



**WACKER
NEUSON**

all it takes!

Operator's Manual Rammer

AS



Machine Type	AS30, AS50, AS60
Material Number	5100056974
Version	4
Date	02/2024
Language	[en-US]

Imprint

Publisher and copyright holder

Wacker Neuson Produktion GmbH & Co. KG
Wackerstraße 6
85084 Reichertshofen, Germany

Registered office: Ingolstadt
Register court and number: Local Court Ingolstadt, HRA3195
VAT ID No./VAT Number: DE277138620
Telephone: +49 (0)8453-3403200

www.wackerneuson.com

Original operator's manual

This document may be used by the recipient only for the designated purpose. It may in no way be duplicated or translated in any other language, in whole or in part, without prior permission in writing from the manufacturer.

All rights reserved, in particular the copyright, the right of reproduction and the right of distribution applicable worldwide. Reproduction or translation of this publication, in whole or part, is not permitted without the written consent of Wacker Neuson Produktion GmbH & Co. KG.

Violations of legal regulations, in particular of the copyright protection, will be subject to civil and criminal prosecution.

Wacker Neuson Produktion GmbH & Co. KG reserves the right to change its products and their technical specifications for further technical development at any time without any claim to changes to machines already delivered. The information in the technical documentation supplied with the product applies in each case.

The machine on the cover is for illustration purposes only and may therefore have special equipment (options).

Wacker Neuson Produktion GmbH & Co. KG, responsibility for errors or omissions not accepted, printed in Germany.

Copyright © 2024/2024

California Proposition 65 Warning



WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.



WARNING

Cancer and Reproductive Harm
www.P65Warnings.ca.gov



WARNING

Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.



Contents

1 Foreword

1.1 Introduction	6
1.2 Storage Location of the Operator's Manual	6
1.3 Accident Prevention Regulations	7
1.4 Contact person	7
1.5 Limitation of liability	8
1.6 Use of the operator's manual	8

2 Usage

2.1 Designated use	9
2.2 Unintended use	9

3 Safety

3.1 Safety symbols and signal words	10
3.2 Principle	10
3.3 Structural changes	11
3.4 Responsibility of the operator	11
3.5 Obligations of the operator	12
3.6 Qualification of staff	12
3.7 General safety instructions	12
3.8 Specific safety instructions for vibratory rammers	15
3.9 Service	16
3.10 Vehicle fluids	17

4 Description of the Machine

4.1 Type plates and labels	19
4.2 Components	22
4.3 Control elements	23

5 Transportation

5.1 Safety instructions for transport	24
5.2 Prerequisites and preparations	24
5.3 Lifting the machine	24
5.4 Lashing the machine	25

6 Commissioning

6.1 Safety instructions for operation	26
6.2 Tests before commissioning	27
6.3 Install the rechargeable battery	28
6.4 Putting into operation	28

7 Operation

7.1 Operating the machine	30
7.2 Putting out of operation	30
7.3 Remove the rechargeable battery	31

8 Maintenance

8.1 Safety instructions for maintenance	32
8.2 Maintenance plan	32
8.3 Maintenance work	33

9 Troubleshooting

9.1 Troubleshooting machine	37
-----------------------------------	----

10 Shutdown

10.1 Temporary decommissioning	38
10.2 Final shutdown	38

11 Accessories

11.1 Accessories	40
11.2 Transport roller installation	40

12 Technical Data

12.1 General instructions	41
12.2 Noise and vibration data	41
12.3 AS	41
12.4 Conversion table	43

1 Foreword

1.1 Introduction

This operator's manual contains important information and procedures for the safe, proper and economical operation of this machine. Careful reading, understanding and observing it helps to avoid hazards, reduce repair costs and downtimes and thus increase the availability and service life of the machine.

This operator's manual is not a manual for extensive maintenance or repair work. Such work must be carried out by the service partner or by technically trained personnel. The machine must be operated and maintained in accordance with the instructions in this operator's manual. Improper operation or maintenance can cause hazards.

Defective machine parts must be replaced immediately!

The manufacturer is always available to answer questions about operation or maintenance.

1.2 Storage Location of the Operator's Manual

This operator's manual must be kept in the immediate vicinity of the machine and accessible to personnel at all times.

If a second copy of this operator's manual is lost or required, the following options are available for obtaining a replacement:

- On the Internet at <http://www.wackerneuson.com>.
- Contact the service partner

1.2.1 Understanding These Instructions

This section helps to understand the operator's manual and the illustrations used therein.

Target group


People working with this machine must be regularly trained with regard to the dangers and risks occurring when using this machine.

This operator's manual is aimed at:

- Operating personnel:
 - These people have been instructed in working with the machine and about possible dangers and risks arising due to improper behavior.
- Technically trained personnel:
 - These people have a professional training as well as additional knowledge and experience. They are capable of assessing the tasks assigned to them and recognizing any possible risks and dangers.

Explanation of symbols

Symbol	Explanation
1., 2., 3...	Indicates an activity. The sequence of the steps must be observed.
⇒	Indicates a result or an intermediate result of an action.

Symbol	Explanation
✓	Indicates prerequisites that must be established for the activity.
•	Indicates a list, e.g. if several components are named one after the other.
-	Indicates a sub-list, e.g. if components consist of further components
ⓘ	Identifies a position, usually a component or control element, in a graphic. The numbering may be sequential or in Roman numerals.
1; A	Indicates the naming of components in explanatory texts. It is identical with the adjacent positions in the illustrations.
	Indicates a direction of movement or different positions for switches.
▶	Indicates the avoidance of hazards in warning notices.
[▶52]	Indicates a cross-reference in tables. Here e.g. reference to page 52

1.2.1.1 Explanation of symbols

The symbols used in the operator's manual are explained below. The symbols are used exclusively in warning or environmental instructions or information. Warnings must always be observed to protect the operator and third parties from personal injury and damage to property.



Symbol for warnings

This symbol marks general warnings. It is used to alert you of possible hazards, e.g. risks of injury or accidents.



Symbol for indications of technical damage

This symbol is a warning symbol that indicates a danger of technical damage. It is used to indicate situations where damage to the machine or third-party property may occur.



Symbol for environmental information

This symbol indicates environmental information. It is used to warn of possible environmental hazards.



Symbol for information

This symbol indicates information. This information can include tips on operation, for example. It helps to better understand and use the machine.

1.3 Accident Prevention Regulations

In addition to the notes and safety instructions in this operator's manual, the local accident prevention regulations and the national industrial safety regulations apply.

1.4 Contact person

Depending on the country, the contact person is a service partner, a subsidiary or a dealer.

- On the Internet at <http://www.wackerneuson.com>.

1.5 Limitation of liability

In the event of the following infringements, the manufacturer disclaims any liability for personal injury and damage to property:

- Actions contrary to this operator's manual.
- Non-designated use
- Deployment of untrained personnel.
- Use non-approved spare parts and accessories.
- Improper handling.
- Structural changes of any kind.
- Non-observance of the General Terms and Conditions (GTC).

1.6 Use of the operator's manual

This operator's manual:

- must be regarded as an integral part of the machine and must be kept in a safe place throughout its service life.
- must be passed on to each subsequent owner or operator of this machine.
- applies to various machine types from one product range. For this reason, some illustrations may differ from the appearance of the purchased machine. Variant-dependent components that are not included in the scope of delivery can also be described.

The manufacturer reserves the right to change the information in this operator's manual without notice.

It must be ensured that any changes or additions made by the manufacturer are immediately incorporated into this operator's manual.

Group - Type	Material number (Mat. no.)
AS30e	5100026851
AS50e	5100053792
AS60e	5100052267



Information

Compatible rechargeable batteries!

The following rechargeable batteries can be used after a software update:

- ▶ BP1000 with production date 10/2022 or later (see type label)
- ▶ BOB14
- ▶ Other non-compatible rechargeable batteries show an error message and do not release any voltage at the connection socket.

2 Usage

2.1 Designated use

Designated use also includes observing all notes and safety instructions in this operator's manual and observing the prescribed care and maintenance instructions.

Any other use or use that goes beyond this is considered improper use. The manufacturer shall not be liable or liable for any damage resulting therefrom. The risk is borne solely by the operator.

The machine is used for:

- Compaction of cohesive, mixed and granular soils.
- Soil compaction in trenches.
- Backfilling of structures.
- Use in civil engineering, gardening and landscaping.
- Asphalt compaction.
- Only use rechargeable batteries permitted by the manufacturer.

2.2 Unintended use

The manufacturer is not liable for personal injury or damage to property resulting from unintended use. The following activities, among others, are not intended:

- Connecting non-permitted components.
- Operating the machine outside the performance data.
- Operation in an potentially explosive environment!
- Operation in the vicinity of open flames. Fire hazard!
- Compaction of strongly cohesive soils.
- Compaction of frozen soils.
- Compaction of hard, non-compactable soils.
- Compaction of non-load-bearing soils.
- Shaking in cobblestones.

3 Safety

3.1 Safety symbols and signal words

The following symbol identifies safety instructions. It is used for warning against potential personal risk or danger.



⚠ DANGER

DANGER identifies a situation causing death or serious injury if it is not avoided.

Consequences in case of non-observance.

- ▶ Avoidance of injury or death.



⚠ WARNING

WARNING identifies a situation that can cause death or serious injury if it is not avoided.

Consequences in case of non-observance.

- ▶ Avoidance of injury or death.



⚠ CAUTION

CAUTION identifies a situation that can cause injury if it is not avoided.

Consequences in case of non-observance.

- ▶ Avoidance of injury.



NOTICE

INFORMATION identifies a situation that causes damage if it is not observed.

Consequences in case of non-observance.

- ▶ Avoidance of damage to property.

3.2 Principle

The machine has been designed and built in accordance with latest state-of-the-art standards and the recognized safety regulations.

Warning! Risk of injury due to improper use.

Improper use can result in danger to life and limb for the operator and third parties or machine and other property damage.

- Read and observe the notes and safety instructions in this operator's manual. Failure to follow these instructions may result in electric shock, fire and/or serious injury, as well as damage to the machine and/or other objects.
- Keep safety instructions and information for the future.

3.3 Structural changes

Warning! Risk of injury due to structural changes.

Unauthorized structural changes to this machine can pose a risk to operators and/or third parties, as well as damage to the machine and/or other property.

- Do not make any structural changes without the manufacturer's written consent.

In particular, a structural change shall be deemed to have occurred:

- When opening of the machine and permanent removal of components.
- Installation of spare parts that do not come from the manufacturer or are not equivalent in design and quality to the original parts.
- Attachment of accessories of any kind that do not originate from the manufacturer.

The manufacturer's liability and warranty are also void in the event of unauthorized structural alterations.

Spare parts or accessories from the manufacturer can be installed or removed safely.

Further information is available on the Internet at - <http://www.wackerneuson.com>.

3.4 Responsibility of the operator

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

- The operator must make the operator's manual accessible to the personnel at all times and ensure that the operator has read and understood the operator's manual.
- The operator's manual must be kept ready to hand at the machine or at the place of use.
- The operator must hand over the operator's manual to any other operator or subsequent owner of the machine.
- The country-specific regulations, standards and directives on accident prevention and environmental protection must also be observed. The operator's manual must be supplemented by further instructions for compliance with operational, official, national or generally applicable safety guidelines.

3.5 Obligations of the operator

- Know and implement applicable health and safety regulations.
- In a risk assessment, identify hazards arising from working conditions at the place of use.
- Create operating instructions for the operation of this machine.
- Regularly check whether the operating instructions correspond to the current status of the regulations.
- Clearly regulate and define responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Train personnel at regular intervals and inform them about possible dangers.
- Refresh instruction at regular intervals.
- Keep records of the training received and make them available to the competent authority on request.
- Provide personnel with the necessary protective equipment.

3.6 Qualification of staff

Warning! Risk of injury due to misuse.

In the event of misuse, abuse or operation by untrained personnel, there is a risk to the health of the operator and/or third parties, as well as damage or total failure of the machine and/or other property damage.

- The machine may only be commissioned and operated by trained personnel.

In addition, the following requirements apply to the operator:

- Physical and mental suitability.
- Minimum age 18 years.
- No influence on reactivity by drugs, alcohol or medication.
- Familiarity with the safety instructions in this operator's manual.
- Familiarity with the intended use of this machine.
- Instructed in the independent operation of the machine.

3.7 General safety instructions

The safety instructions in this chapter contain the "General safety instructions", which must be listed in the operator's manual in accordance with the applicable standards. It may contain instructions which are not relevant for this machine.

3.7.1 Workplace

Warning! Risk of injury due to unsafe work environment.

Unsafe working environment can cause the machine to tip, roll, slide and fall. People can be injured as a result.

- Before starting work, familiarize yourself with the working environment, e.g. load-bearing capacity of the floor or obstacles in the environment.
- Always secure the machine against tipping, rolling, slipping and falling.
- Observe the changing ground conditions, especially on uneven and soft ground or on slopes. Secure the machine against slipping!
- When working near pits, ditches or plateaus, exercise caution! The load-bearing capacity of the ground must safely carry the weight of the machine and the operator.

Warning! Risk of injury if distracted by third parties.

Distraction by others can result in loss of machine control. This can seriously injure people and cause damage to property.

- Secure work area to public transport area.
- Keep unauthorized persons and children away when working with this machine.

Warning! Risk of injury due to adverse working conditions.

Cluttered and poorly lit work areas can lead to accidents. People can trip, fall and be seriously injured as a result.

- Keep work area tidy.
- Provide adequate lighting.

3.7.2 Personal safety

Warning! Risk of injury due to physical impairment.

Physical impairment can reduce the ability to react. This can lead to loss of machine control. People can be injured as a result.

- Do not work under the influence of drugs, alcohol or medication.

Warning! Danger of being drawn in by unsuitable clothing and long hair.

Wide or loose clothing, protective gloves, jewelry and long hair can be caught and pulled in by moving/rotating machine parts. This can result in severe injuries.

- Keep loose or loose clothing and protective gloves away from moving/rotating machine parts.
- Remove jewelry before starting work.
- Tie up long hair or use a hair net.

Warning! Danger of falling due to unsafe position.

Working in an unstable position can lead to falls. Falls can cause serious injuries.

- Always ensure a safe footing.
- Always have both feet on the ground.

Warning! Risk of injury to third parties

Bystanders can be seriously injured by incidents in the work area.

- Make sure there are no other people in the danger area.

Caution! Damage to health from exposure to vibration.

Prolonged use of this machine may result in long-term vibration-related damage or impaired circulation in the fingers, hands or wrists. Signs of this can be body parts falling asleep, tingling, hurting, stinging and discoloring.

In the case of personal predisposition to poor blood circulation, working time can be reduced despite safety gloves and regular breaks from work.

- Take regular breaks from work.
- If these symptoms are detected, consult a doctor immediately.
- Observe national occupational safety requirements.

Vibration exposure, [see Technical Data on page 41](#)

Personal protective equipment

Suitable protective equipment must be used for all work. Personal protective equipment considerably reduces the risk of injury.

Warning! Risk of hearing damage from exceeding permissible noise limits.

Working with the machine without hearing protection can lead to hearing damage in the long-term.

- Always use hearing protection when working with the machine.
- When working with hearing protection, work particularly attentively and carefully, because noises, e.g. screams or beeps, are only perceived to a limited extent.

3.7.3 Handling and use

Warning! Risk of injury from falling loads.

In the event of improper transport or transport with unsuitable lifting gear, loads can fall. People can be hit and seriously injured or killed.

- Do not stay under lifted loads.
- Only use suitable and tested lifting gear and slings with sufficient load-bearing capacity.
- Secure the machine safely to the lifting gear.
- Use appropriate transport method.

Warning! Risk of crushing from swinging loads.

Improper transport can cause loads to swing. People can be hit or crushed by this and be seriously injured or killed.

- Keep a sufficient distance from the lifted loads.
- Secure raised loads against swinging.

Warning! Danger to life due to unauthorized troubleshooting

Unauthorized troubleshooting can lead to unforeseen machine states. People can be injured as a result.

- If faults occur on this machine which are not described in this operator's manual, contact the service partner.
- Do not rectify faults on your own.

Warning! Risk of injury from defective machines or components.

Defective machines or components can lead to unforeseen machine states. People can be injured as a result.

- Handle machines with care.
- Do not start a defective engine.
- Have defective parts replaced before operating the machine.

Warning! Risk of injury due to functionally restricted controls.

Controls that are not fully functional can lead to unforeseen machine states. People can be injured as a result.

- Check the machine's controls for functionality before operation.
- Do not lock, manipulate or alter the machine controls in an inadmissible manner.

Warning! Risk of injury due to unauthorized start-up.

Unauthorized start-up can lead to dangerous situations. Persons involved can be seriously injured as a result.

- Only allow the machine to be operated by authorized personnel.
- Secure unused machines against unauthorized putting into operation.
- After operation, store the machine in a locked, clean, frost-free and dry place that is inaccessible to other people and children.
- Use the machine, accessories, tools etc. in accordance with these instructions.

3.8 Specific safety instructions for vibratory rammers

3.8.1 External influences

Caution! Risk of injury from slipping machine.

In heavy rain, the machine may slip on sloping surfaces. This can injure people and damage the machine.

- Do not operate the machine on inclined surfaces in heavy rain.

3.8.2 Operational safety

Warning! Risk of injury from uncontrolled guided machine.

Loss of machine control can result in serious injury to the operator or others.

- Always hold the machine with both hands.
- Take a firm stand.

Caution! Risk of injury from the machine slipping.

When operating the machine on inclined surfaces, the machine can slip and tip over. This can injure people and damage the machine.

- Only approach gradients from below.
- Stay above the machine during compaction work across the slope.
- Do not leave the designated operating position when the machine is in operation.
- Exercise the utmost degree of caution near abysses or slopes.
- Ensure stability.

Caution! Danger of being buried in ditches and pits.

When operating the machine in ditches and pits, side walls can collapse due to vibration. People can be buried and injured.

- Check side walls for stability before starting work.
- Pay close attention to sidewalls in ditches and pits.

Caution! Risk of injury to third parties when the machine is running.

When operating the machine, people in the work area can be injured.

- Never let the machine run unattended.
- Block off a large work area and keep unauthorized persons away.
- Make sure people in the work area keep a minimum distance of 2 meters from the running machine.

3.8.2.1 Safety distances

Note! Material damage due to careless work.

Careless work can damage lines laid in the floor.

- When operating the machine, make sure that no gas, water or electrical lines or pipes are damaged.

Note! Material damage caused by vibrations.

Compaction work in the vicinity of buildings can lead to building damage.

- Check all possible effects and vibrations on surrounding buildings beforehand.
- Observe the relevant regulations and rules for measuring, assessing and reducing vibrations, in particular DIN 4150-3.

Information! The manufacturer shall not be liable for any damage to buildings.

3.9 Service

Warning! Risk of injury from defective machine.

Machines that are not or improperly maintained/repared may have defects that go unnoticed. This can cause personal injury and property damage.

- Observe maintenance intervals according to maintenance plan.
- Only have the machine repaired or serviced by technically trained personnel.
- Have work not listed in the maintenance plan carried out by the service partner.
- Replace worn or damaged machine parts immediately.
- Only use original spare parts and accessories. The operational safety of the machine is thus maintained.
- Carry out maintenance work in a clean and dry environment (e.g. workshop).
- Replace any missing, damaged or illegible safety labels immediately. Safety and information labels contain important information for the protection of the operator.
- Keep the machine clean.

Warning! Risk of injury due to modified or removed safety devices.

Modified or removed safety devices lose their protective function. People can be injured as a result.

- Operate the machine only when the safety devices are correctly installed and functional.
- Do not change or remove safety devices.
- Reattach safety and protective devices removed for maintenance/service (e.g. V-belt protection).

Caution! Risk of crushing/risk of burns when the machine is running.

Moving/rotating machine parts can cause crushing. Hot machine parts can cause burns if touched.

- Do not service, repair, adjust or clean the machine when it is switched on.
- Switch off the machine and let it cool down.

Caution! Risk of crushing if the machine starts up unintentionally.

Machines with an external or internal power supply can start up unintentionally. People can be injured by moving parts.

- Remove accumulator from the machine before maintenance work.

3.9.1 Threaded fittings

Caution! Risk of injury due to missing or loose screw connections.

Missing or loose screw connections can lead to loose machine parts. People can be injured as a result.

- All threaded fittings must comply with the specified specifications and be firmly bolted together.
- Observe the correct tightening torques.
- Screws and nuts must not be damaged, bent or deformed.
- Particular attention should be paid to the following:
 - Self-locking nuts and micro-encapsulated screws must not be reused after loosening. The fastening effect is lost.
 - Screw connections with adhesive securing/liquid adhesives (e.g. Loctite) must be cleaned after loosening and provided with new adhesive before reuse.

Information! Observe the instructions of the liquid adhesive manufacturer.

3.10 Vehicle fluids

Warning! Danger of scalding from hot operating materials.

Operating materials can become very hot after a short operation period. Contact with hot operating materials can lead to severe scalding.

- Switch off the machine and let it cool down.
- Use protective gloves.

Warning! Risk of fire and explosion from flammable cleaning agents.

Flammable detergents can cause fires and explosions. People can be injured as a result.

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

Caution! Risk of damage to health.

Operating materials can contain toxins that can severely damage the eyes, mucous membranes and skin on contact.

- Do not inhale vapors.
- Avoid eye and skin contact.
- Always wear protective goggles and gloves when handling operating materials.
- Consult a doctor immediately if operating materials get into your eyes.
- In case of skin contact, wash skin immediately with soap and water.
- Do not eat or drink while working with vehicle fluids.

Environment Risk of environmental damage.

Operating materials that get into the ground, water bodies or sewage system can cause environmental damage.

- Line work surface with impermeable foil.
- Use collection containers for old operating materials.
- Dispose of discharged or spilled vehicle fuel in accordance with applicable environmental regulations.
- Clean the machine in a suitable place where the dirty waste water can be collected in an environmentally friendly manner.
- Collect contaminated water and dispose of it in an environmentally friendly manner.

4 Description of the Machine

4.1 Type plates and labels

4.1.1 Type label

A type label is permanently attached to the machine.

Other type labels

Furthermore, the following components of the machine are provided with their own type label:

- the rechargeable battery

Symbols on the type label

Various symbols and markings for national and international approvals can be shown on or next to the nameplate.

4.1.1.1 Labeling on the machine

Type label data

The type label contains information that uniquely identifies this machine. This information is required for ordering spare parts and for technical queries.

Enter the data on the machine in the following table:

Designation	Your details
Group - Type	
Material number (Mat. no.)	
Machine version (version)	
Machine number (machine no.)	
Year of construction	

4.1.2 Safety and information labels



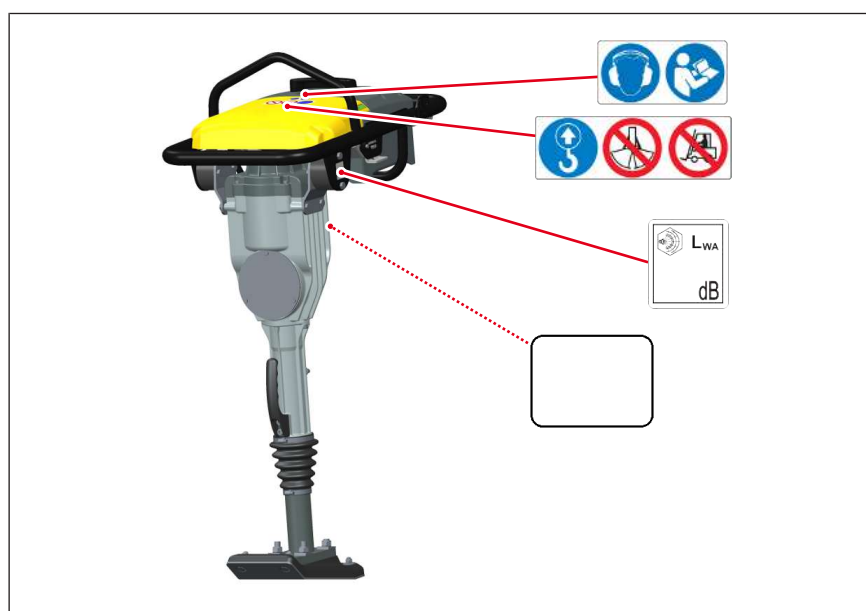
⚠ WARNING

Injury hazard due to missing or damaged labels and signs!

Safety labels contain important information to protect the operator.

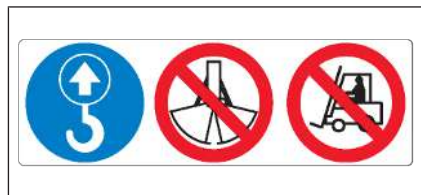
- ▶ Keep all safety, warning and operating instructions on the machine in a clearly legible condition.
- ▶ Replace missing or damaged labels and signs immediately.

AS30e



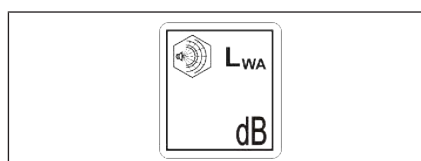
Wear personal protective equipment to avoid injury and health problems.

- Use hearing protection.
- Read the operator's manual.

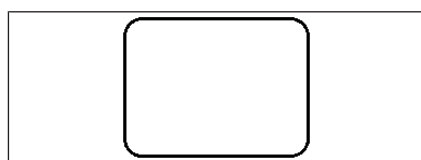


The falling machine can cause serious injuries.

- Only lift the machine at the central suspension with tested lifting gear and slinging gear (safety load hook).
- Do not use the excavator bucket to lift the machine by the central suspension.
- Do not use the forklift to lift the machine by the central suspension.

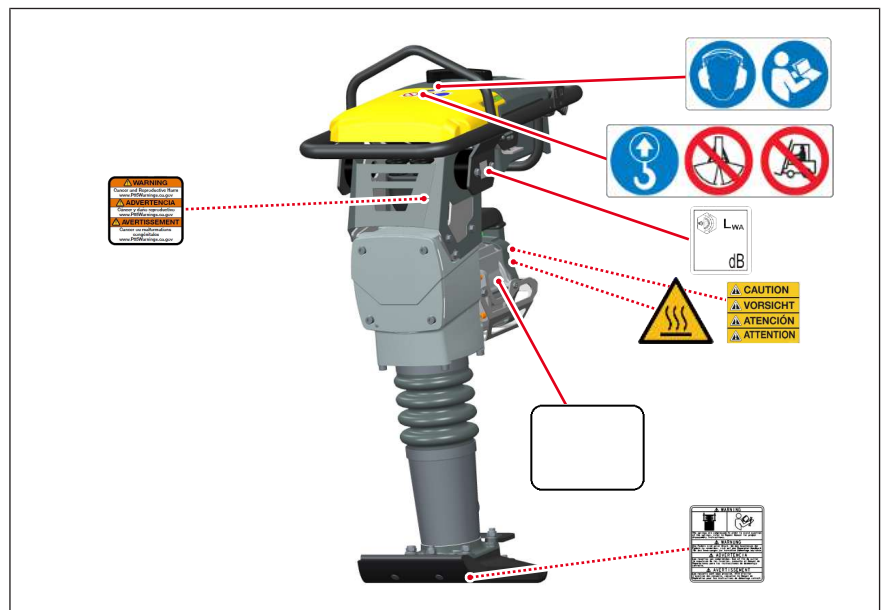


Guaranteed sound power level.



Type label.

AS50e/AS60e



4



Wear personal protective equipment to avoid injury and health problems.

- Use hearing protection.
- Read the operator's manual.



The falling machine can cause serious injuries.

- Only lift the machine at the central suspension with tested lifting gear and slinging gear (safety load hook).
- Do not use the excavator bucket to lift the machine by the central suspension.
- Do not use the forklift to lift the machine by the central suspension.



Guaranteed sound power level.



Risk of burns!

Warning of hot surface.



Caution!

4.2 Components



Warning!

Release the cover slowly so that the spring does not pop out.

Read the repair instructions.



Warning of health risks

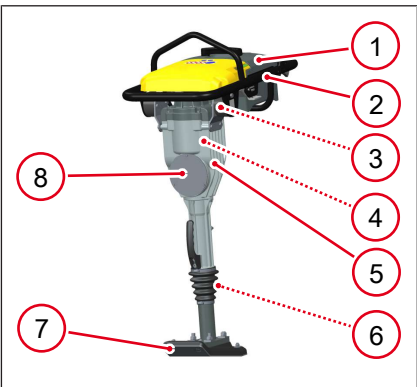
WARNING! CALIFORNIA: Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

For more information: www.P65Warnings.ca.gov



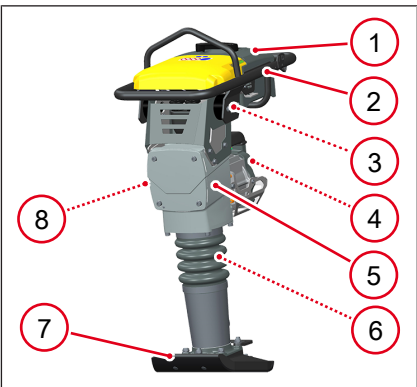
Type label.

4.2 Components



AS30e

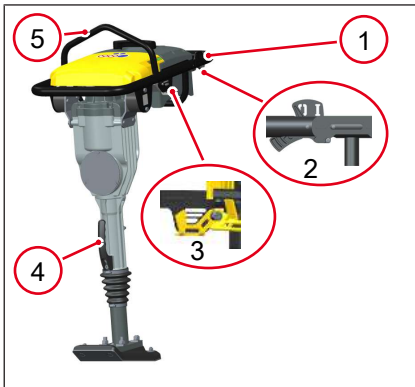
- 1 Rechargeable battery
- 2 Guide bracket
- 3 Vibration absorber
- 4 Drive motor
- 5 Crankcase
- 6 Ramming system
- 7 Ramming shoe
- 8 Type label



AS50e/AS60e

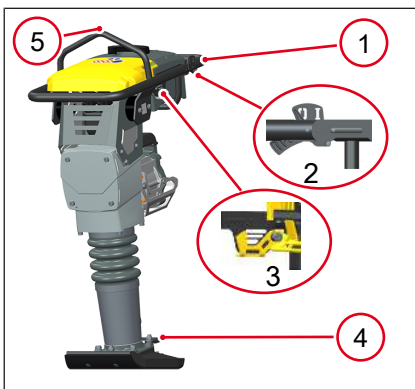
- 1 Rechargeable battery
- 2 Guide bracket
- 3 Vibration absorber
- 4 Drive motor
- 5 Crankcase
- 6 Ramming system
- 7 Ramming shoe
- 8 Type label

4.3 Control elements



AS30e

- 1 Guide bracket
- 2 Start and safety level
- 3 Lock
- 4 Handle
- 5 Central suspension



AS50e/AS60e

- 1 Guide bracket
- 2 Start and safety level
- 3 Lock
- 4 Handle
- 5 Central suspension

5 Transportation

5.1 Safety instructions for transport



⚠ WARNING

Hazard of falling!

The falling machine can cause serious injuries, e.g. by crushing.

- ▶ Only use suitable and tested lifting gear and slings (safety hooks) with sufficient lifting capacity.
- ▶ Only lift the machine by the central suspension.
- ▶ Secure the machine safely to the lifting gear.
- ▶ Do not lift the machine by the guide bracket.
- ▶ Leave the danger zone when lifting, do not stand under suspended loads.



⚠ CAUTION

Risk of injury from falling machine!

- ▶ Secure the machine against tipping over, falling down or slipping, e.g. in a closed container.
- ▶ Use safety shoes.

5.2 Prerequisites and preparations

- Switch off the machine and let it cool down.
- Unlock the lock manually.
- We recommend removing the rechargeable battery from the machine before charging and transporting.
- Use only suitable hoists with sufficient lifting capacity.
- Only use suitable lifting equipment with sufficient lifting capacity, [see Technical Data on page 41](#).
- The transport vehicle must have a sufficient bearing load and a suitable loading surface.

5.3 Lifting the machine



⚠ CAUTION

Risk of crushing!

Crushing of hands and feet possible.

- ▶ Work cautiously.



NOTICE

Note on the lifting procedure!

- ▶ Designate a competent instructor for a safe lifting procedure.



1. Attach suitable sling to central suspension **1** for lifting the machine.
2. Carefully load the machine into or onto a stable and stable means of transport.
3. Move the machine laterally.

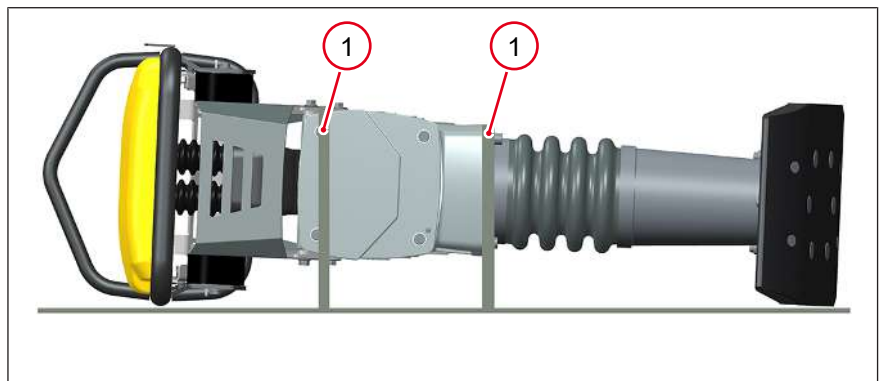
5.4 Lashing the machine



NOTICE

Use anti-slip mats to secure the load.

5



1. Lash the machine to the transport vehicle as shown.
 2. Attach the tension belts **1** over the machine and tighten them.
- ⇒ The machine is secured against unrolling, slipping and tipping over.

6 Commissioning

6.1 Safety instructions for operation



⚠ WARNING

Risk of serious injury, death and property damage due to smoke development and fire!

A damaged or defective rechargeable battery can smell unusual, smoke or burn. Persons may be seriously injured or killed and property damage may occur.

- ▶ Do not use the rechargeable battery and separate it from combustible materials if it smells or smokes unusually.
- ▶ In case of fire, extinguish with water only, do not use a direct water jet.



⚠ WARNING

Tipping hazard!

Risk of serious injury from slipping or overturning machine.

- ▶ Ensure sufficient stability.
- ▶ Always secure the machine against tipping over.
- ▶ Park the machine on a level surface with firm ground.



⚠ WARNING

Improper handling may result in injury or serious material damage.

- ▶ Please read and follow all safety instructions in this operator's manual.



⚠ WARNING

Risk of hearing damage if the country-specific noise limit is exceeded!

Working with the machine without hearing protection can lead to hearing damage in the long-term.

- ▶ Wear ear protectors.
- ▶ Work attentively and cautiously when using hearing protection.



⚠ CAUTION

Health hazard due to vibrations!

Physical impairments due to vibration.

- ▶ Take regular breaks.



⚠ CAUTION

Risk of injury due to uncontrolled machine operation!

- ▶ Always hold the machine with both hands and take a firm stand.
- ▶ Use safety shoes.



⚠ CAUTION

Risk of crushing!

Crushing of hands and feet possible.

- ▶ Work cautiously.



⚠ CAUTION

Risk of injury and material damage due to recoil!

On firm, hard or unyielding floors, injuries and material damage may result from strong rebounds.

- ▶ Avoid hard or unyielding floors.



⚠ CAUTION

Risk of collapse and spillage!

There is a risk of injury from falling or spilling when working on fracture, pit, dump and embankment edges, on trench edges and heels.

- ▶ Pay attention to side walls and their stability.
- ▶ Ensure stability.

6

6.2 Tests before commissioning



Information

Further information and detailed descriptions, [see Maintenance on page 32](#).

Perform the following checks:

- Check machine and components for damage.
 - Do not put the damaged machine into operation. Damages and defects must be repaired immediately.
- Check shift lever and safety lever for ease of movement.
- Check the charge state of the accumulator.
- Check grease or lubricating oil.
- Check to ensure the screw connections are firmly seated.
- Check control elements for functionality.

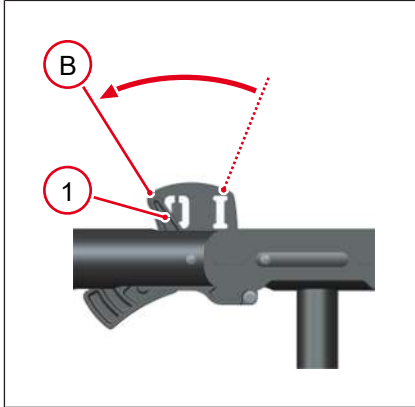
6.3 Install the rechargeable battery



NOTICE

Damage to the machine or the accumulator.

Connections and contact area of the accumulator must be clean and dry.



1. Move start lever **1** to position **B**.



2. Place rechargeable battery **2** on the charger.
 3. Carefully insert the rechargeable battery into the provide guide rail.
 4. Insert the rechargeable battery by the handle until you hear a clearly audible snapping sound of the lock **3**.
 5. Make sure the rechargeable battery is firmly seated.
- ⇒ The machine is ready for operation.

6.4 Putting into operation



NOTICE

Active fan control for cooling the rechargeable battery and converter

- The fan can start running as soon as the rechargeable battery is switched on.
- The fan can continue to run after the machine has been switched off if the rechargeable battery is activated.

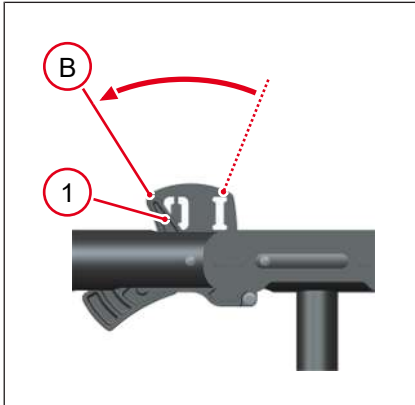


NOTICE

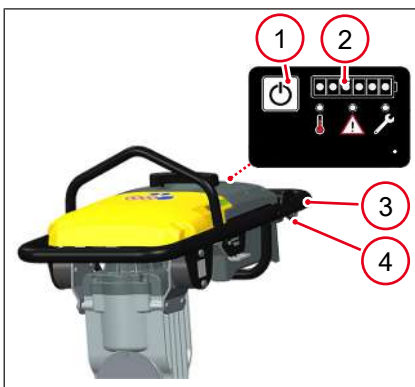
Possible error message on the rechargeable battery

If the machine is started too quickly, error messages may appear on the accumulator.

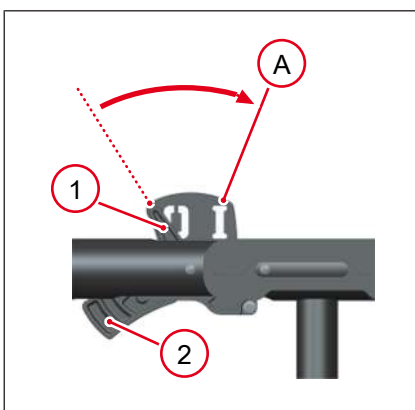
- ▶ Wait at least 4 seconds after activating the rechargeable battery.
- ▶ Then continue with the starting procedure.



- ✓ Machine stands upright on suitable ground when starting.
- ✓ Start lever 1 is in position B.



1. Hold the machine by the guide bracket 3.
2. Press start button activation/deactivation 1.
3. Check the current state of charge via the control light Charge state 2.



4. Pull the safety lever 2 with one hand.
 5. Move start lever 1 to position A.
 - ⇒ The machine starts up.
- ⇒ Vibration begins when moved forward.

7 Operation

7.1 Operating the machine



⚠ CAUTION

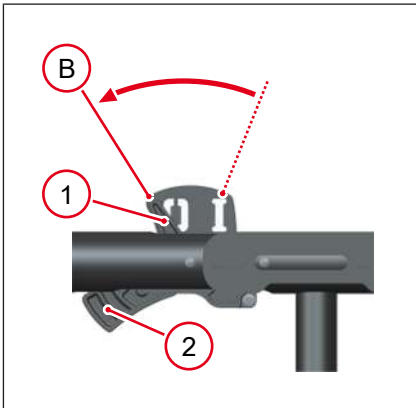
Risk of injury due to uncontrolled machine operation!

- ▶ Always hold the machine with both hands and take a firm stand.
- ▶ Use safety shoes.



- The operator's designated location is behind the machine.
- Guide and steer the machine using the guide bracket.
- Let the machine move forward on its own. Do not use your muscles to push it forward or pull it back.
- For optimal control, performance and minimum hand and arm vibration, hold the guide bracket on the left and right.
- To avoid damage to the machine, do not move the machine when it is running.
- Exercise caution with rough material. To avoid extreme wear and tear to the ramming plate, ensure that it is always parallel to the ground being compacted.

7.2 Putting out of operation



- ✓ The machine is on a level surface.

1. Move start lever **1** to position **B**.

- ⇒ Safety lever **2** disengages.
- ⇒ Machine turns off.
- ⇒ Rechargeable battery stays active for 5 minutes to restart machine.



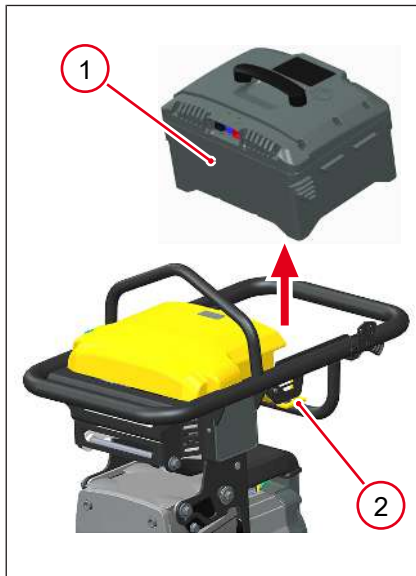
2. Deactivate the rechargeable battery on start button activation/deactivation **1**.

- ⇒ Rechargeable battery is deactivated.

3. Allow the machine to come to a complete stop.

- ⇒ The machine is out of operation.

7.3 Remove the rechargeable battery



✓ The machine is out of operation.

1. Push the lock **2** down.
2. Carefully pull back rechargeable battery **1** by the handle as far as it will go.
3. Pull out the rechargeable battery by the handle and put it down safely.

8 Maintenance

8.1 Safety instructions for maintenance



⚠ WARNING

Improper handling may result in injury or serious material damage.

- ▶ Please read and follow all safety instructions in this operator's manual.



⚠ WARNING

Risk of injury from uncontrolled machine starting and moving parts!

- ▶ Only perform maintenance work when the machine is switched off.
- ▶ Remove the rechargeable battery.



⚠ WARNING

Hazard from electric current.

Risk of injury from electric shock.

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



NOTICE

Damage by penetrating water!

Penetrating water can damage electrical operating elements or machine components.

Penetrating moisture can lead to total failure.

- ▶ Do not clean the machine with high pressure or steam cleaners!
- ▶ Use a cloth to remove water that has entered (e.g. due to rain) the housing and then let the machine dry.
- ▶ Only use dry and clean cloths.



Environment

Soil contamination due to oil leaking or overflowing.

- ▶ Line work surface with impermeable foil.
- ▶ Use collecting container for used oil.
- ▶ Dispose of used oil in an environmentally friendly manner in accordance with statutory regulations.

8.2 Maintenance plan

Maintenance work	daily	50 h	300 h
Clean the machine.	•		

Maintenance work	daily	50 h	300 h
Visual check for completeness.	•		
Visual inspection of all components for damage.	•		
Check controls for ease of movement and function.	•		
Check screw connections.	•		
Check oil level and add oil if necessary.**	•		
Grease ramming system.*		•	
Oil change**		• ¹	•
¹ Change oil for the first time after 50 h. * AS30e ** AS50e / AS60e			

8.3 Maintenance work

8.3.1 Carrying out preparations

1. Place the machine on a level surface.
2. Take the machine out of operation.
3. Let the machine cool down.
4. Remove the rechargeable battery.

8.3.2 Cleaning the machine



NOTICE

Notice for cleaning the machine!

- Do not clean the machine with high pressure or steam cleaners!

Observe the following when cleaning:

1. Clean machine with compressed air.
2. Clean ventilation slots with a suitable non-metallic tool.
3. Wipe the housing with a damp and clean cloth.

Visual check after cleaning:

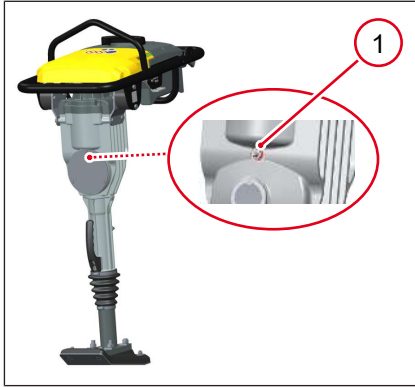
1. Check cables and lines for damage and leaks.
 2. Check screw connections.
 3. Check all safety, warning and operator's manual for completeness.
- ⇒ Replace missing or damaged labels and signs immediately.
- ⇒ Remedy any deficiencies noted immediately.

8.3.3 Grease ramming system



NOTICE

Use only special lubricants for lubrication, [see Technical Data on page 41](#).



1. Remove dirt in the area of the grease nipple **1**.
2. Place the filled grease gun on the grease nipple and actuate it approx. 20 times (approx. 30 g).
3. Wipe the area of the grease nipple with a clean cloth.

8.3.4 Checking and refilling the oil level in the tamping system

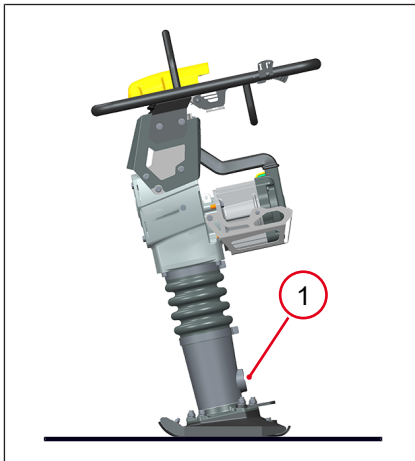


NOTICE

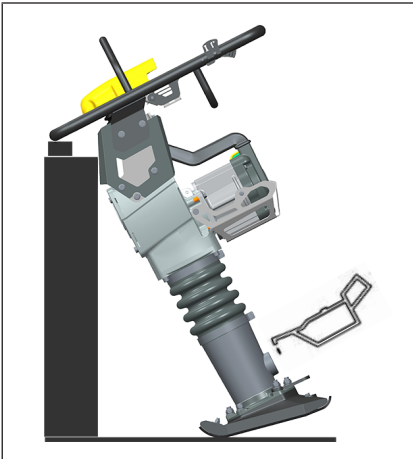
Damage to machine due to incorrect oil level!

A too high oil level can result in a hydraulic lock in the ramming system. This can lead to faulty operation and damage to the ramming system.

- Do not overfill the ramming system with oil.



- ✓ Machine is in an upright and stable position for at least 15 minutes.
1. Remove dirt in the area of the sight glass **1**.
 2. Check the oil level through the sight glass.
⇒ The oil level must be between $\frac{1}{2}$ and $\frac{3}{4}$.
 3. If necessary, top up oil, [see technical data on page 41](#).



Refilling the oil level in the ramming system

1. Tilt the machine forward to access the sight glass.
2. Secure the machine in this position.
3. Unscrew the sight glass.
4. Clean the thread on the sight glass.
5. Pour oil into the housing through the opening in the sight glass.
6. Tighten the sight glass.



7. Stand the machine upright and stable to check the oil level.
8. If necessary, top up oil until the sight glass $\frac{1}{2}$ to $\frac{3}{4}$ is filled.
9. Tighten the sight glass again. Tightening torque 10 Nm.
10. Wipe the area of the sight glass with a clean cloth.

8.3.5 Changing oil in the ramming system

AS50e / AS60e



⚠ CAUTION

Danger of scalding from hot operating materials!

Hot operating materials can cause burns to the skin.

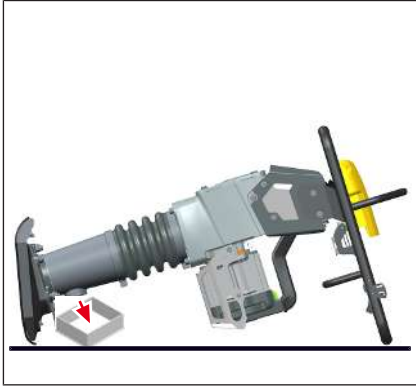
- ▶ Switch off the machine and let it cool down.



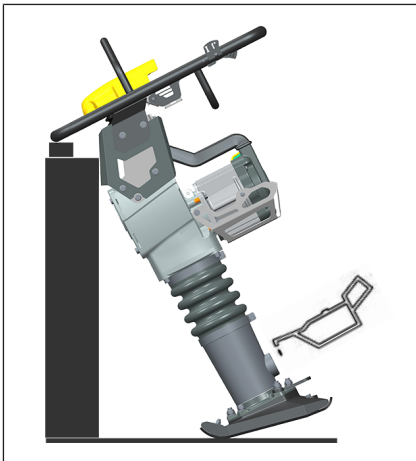
Environment

Soil contamination due to oil leaking or overflowing.

- ▶ Line work surface with impermeable foil.
- ▶ Use collecting container for used oil.
- ▶ Dispose of used oil in an environmentally friendly manner in accordance with statutory regulations.



- ✓ Remove any contamination.
- ✓ A suitable container for draining the used oil is provided.
- 1. Unscrew the sight glass.
- 2. Clean the thread on the sight glass.
- 3. Tilt the machine backwards until it is resting on the guide bracket.
- 4. Allow the used oil to drain completely.



- 5. Tilt the machine forward and secure it in this position.
- 6. Fill oil into the housing through the opening in the sight glass, [see Technical data on page 41](#).
- 7. Tighten the sight glass.



- 8. Stand the machine upright and stable to check the oil level.
- 9. If necessary, top up oil until the sight glass $\frac{1}{2}$ to $\frac{3}{4}$ is filled.
- 10. Tighten the sight glass again. Tightening torque 10 Nm.
- 11. Wipe the area of the sight glass with a clean cloth.

9 Troubleshooting

9.1 Troubleshooting machine



⚠ WARNING

Danger to life due to unauthorized troubleshooting!

- ▶ If faults occur on this machine which are not described in this operator's manual, contact the service partner.
- ▶ Do not rectify faults on your own.



NOTICE

Possible error message on the rechargeable battery

If the machine is started too quickly, error messages may appear on the accumulator.

- ▶ Wait at least 4 seconds after activating the rechargeable battery.
- ▶ Then continue with the starting procedure.

Fault	Possible cause	Remedy
The machine does not start.	The charge condition of the rechargeable battery is too low.	To charge the rechargeable battery, refer to the operator's manual of the rechargeable battery.
	The rechargeable battery is not inserted correctly into the machine.	Insert the rechargeable battery correctly into the machine.
	The rechargeable battery is defective.	Have the rechargeable battery repaired.*
	Rechargeable battery overtemperature.	Let the rechargeable battery cool down.
Machine shows unexpected glitches during startup or operation.	Observe the operator's manual for the rechargeable battery.	Deactivate the rechargeable battery and remove it from the machine. If the fault persists, have the rechargeable battery repaired.*
Machine turns itself off.	The charge condition of the rechargeable battery is too low.	To charge the rechargeable battery, refer to the operator's manual of the rechargeable battery.
	The machine was overloaded.	Switch the machine on again.
	Machine is overheated.	Let the machine cool down.
	Machine under temperature.	Operate the machine only in the permitted temperature range, [41].
	Rechargeable battery overtemperature.	Let the rechargeable battery cool down.
* Have this work carried out by a service partner.		

10 Shutdown

10.1 Temporary decommissioning



⚠ WARNING

Fire and explosion hazard!

Storage with other hazardous substances may lead to fire or explosion due to dangerous interaction.

- ▶ Store separately from other hazardous materials.
- ▶ Store away from other flammable materials.
- ▶ Keep a minimum distance of 2.5 m.



Information

Further information and detailed descriptions, [see Maintenance on page 32](#).

Storage requirements

- Store dust-free and dry.
- Do not store outdoors.
- Protect from direct sunlight.
- Observe storage temperature, [see Technical Data on page 41](#).
- Store in a locked place that is not accessible to children.

If the machine is stationary for more than 1 month, perform the following measures:

Entire machine	<ul style="list-style-type: none"> • Clean thoroughly. • If necessary, rectify all defects. • Check for leaks, rectify any defects if necessary.
----------------	---

If the machine is shut down for more than 6 months, contact a service partner.

10.2 Final shutdown

If the machine is no longer in use and is shut down for good, all operating fluids must be drained.

Have the machine professionally dismantled and disposed of by a state-approved recycling company.

Professional disposal of this machine avoids negative effects on human health and the environment, helps with the targeted treatment of pollutants and makes it possible to recycle valuable raw materials.

10.2.1 Disposal of old electrical and electronic equipment

Disposal of old electrical and electronic equipment

Professional disposal of this machine avoids negative effects on human health and the environment, helps with the targeted treatment of pollutants and makes it possible to recycle valuable raw materials.

For customers in EU countries

This machine is subject to the European directive for old electrical and electronic equipment (Waste Electrical and Electronic Equipment (WEEE)), as well as the corresponding national laws.

The WEEE directive provides the framework for an EU-wide treatment of old electrical equipment.

The machine is marked with the crossed-out garbage bin symbol. This means that you do not dispose of the battery in normal household waste but that it must be disposed of in a separate, environmentally friendly collection facility.

This unit is intended as a professional electrical tool exclusively for commercial use (so-called B2B device according to WEEE directive). In contrast to equipment mainly used in private households (so-called B2C equipment), this machine may therefore not be disposed of in some EU countries, e.g. in Germany, at the collection points of the public waste disposal authorities (e.g. municipal recycling centers). In case of doubt, information on the prescribed disposal route for B2B electrical appliances in the respective country can be obtained from the sales outlet in order to ensure disposal in accordance with the applicable legal regulations. There are also some notes to follow in the sales contract or in the general Terms and Conditions of the sales location.

For customers in other countries

It is recommended that you do not dispose of the machine in normal household waste but rather in a separate, environmentally friendly collection facility. National laws also may, under certain circumstances, prescribe the separate disposal of electrical and electronic products. Correct disposal of this machine in accordance with current national guidelines must be assured.

11 Accessories

11.1 Accessories



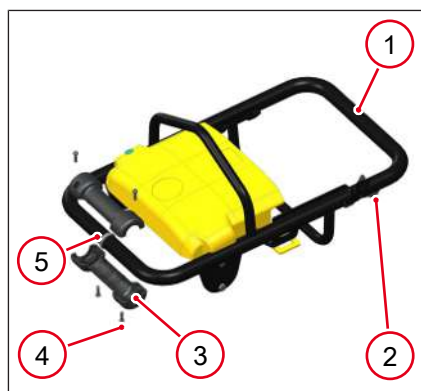
⚠ CAUTION

Risk of injury and possible machine damage!

Use of non-original spare parts or accessories can lead to injuries or machine damage.

- ▶ Only use original spare parts and accessories.
- ▶ In case of disregard, no liability will be accepted.

11.2 Transport roller installation



✓ The rechargeable battery is removed.

1. Place the machine upright and stable on a level surface with sufficient load-bearing capacity.
2. Secure machine against overturning.
3. Set start lever **2** to OFF position.
4. Center half shells **3** around weld **5** of guide bracket **1**.
5. Attach half shells with four screws **4** to the guide bracket.
6. Tightening torque 2,5 Nm

12 Technical Data

12.1 General instructions



Information

For system technical reasons, empty columns can be displayed in the technical data, and numbers and letters that written in superscript or subscript may be displayed incorrectly, e.g:

- ▶ Sound power level L_{WA} instead of L_{WA}
- ▶ Sound pressure level L_{pA} instead of L_{pA}
- ▶ Vibration total value a_{hv} instead of a_{hv}
- ▶ Carbon dioxide CO₂ instead of CO₂
- ▶ Unit m/s² instead of m/s²

12.2 Noise and vibration data

The noise and vibration data listed have been determined in accordance with the following guidelines for the typical machine operating conditions / special test conditions and using harmonized standards:

- Machinery Directive 2006/42/EC
- Noise Emission Directive 2000/14/EC

During operational use, values may differ depending on the prevailing operating conditions.

Sound pressure level at operator station

- L_{pA} was determined according to EN ISO 11201 and EN 500-4.

Guaranteed sound power level

- L_{WA} was determined according to EN ISO 3744 and EN 500-4.

Weighted vibration total value hand-arm vibration

- a_{hv} was determined according to EN ISO 20643 and EN 500-4.

12.3 AS

Type	AS30e	AS50e
Material number machine	5100026851	5100053792
Rechargeable battery material number	5100069473 5100069472	5100069473 5100069472
Rated current [A]	26,30	41,00
Rated voltage [V]	51	51
Rated output [kW]	1,34	1,95
Type of current (output)	DC	DC
Number of strokes [1/min]	810	680
Forward travel [m/min]	11,00	8,8
Impact force [kN]	10	16

Type	AS30e	AS50e
Material number machine	5100026851	5100053792
Length [mm]	620	610
Width [mm]	361	363
Height [mm]	1.046	1.050
Length (Ramming shoe) [mm]	296	340
Width (Ramming shoe) [mm]	150	280
Operating weight [kg]	41,7	71
Lift at ramming shoe [mm]	40	39
Engine type	Asynchronous engine	Asynchronmotor
Insulation class	F	F
Rated output [kW]	1,3	2,1
Rated torque [Nm]	2,1	3,3
Rated speed [1/min]	4700	4350
Special lubricants	Gadus S3 V220C 2	SAE 10W30
Relubrication interval [h]	50	250
Oil specifications (Ramming system)	—	SAE 10W40
Oil volume (Ramming system) [l]	—	0,7
Protection type	IP23	IP23D
Operating temperature range [°C]	0 – +45	0 – +45
Storage temperature range [°C]	-30 – +50	-30 – +50
Sound pressure level LpA [dB(A)]	87	91
Sound power level LWA measured [dB(A)]	103	102
Sound power level LWA guaranteed [dB(A)]	108	108
Vibration total value ahv [m/s ²]	7,5	7,7
Measurement uncertainty of the total vibration value ahv [m/s ²]	1,0	0,9

* The actual operating speed depends on numerous operating parameters and may differ from the rated speed.

Type	AS60e	
Material number machine	5100052267	
Rechargeable battery material number	5100069473 5100069472	
Rated current [A]	44,00	
Rated voltage [V]	51	
Rated output [kW]	2,24	
Type of current (output)	DC	
Number of strokes [1/min]	680	
Forward travel [m/min]	10,4	
Impact force [kN]	17	
Length [mm]	610	
Width [mm]	363	
Height [mm]	1.050	
Length (Ramming shoe) [mm]	340	
Width (Ramming shoe) [mm]	280	

Type	AS60e	
Material number machine	5100052267	
Operating weight [kg]	71	
Lift at ramming shoe [mm]	50	
Engine type	Asynchronous engine	
Insulation class	F	
Rated output [kW]	2,12	
Rated torque [Nm]	3,5	
Rated speed [1/min]	4350	
Special lubricants	SAE 10W30	
Relubrication interval [h]	250	
Oil specifications (Ramming system)	SAE 10W40	
Oil volume (Ramming system) [l]	0,7	
Protection type	IP23D	
Operating temperature range [°C]	0 – +45	
Storage temperature range [°C]	-30 – +50	
Sound pressure level LpA [dB(A)]	91	
Sound power level LWa measured [dB(A)]	104	
Sound power level LWa guaranteed [dB(A)]	108	
Vibration total value ahv [m/s ²]	9,5	
Measurement uncertainty of the total vibration value ahv [m/s ²]	1,5	
* The actual operating speed depends on numerous operating parameters and may differ from the rated speed.		

12.4 Conversion table

The following conversion tables enable the conversion of the metric values from the instructions, in particular the technical data, into the imperial.

Conversion table	
Volume units	
1 cm ³	0.061 in ³
1 m ³	35.31 ft ³
1 ml	0.034 US fl.oz.
1 l	0.26 gal.
1 l/min	0.26 gal./min
Length units	
1 mm	0.039 in
1 m	3.28 ft
Weights	
1 kg	2.2 lbs.
1 g	0.035 oz.
Pressure	
1 bar	14.5 psi
1 kg/cm ²	14.22 lbs/in ²

Conversion table	
Force/output	
1 kN	224.81 lbf
1 kW	1.34 hp
1 PS	0.986 hp
Torque	
1 Nm	0.74 ft.lbs
Speed	
1 km/h	0.62 mph
Acceleration	
1 m/s ²	3.28 ft./s ²



**WACKER
NEUSON**
all it takes!

**Wacker Neuson Produktion GmbH &
Co. KG**

Wackerstraße 6
D-85084 Reichertshofen

Tel.: +49 8453 340-0
Email: service-LE@wackerneuson.com
www.wackerneuson.com

Material Number: 5100056974
Language: [en-US]