

Operator's manual

Vibratory rammer

AS

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Manufacturer

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Translation of the original operator's manual in German



**WACKER
NEUSON**

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1 Foreword

This operator's manual contains information and procedures for the safe operation and maintenance of your Wacker Neuson machine. In the interest of your own safety and to prevent accidents, you should carefully read through the safety information, familiarize yourself with it and observe it at all times.

This operator's manual is not a manual for extensive maintenance and repair work. Such work should be carried out by Wacker Neuson service or authorized specialists.

The safety of the operator was one of the most important aspects taken into consideration when this machine was designed. Nevertheless, improper use or incorrect maintenance can pose a risk. Please operate and maintain your Wacker Neuson machine in accordance with the instructions in this operator's manual. Your reward will be troublefree operation and a high degree of availability.

Defective machine parts must be replaced immediately!

Please contact your Wacker Neuson representative if you have any questions concerning operation or maintenance.

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We expressly reserve the right to make technical modifications – even without special notice – which aim at further improving our machines or their safety standards.

2 Introduction

2.1 Use of the manual

This manual is considered as part of the machine and must be kept in a safe place throughout the entire lifecycle. This manual must be handed over to every subsequent owner or user of the machine.

2.2 Storing the manual

This manual is part of the machine and must be stored in the immediate vicinity of the machine and be available to staff at all times.

In the case of loss or if a second copy of this manual is required, there are two options for obtaining a replacement:

- Download from the Internet - www.wackerneuson.com
- Contact your Wacker Neuson representative.

2.3 Accident prevention regulations

Local accident prevention regulations and national occupational safety provisions apply in addition to the notes and safety information contained in this manual.

2.4 Further information

This manual is valid for different machine types from a product range. As such, some illustrations may differ from the appearance of your machine. Variant-dependent components may also be described that are not included in the delivery.

The information contained in this manual is based on machines which have been manufactured at the time of printing. Wacker Neuson reserves the right to amend this information without notification.

It must be ensured that any potential amendments or supplements from the manufacturer are included immediately in this manual.

2.5 Target group

Note: Persons working with this machine must receive regular training about the risks and hazards of this machine.

This operator's manual is aimed at the following persons:

Operatives:

These persons are introduced to the machine and informed about potential hazards arising from improper behavior.

Specialist staff:

These persons have specialist training, as well as additional knowledge and experience. They are able to assess the tasks entrusted to them and recognize potential risks and hazards.

2.6 Symbol explanation

This manual contains prominent safety information relating to category types: **DANGER, WARNING, CAUTION** and **NOTE**.

Before commencing any work on or with this machine, notes and safety information must be read and understood. All notes and safety information contained in this manual must also be shared with maintenance, repair, and transport staff.



DANGER

This combination of symbol and signal word indicates a hazardous situation, which, if ignored, will lead to death or serious injuries.



WARNING

This combination of symbol and signal word indicates a hazardous situation, which, if ignored, may lead to death or serious injuries.



CAUTION

This combination of symbol and signal word indicates a potentially hazardous situation, which, if ignored, may lead to minor injuries and damage to the machine.

Notes

Note: Further information.

2.7 Wacker Neuson representative

Depending on your country, the Wacker Neuson representative is a Wacker Neuson service, a Wacker Neuson affiliate or a Wacker Neuson dealer.

On the Internet at www.wackerneuson.com.

The address of the manufacturer is located at the beginning of this manual.

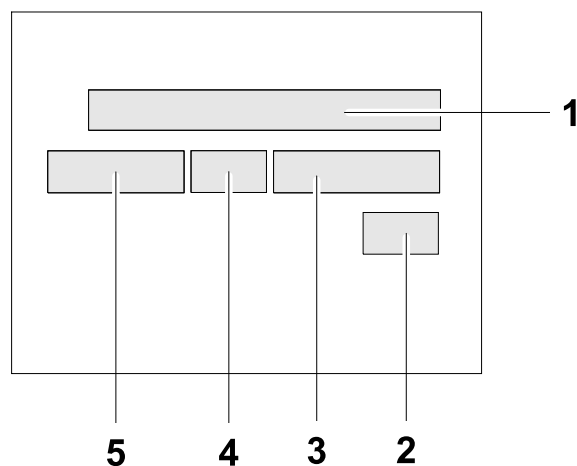
2.8 Limitation of liability

Wacker Neuson will refuse to accept liability for injuries to persons or for damage to materials in the following cases:

- Failure to comply with this manual.
- Improper use.
- Use of untrained staff.
- Use of non-authorized spare parts and accessories.
- Improper handling.
- Any type of structural alteration.
- Non-compliance with with the General Terms and Conditions of Business (T&C).

2.9 Identification of the machine

Nameplate data



The nameplate lists information that uniquely identifies this machine. This information is needed to order spare parts and when requesting additional technical information.

► Enter details on the machine in the following table:

Item	Designation	Your information
1	Group and type	
2	Construction year	
3	Machine no.	
4	Version no.	
5	Item no.	

3 Safety

Note: Read and comply with all notes and safety instructions in this manual. Failure to comply with these instructions can cause electric shock, fire and/or serious injuries as well as damage to the machine and/or damage to other objects. Keep safety instructions and notes for the future.

The notes and safety instructions in this chapter apply for all machine types described in this manual.

The rechargeable battery is classified as a lithium ion battery according to international transport law. Lithium-ion batteries are a hazardous material and belong to hazardous material class 9 *Different hazardous substances and objects*.

The following information should help to comply with the obligations in this regard. In addition to the requirements named here, additional national regulations as well as exceptions due to the national transfer of multi-lateral agreements may also exist. These must also be observed:

The outline of the obligations under the hazardous material law in this manual does not release anyone from their own due diligence as well as the observance of regulations according to the original legal texts.

3.1 Policy

In keeping with the latest technological developments

The machine is built in keeping with the latest technological developments and according to the recognized technical safety rules. Nevertheless, improper use can result in hazards to life and limb of the user, third parties or to damage to the machine and other material assets.

3.2 Application in accordance with the intended purpose

The machine is intended for the compaction of cohesive, mixed and granular soils.

The machine may only be combined and operated with permissible components.

The machine may only be operated with the rechargeable battery and accessories permitted by Wacker Neuson.

Application in accordance with the intended purpose also includes the observation of all notes and safety instructions in this manual as well as complying with the prescribed care and maintenance instructions.

Any other or exceeding use is considered improper. The manufacturer's liability and warranty are canceled for any damage resulting from improper use. The risk lies entirely with the operator.

In particular, misuse is considered:

- The connection of non-permissible components.
- Operating the machine outside of the power rating.
- Operation contrary to the notes and safety instructions fixed to the machine and included in the manual.

3.3 Structural changes

Structural changes may not be made without written approval from the manufacturer. Unapproved structural changes may result in this machine posing dangers for the operator and/or a third party as well as cause machine damage.

In the event of unapproved structural changes, the manufacturer's liability and guarantee are also not applicable.

The following in particular are considered structural changes:

- Opening the machine and a permanent removal of elements.
- Installation of spare parts that do not originate from Wacker Neuson or are not comparable in the design system and quality of the original parts.
- Attaching accessories that do not originate from Wacker Neuson.

3.4 Responsibility of the operator

The operator is the person who operates this machine for commercial or economical purposes or who releases it to a third party for use / application and during operation bears the legal product responsibility for the protection of the personnel or third party.

The operator must make the manual available to personnel at all times and make sure that the user has read and understood this manual.

All people whose working area includes the transport of the rechargeable battery are to be instructed in the requirements for transporting hazardous goods before commencing work.

3.5 User responsibilities

- Know and implement the applicable industrial safety regulations.
- Use a risk assessment to identify the dangers that result from the working conditions at the site of application.
- Create operating instructions for the operation of this machine.
- Regularly check whether the operating instructions correspond to the current status of rules and standards.
- Clearly regulate and specify the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Train personnel at regular intervals and inform them of possible dangers.
- Periodically refresh the instruction.
- Keep records of the training received and provide them to the competent authorities upon request.
- Provide the personnel with the necessary protective equipment.

3.6 Personnel qualification

This machine may only be operated and used by trained personnel.

The rechargeable battery may only be transported by specially trained or instructed personnel.

In the event of misuse, misapplication or operation by untrained personnel, dangers threaten the health of the user or third parties and damage to or the complete failure of the machine also threatens.

In addition, the following previous conditions apply to the operator:

- Be physically and mentally eligible.
- No influence on the ability to respond due to drugs, alcohol or medication.
- Be familiar with the safety instructions in this manual.
- Be familiar with the use of this machine in accordance with the intended purpose.
- Instructed in the independent operation of the machine.

3.7 General sources of danger

Residual dangers in particular are hazards when dealing with machines that, despite a safe design, cannot be eliminated.

These residual dangers are not obvious and may be the source of a possible injury or health hazard.

If unforeseeable residual dangers occur, the operation of the machine is to be stopped immediately and the competent manager is to be informed. This manager shall make the following decisions and initiate everything required to eliminate the occurring risk.

If necessary, the machine manufacturer is to be informed.

3.8 General safety instructions

The safety instructions in this chapter include the "general safety instructions" that are listed in the manual according to the applicable standards. There may be notes included that are not relevant for this machine.

3.8.1 Working area

- Keep the working area tidy. Cluttered or dark working areas can cause accidents.
- Before beginning work, familiarize yourself with the working environment, e.g. the load-bearing capacity of the floor or obstacles in the vicinity.
- Secure the working area from the public traffic area.
- Keep children and other people away when working with this machine. Distractions may cause a loss of control of the machine.
- Always secure the machine against tipping, rolling, sliding and falling over. Risk of injury!

3.8.2 Service

- Only have the machine repaired or maintained by qualified technically trained personnel.
- Only use original spare parts and accessories. This preserves the operational safety of the machine.

3.8.3 Safety of persons

- Working under the influence of drugs, alcohol or medication can cause serious injuries.
- Appropriate protective equipment is to be worn for all work. Appropriate protective equipment reduces the risk of injury considerably.
- Remove tools before operating the machine. Tools that are located on a rotating machine part can be accelerated and lead to serious injuries.
- Always ensure a good footing.
- Vibration-induced long-term damage cannot be ruled out entirely during longer periods of work with this machine. For the vibration load of the machine, see chapter *Technical Data*.
- Wear appropriate clothing. Keep baggy or loose clothing, protective gloves, jewelry and long hair away from moving / rotating machine parts. Entanglement hazard!

3.8.4 Handling and use

- Never operate machines whose switches are defective. Have defective switches exchanged immediately. Machines with defective switches have a high risk of injury.
- Store unused machines out of the reach of children. The machine may only be operated by authorized personnel.
- Handle the machine with care. Have defective parts exchanged immediately before the machine is operated. Defective machines have a high risk of accidents.
- Use the machine, accessories, insertion tools, etc. according to these instructions.

3.9 Specific safety instructions - Vibratory rammer AS

3.9.1 External influences

The vibratory rammer may not be operated in the event of the following external influences:

- In an explosive vicinity

3.9.2 Take work breaks regularly

When operating this machine for long periods of time, vibration-induced circulatory disorders may occur to your fingers, hands or wrists.

Symptoms:

- The aforementioned body parts falling asleep, tingling, pain, sharp pains and changes to skin color.

Note: If these symptoms are determined, seek medical attention immediately.

- If you have a personal disposition to poor blood circulation, your working time may be reduced despite wearing protective gloves and taking regular work breaks.

3.9.3 Operational safety

- When operating the machine, ensure that no gas, water or electric lines and tubes are damaged.
- Pay maximum attention near drops or slopes. Risk of crashing!
- In trench applications and pits, pay very close attention to the side walls to ensure they are stable and do not collapse from the vibration. Danger of collapse!
- Never leave the machine running unattended. Risk of injury!
- Demarcate a large working area and keep unauthorized people away. Risk of injury!
- Machine operators must ensure that people in the working area keep a minimum distance of 5 meters from the running machine.
- Only use Wacker Neuson rechargeable batteries. These batteries are vibration proof and are therefore suitable for the high vibration exposure.

3.10 General safety instructions - Fuel, lubricants and coolants

The following notes must be observed:

- Safety glasses and protective gloves are always to be worn when dealing with fuel, lubricants and coolants. Seek medical attention, for example if you get oil or grease in your eyes.
- Avoid direct skin contact with fuel, lubricants and coolants. Rinse skin immediately with water and soap.
- Do not eat or drink while working with fuel, lubricants and coolants.
- Contaminated oil from dirt or water can lead to premature wear or failure of the machine

If fuel, lubricants and coolants escape from the machine, do not operate the machine any longer and have it repaired immediately by the Wacker Neuson contact partner.

3.11 Maintenance

The following notes must be observed:

- This machine may not be maintained, repaired, adjusted or cleaned while switched on. The rechargeable battery must be removed.
- Adhere to maintenance intervals.
- Observe the maintenance schedule. Non-listed work must be taken over by the service department of the Wacker Neuson contact partner.
- Immediately replace worn or damaged machine parts. Only use spare parts from Wacker Neuson.
- Keep the machine clean.
- Missing, damaged or illegible safety labels must be replaced immediately. Safety labels contain important information regarding the protection of the operator.

Maintenance jobs must be performed in a clean and dry vicinity (e.g. workshop).

3.12 Safety equipment

Safety equipment protects the user of this machine from being exposed to existing hazards. These are barriers (separating protective devices) or other technical measures. This prevents the user from being exposed to a danger. The source of danger will be eliminated in certain situations or the danger will be reduced.

This machine has the following safety equipment:

Position sensor

The position sensor prevents an uncontrolled switching on of the machine if it is on the ground. The position sensor is inoperative as soon as the machine is running. It can therefore also be used in a slanting position.

3.13 General safety instructions - Rechargeable battery (accessories)

The following notes must be observed:

- To charge the Wacker Neuson rechargeable batteries, only use the battery charger approved by Wacker Neuson.
- Wacker Neuson rechargeable batteries may only be used in the machine specified for this purpose by Wacker Neuson.
- Rechargeable batteries may not be dismantled, opened or deformed.
- The rechargeable batteries may not be exposed to heat or fire. Storage in direct sunlight is to be avoided.
- Rechargeable batteries may not be shorted out.
- Rechargeable batteries may not be stored in a box or draw as this can pose hazards where a mutual short-out can occur or a short-out can occur due to other conductive materials.
- Rechargeable batteries may not be exposed to any mechanical impacts.
- If a rechargeable battery is leaking, the fluid must not come into contact with your skin or eyes. If contact has been made, wash the affected area with plenty of water and seek immediate medical attention.
- The polarity identification of plus and minus on the rechargeable battery and the machine must always be observed. Proper use must be ensured.
- Rechargeable batteries that are not intended for use together with the machine may not be used.
- Keep rechargeable batteries away from children.
- Seek immediate medical attention if rechargeable battery components are accidentally swallowed.
- Keep rechargeable batteries clean and dry. Do not allow to come into contact with water.
- If the connections of rechargeable batteries become dirty, clean these with a dry and clean cloth.
- Rechargeable batteries must be charged before use. The proper charging process is to be applied in the process. See the chapter Charging and installing rechargeable batteries.
- Do not overcharge the rechargeable batteries. Once the charge cycle is complete, the rechargeable battery is to be disconnected from the battery charger.
- When stored (>1 month), ensure that the charge capacity is between 30-50% if possible.
- Rechargeable batteries have their best power output if they are operated at normal room temperature (about 20°C).
- Rechargeable batteries may only be used in such applications that are intended for them.

- Keep paper clips, coins, keys, nails, screws and other small metal objects that could cause a bridging of the contacts away from rechargeable batteries. Danger of short circuit and fire!
- Rechargeable batteries are to be removed from the machine if possible if they are not being used.
- The rechargeable battery must be removed from the machine before transport.
- Remove the rechargeable battery from the machine when stored.
- Dispose of properly.

3.14 General safety instructions - Battery charger (accessories)

The following notes must be observed:

- Check the cable and plug before using the battery charger. A damaged battery charger, cable and plug increase the risk of an electric shock.
- Do not use the battery charger if damage has been found. Do not open the battery charger yourself, but rather only have it repaired by qualified technically trained personnel who are using original spare parts.
- Only use the battery charger indoors and keep away from rain and moisture. The penetration of water into the battery charger increases the risk of an electric shock.
- Only charge approved rechargeable batteries from Wacker Neuson.
- The battery charger may not be exposed to heat or fire. Storage in direct sunlight is to be avoided.
- The battery charger may not be exposed to any mechanical impacts.
- Rechargeable batteries that are not intended for use together with the machine may not be used.
- If the connections are dirty, clean these with a dry and clean cloth.
- Once the charge cycle is complete, the rechargeable battery is to be disconnected from the battery charger.
- Do not operate the battery charger on easily flammable surfaces (e.g. paper, textiles) or in flammable environments. Risk of fire!
- Do not operate the battery charger in freezing temperatures and do not place it in direct sunlight.
- The connector plug of the battery charger must fit in the plug receptacle. The plug may not be changed in any way. Do not use any adapters, since these are usually designed without a grounded conductor terminal. In this case, there is an increased risk of electric shock.
- Avoid physical contact with grounded surfaces (tubes, heaters). If the body is grounded, there is an increased risk of electric shock.
- Keep battery charger away from children.
- Always keep the battery charger clean and dry. Dirt accumulation results in the danger of an electric shock.
- Keep the power cable clean and avoid the effects of heat, oil, sharp edges or moving machine parts on the cable. The power cable may not be used for carrying or suspending the machine. Do not pull the cable to pull the plug out of the plug receptacle.
- Dispose of properly.

3.14.1 Electrical safety

- The connector plug of the battery charger must fit in the plug receptacle. The connector plug may not be modified in any way. Do not use the adapter plug together with grounded machines. Unchanged plugs and plug receptacles reduce the risk of an electric shock.
- Avoid physical contact with grounded surfaces. There is a higher risk of electric shock if your body is grounded.
- Keep battery charger away from moisture. Penetrating moisture increases the danger of an electric shock.
- Do not divert the cable from its intended use. Protect cable from heat, oil and sharp objects. Damaged or entangled cables increase the risk of an electric shock.
- When working outdoors, only use cables that are suitable for outdoor use. The use of a cable that is suitable for outdoor use reduces the risk of an electric shock.
- If work in a moist environment cannot be avoided, a fault current protective switch must be used. Fault current protective switches reduce the risk of an electric shock.






3.14.2 Extension cable and cable drum

The following points must be observed in order to minimize the danger of injuries, fire, electric shock and material damage:

- The extension cable and cable drum must be inspected and undamaged.
- Only use extension cables with grounded conductors and a grounded conductor terminal to the plug and coupling.
- Only use inspected extension cables and cable drums that are suitable for construction site use.
- Damaged extension cables and cable drums may not be used and must be replaced immediately.
- Cable drums and multi-pole plug receptacles must have the same requirements as extension cables.
- Protect extension cables, cable drums, multi-pole plug receptacles and connection couplings from moisture.
- The extension cables and cable drums must be completely unrolled before operation.

3.15 Personal Protection Equipment

Note: In order to avoid possible injuries when dealing with this machine, personal protective equipment must be worn for all work on and with this machine.

Pictogram	Significance	Description
	Wear safety shoes!	Safety shoes protect against crushing, falling parts and slipping on slippery surfaces.
	Wear safety glasses!	Safety glasses protect against flying objects and liquid spray.
	Wear protective gloves!	Protective gloves protect against abrasions, cut injuries, punctures as well as hot surfaces.
	Wear ear protection!	Ear protection protects against permanent hearing damage.
	Wear a protective helmet!	A protective helmet protects against injuries from falling objects.

Note: With this machine, it is possible to exceed the permissible, country-specific noise limit (personal rating level).

That is why ear protection must be worn. For exact values for noise measurement, see chapter *Technical Data*.

Work particularly cautiously and pay attention when wearing ear protection, as your ability to hear noises, such as screams or signal tones, is restricted.

Wacker Neuson recommends always wearing ear protection.

3.16 Behavior in dangerous situations

Preventative measures:

- Always be prepared for accidents.
- Keep first-aid equipment on hand.
- Make personnel familiarized with accident reporting, first aid and rescue facilities.
- Keep access routes clear for rescue vehicles.
- Train personnel in first aid measures.

Measures in case of emergency:

- Immediately switch off machine.
- Bring injured and other people out of the danger zone.
- Initiate first aid measures.
- Alert rescue forces.
- Keep access routes clear for rescue vehicles.
- Inform the person responsible at the site of application.

Measures in the case of a fire:

- Remain clear of resulting vapors and gases. Note the wind direction!
- Only extinguish fire with a fire extinguisher of fire classification ABC (powder extinguisher).

4 General Power Tool Safety Warnings



WARNING Read all safety warning, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “power tool” in the warning refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
- c) *Power tools create sparks which may ignite the dust or fumes.*
- d) **Keep children and bystanders away while operating a power tool.**
- e) *Distractions can cause you to lose control.*

2)Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.**
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

- f) **When operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3) Personal safety

- a) **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.*
- b) **Use personal protective equipment. Always wear eye protection.**
- c) *Protective equipment such as dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.*
- d) **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.**
- e) *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*
- f) **Remove an adjusting key or wrench before turning the power tool on.**
- g) *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- h) **Do not overreach. Keep proper footing and balance at all times.**
- i) *This enables better control of the power tool in unexpected situations.*
- j) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.**
- k) *Loose clothes, jewellery or long hair can be caught in moving parts.*
- l) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**
- m) *Use of dust collection can reduce dust-related hazards.*
- n) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore, tool safety principles.**
- o) *A careless action can cause severe injury within a fraction of a second.*

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.**
- c) *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- d) **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.**
- e) *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- f) **Store idle power tools out of**
- g) **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.*
- h) **Maintain power tools and accessories. Check for misalignment or binding 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.**
- i) *Many accidents are caused by poorly maintained power tools.*
- j) **Keep cutting tools sharp and clean.**
- k) *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- l) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**
- m) *Use of the power tool for operations different from those intended could result in a hazardous situation.*
- n) **Keep handles dry, clean and free from oil and grease.**
- o) *Slippery handles do not allow for safe handling and control of the tool in unexpected situations.*

5) Battery tool use and care

- a) **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.*
- b) **Use power tools only with specifically designated battery packs.**
- c) *Use of any other battery packs may create a risk of injury and fire.*
- d) **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.*
- e) **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.*

6) Service

- a) **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.*

* The vibratory rammer AS30 and AS50 has the class rating IP2X and is equally suitable for operation in dryness and rain.

For longer working breaks (>1 day), the vibratory rammer AS30 and AS50 may not remain outdoors unprotected.

5 Safety and information labels



WARNING
Illegible symbols
Over time, labels and plates on the machine can become dirty or become unrecognizable in some other way.

- Keep all safety, warning and operating instructions on the machine in a good legible condition.
- Renew damaged labels and plates immediately.

The following labels are located on the machine:

AS 30



AS 50



Item	Label	Description
1		Use personal protective equipment in order to avoid injuries and health hazards: <ul style="list-style-type: none">■ Ear protection.■ Eye protection. Read the operator's manual before commissioning.

6 Standard package

The standard package includes:

- Vibratory rammer.
- Operator's manual.
- Transport regulation for the rechargeable battery.
- Parts book.

Other components:

- Rechargeable battery.
- Battery charger.

Note: The rechargeable battery is delivered separately for technical safety reasons.

7 Setup and function

7.1 Application area

The vibratory rammer is used for the compaction of soil and is used in gardening and landscaping, civil engineering and road and highway construction.

7.2 Brief description

This machine is a vibratory rammer that is operated with a Wacker Neuson rechargeable battery.

The Wacker Neuson vibratory rammer essentially consists of the drive system, ramming system, ramming shoe and handle grip.

The drive motor transmits the power through the ramming system and the ramming shoe. An impact force is therefore generated for the compaction of the soil.

Rechargeable battery

This component is a lithium-ion rechargeable battery (with lithium iron phosphate cells).

The rechargeable battery has a display with six LEDs, which indicate the charge situation of rechargeable battery as well as service information.

Battery charger

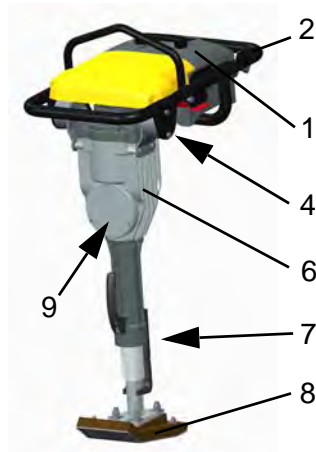
This component is a battery charger for the efficient charging of rechargeable batteries.

The charging process is automatically adjusted to the current charge situation of the rechargeable battery. If the rechargeable battery is fully charged, the battery charger switches to the preservation mode.

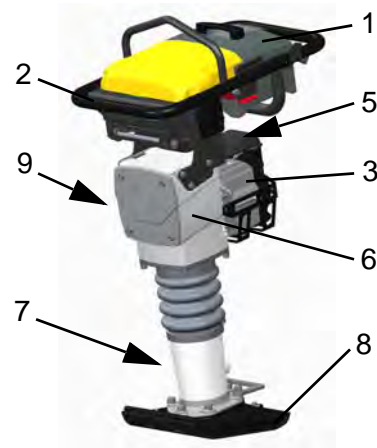
8 Components and operator's controls

8.1 Components

AS 30



AS 50



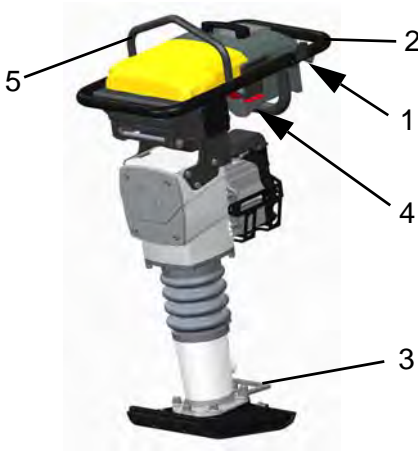
Item	Designation	Item	Designation
1	Rechargeable battery (optional)	5	Parallelogram of oscillating suspension unit
2	Handle grip	6	Crankcase
3	Drive motor (not visible for AS 30)	7	Ramming system
4	Vibration damper	8	Ramming shoe
		9	Nameplate

8.2 Operator's controls

AS 30

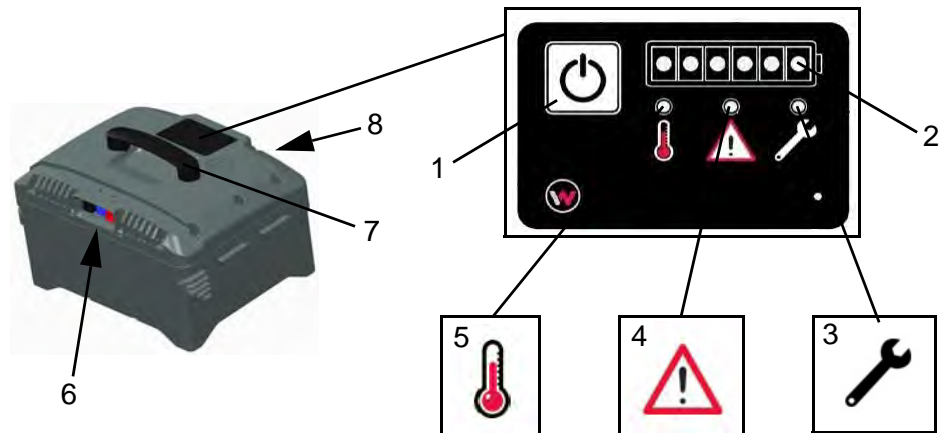


AS 50



Item	Designation	Item	Designation
1	Switching and safety lever	4	Unlocking the rechargeable battery
2	Handle grip	5	Central lifting point
3	Handle grip		

8.3 Components and operator's controls of the rechargeable battery (optional)



Item	Designation	Item	Designation
1	Start button on / off	5	Temperature display
2	Display - charge situation of battery	6	Connection
3	Service indicator	7	Handle
4	Fault indication	8	Nameplate

Display - charge situation of battery

The display uses six LEDs to indicate the charge situation of rechargeable battery.

Service indicator

If the LED illuminates, contact the service department of the Wacker Neuson contact partner.

Temperature display

The LED illuminates if the rechargeable battery has reached a temperature that is too high or too low.

Fault indication

The LED illuminates if there is a fault.

8.4 Components and operator's controls of the battery charger (optional)



Item	Designation	Item	Designation
1	LED charge indicator	4	Power cable of the rechargeable battery
2	LED operating indicator	5	Power cable
3	LED fault indicator	6	Nameplate

9 Transport



WARNING

Improper handling can lead to injuries or serious material damage.

- ▶ Read and observe all safety instructions in this operator's manual.



DANGER

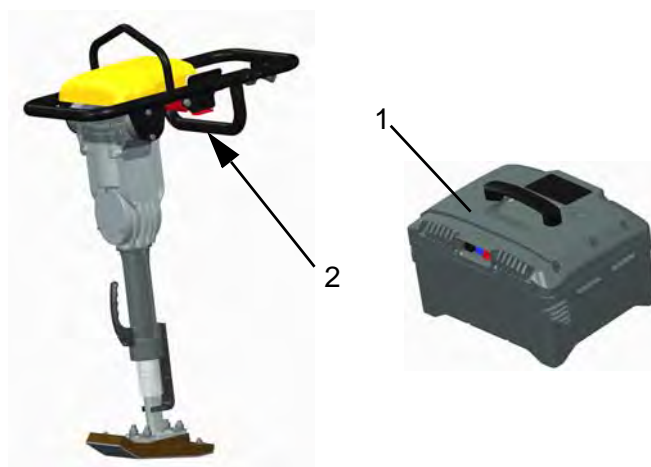
Danger from falling.

A falling machine can cause serious injuries, for example from crushing.

- ▶ Only suitable and tested lifting gear and tackles (safety load hooks) with a sufficient load-bearing capacity can be used.
- ▶ Reliably secure the machine to the lifting gear.
- ▶ Do not lift the machine with an excavator bucket or forklift.
- ▶ Do not lift the machine by the handle of the rechargeable battery.
- ▶ Leave the danger area when lifting and do not stay under suspended loads.

9.1 Loading and transporting the machine

Perform preparations



Item	Designation	Item	Designation
1	Rechargeable battery	2	Release

The rechargeable battery must be removed before loading and transport.

Lifting and lash down the machine

Note: Appoint a specialist flagman for a safe lifting operation.
AS 30 / AS 50

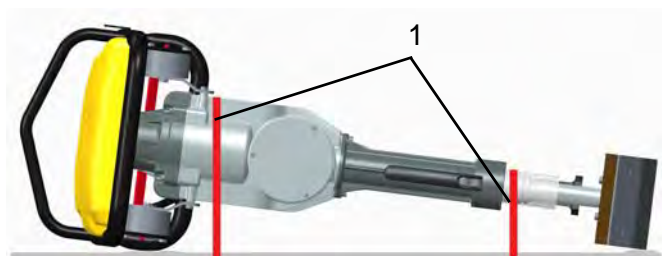


Item	Designation	Item	Designation
1	Handle grip	2	Central lifting point

1. To lift the machine, mount suitable tackles to the central lifting point or on the handle.

Note: The vibratory rammer AS 50 may not be lifted by the handle.

2. Carefully load the machine into or onto a stable means of transport capable of bearing the load. Turn the machine on its side.



Item	Designation
1	Attachment of the tension belt

3. After loading, lash down the machine on the means of transport so that it is secured against rolling, sliding and tipping over. Attach and tension the tension belt over the vibratory rammer.

9.2 Packaging and transporting the rechargeable battery

Note: Always read and comply with the enclosed transport regulation of the rechargeable battery and the safety instructions in this manual!
The current state of transport regulations must be observed, regardless of the transport medium and route.

- The rechargeable battery must be switched off during packaging and transport.

9.3 Transporting the battery charger

Wind up the battery charger cable. Do not bend the cable.

10 Storage

In order to avoid possible damage, the following points must be observed:

- Always store the machine, rechargeable battery and battery charger separately.
- Do not store outdoors.
- Store dry and free of dust.
- Protect from direct sunlight.

10.1 Specific storage - Rechargeable battery

In order to avoid possible damage, the following points must be observed:

- If possible, store at an air humidity of < 80%. Risk of corrosion!
- Store as cool as possible (< 25 °C).
- If possible, store at 30-50% charge situation of battery.
- Store separately from other hazardous substances (minimum distance of 2.5 meters).
- Do not store with metallic objects. Risk of short circuit!
- No fire and open light in the storage area.
- For permitted storage temperatures, see chapter *Technical Data*.

11 Operation



WARNING

Improper handling can lead to injuries or serious material damage.

- Read and observe all safety instructions in this operator's manual.
-

11.1 Before commissioning

11.1.1 Control procedures before commissioning

- Check the machine and components for damage. In the event of visible damage, do not operate the machine and immediately contact a Wacker Neuson dealer.
- Check the switching and safety lever for smooth and effortless movement.
- Ensure that loose packaging material has been removed from the machine.
- Current regulations of the local authorities for noise emissions.
- Charge situation of rechargeable battery.
- Lubricating grease or oil.
- Check the screwed connections for a secure seat.

Note: Perform control procedures according to the *Maintenance* chapter. If necessary, top off missing fuel, lubricants and coolants, see chapter *Technical Data*.

11.1.2 Charge and deploy rechargeable battery

Note: Only use battery chargers and rechargeable batteries from Wacker Neuson.

Charge the rechargeable battery

1. Place the battery charger and rechargeable battery on a dry and clean working area.
2. Connect the battery charger to the power source.
3. Then connect the rechargeable battery to the battery charger.
4. Check the charge situation of battery regularly.
5. If the rechargeable battery is completely charged, unplug the rechargeable battery from the battery charger and de-energize the battery charger.

Deploy the rechargeable battery

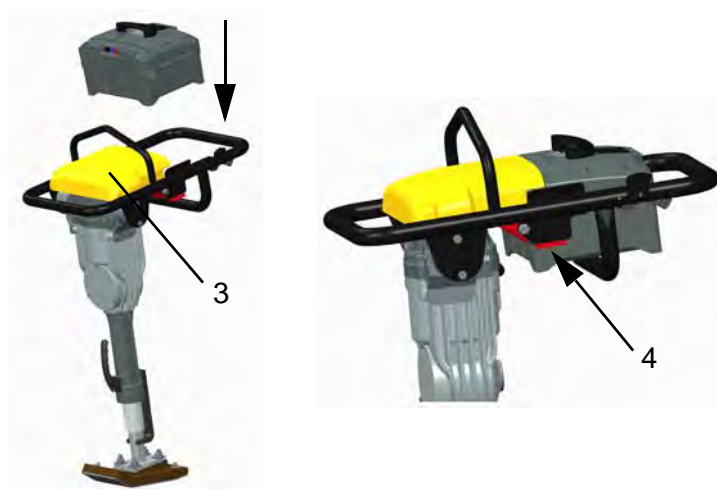
Note: The electrical contacts and contact surface of the rechargeable battery must be clean and dry.



Item	Designation	Item	Designation
1	Rechargeable battery	2	Starter lever

1. Firmly hold the vibratory rammer by the handle with one hand.
2. Position the starter lever of the vibratory rammer in the OFF position.

Note: Note the direction of installation when installing the rechargeable battery. The connections must point in the direction of the protective cover.



Item	Designation	Item	Designation
3	Protective cover	4	Lock

3. With the other hand, lift the rechargeable battery by the handle and carefully insert it into the provided guide rail.

4. Insert the rechargeable battery by the handle until you hear a clearly audible snapping into place sound of the lock. Make sure the rechargeable battery is firmly seated.

11.2 Notes about operation



WARNING

Danger of tipping

There is a serious risk of injury due to the machine slipping or tipping over.

- ▶ Always secure the machine from tipping over.
 - ▶ Place the machine on level surface with a firm substrate.
-



DANGER

Danger of crushing

It is possible to crush hands and feet.

- ▶ Work carefully.
-



CAUTION

Beware of physical impairments caused by vibration.

- ▶ Take breaks periodically.
-



CAUTION

Injuries or material damage.

There can be strong recoils on firm, hard or rigid bottoms.

- ▶ Avoid these bottoms.
-



- The proper location of the operator is behind the machine.
- Guide and steer the machine using the handle.

- Utilize the machine's net weight when working.
- Allow the machine to pull forward independently. Do not push or pull forward or backward with muscle power.
- Hold the handle left and right for an optimal control, performance and minimal hand-arm-vibrations.
- To avoid damage to the machine, the machine may not be relocated in a running state.
- Use caution with coarse materials. In order to avoid extreme wear of the ramming shoe, this must always strike parallel to the bottom to be compacted.

Operation in channels

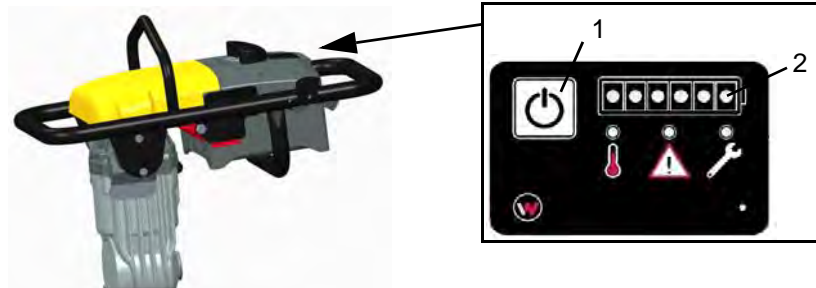
- On pit, cavity, dump and embankment edges, on trench edges and terraces, operate the machine so that there is no danger of falling or tipping over.
- Pay attention to the side walls and their stability. Danger of collapse and burying!
- Stability!

Operation below freezing

The cold grease or oil in the percussion system can increase the resistance so much that the centrifugal clutch slips.

11.3 Commission

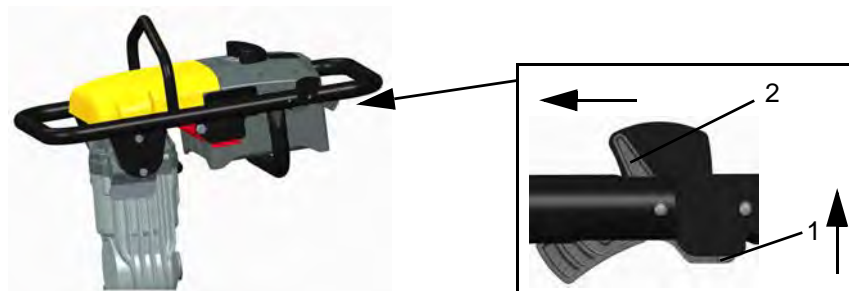
Note: The machine must stand upright when starting and be placed on a suitable subsurface.



Item	Designation	Item	Designation
1	Start button on / off	2	LED light progress bar

1. Firmly hold the machine by the handle.
2. Check that the starter lever is in the OFF position.
3. Press the starter button on the rechargeable battery.
4. Pay attention to the light progress bar. The LEDs illuminate alternating and then show the current charge situation of rechargeable battery.

Note: If not started, the rechargeable battery automatically switches off after 30 seconds.



Item	Designation	Item	Designation
1	Safety lever	2	Starter lever

5. With one hand, pull the safety lever and slowly push the starter lever forward.
6. The machine will start and the vibration starts in the forward direction.

11.4 Operation

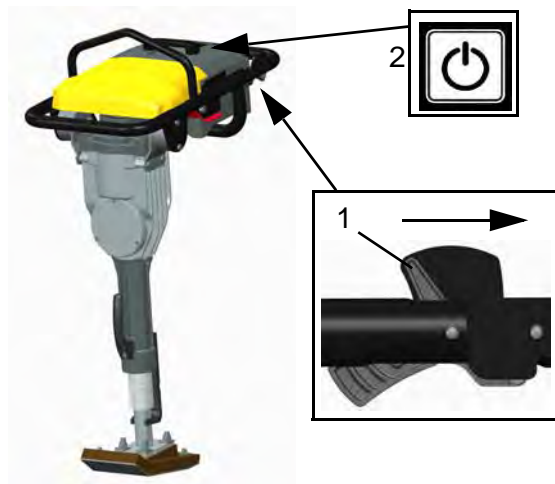
Only guide and steer the machine using the handle.

11.4.1 Display - charge situation of battery

Regularly check the charge situation of rechargeable battery during operation.

Number of illuminating LEDs of the rechargeable battery	Significance
1 LED illuminates	Charge situation of battery 0 - 20% - Charge the rechargeable battery.
2 LEDs are illuminated	Charge situation of battery > 20%
3 LEDs are illuminated	Charge situation of battery > 40%
4 LEDs are illuminated	Charge situation of battery > 60%
5 LEDs are illuminated	Charge situation of battery > 80%
6 LEDs are illuminated	Charge situation of battery 100% - Cells are balanced.
6 LEDs are constantly illuminated	Charge situation of battery 100% - Rechargeable battery is completely charged.
all LEDs off	Automatic shutdown after about 30 seconds

11.5 Decommissioning



Item	Designation	Item	Designation
1	Starter lever	2	Start button on / off

1. Slowly pull the starter lever backward until the detent.
2. The safety lever will lock into place with the starter lever and hold this in the OFF position.
3. Wait until the machine has come to a complete standstill.

Note: Park the machine so that it cannot tip over, fall or slip away.

11.6 After operation

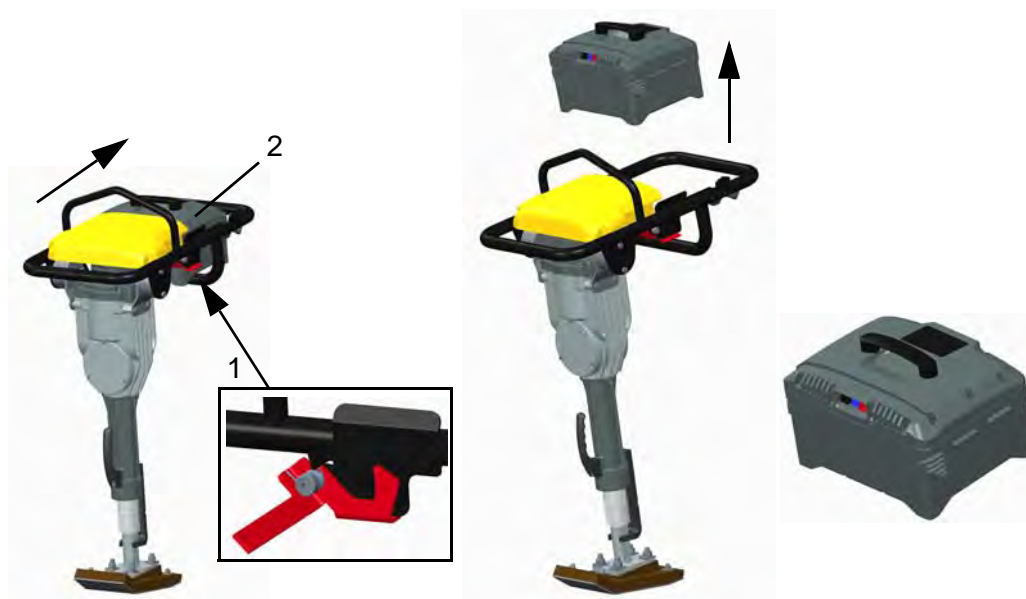


CAUTION

Hot surfaces

- Wear protective gloves.

11.6.1 Remove the rechargeable battery



Item	Designation	Item	Designation
1	Release	2	Rechargeable battery

1. Wait until the machine has come to a complete standstill.
2. Check that the starter lever is in the OFF position.
3. Push the lock down.
4. Carefully pull the rechargeable battery by the handle to the rear until the detent.
5. Pull out the rechargeable battery by the handle and put down safely.

12 Maintenance



WARNING

Improper handling can lead to injuries or serious material damage.

- ▶ Read and observe all safety instructions in this manual.
-



WARNING

Risk of injury from uncontrolled starting machine and moving parts.

- ▶ Only perform maintenance jobs with the machine switched off.
-



WARNING

Warning of hot surfaces

The crankcase with the engine and guide cylinder can heat up greatly after even a short period of time, which can lead to severe burns on contact with skin.

- ▶ Always allow the machine to cool down after use.
 - ▶ If the cool-down phase cannot be adhered to (e.g. due to an emergency), use heat-resistant protective gloves.
-



WARNING

Electrical voltage

Risk of injury from electric shock.

- ▶ Switch the machine off.
 - ▶ Remove the rechargeable battery.
-

12.1 Maintenance table

Maintenance jobs	Daily	50 hours	200 hours
Clean the machine Visual inspection for completeness. Visual inspection for damage.	■		
Check the switching and safety lever for smooth and effortless movement and function.	■		
Grease the ramming system*		■	
Check the oil level, top off if necessary.**	■	■	
Change the oil**		■ ¹	■
Check the screwed connection.	■		
Clean the rechargeable battery Visual inspection for damage.	■		
Clean the battery charger Visual inspection for damage.	■		
¹ Perform first oil change after 50 hours. * AS 30 ** AS 50			

12.2 Maintenance jobs



CAUTION

Health risk from fuel, lubricants and coolants.

- ▶ Do not inhale fuel, lubricants and coolants and vapors.
- ▶ Avoid contact of skin or eyes with fuel, lubricants and coolants.

Perform preparations

1. Place the machine on level surface.
2. Shut down the machine.
3. Remove the rechargeable battery.
4. Let the machine cool down.

12.2.1 Machine maintenance jobs

Clean the machine

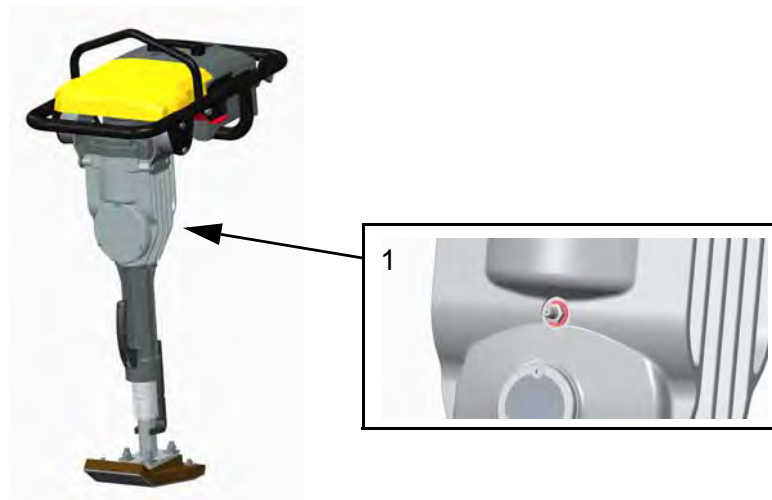
Note: Do not use high pressure washers!
Penetrating water can damage the drive motor, electrical operator's controls or components of the machine.

1. After cleaning, check the cable, utility lines and hardware for loose connections, chafe marks and other damage.
2. Immediately eliminate detected deficiencies.

Screwed connections

For vibratory rammers, all screwed connections must be checked to ensure a firm seat at regular intervals.

Grease the ramming system - AS 30



Item	Designation
1	Zerk fitting

1. Remove dirt accumulation within the range of the zerk fitting.
2. Apply the filled grease press to the zerk fitting and actuate about 20 times (about 30 grams).

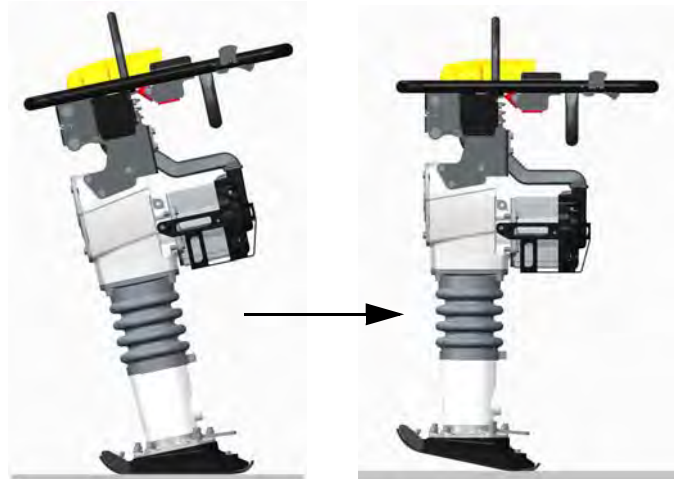
Note: Only use special lubricants for the lubrication, see chapter *Technical Data*.

3. Wipe the area of the zerk fitting with a clean cloth.

Check the oil level and top off - AS 50

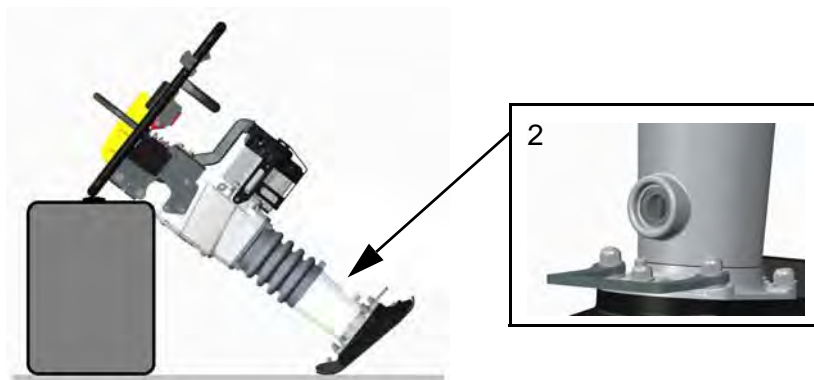
Note: If the vibratory rammer was transported in a horizontal position or was just relocated, it must be put in a vertical position for 15 minutes before the oil level can be checked.

1. Remove dirt accumulation within the range of the oil level glass.



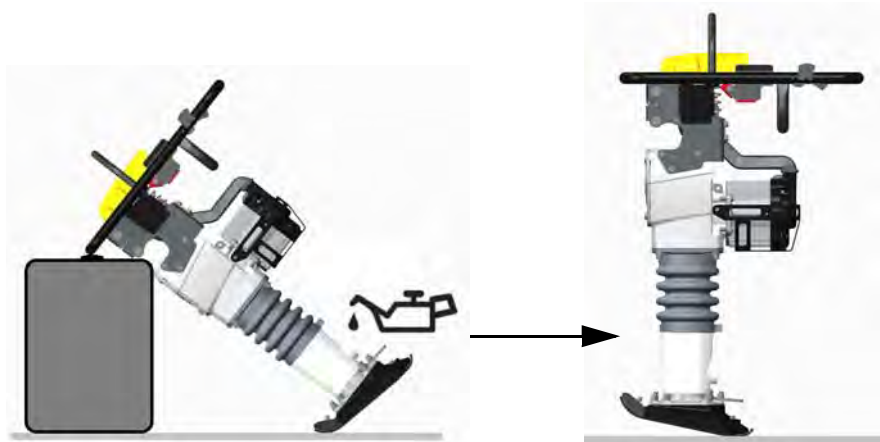
2. Tilt the vibratory rammer so that it forms a right angle to the ground.
3. Check the oil level through the inspection glass. Oil must fill 1/2 to 3/4 of the inspection glass.
4. If the oil level is too low, top off the oil. For the oil specification, see the chapter *Technical Data*.

Note: Do not overfill the ramming system with oil. An oil level that is too high can lead to a hydraulic lock in the ramming system. This can lead to faulty operation and damage to the ramming system and the ramming shoe.



Item	Designation
1	Oil level glass

5. Tilt the vibratory rammer forward to obtain access to the inspection glass. Secure in this position.
6. Screw on the oil level glass. Clean the thread on the inspection glass and wrap with Teflon tape.

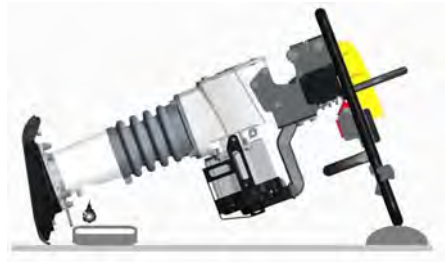


7. Fill oil through the opening in the inspection glass in the housing.
8. Screw the inspection glass back on, but do not tighten.
9. Stand the vibratory rammer upright to check the oil level.
10. If necessary, top off the oil until the inspection glass is 1/2 to 3/4 filled.
11. Then tighten the inspection glass. The tightening torque is 9 Nm.
12. Wipe the area of the oil level glass with a clean cloth.

Oil change - AS 50

1. Remove dirt accumulation within the range of the oil level glass.
2. Screw on the oil level glass. Clean the thread on the inspection glass and wrap with Teflon tape.

Note: Used oil must be disposed of according to the applicable local environmental protection regulations.



3. Tilt the vibratory rammer backward until it rests on the handle grip and the drain the used oil into a suitable reservoir.

Note: This process can take up to 10 minutes.



4. Tilt the vibratory rammer forward and secure in this position.
5. Fill oil through the opening in the inspection glass in the housing. For the oil specification, see chapter *Technical Data*.
6. Screw the inspection glass back on, but do not tighten.
7. Stand the vibratory rammer upright to check the oil level.
8. If necessary, top off the oil until the inspection glass is 1/2 to 3/4 filled.

9. Then tighten the inspection glass. The tightening torque is 9 Nm.
10. Wipe the area of the oil level glass with a clean cloth.

12.2.2 Maintenance jobs for the rechargeable battery

Clean the rechargeable battery



WARNING

Risk of fire and explosion when using flammable cleaning agents.

- Do not clean the machine and elements with gasoline or other solvents.
-

Note: Only use dry and clean cloths!

Penetrating moisture can lead to a total failure.

- Check for damage after cleaning.

Note: If the rechargeable battery is damaged, contact the service department of the Wacker Neuson contact partner.

12.2.3 Maintenance jobs of the battery charger

Clean the battery charger



WARNING

Risk of fire and explosion when using flammable cleaning agents.

- Do not clean the machine and elements with gasoline or other solvents.
-

Note: Only use dry and clean cloths!

Penetrating moisture can lead to a total failure.

1. Check for damage after cleaning.
2. Check the cable and plug to ensure they are in a flawless condition.

Note: If the battery charger is damaged, contact the service department of the Wacker Neuson contact partner.

13 Troubleshooting



DANGER

Danger to life from unauthorized troubleshooting.




- If faults occur with this machine that are not described in this manual, contact the manufacturer. Do not eliminate the faults independently.

13.1 Fault table

Fault	Possible causes	Remedial measure
The vibratory rammer will not operate.	The charge situation of rechargeable battery is too low.	Charge the rechargeable battery.
	The rechargeable battery is not properly installed in the vibratory rammer.	Install the rechargeable battery in the vibratory rammer correctly.
	The rechargeable battery is defective.	*
	The starter lever is in the forward position when ON switch on the rechargeable battery was actuated.	Put the starter lever in the OFF position.
The vibratory rammer displaying unexpected faults during commissioning or operation.	Unknown.	Actuate the ON / OFF start button and remove the rechargeable battery if the fault persists *
The vibratory rammer switches itself off.	The charge situation of rechargeable battery is too low.	Charge the rechargeable battery.
	The vibratory rammer was overloaded.	Switch the vibratory rammer on again.
	Excess temperature of the inverter.	Allow the vibratory rammer to cool down.
*Contact a Wacker Neuson contact partner.		



13.2 Fault table - rechargeable battery

Pictogram	LED over Pictogram	Possible causes	Remedial measure
	<ul style="list-style-type: none"> - Fault LED illuminates. - Fault LED illuminates constantly. 	<ul style="list-style-type: none"> - Voltage too high. - Contacting error. - Hardware error. 	<ul style="list-style-type: none"> - Disconnect the rechargeable battery from the machine or battery charger. - Clean contacts, dry if necessary. - Put machine back into operation and acknowledge error by using a touch button. <p>*</p>
	Temperature LED illuminates.	Temperature error (over / under temperature).	<ul style="list-style-type: none"> - Only operate machine in the permissible temperature range. - Allow the equipment to cool down if necessary. - Put machine back into operation and acknowledge error by using a touch button.
	Maintenance LED illuminates.	The rechargeable battery was disabled due to a fault.	*
*Contact a Wacker Neuson contact partner.			

14 Disposal

14.1 Disposal of waste electrical and electronic equipment

For customers in EU countries

This device is subject to the European Directive on waste electrical and electronic equipment (WEEE) and the corresponding national legislation. The WEEE directive outlines the procedure for handling electrical waste equipment across the EU.



The device is labelled with the symbol of a crossed out dustbin shown here. This means you may not dispose of it with normal household waste but in a separate environmentally-friendly waste collection.

This device is a professional electrical tool designed for commercial applications only (B2B device according to WEEE directive). Contrary to equipment used in most private households (B2C devices), in some EU countries such as Germany, this device may not be disposed of at a collection point in a public disposal facility (for example at public waste depots). In case of doubt, ask the sales outlet about the proper disposal procedure for B2B electrical equipment in your country and ensure you dispose of the device in accordance with the valid legal guidelines. Please also note any information in the sales contract and the general terms and conditions from the point of sales.

The proper disposal of this device prevents the occurrence of any negative effects on people or the environment, follows the specific procedures for handling harmful substances and enables valuable raw materials to be recycled.

For customers in non-EU countries

The proper disposal of this device prevents the occurrence of any negative effects on people or the environment, follows the specific procedures for handling harmful substances and enables valuable raw materials to be recycled. Therefore, we recommend that this device is disposed of in a separate, environmentally-friendly waste collection and not with normal household waste. In some cases, national legislation also stipulates the separate disposal of electric and electronic products. Please ensure you dispose of this device in accordance with the valid regulations in your country.

15 Accessories



CAUTION

Accessories and spare parts that do not originate from Wacker Neuson can increase the risk of injury and possible damage to the machine.

- The use of other accessories and spare parts that do not originate from Wacker Neuson shall cancel any liability.
-

A wide range of accessories is offered for the machine.

More information about the individual accessories can be found on the Internet at www.wackerneuson.com.

16 Technical data

16.1 Vibratory rammer

Designation	Unit	AS 30	AS 50
Item number		5100002884	5100003033
Rated current	A	26.30	41.00
Rated voltage	V	51	51
Rated power	kW	1.34	2.10
Kind of current (output)		DC	DC
Percussion rate	rpm	820	680
Power transmission		single-stage beveled gear transmission	single-stage spur wheel gear transmission
Length	mm (in)	620 (24.4)	640 (25.2)
Width	mm (in)	361 (14.2)	358 (14.1)
Height	mm (in)	1021 (40.2)	1074 (42.3)
Length (ramming shoe)	mm (in)	264 (10.4)	340 (13.4)
Width (ramming shoe)	mm (in)	150 (5.9)	280 (11.0)
Height (ramming shoe)	mm (in)	57 (2.2)	78 (3.1)
Weight	kg (lb)	35.00 (77.16)	63.50 (139.99)
Operating weight	kg (lb)	44.5 (98.1)	74.0 (163.1)
Type of engine		Asynchronous motor	Asynchronous motor
Insulation class		F	F
Recommended battery type		BP 600	BP 600
Battery running time	min	30	20
Special lubricant		Gadus S3 V220C 2	SAE 10W/30
Class rating		III / protective low voltage	III / protective low voltage
Protection rating		IP2X	IP2X
Bearing temperature range	°C (°F)	-30 – +50 (-22 – +122)	-30 – +50 (-22 – +122)

Designation	Unit	AS 30	AS 50
Operating temperature range	°C (°F)	-0 – +45 (-32 – +113)	-0 – +45 (-32 – +113)
Sound pressure level L_{pA}	dB(A)	92	92
Standards		DIN EN ISO 11201	DIN EN ISO 11201
Sound power level L_{WA} measured	dB(A)	106	106
Guaranteed	dB(A)	108	108
Standards		DIN EN 500-4	DIN EN 500-4
Vibration total value a_{hv}	m/s^2 (ft/s^2)	10.0 (32.8)	12.0 (39.4)
Standards		DIN EN 500-4	DIN EN 500-4
Uncertainty of measurement of the vibration total value a_{hv}	m/s^2 (ft/s^2)	1.0 (3.3)	2.2 (7.2)

16.2 Rechargeable battery

Designation		BP 600
Item number		5100002398
Rated voltage	V	51
Kind of current (output)		DC
Length	mm (in)	220 (8.7)
Width	mm (in)	290 (11.4)
Height	mm (in)	197 (7.8)
Weight	kg (lb)	9.10 (20.06)
Battery product identification		16IXR27/66-4, X=FePO ₄
Battery type		Lithium ion
Energy content	Wh	614.4
Capacity	Ah	12
Max. discharge current	A	50
Max. charging current	A	18
Protection rating		IP2X
Bearing temperature range	°C (°F)	-30 – +50 (-22 – +122)
Operating temperature range	°C (°F)	-10 – +50 (-14 – +122)
Operating temperature range when charging	°C (°F)	-0 – +45 (-32 – +113)



16.3 Battery charger

Designation		C 48/4
Item number		5100006221
Rated voltage	V	230 (90 – 265)
Kind of current (input)		AC 1~
Rated current	A	<3
Rated frequency	Hz	50 – 60
Kind of current (output)		DC +/-
Output current	A	4 +/-0.5
Max. output voltage	V	57.6
Length	mm (in)	190 (7.48)
Width	mm (in)	145 (5.70)
Height	mm (in)	65 (2.56)
Weight	kg (lb)	2.0 (4.4)
Power cable	mm (in)	1500 (59.05)
Power cable	mm (in)	1800 (70.87)
Class rating		II
Protection rating		IP54
Bearing temperature range	°C (°F)	-30 – +50 (-22 – +122)
Operating temperature range	°C (°F)	-0 – +45 (-32 – +113)

16.4 Extension cable



WARNING

Warning of electrical voltage!

Serious injury due to electric shock.

- ▶ Check power cable and extension cable for damage.
- ▶ Only use extension cables whose grounded conductor is connected to the plug and coupling - only for machines of class rating I + III, see chapter *Technical data*.

The following points must be observed:

- Only use approved extension cables.
- Data about the model designation and voltage of this machine is located on the nameplate.
- The necessary stranded conductor cross-section can be found in the following table.

Machine type	Voltage [V]	Extension [m]	Stranded conductor cross-section [mm ²]
C 48/4	230	≤ 150	1.5
C 48/13	230	≤ 150	1.5

17 Glossary

Class rating

The class rating according to DIN EN 61140 specifies the safety measures for electrical equipment to avoid electrocution. There are four class ratings:

Class rating	Meaning
0	No special protection apart from the basic insulation. No grounded conductor. Plug connection without grounded conductor contact.
I	Connection of all conductive housing components to the grounded conductor. Plug connection with grounded conductor contact.
II	Reinforced or double insulation (protective insulation). No connection to the grounded conductor. Plug connection without grounded conductor contact.
III	Machines are operated on protective low voltage (< 50 V). Connection to the grounded conductor is not necessary. Plug connection without grounded conductor contact.

Protection class IP

The protection class according to DIN EN 60529 indicates the suitability of electrical equipment for use in certain ambient conditions as well as the protection against risks.

The protection class is specified by an IP code according to DIN EN 60529.

Code	Meaning 1st number: Protection against touching hazardous parts. Protection against permeating foreign objects.
0	Not protected against contact. Not protected against foreign bodies.
1	Protected against contact with the back of the hand. Protected against large foreign objects with diameter > 50 mm (1.9 in).
2	Protected against contact with one finger. Protected against medium-sized foreign objects (diameter > 12.5 mm (0.5 in)).
3	Protected against touch with a tool (diameter > 2.5 mm (0.01 in)). Protected against small foreign objects with (diameter > 2.5 mm (0.01 in)).
4	Protected against touch with a wire (diameter > 1 mm (0.03 in)). Protected against granular foreign objects (diameter > 1 mm (0.03 in)).
5	Protected against contact. Protected against dust depositing inside.
6	Completely protected against any contact. Protected from dust.

Code	Meaning 2nd number: Protection against permeating water
0	Not protected against permeating water.
1	Protected against water dropping vertically.
2	Protected against diagonally falling water (15° angle).
3	Protected against spray (60° angle).
4	Protected against spraying water from all directions.
5	Protected against water jets (nozzle) from any angle.
6	Protected against strong water jets (overflow).
7	Protected from temporary immersion in water.
8	Protected from ongoing immersion in water.



**WACKER
NEUSON**

EC Declaration of Conformity

Manufacturer

Wacker Neuson Produktion GmbH & Co. KG, Preussenstrasse 41, 80809 Munich

Product

Product	AS 30	AS 50
Product category	Vibration hammer	
Product function	Compacting soils	
Item number	5100002884	5100003033
Net installed power	1.34 kW	2.10 kW
Measured sound power level	106 dB(A)	106 dB(A)
Guaranteed sound power level	108 dB(A)	108 dB(A)

Conformity assessment procedure

According to 2000/14/EC, Appendix VIII, 2005/88/EC.

Notified body

VDE Prüf- und Zertifizierungsinstitut GmbH, Merianstraße 28, 63069 Offenbach/Main

Directives and standards

We hereby declare that this product meets and complies with the relevant regulations and requirements of the following directives and standards:

2006/42/EC, 2000/14/EC, 2005/88/EC, 2004/108/EC

Authorized representative for technical documents

Leo Göschka,
Wacker Neuson Produktion GmbH & Co. KG, Preussenstrasse 41, 80809 Munich

Munich, 10 March 2015

Helmut Bauer
Managing Director



**WACKER
NEUSON**

EC Declaration of Conformity

Manufacturer

Wacker Neuson Produktion GmbH & Co. KG, Preussenstrasse 41, 80809 Munich

Product

Product	C 48/4	C 48/13
Product category	Battery charger	
Product function	Charging the battery	
Item number	5100006221	5100002543

Directives and standards

We hereby declare that this product meets and complies with the relevant regulations and requirements of the following directives and standards:

2006/95/EC, 2004/108/EC, EN 55011, EN 61000

Authorized representative for technical documents

Leo Göschka,
Wacker Neuson Produktion GmbH & Co. KG, Preussenstrasse 41, 80809 Munich

Munich, 10 March 2015

Helmut Bauer
Managing Director

Translation of the original Declaration of Conformity

