

# Operating instructions Hydraulic rescue equipment

## POWER UNITS



E/V 50-T+SAH 20, E/V-TriPPle-T+SAH 20, E/V-MATIC+SAH 20,  
E/V 400, V 50 S, V 50 Eco, V 400 Eco, V EcoCompact, E-Compact,  
V EcoSilent, Battery Pac, DPH 4018 SA

8142459



Tested according to  
EN 13204-2005 and  
NFPA 1936:2010

**WEBERRESCUE**  
SYSTEMS

[www.weber-rescue.com](http://www.weber-rescue.com)

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# 1 General

## 1.1 Information regarding the operating instructions

These operating instructions provide important information for using the hydraulic power units and hand pumps. 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 carefully 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

### Warning instructions

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

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



#### **DANGER!**

...indicates an immediate dangerous situation that can result in death or serious injury if it is not avoided.



#### **WARNING!**

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



#### **CAUTION!**

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



#### **ATTENTION!**

...indicates a potentially dangerous situation that can result in material damage if it is not avoided.

## Tips and recommendations



### NOTE!

...indicates useful tips and recommendations as well as information for efficient and trouble-free operation.

## 1.3 Limitations of liability

All information and instructions in this operating manual have been provided under due consideration of applicable standards and guidelines, the current state of technology, as well as our many years of knowledge and experience.

The manufacturer assumes no liability for damage due to:

- Failure to follow the operation instructions
- Improper use
- Use by untrained personnel
- Unauthorized modifications
- Technical changes
- Use of non-approved spare parts
- Use of non-original accessories

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

All text, diagrams, drawings and images in this operating manual may be used without restriction and without any prior approval.

**NOTE!**

Further information, images and drawings can be found on our homepage. [www.weber-rescue.com](http://www.weber-rescue.com)

## 1.5 Guarantee conditions

The guarantee 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.

### Germany

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**NOTE!**

When contacting our customer service department please provide the designation, type and year of manufacture of your equipment. This information 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.



### **WARNING!**

**Danger when operating equipment with different operating pressures!**

Do not use pump power units with a higher operating pressure than the pressure that the rescue equipment is designed for (this can be seen on the type plate and in the operating instructions).

### 2.1 Proper use

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

**Power units** (E/V 50-T+SAH 20, E/V-TriPPPlE-T+SAH 20, E/V-MATIC+SAH 20, E 50-T 1xSAH 20, E/V 400 S, V 50 S, V 50 Eco, V400 ECO, V EcoCompact, E Compact, V EcoSilent, Battery Pac, Handpumpe)

- All of the power units are designed as one-man devices and may therefore be operated by one person only.
- These devices are designed exclusively for operating hydraulic rescue equipment from WEBER-HYDRAULIK.
- Simultaneous operation of multiple pieces of equipment only if it is possible to exclude mutual risk.





**WARNING!**  
Danger due to improper use!

Any use of the equipment that exceeds the intended use or deviates from it can lead to dangerous situations! Therefore it is imperative that:

- » The equipment is used only for the purposes listed above.
- » Observe all other instructions in chapter 5 (operation) regarding appropriate use of the equipment.

## 2.2 Responsibility of the customer

In addition to the working safety instructions in this operating manual, observe safety and accident protection guidelines and environmental protection guidelines applicable to the area of application of the equipment. Particularly applicable in this regard:

- The customer must inform himself of applicable industrial safety regulations and, within the framework of a hazard analysis, identify other hazards that may exist at the equipment's installation site due to the specific 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, the operator must train personnel and inform them of the dangers of working with the machinery at regular intervals.

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

- After every usage, at least once per year, the device must undergo a visual inspection by trained personnel (per GUV-G 9102 or country-specific directive).
- Every three years, or in the event of doubts about the safety or reliability of the equipment, an additional functional and load test is to be carried out (per GUV-G 9102 or country-specific directive).

## 2.3 Operating personnel

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

- **Trained person**  
Is informed about the tasks assigned to them and the possible dangers in the event of improper behaviour through customer training.
- **Specialist**  
Is an individual who, due to their specialized training, skills, and experience, as well as knowledge of the applicable manufacturer's regulations is capable of executing the tasks assigned to them and of recognizing possible hazards on their own.



### **WARNING!**

**Danger of injury due to insufficient training!**

Improper handling of the equipment can lead to serious injury or material damage. Therefore it is imperative that:

- » Particular tasks are only carried out by the personnel listed in the appropriate chapter of this instruction manual.
- » In case of 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 minimize the risks to operating personnel when working with the power units.

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



### Protective work clothing

Tight-fitting work clothing with tight sleeves and without projecting parts should be worn for work. It is primarily used to protect against entanglement by moving equipment parts.



### Safety footwear

Safety footwear with steel toecaps must always be worn as protection against heavy falling parts and from slipping on slippery ground.



### Work gloves

Work gloves must be worn when working with the equipment for protection against sharp edges and glass fragments.



### Helmet with face shield

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



### Protective goggles

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

With certain work the following must also be worn in addition:



### Ear protectors

In addition to the basic protective equipment, ear protectors should also be worn for protection against hearing damage.

## 2.5 Specific hazards

The hazards that arise within the framework of the risk evaluation are listed in the following section.

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

### Electric shock



#### **DANGER!**

#### **Life-threatening danger due to electric shock!**

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

Therefore:

- » Disconnect the power supply immediately if there is damage to the insulation and have it repaired.
- » Only a qualified electrician should perform work on the electrical equipment.
- » All electrical work on the system must be carried out with the system disconnected from the mains power supply and the system must be checked to confirm that it is de-energised.
- » Prior to any maintenance, cleaning or repair works the power supply must be switched off and secured against being unintentionally switched back on.
- » Do not bypass fuses or render them inoperable. Always use the correct amperage when changing fuses.
- » Keep moisture away from live parts. Moisture can lead to a short circuit.

## Noise



### **WARNING!** Hearing damage due to noise!

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

Therefore:

- » Also wear ear protectors when carrying out particularly noise-intensive works.
- » Do not stay in the hazardous area longer than necessary.

## Hydraulic energy



### **WARNING!** Danger due to hydraulic energy!

Serious injuries can be caused by discharged hydraulic force and the emergence of hydraulic oil.

Therefore:

- » Always keep your eyes on the hydraulic equipment throughout the working process and set down if necessary.
- » Check the hoses and the equipment for damage after every usage.
- » Avoid skin contact with the hydraulic oil (wear protective gloves).
- » Remove hydraulic oil from wounds without delay and seek medical attention immediately.

## 2.6 Behaviour in the event of danger or accidents

### Preventative measures

- Always be prepared for accidents
- Keep first aid equipment (first-aid box, blankets etc.) to hand
- Familiarize personnel with accident alarms, first-aid kits, and rescue equipment
- Keep entry ways clear for rescue vehicles

### In the event of an accident

- Shut down the equipment immediately
- Initiate first-aid measures
- Get people out of the danger zone
- Inform the responsible parties at the implementation site
- Notify a physician and/or the fire department
- Keep entry ways clear for rescue vehicles

## 2.7 Symbols

The following symbols and instruction signs are found on the equipment. These symbols and instructions refer to the immediate vicinity in which they are affixed.



**Comply with the instructions in the operating manual**

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

**Warning of hot surface**

The power unit's engine can become very hot during operation. Therefore, do not touch it and wear protective gloves.



**WARNING!**

**Danger of injury due to illegible symbols!**

Over time, stickers and symbols on the equipment can become fouled or can become illegible in some other manner.

Therefore it is imperative that:

- » Keep all safety, warning, and operating instructions that are affixed to the device in good, legible condition.
- » Replace damaged signs and stickers immediately.

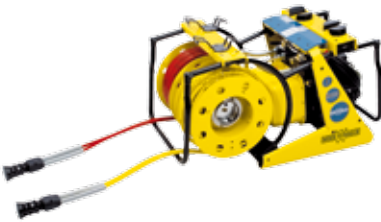
### 3 Technical data



E/V 50-T+SAH 20



E/V-TriPPle-T+SAH 20



E/V-MATIC+SAH 20



E/V 400 (ECO)



V 50 S





V 50 Eco



V EcoCompact



E-Compact



V EcoSilent



Battery Pac



DPH 4018 SA

	<b>E 50-T+SAH 20</b>	<b>V 50-T+SAH 20</b>	<b>E-TriPPle-T+SAH 20</b>
Length*	500 mm / 830 mm	536 mm / 845 mm	500 mm / 837 mm
Width*	440 mm / 440 mm	440 mm / 440 mm	440 mm / 440 mm
Height*	473 mm / 470 mm	472 mm / 472 mm	472 mm / 473 mm
Weight*	44 kg / 73 kg	42 kg / 71 kg	50 kg / 85 kg
Engine	Electrical engine 230 V, 50 Hz, 1.3 kW	4-stroke petrol engine, 3 kW	Electrical engine 230 V, 50 Hz, 1.8 kW
Operating pressure	630/700 bar	630/700 bar	630/700 bar
Oil volume	4.0 litres	4.0 litres	5.8 litres
Flow rate ATO (LP/HP)	4.2 / 1.1 [l/min]	4.0 / 1.4 [l/min]	-
Flow rate MTO (LP/HP)	2.1 / 0.55 [l/min]	2.12 / 0.7 [l/min]	2.3 / 0.7 [l/min]
Max. noise emission	80 dBA	88 dBA	86 dBA
EN class	ATO / MTO	ATO / MTO	MTO
Part no. (without SAH)	181.228.9	181.227.0	593.254.8
Part no. (with SAH)	1811940	1811924	5932521

	<b>V-TriPPle-T+SAH 20</b>	<b>E-MATIC+SAH 20</b>	<b>V-MATIC+SAH 20</b>
Length*	527 mm / 839 mm	433 mm / 831 mm	474 mm / 844 mm
Width*	440 mm / 440 mm	332 mm / 440 mm	369 mm / 440 mm
Height*	471 mm / 473 mm	423 mm / 477 mm	428 mm / 477 mm
Weight*	50 kg / 80 kg	40 kg / 75 kg	35 kg / 72 kg
Engine	4-stroke petrol engine, 4 kW	Electrical engine 230 V, 50 Hz, 1.3 kW	4-stroke petrol engine, 3 kW
Operating pressure	630/700 bar	630/700 bar	630/700 bar
Oil volume	5.8 litres	4.0 litres	4.0 litres
Flow rate ATO (LP/HP)	-	4.4 / 0.6 [l/min]	4.6 / 0.8 [l/min]
Flow rate MTO (LP/HP)	2.7 / 0.68 [l/min]	2.2 / 0.3 [l/min]	2.3 / 0.4 [l/min]
Max. noise emission	94 dBA	84 dBA	86 dBA
EN class	MTO	ATO / MTO	ATO / MTO
Part no. (without SAH)	593.255.6	593.517.2	593.518.0
Part no. (with SAH)	5932211	5935202	5935210

\* with and without SAH

	<b>E 400</b>	<b>V 400</b>	<b>V 400 ECO</b>
Length	413 mm	382 mm	382 mm
Width	288 mm	280 mm	280 mm
Height	385 mm	406 mm	406 mm
Weight	20.5 kg	18.0 kg	17.3 kg
Engine	Electrical engine 220 V, 50 Hz, 0.5 kW	4-stroke petrol engine 1.5 kW	4-stroke petrol engine 1.5 kW
Operating pressure	630/700 bar	630/700 bar	630/700 bar
Oil volume	2.5 litres	2.5 litres	2.5 litres
Flow rate ATO (LP/HP)	2.3/0.5 [l/min]	3.0/0.6 [l/min]	-
Flow rate MTO (LP/HP)	-	-	3.0 / 0.6 [l/min]
Max. noise emission	75 dBA	84 dBA	84 dBA
EN class	ATO	ATO	ATO
Part no.	5934923	5934753	5936853

	<b>V 50 S</b>	<b>V 50 Eco</b>	<b>V EcoCompact</b>	<b>E-Compact</b>
Length	464 mm	425 mm	410 mm	415 mm
Width	369 mm	333 mm	320 mm	195 mm
Height	461 mm	467 mm	409 mm	316 mm
Weight	31.4 kg	29.9 kg	23.9 kg	11.5 kg
Engine	4-stroke petrol engine 3 kW	4-stroke petrol engine 2.2 kW	4-stroke petrol engine, 2.2 kW	Electrical engine 230 V, 50 Hz, 1.5 kW
Operating pressure	630/700 bar	630/700 bar	630/700 bar	630/700 bar
Oil volume	4.0 litres	4.0 litres	3.8 litres	2.8 litres
Flow rate ATO (LP/HP)	4.6/1.7 [l/min]	5.4/1.4 [l/min]	5.4 / 1.4 [l/min]	-
Flow rate MTO (LP/HP)	2.3/0.85 [l/min]	2.7/0.7 [l/min]	2.7 / 0.7 [l/min]	2.7 / 0.6 [l/min]
Max. noise emission	88 dBA	84.3 dBA	89 dBA	-
EN class	ATO / MTO	ATO / MTO	ATO / MTO	STO
Part no.	5934460	5935717	5936454	1050354

	<b>V EcoSilent</b>	<b>Battery Pac</b>	<b>DPH 4018 SA</b>
Length	580 mm	203 mm	650 mm
Width	295 mm	427 mm	255 mm
Height	445 mm	301 mm	183 mm
Weight	24.9 kg	10.4 kg	14.6 kg
Engine	4-stroke petrol engine 2.2 kW	Direct current motor 28V/700W	-
Operating pressure	630 / 700 bar	630 / 700 bar	630 / 700 bar
Oil volume	2.7 litres	2.5 Liter	2.5 litres
Flow rate ATO (LP/HP)	5.4/1.4 [l/min]	1.2/0.5 [l/min]	0.040 / 0.0031 *
Flow rate MTO (LP/HP)	2.7/0.7 [l/min]	-	-
Max. noise emission	79.6 dBA	-	-
EN class	ATO / MTO	ATO	ATO
Part no.	5935318	1056067	1051174

\* litres per pump stroke

### 3.1 Operating conditions

The permissible operating temperature range for the power units lies between -20° C and +80° C. Reliable functioning of the equipment cannot be guaranteed outside this range.

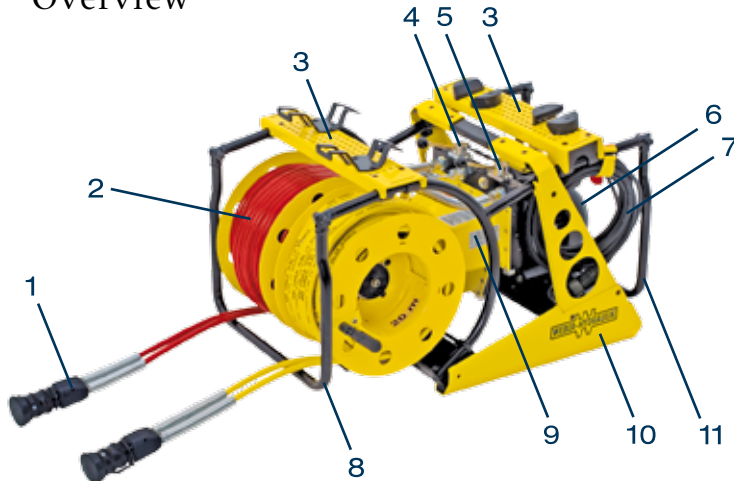
Ensure that an inclination angle of 20° in every direction is not exceeded whilst the pump is operating. Otherwise there is a risk that the air filter of the engine could be contaminated by engine oil.

### 3.2 Type plate

The type plate can be found on all power units in the area of the tank. Here you can find the serial number, manufacturing date, nominal pressure, equipment designation and the EN standard.

## 4 Structure and function

### 4.1 Overview



- |   |                             |    |                             |
|---|-----------------------------|----|-----------------------------|
| 1 | Coupling                    | 7  | Electrical power connection |
| 2 | Hose reel                   | 8  | Carry handle (front)        |
| 3 | Equipment brackets          | 9  | Hydraulic oil tank          |
| 4 | Control lever (red hose)    | 10 | Frame                       |
| 5 | Control lever (yellow hose) | 11 | Carry handle (rear)         |
| 6 | Engine                      |    |                             |

### 4.2 Brief description

Hydraulic power units serve the operation of the associated hydraulic rescue devices. They are available with an electrical engine and with a combustion engine. Furthermore, one differentiates between equipment with and without integrated rapid deployment reels and compact power units.

With almost all power units, two devices can be operated simultaneously (in fact three in the case of the E/V – TriPPle-T!), or one device in turbo mode. Two hose pairs, each 20 m long, are located on the rapid deployment reels. These can be easily rolled out even when pressurised.

## 4.3 Hydraulic supply

### 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 power units 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  $-20^{\circ}\text{C}$ .



### 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)
- » Hydrex Arctic (Petro Canada)

## Oil level indicator

There is a sight glass located on the side of the oil tank, with which the oil level can be monitored. This must be checked regularly after every use. The oil must be topped up if required.

## 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.



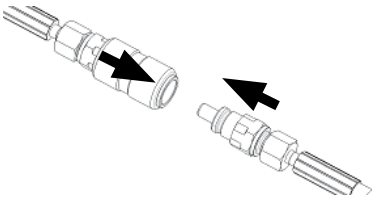
## Plug-in coupling (SKS)

### 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 together 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.

## 5 Operation

### 5.1 General

To start the power unit with an electrical engine connect the equipment to an electrical power supply. Then set the main switch to the „1“ position.

To start combustion engines please read the accompanying operating instructions from the engine manufacturer.

The details of any special steps required to start the power units follow separately.



#### CAUTION!

When using SKS couplings the engine must never be started before the control lever is out of the „0“ position and the work equipment is connected! With single couplings this is not necessary.

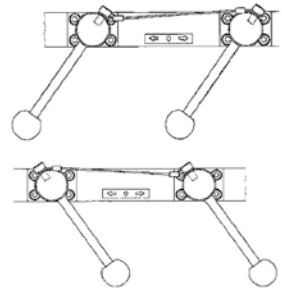
### 5.2 E/V 50-T + SAH 20, E/V – MATIC + SAH 20, V 50 S, V 50 Eco, V EcoCompact, V-EcoSilent

The power unit is operated by the two control levers (between the equipment brackets). The oil flow in the two hose sets is controlled by these. The middle position of the control levers represents the „0“ position.

#### Two-way operation (with turbo function):

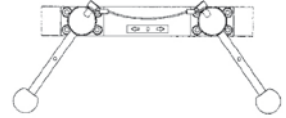
In order to feed the entire oil flow into the left hose pair, both control levers must be turned to the left.

In order to feed the whole oil flow into the right hose pair, both control levers must be turned to the right.



**Simultaneous operation:**

In order to supply both hose pairs simultaneously (with split oil flow), the left control lever must be turned to the left and the right control lever must be turned to the right.

**NOTE!**

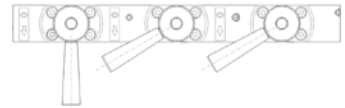
The oil flow is likewise split if one lever is operated and the other remains in the „0“ position. It is therefore necessary to operate both control levers for the turbo function.

### 5.3 E/V – TriPPle-T + SAH 20

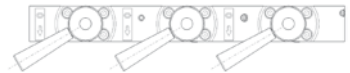
The power unit is operated by the three control levers (between the equipment brackets). The oil flow in the three hose pairs is controlled by these. The control lever position perpendicular to the equipment (on „0“) represents the „0“ position.

**Single operation:**

In order to supply a hose line with oil the corresponding control lever must be moved to the arrow position. The other two remain in the „0“ position.

**Simultaneous operation:**

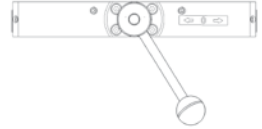
In order to supply all three hose pairs simultaneously, all three control levers must be turned to the arrow position.



## 5.4 E/V 400

The power unit is operated by the control lever (adjacent to the connection for the high pressure hose). The oil flow in the hose pair is controlled by this. The control lever position perpendicular to the equipment (on „0“) represents the „0“ position.

To operate, simply turn the control lever in the direction of the arrow. This initiates the oil flow in the hose pair.



## 5.5 Battery Pac

The Battery Pac can be carried on the shoulder or used as an independent stand-alone battery powered power unit.



To start the unit press the On/Off switch on the housing or the strap (Fig. 1). The On/Off switch then lights up green.



Fig. 1

The product is supplied with one battery and you can purchase a second battery to double the unit's operating time. You can operate the unit with one battery or with two batteries operating in parallel (batteries are then drained parallel as well). The battery is inserted into the battery compartment. Simultaneously pressing the unlocking mechanism releases the battery from the unit.

The coupling can be stored in the side pocket (Fig. 2).

After use the hydraulic fluid level should always be between Min. and Max. so that all of the units can be operated, as the nominal pressure and tank content are designed to operate all WEBER rescue equipment. The oil tank can be filled / drained very easily by retracting or expanding a rescue tool (Fig. 3).

Fig. 2



Fig. 3



## 5.6 V EcoSilent

To start the power unit the yellow ECO lever must first be set to the start position („S“). Then turn the the ignition switch (rotary switch) to the right to „Choke“ and start the engine with the pull-chord. After warming up turn the ignition switch to position „1“ and set the ECO lever to „ECO“.

### Control

In order to control the outputs, two control levers are fitted directly above the couplings. It is possible to control the oil flow with these (by sliding to the side; similar to E/V 50-T).



### Fuel tap

When transporting the power unit for an extended period the fuel feed can be shut off. In order to do so it is necessary to close the fuel tap (red). This is located under the maintenance cover on the pull-chord side.



### Petrol tank

The petrol tank can be filled via the filling port under the black cover flap on the top side of the device. The fuel level can be seen on the display on the operator panel.



## 5.7 E-Compact

### Operation

Before starting the electric engine, check that all electrical connections and cables are in proper order. First of all connect the power cable to the supply socket. Switch control lever in neutral position. Connect hose and tool to the power unit. The engine is started by pressing ON/OFF button, green LED is on. Switch control lever into position 1. Power unit is ready for use.

### Service instruction

After app. 200 hours operation the red light is flashing. Please contact an authorised customer service department to change the carbon brushes at electric engine.



- 1 ON/OFF button
- 2 LED attention (red)
- 3 LED operation (green)
- 4 Oil filling plug (Weber hydraulic oil)
- 5 Control lever

## 5.8 DPH 4018 SA (hand pump)

In order start up the hand pump, first turn the pressure relief valve (Fig. 1) counter-clockwise and operate the pump lever a few times. This exhausts the air from the pump.

Finally, turn the pressure relief valve fully in a clockwise direction and do not open it again during subsequent work with the equipment!

It is now possible to initiate the oil flow to the rescue equipment by actuating the pump lever.

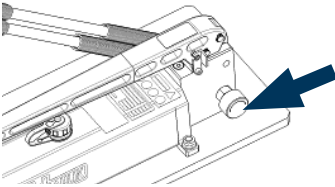


Fig. 1

## 6 Transport, packaging and storage

### 6.1 Safety information



**CAUTION!**

**Incorrect transportation can cause damage!**

Significant material damage can occur due to incorrect transportation.

Therefore:

- » Proceed with caution when unloading packages and observe the symbols on the packaging.
- » Do not open fully or dispose of packaging until at the intended storage location.

### 6.2 Transport inspection

The delivery should be checked immediately upon receipt for completeness and any possible transportation damage, so that a quick remedy can be instigated if necessary.

In the event of visible external damage proceed as follows:

- Do not accept the delivery, or only accept it with reservation.
- Note the extent of transport damage on the transport documents or on the transport company's delivery note.
- Submit 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 such that the arrows point upwards. Do not roll or tilt.

## 6.4 Disposal of packaging



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

## 6.5 Storage

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



**CAUTION!**

The equipment must be stowed securely in the mountings intended for this, in order to avoid it being damaged whilst in transit etc.

Do not tilt or recline the power units as oil will leak from the container vent.

## 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 it is imperative that:

- » Execute all operating steps in accordance with the information in this operating manual.
- » Prior to starting work ensure that all covers and protective devices are installed and functioning properly.

#### Personal protective gear

Wear the protective gear detailed in chapter 2.4 with all work!



**NOTE!**

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

## 7.2 Checks

Check the power unit 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 frame (damage)
- Check the control lever (function)
- Check the couplings (damage, dirt)
- Check the reels and carry handles (securely fastened)
- Check the protective covers (damage)
- Check the hoses (damage)

## 7.3 Installation

### Transport protection

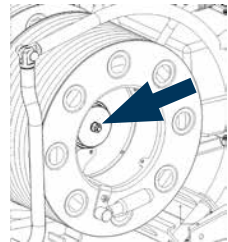
Before first commissioning replace the transport protection at the oil tank filler port with an appropriate vent plug as explained in the instructions attached to the power unit.

### Reel brake

Each rapid deployment reel is equipped with a separate reel brake. The brake force can be set by the nut (SW 13) in the middle of the reel mount.

Turn clockwise = increase brake force

Turn anti-clockwise = decrease brake force



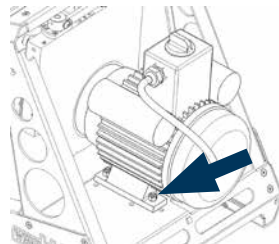
### Filling with petrol

In the case of power units that have a combustion engine (V power units), it is first necessary to fill the petrol tank. Observe the manufacturer's operating instructions for this!

### Moving the electrical engine

In all power units with electrical engines it is possible to move these engines backwards by up to 25 mm. This results in a greater clearance between the reel and the tank. (Fastening via four bolts in pre-drilled elongated holes)

The rescue equipment can now be connected (as described in chapter 4.4).



## 7.4 Shutting down (end of work)

Once the work is complete return the control lever to the „0“ position and switch the machine off via the main switch.

## 8 Servicing

### 8.1 Safety information

**WARNING!**

Injury hazard due to improperly executed maintenance tasks!

Improper maintenance can cause serious injury or material damage.

Therefore it is imperative that:

- » Maintenance work is carried out only by specialist personnel.
- » Order and cleanliness are assured at the installation site!  
Parts and tools that are lying loose are a source of hazards.
- » Protective gloves are worn during all work!

### 8.2 Care and maintenance

The following measures are imperative in the interest of maintaining a state of constant operational readiness:

- After each use and at least once per year, the device and the accessory parts must undergo a visual inspection. You should pay particular attention to the oil level, engine, hoses and coupling halves.
- Every three years, or in the event of doubts about the safety or reliability of the equipment, an additional functional and load test is to be carried out (per GUV-G 9102 or country-specific directive).
- Fin grease OG must be injected into the moving parts from time to time.
- The hydraulic oil in the power unit must be completely replaced every three years.



**ATTENTION!**

The equipment must be cleaned of all contaminants before any maintenance work so that no dirt can enter the hydraulic system. The cleaning can be carried out with a standard citrus cleaning agent or with WD-40.

## 8.3 Maintenance schedule

A more precise maintenance schedule with test intervals, test regulations and test results can be taken from GUV - G 9102 item 17 (hydraulically actuated rescue equipment).



**NOTE !**

Our customer service department is available for you if there should be problems with the maintenance of the equipment (see chapter 1.6).

## 9 Faults

Fault	Possible cause	Remedial measures
No pressure created	<ul style="list-style-type: none"> <li>- Switching valve in „0“ position, incorrect side or not fully controlled to the limit stop</li> <li>- Too little oil in the power unit</li> <li>- Power unit not bled after oil change</li> </ul>	<ul style="list-style-type: none"> <li>- Control the requisite, correct side</li> <li>- Top up oil</li> <li>- Bleed, see repair instructions</li> </ul>
Rescue equipment cannot be coupled	<ul style="list-style-type: none"> <li>- Switching valve in not in „0“ position with running engine (SKS)</li> <li>- Coupling halves damaged</li> </ul>	<ul style="list-style-type: none"> <li>- Move switching valve to „0“ position (SKS)</li> <li>- Replace coupling halves</li> </ul>
Oil discharge on the hoses and their bonding	Leaks, possible damage	Repair by authorised customer service
Degradation of the surfaces of the hydraulic hoses	Contact with aggressive chemical fluids	Repair by authorised customer service
Oil escaping at the coupling halves	Leaks	Replace coupling halves

## 10 Decommissioning / recycling

After the service life has expired the equipment must be disposed of correctly. Individual parts can however certainly be reused.

The hydraulic oil must be completely drained off and collected. Please note that the hydraulic oil must be disposed of separately!

The local disposal regulations apply to the disposal of all equipment parts and packaging materials.



**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, ÖÖ.

Herewith we declare, that our "Hydraulic rescue Equipment"

<b>SPREADER</b>	SP35, SP35L, SP40EN, SP43XL, SP49, SP50XL, SP60, SP80
<b>POWER WEDGE</b>	SPK250
<b>CUTTER/ VARIO</b>	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
<b>RESCUECYLINDER</b>	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
<b>POWER-UNITS</b>	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
<b>HANDPUMP/ACCESSORIES</b>	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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SYSTEMS