units and hand pumps may be used to drive the rescue ram.
Equipment from other manufacturers can only be used under certain conditions. Therefore always consult with us before operating a device with a power unit from another manufacturer!

ATTENTION!
Before using pumps and power units from other manufacturers always contact WEBER-HYDRAULIK or an authorised dealer. Incorrect application can lead to hazardous situations for which we cannot accept any liability!

Hoses

The connection of the device with the power unit is carried out via high pressure hoses. Hoses are available in lengths of 5 m, 10 m and 20 m. As the length of the lines increases so too does the associated pressure loss. With a line length of 50 metres this pressure loss remains acceptable and has no significant effect.

CAUTION!
Do not use damaged hoses!

With damaged hoses there is a danger of escaping hydraulic medium under pressure, or of the hoses whipping around.

Therefore:

» The hoses should be subjected to a visual inspection (leak-tightness, surface damage such as kinks) after every use and at least once per year.

- Every three years, or in the event of doubts about the safety or reliability, carry out an additional functional and load test (as per GUV-G 9102 or specific national directive).
- Replace hoses every 10 years! The date (code letters or quarter/year) is specified on the hose bonding.
- Ensure that the hoses are not exposed to tension or torsion (turning).
- Do not kink the hoses or draw them over edges (smallest bend radius 40 mm).
- Do not subject the hoses to high temperatures.
- Protect hoses from contact with materials that can cause damage to the outer covering e.g. acids, alkalis, or solvents.

Hydraulic oil

All rams are designed and tested for WEBER hydraulic oil Part no. 804932.
This oil possesses a particularly high purity level and also works flawlessly at temperatures below zero, down to -20° C.

NOTE!
In addition to the oil mentioned above we recommend:

- AERO Fluid 41 (Shell)
- Univis HVI-13 (Esso)
- Aero-hydraulic 520 (Total)
- Hydraulik DB (Castrol)
- Renolin/MR310 (Fuchs)

4.4 Equipment connections

SINGLE coupling

Connecting:
Remove the protective cap from the coupling male and the coupling female (Fig. 1). Conflate Single coupling male and female in the bayonet catch (Fig. 2). Hold coupling female on the black slew ring and turn clockwise until the coupling snaps in (Fig. 3). Put protective caps together (Fig. 4). You don't have to switch the power unit to position 0 to connect or disconnect the coupling!

Disconnecting:
Remove the protective caps. Hold coupling female on the black slew ring and turn anticlockwise direction. Turn the black slew ring until you can release the coupling easily. Put protective caps to coupling male and the coupling female.

Fig. 1

Fig. 2

Fig. 3

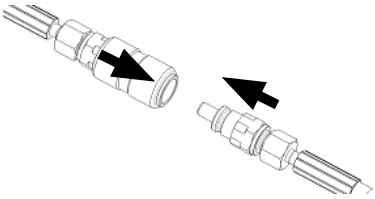
Fig. 4

NOTE!
When using the SINGLE coupling, pressure relief connectors are no longer required.

Plug-in coupling (SKS)

Connecting:
Remove the protective cap from the coupling male. Take hold of the coupling female by the knurled sleeve cover and pull out the protective plug. With one hand take hold of sleeve cover of the coupling female, with the other grasp the coupling male (black) by the hex nut, and press the sleeve cover slightly against the coupling male until the ball bearings engage. Twisting the male coupling slightly when pressing togehter eases the coupling process.

Disconnecting:
Grasp the coupling male (black) by the hex nut with one hand and with the other take hold of the sleeve cover and draw it back. The disconnecting will cause a few drops of hydraulic oil to escape. Plug in the protective caps immediately.



CAUTION!
When coupling SKS connections the power unit operating lever must be in the „0“ position.

NOTE!
A pressure relief connector is fitted to the hydraulic power units and the hand pump, with which a few drops of oil can be discharged from the hoses. This permits re-coupling following pressure increases in de-coupled equipment.
In this case simply insert the pressure relief connector into the coupling sleeve and turn the knurled screw to the right until oil leaks out.

NOTE!
The following section only pertains to the SINGLE coupling. When connecting SKS couplings first ensure that the control lever is in the „0“ position!

4.5 Use of the control handle

The rescue ram can be operated by the pushbutton on the control handle. The speed of movement of the ram is controlled precisely by the greater or lesser degree of force applied to the pushbutton.
The maximum pushing force is only applied when the pushbutton is fully depressed.

Extending the rescue ram

The primary motion direction of the device (extending) is triggered by depressing the lower tapered (convex) end of the button.
The direction of movement is marked on the equipment with the symbol:

Retracting the rescue ram

The ram is retracted with the upper curved (concave) end of the button, which is marked with the following symbol:

Dead-man‘s switching

If the pushbutton is released then it returns to the neutral position automatically. With this, the device stops still in any position (including under load).

4.6 Changing the pressure plates

The pressure plate on the head of the piston rod can be removed or replaced simply by pulling. Further head pieces (available as separate accessories) or the bracket for the chain set can be attached instead of the standard pressure plate.

5 Possible applications

5.1 Safety information

WARNING!
During all work with the rescue rams, parts which are tensioned can break off or be blown off and thus endanger personnel.

Therefore, personnel who are not directly involved must maintain a safe distance or only stay in the hazardous area as long as is strictly necessary.

5.2 Lifting / pressing

The rescue ram is positioned in its retracted condition in order to lift up or push bodywork parts away. When doing this ensure that the ram is positioned under the load as centrally and perpendicularly as possible. In order to guarantee better application, the push piece can be rotated on the piston rod. With the telescopic rams (RZT 2 and RZT 3) the complete piston rod must be rotated as the push piece is rigidly fastened to the piston rod.

Lifted parts must be immediately supported and braced in an appropriate manner. Standing under raised loads is not permitted.

NOTE!
Before using a rescue ram the point of application must be supported so that the pushing force is guaranteed to develop in the correct direction.

5.3 Pulling

Pulling is only possible with RZ 1, RZ 2 and RZ 3 in conjunction with special adapters (accessory ID: 384.790.0 or 383.730.0). The telescopic rams (RZT) may not be used for pulling!

After the chain set is attached to the ram head (as explained in chapter 4.6), the rescue ram can also be used for pulling.

The chains must always be stretched taught during this application, and must only be loaded in the direction of pulling. To tension the chain, it is possible to press one lock in respectively so that the chain can be pulled through the bracket.

If the pulling distance is insufficient then it must be secured with tensioning chains or alternative means so that the ram can be opened again and the chain re-tensioned.

ATTENTION!
Store the pulling chains with the chain locks fitted approx. 10 - 20 cm from the end. Check the chains before each use. Check that the weight does not load the point of the hook but rather lies in the middle of the hook.

- Do not carry out any repairs yourself.
- Do not load the chains beyond the intended load capacity.
- Do not apply loads jerkily.
- Do not galvanise or paint the chains without the permission of the manufacturers.
- Do not shorten the chains by knotting.
- Do not apply thermal loads to the chains.
- Only use chains and accessory parts between –40°C and +200°C.
- Observe the applicable accident prevention guidelines as well as the stipulations of DIN EN 818-7 and DIN 685-5 with all maintenance work.
- Chains may only be used for pulling. Lifting loads is not permitted.

Chains must no longer be used if:

» Deformation, cracks or corrosive pitting are present.

» The chain link wire diameter has lost 10% of its thickness.

» An individual chain link is permanently stretched.

» An individual link has increased in size by more than 2%.

» The inner pitch of a measured string of 11 chain links has increased by more than 2%.

6 Transport, packaging and storage

6.1 Safety information

CAUTION!
Incorrect transport can cause damage!
Improper transport can cause significant material damage.

Therefore:

» Proceed with caution when unloading the packages, and observe the symbols on the packaging.

» Do not fully open and remove the package until it has reached its actual storage location.

6.2 Transport inspection

Upon receipt, the delivery should be checked immediately for completeness and damage during transport so that a quick remedy can be performed, if necessary.

If there is visible external damage, please proceed as follows:

- Do not accept the delivery, or only accept it with reservation.
- Note the extent of the transport damage on the transport documents or on the transport company‘s delivery note.
- File a complaint.

NOTE!
Report any defect as soon as it is detected.
Claims for damages can be directed to our customer service department (see chapter 1.6).

6.3 Symbols on the packaging

Caution, fragile!

Handle the package carefully — do not drop, throw, strike or tie up.

This way up!

The package must be transported and stored strictly so that the arrows point upward. Do not roll or tilt.

6.4 Disposal of packaging

All packaging materials and disassembled parts (transport protection) must be disposed of properly, in accordance with local regulations.

6.5 Storage

The equipment must be stored in a dry and dust-free environment, where possible. Avoid direct UV radiation to the hoses.

CAUTION!
The equipment must be stowed securely in the mountings provided in order to avoid damage during transit, etc.

7 Installation and commissioning

7.1 Safety information

WARNING!
Danger of injury due to improper operation!

Improper operation can cause serious injury or material damage.

Therefore, make absolutely sure to:

» All operating steps are executed in keeping with the information in this operating manual.

» All covers and protective devices are installed and in proper working order prior to starting work.

Personal protective equipment

Wear the protective equipment detailed in Chapter 2.4 for all work!

NOTE!
Special reference is made where it is necessary to wear additional protective equipment for certain work with or on the device.

7.2 Checks

Check the rescue ram for damage. If the equipment should be found not to be in flawless condition then it must not be used! In this event, inform your supplier immediately.

- Check the piston rod (damage)
- Check the control handle including pushbutton (function)
- Check the couplings (damage, dirt)
- Check the hose lines (damage)

7.3 Installation

Move both control levers on the hydraulic power unit to the „0“ position (Fig. 1), pull off the dust protection cover of the coupling and connect the hydraulic hoses with the rescue ram as described in chapter 4.4. In order to avoid contamination then connect the protective caps.
When using the SINGLE coupling, coupling can also be carried out without pressure („0“ position on power unit not necessary).

When operating a hydraulic power unit observe the operating instructions for the equipment!

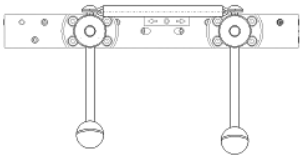


Fig. 1

7.4 Shutting down (end of work)

Once the work is complete the ram piston rod must be fully retracted in order to relieve the equipment of any hydraulic loading.

Then the equipment can be disconnected providing that the power unit control lever is in the „0“ position. Care must be taken to ensure that no dirt ends up on the coupling and that the protective caps are immediately fitted.

8 Servicing

8.1 Safety information

WARNING!
Risk of injury due to improperly performed maintenance work!

Improper maintenance of the equipment can cause serious injury or material damage.

Therefore, make absolutely sure to:

» Only let qualified personnel carry out maintenance work.

» Make sure the installation site is organised and clean! Loose components and tools lying around are sources of danger.

» Wear protective gloves for all work!

8.2 Care and maintenance

In the interest of permanent operational readiness, the following measures are essential:

- Each time the device is subjected to a load, but at least once a year, the equipment and the accessories must be visually inspected. Special attention must be paid to spreader tips, joints, blades, hoses, and coupling halves.
- Every three years, or if there are doubts about the safety or reliability of the equipment, functional testing and stress testing must also be carried out (according to GUV-G 9102 or country-specific guidelines).
- After every loading, the lubrication of the movable parts and pins must be inspected and sprayed with Fin Grease OG.

ATTENTION!
Prior to all maintenance work, the equipment must be cleaned of any dirt so that it does not get into the hydraulic system.
The cleaning can be carried out using a conventional citrus cleaner or using WD 40.

8.3 Maintenance schedule

A precise maintenance plan with testing intervals, regulations and results can be found in the GUV – G 9102 Point 17 (hydraulically operated rescue equipment).

NOTE!
If there are any problems with the maintenance of the devices, our customer service is available (see Chapter 1.6).

9 Faults

Fault	Possible cause	Remedial measures
Equipment fails to deliver full performance	Control buttons not fully depressed	Fully depress control buttons
Equipment delivers no power or moves in the opposite direction to that commanded	Pressure line (P) and return line (T) were transposed when hoses or couplings were replaced	Change round in accordance with the repair instructions
Ram cannot be coupled	Pressure build-up due to heating (only SKS coupling) Coupling are damaged or heavily soiled	Drain a little oil out of the equipment with the pressure relief plug, see chapter 4.3 (only SKS coupling)
Oil escaping at the control handle (hole between the hoses)	Return hose is not correctly coupled (only SKS coupling)	Move power unit control lever to the "0" position and couple correctly (only SKS coupling)
Equipment non-functional despite actuating the control buttons	Pressure hose is not coupled	Move power unit control lever to the "0" position and couple correctly (only SKS coupling)
Ram exhibits movement in the opposite direction under load	Check non-return valve	Have the equipment checked by authorised customer services
Oil discharge on the hoses or their bondings	Hoses leaking, possibly due to damage	Repair by authorised customer service
Degradation of the surfaces of the hoses	Contact with aggressive chemical fluids	Repair by authorised customer service
Oil escaping at the coupling halves	Coupling leaking	Replace coupling, see repair instructions

10 Decommissioning / recycling

After the end of the normal service life, the equipment must be professionally disposed of. Individual parts can, however, certainly be used again.

The hydraulic oil must be completely drained and collected. Make sure that the hydraulic oil is disposed of separately!

For disposal of all device components and packaging materials, the disposal conditions of the specific location apply.

NOTE!
Please consult your supplier regarding the disposal of the equipment.

11 EC Declaration of Conformity

EC-DECLARATION OF CONFORMITY

according to Directive 2006/42/EG

WEBER-HYDRAULIK GMBH

Industriegebiet 3 + 4, A-4460 Losenstein, OÖ,

Herewith we declare, that our "Hydraulic rescue Equipment"

SPREADER	SP35, SP35L, SP40EN, SP43XL, SP49, SP50XL, SP60, SP80
POWER WEDGE	SPK250
CUTTER/ VARIO	S 33-14, S 50-14, S140-26, S200-49, S260-50, S270-71, S310-36, C100-31
	RS130-49, RS(X)160-50, RS(X)165-65, RS170-105, RSX105-29, RSX180-80 (PLUS), RSX185-105, RS(X)200-107 (PLUS), SPS330EN, SPS360, SPS400
RESCUECYLINDER	RZ 1 - ... bis RZ 3 - ..., RZ 11 - ... bis RZ 22 - ..., RZT 2- 600, RZT 2- 750, RZT 2- 775, RZT 2-1000, RZT 2-1170, RZT 2-1500, RZT 2-1120-XL, RZT 2-1500-XL, RZT 3-1310-XL
POWER-UNITS	E/V 50 .., E/V 60 .., E/V 400 ..., V400- Silent, V400-ECO E/V- Matic, E-Compact, V 50- Eco, V-Ecocompact, V- Ecosilent E/V- TRIPPPLE T, HYDROPAC
HANDPUMP/ACCESSORIES	DPH 3215 .., DPH 4018 .. and accessories to all tools

meet the relevant basic safety and health requirements of the Directive
EC-MACHINE DIRECTIVE 2006/42/EC

For the relevant implementation of the safety and health requirements mentioned in the Directive, the following standards and or technical specifications has been respected:

DIN EN 13204	DIN EN ISO 12100-1	DIN EN ISO 12100-2
DIN EN ISO 13857	NFPA 1936	NFS 61.571

The tools are tested according to EN 13204 trough TÜV-Süd.

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WEBER-HYDRAULIK GmbH

Losenstein, 18.07.2012

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