Operating and Maintenance Manual

SRE 300

0170055

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Introduction

This operating and maintenance manual is designed to facilitate familiarization with your tamper, and enable you to maintain the tamper and use it in accordance with the proper application possibilities.
When complying with the instructions in the operating and maintenance manual you help avoid hazards, reduce repair and downtime costs, and increase the reliability and service life of your tamper.
This operating and maintenance manual must always be available at the implementation site of the tamper.
If necessary, you can obtain additional information from your authorized WEBER dealer, or you can obtain information from one of the contact addresses on the last page.

The valid conformity declaration is enclosed with every machine delivery.

For information on the battery used, log on to **www.pellenc.com**

Safety guidelines
General

All safety instructions must be read and complied with, non-compliance results in
– Danger to life and limb of the user
– Impairments to the machine or other property.
In addition to the operating manual, the accident-prevention regulations in the country where the appliance is used must be complied with.

Intended use

The tamper should only be used in technically faultless condition, as intended, in a safety-conscious and hazard-conscious manner, in compliance with the instructions in the operating manual. Malfunctions that impair safety must be eliminated without delay.
The SRE 300 tamper is designed exclusively for compacting
– Sand
– Gravel
– Crushed rock
– Semi-cohesive mixed material.

Any other use of the tamper is considered to be improper use for which the owner shall be exclusively responsible. All liability is rejected if damage occurs due to non-compliance with this provision. This risk is borne solely by the user.

Additional safety instructions regarding the use of the battery (accessories)

The tamper SRE 300 is intended to be used with the type 1200 / 1500 battery made by Pellenc. The battery is not included with the tamper.

Operation with the battery requires that the operating manual included by manufacturer Pellenc be observed.

Included with the Pellenc battery are:

– Device battery, type 1200/1500
– Charger
– Carrying system (special accessory)
– Operating manual

The correct and proper use of the battery in accordance with the operating manual provided by battery manufacturer Pellenc is the sole responsibility of the owner.

Safety instructions on how to use the tamper SRE 300 with batteries

– Never modify in any way the plug connection of the connecting cables – neither on the tamper nor on the batteries.

– Never use the cable for carrying, pulling or unplugging the device.

– Protect the cable from heat, lubricants, sharp edges or moving parts.

– In case of damage to the connecting cable of the tamper or the connecting cable of the battery, the damage must be rectified immediately by an authorized specialist. Operation with damaged connecting cables is prohibited.

– Refrain from inserting such metal objects as paper clips, keys, nails, screws or other small metal parts into the electric motor, the case housing of the electronics or the battery as they may cause a short circuit.

– The tamper, the case housing the electronics and the battery must not be immersed in water.

Easily foreseeable misuse

Any use for which the machine is not intended.

General safety instructions for power tools
(Excerpt from DIN EN 62841-1 (VDE 0740-1))

The term “power tool” used in the safety instructions refers to mains-operated (corded) power tools or battery-operated (cordless) power tools.

Work area safety

– Keep work area clean and well lit. Cluttered or dark areas invite accidents.

– Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

– Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

– Power tool plugs must match the outlet.
Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

– Avoid body contact with grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

– Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

– Do not abuse the connecting cable. Never use the connecting cable for carrying, pulling or unplugging the power tool. Keep the connecting cable away from heat, oil, sharp edges or moving parts. Damaged or entangled connecting cables increase the risk of electric shock.

– When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of an extension cord suitable for outdoor use reduces the risk of electric shock.

– If operating a power tool in a damp location is unavoidable, use a residual current device. Use of an RCD reduces the risk of electric shock.

Personal safety

– Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

– Use personal protective equipment and always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

– Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and / or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.

– Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

– Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

– Dress properly. Do not wear loose clothing or jewelry.
Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

– If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

– Do not take your safety for granted and ignore the safety rules for power tools even if you are very familiar with the power tool after frequent use. Careless handling can lead to severe injury within split seconds.

Power tool use and care

– Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job in a better and safer way at the rate for which it was designed.

– Do not use the power tool if the switch does not turn on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

– Disconnect the plug from the power source and / or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

– Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

– Maintain power tools and tool bits with care. Check for misalignment or jamming of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

– Use the power tool, accessories and tool bits etc. in accordance with these instructions. Take into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in hazardous situations.

– Keep handles and gripping surfaces dry, clean and free from oil and grease. Slippery handles and gripping surfaces prevent safe handling and control of the power tool in unforeseeable situations.

Service

– Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Battery tool use and care

– Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

– Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

– When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

– Under abusive conditions, liquid may be ejected from the battery. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

– Do not use a damaged or modified battery. Damaged or modified batteries can behave unexpectedly and lead to fires, explosions or injuries.

– Do not expose a battery for fire or high temperatures. Fire or temperatures above 130 °C can cause an explosion.
Note – the temperature specification of “130 °C” can be substituted with “265 °F”.

– Follow all the instructions for charging and never charge the battery or the cordless tool outside the temperature range specified in the operating instructions. Incorrect charging or charging outside the permitted temperature range can destroy the battery and increase the fire risk.

Operation

Tampers are only permitted to be operated by suitable persons of or above the age of eighteen. Operators must be instructed in how to guide the tamper by the owner or by owner's assigned personnel.
The machine operator must comply with traffic regulations. If instructions that affect safety are given by third parties, then the operator must be authorized to reject these instructions.

Unauthorized persons are forbidden from being in the area of the tamper during the compacting process.

Protective equipment

This machine is capable of exceeding the permissible sound level of 80 dB(A). The owner might also face additional dangers when using the machine. Precautionary action must, therefore, be taken.

Protective equipment includes:

Hearing protection

Hard hat

Safety shoes

Protective gloves

Operation

Prior to starting work the owner of the tamper must be familiar with the work environment. The work environment includes obstacles in the work and traffic area, the bearing capacity of the ground, as well as the necessary safeguarding of the construction site in the area adjacent to public traffic; and it includes compliance with traffic regulations.
The tamper should only be operated when the protective fixtures are mounted.
The protective fixtures must all be in functional condition.
At least once per shift the tamper must be checked for apparent defects. If there are apparent defects then operation of the tamper must be stopped immediately and the responsible person must be informed. Prior to restarting, tamper malfunctions that have occurred must be corrected.

Maintenance and repair work

Only use **original Weber MT spare parts** to ensure reliable and safe operation for maintenance or repair work.

Adjusting tasks, maintenance tasks, and inspection tasks must be carried out on schedule as specified in this operating and maintenance manual. These activities should only be executed by instructed personnel.

For repair, maintenance, or inspection work the engine of the tamper must be disconnected from the battery.

For maintenance and repair tasks the tamper must be placed on a level and stable substrate and must be secured from rolling off or tipping over.
Ensure that no hazard is caused by components or assemblies while work is in progress.
Do not position yourself or work under suspended loads.

If lubricating oils come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without delay.

Inspection

Tampers must be inspected in accordance with appropriate implementation conditions and operating conditions, as needed; however, an inspection to ensure operationally safe status must be performed by an expert at least once a year. The results of the inspection must be recorded in writing and must be stored at least until the next inspection.

Cleaning work

Observe the device's protection class before cleaning the tamper.
None of the electrical components (engine, switches, etc.) may be cleaned with a high-pressure cleaner.

Disposal

All operating fluids and auxiliary materials must be disposed of in an environmentally-compatible manner in accordance with country-specific regulations.

Important information for operating and maintenance personnel is marked by pictograms.

 Warning against irritants or materials hazardous to health

 Warning against a hazardous place

 Warning against a suspended load

 Wear ear protection

 General regulation

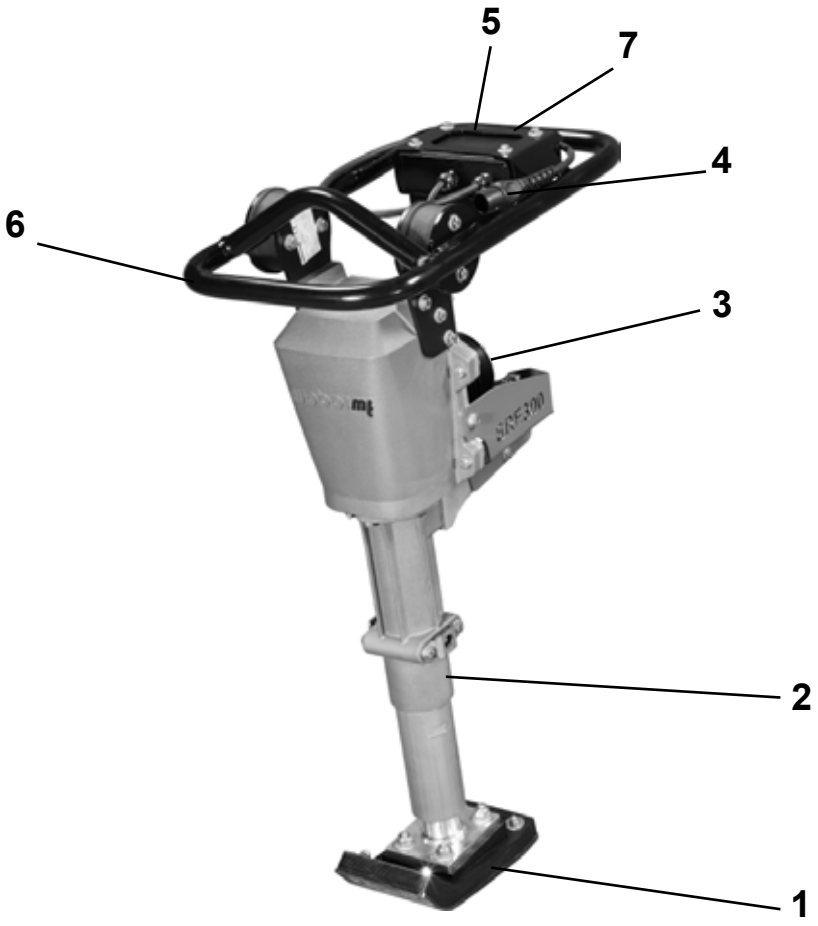
 Environmental protection

 Hard hat

 Safety shoes

 Protective gloves

Graphic presentation



Overall view SRE 300

1	Tamping foot	5	Electronic system with On / Off button
2	Tamping system	6	Manual guidance rod
3	Electric motor	7	Hearing protection (sticker)
4	Connecting cable with plug for battery		

Device description

The series SRE 300 tamper is used for road-building, canal construction, pipe laying and landscaping compaction tasks.

Drive

The compactor is propelled by a direct current synchronous motor.
Force is transmitted via the centrifugal clutch directly to the tamping system.
The compaction work is performed by the tamping foot.

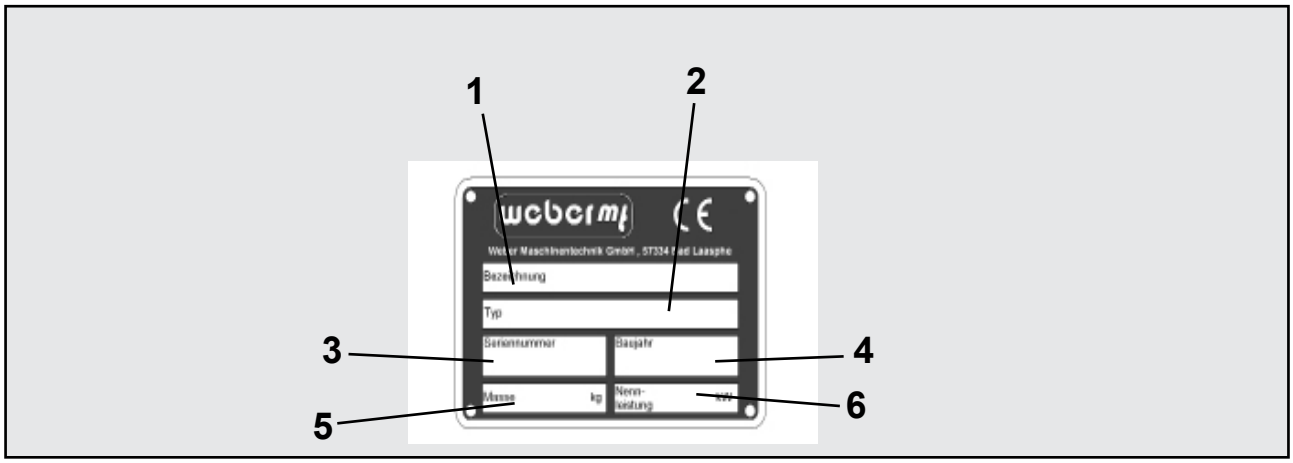
Operation

The electric motor is started with a press of the start button for the motor’s electronic system.
After starting, the tamping system starts to vibrate via the centrifugal clutch which is attached to the engine.

Technical data

	SRE 300
Weight	
Operating weight CECE (in kg)	33
Dimensions	
Overall length (in mm)	585
Overall width (in mm)	314
Height (in mm)	950
Tamping foot width (in mm)	140
Impact rate (/min)	790
Stroke (in mm)	45
Drive	
Engine manufacturer	Weber
Type	Direct current
Performance at operating speed in accordance with ISO 3046-1 (kW)	1.0
Voltage	43.2 (V)
Operating speed (1/min)	6900
Degree of protection	IP 54

	SRE 300
Noise emissions in accordance with 2000/14/EC	
Sound pressure level L_{PA} ascertained in accordance with EN 500, in dB (A)	86
Sound power level L_{WA} ascertained in accordance with EN ISO 3744 and EN 500, in dB (A)	96
Vibration values	
Root-mean-square acceleration value for hand-arm vibration ascertained in accordance with EN 500 in m/s²	9.6
⚠ In accordance with directive 2006/42/EC, complying with the vibration values is the owner's responsibility.	



1 Description

.....

2 TYPE

.....

3 Serial number

.....

4 Year of construction

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5 Mass

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6 Rated power kW

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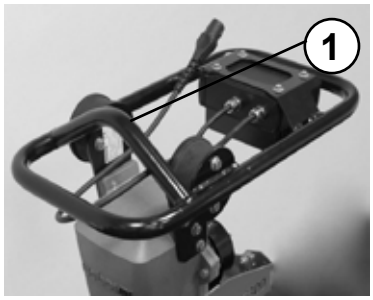
Activities prior to starting work

Transport

When transporting the tamper on a vehicle, secure it with suitable restraints.

Loading with crane



Fit the crane hook into the lifting ring (1) and lift the machine onto the desired means of transport.

Only use lifting machines with a minimum bearing capacity of 100 kg.

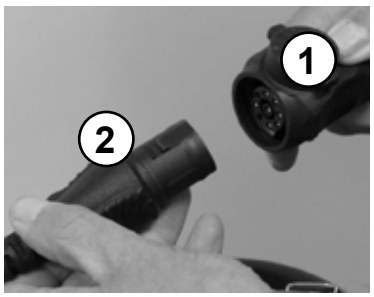
Do not step under suspended loads.

Starting

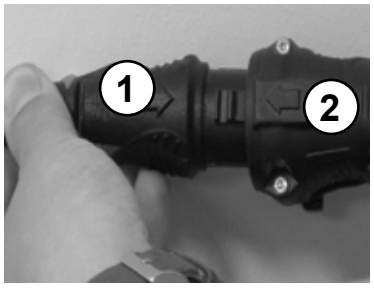
Fit the battery into the carrying system as described in the operating manual provided by manufacturer Pellenc.

Put on the carrying system as described in the operating manual provided by the manufacturer.

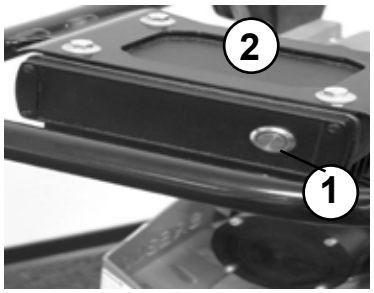
Connect the plug of the battery (1) with the plug (2) of the electronic system.



Switch on the battery as described in the operating manual provided by manufacturer Pellenc.



Put the electric motor of the tamper into operation by pressing the button (1) of the electronic system (2).



Tamping

Only run machine within reach of the manual guidance rod (1).

At obstructions (walls, pits, etc.) ensure that no one can be caught between the machine and the obstruction; or ensure that the machine does not slip into the pit.

Unauthorized persons are forbidden from being in the area of the tamper during the compacting process.

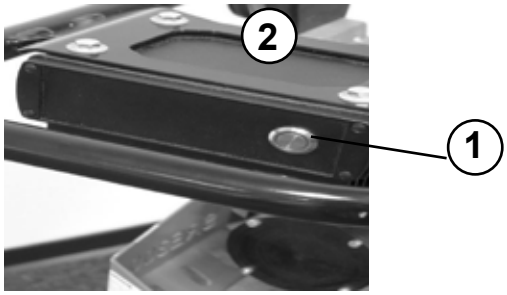
Increased accident danger! Always wear personal protective equipment. Operating the tamper is not permitted without wearing the necessary personal protective equipment.

Personal protective equipment includes:

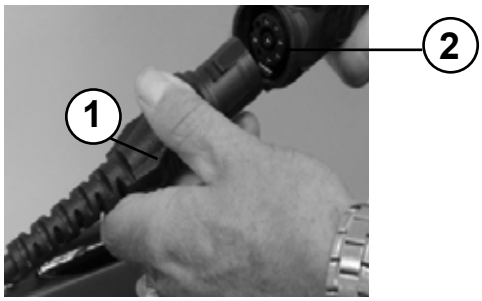
- Wear ear protection
- Hard hat
- Safety shoes
- Protective gloves

Shutting down

Press the button (1) of the electronic system (2) to switch the electric motor off.



Disconnect the plug (1) from the coupling (2). Carefully remove carrying system and battery.



- Switch off the battery as described in the operating manual provided by Pellenc.
- The safety instructions regarding battery operation that have been included in the operating manual supplied by Pellenc must be observed.
- During breaks – even if they are short – the machine must be shut down.
- Parked devices that represent an obstacle must be safeguarded against through conspicuous measures.

Maintenance overview

Maintenance interval	Maintenance activity
Daily	– as needed – clean the cooling fins of the electronic system using a brush
After the first 25 operating hours	– Re-tighten all accessible threaded connections
Every 50 operating hours or 1 x every year	– Lubricating points

Work must be carried out using regulation tools, and the operating and maintenance manual must be complied with for all work.

All maintenance work: select a collection vessel that is large enough to prevent oil from spilling onto the ground. Dispose of waste oil in an environmentally friendly manner (regulation on waste oils).

Dispose of oils, greases, cloths soaked in oil, and replaced parts with oil on them in an environmentally friendly manner.

If lubricating oils come into contact with skin, they can cause skin cancer. Upon contact with the skin, clean affected skin with suitable cleaning agent without delay.

If accessible during maintenance, check the condition and stability of all screws.

Maintenance work

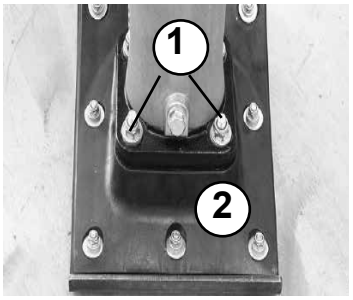
Lubricate lubricating points with bearing grease

Lubricating points “anti-twist device” quantity
1 – 2 strokes.
Use KP2K-20 grease.

Lubricating points “crankcase” quantity 4 – 5 strokes.
Use KP2K-20 grease.

Change the tamping foot

Unscrew the 4 nuts (1).
Lift the tamping foot (2) off of the tamper and attach a new tamping foot.



When mounting the new tamping foot the nuts (1) must be tightened with a torque of 35 Nm.

Mount the fastening nuts of the tamping foot using the plate springs as shown in the adjacent illustration.

Mounting arrangement of the plate springs

Operating fluids and fill levels

Assembly	Lubricant Quality	 SRE 300
Tamper lower part	Shell Gadus S2 V 220AD 2 or comparable KP2K-20 grease	As necessary
Lubricating points	Shell Gadus S2 V 220AD 2 or comparable KP2K-20 grease	Every 50 h.

Troubleshooting

Fault	Possible cause	Remedy
Tamper does not start	Operating error	Execute the start process as prescribed
	Battery switched off	
	Discharge the battery	Charge the battery as described
	Plug connection battery / device not or not properly established	Check the plug connection
Engine runs, but stops after a short time	Discharge the battery	Charge the battery as described
Engine runs at full rpm, tamper does not tamp or tamps inadequately; unclean compaction pattern	Centrifugal clutch is defective	Repair
	Tamping foot is worn	Change the tamping foot
Tamper has no power	Excess grease in the tamping system	Open / clean the tamping system

Actions to be taken before long-term storage (longer than 1 month)

Entire soil compactor	– Clean thoroughly – Check for leaks – If there are leaks – correct defects
All bare parts / fastening bolts	– Oil / grease

If the machine is to be stored for longer than six months, then contact the Weber service organization to discuss additional measures.

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Original instructions