

Operator's manual

Vibratory plate
Test machine

DPU

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Manufacturer

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Translation of the original operator's manual in German

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1 Preface

This operator's manual contains information and procedures for the safe operation and safe maintenance of your Wacker Neuson machine. For your own safety and to protect against injuries, you must read the safety instructions carefully; familiarize yourself with them and observe them at all times. This operator's manual is not a manual for extensive maintenance or repair work. Such work should be carried out by Wacker Neuson service or by technically trained personnel.

When building this equipment, great value was placed on the safety of its operator. However, an improper operation or improper maintenance can pose hazards. Please operate and maintain your Wacker Neuson machine in accordance with the information in this operator's manual. It will reward your attention by providing you with a trouble-free operation and high availability.

Defective machine parts must be replaced immediately!

Please contact your Wacker Neuson contact partner for questions regarding the operation or maintenance.

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We reserve the express right to technical changes that are used to improve our machines or raise the safety standard, even without special notice.

2 Introduction

2.1 Using the manual

This manual is to be considered part of the machine and should be carefully stored during the entire service life of the machine. This manual shall be transferred to subsequent owners or users of the machine.

2.2 Storage location of the manual

This manual is part of the machine and must be kept in the immediate vicinity of the machine and made accessible to staff at all times.

If this manual is lost, or if a second copy is required, there are two options:

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

2.3 Accident prevention regulations

In addition to the notes and safety instructions in this manual, the local accident prevention regulations as well as the national health and safety regulations apply.

2.4 More information

This manual applies to various machine types from one product series. For this reason, some figures may vary slightly in appearance from the machine purchased. Depending on model, there may be descriptions of components that are not included in the standard package.

The information contained in this manual is based on machines manufactured up to the time of printing. Wacker Neuson reserves the right to change this information.

The manufacturer shall immediately include any changes or additions in this manual.

2.5 Target group

Individuals working with this machine must be regularly trained on the dangers of handling the machine.

This operator's manual is intended for the following persons:

Operating personnel:

These individuals have been trained on the machine and informed about the possible hazards of improper conduct.

Technically trained personnel:

These people have professional training as well as additional knowledge and experience. They are able to assess the tasks assigned to them and recognize possible dangers.

2.6 Explanation of symbols

This manual contains safety instructions in the following categories: **DANGER**, **WARNING**, **CAUTION** and **NOTE**.

Before performing any work on or with this machine, the notes and safety instructions must be read and understood. All notes and safety instructions in this manual must be passed on to the maintenance, repair, and transport personnel.



DANGER

This combination of symbol and signal word indicates a hazardous situation that will lead to death or serious injury if it is not avoided.



WARNING

This combination of symbol and signal word indicates a hazardous situation that can lead to death or serious injury if it is not avoided.

**CAUTION**

This combination of symbol and signal word indicates a hazardous situation that can lead to minor injury or damage to the machine if it is not avoided.

NOTE

Supplementary information

2.7 Wacker Neuson Contact person

Depending on the country, the Wacker Neuson contact person is a Wacker Neuson service, a Wacker Neuson affiliate, or a Wacker Neuson dealer.

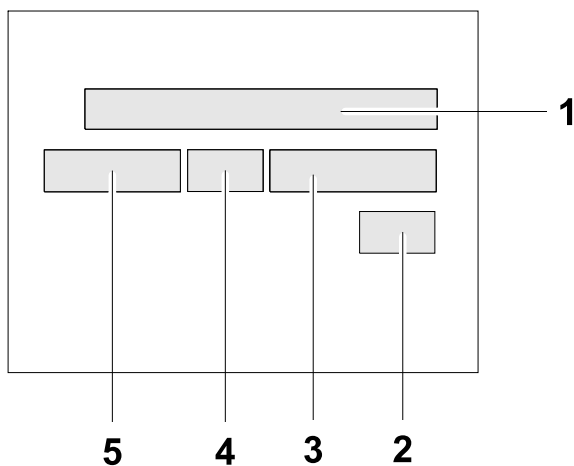
On the Internet at www.wackerneuson.com.

The manufacturer's address can be found at the beginning of this manual.

2.8 Disclaimer

For the following violations, Wacker Neuson dismisses any liability for personal injury or material damage:

- Failure to follow this manual.
- Unintended use.
- Deployment of untrained personnel.
- Using non-approved spare parts and accessories.
- Improper handling.
- Structural modifications of any kind.
- Failure to comply with the General Terms and Conditions (T&Cs).

2.9 Product identification of the machine**Data of the nameplate**

The nameplate contains information that uniquely identifies this machine. This information is required for ordering spare parts and when inquiring about technical issues.

- Enter information about the machine in the following table:

Item	Designation	Your information
1	Group and model	
2	Year of manufacture	
3	Serial number	
4	Version no.	
5	Item number	

3 Security

NOTE

Please read and observe all notes and safety instructions in this manual. Failure to comply with these instructions can lead to electric shock, fire and/or serious injury as well as damage to the machine and/or other objects. Store safety instructions and notes for future use.

3.1 Policy

In keeping with the latest technological developments

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

Proper use

The machine may only be used for the following purposes:

- Soil compaction.
- Asphalt compaction.
- Vibrating paving stones.

The machine may not be used for the following purposes:

- Compaction of very cohesive soils.
- Compaction of frozen soils.
- Compaction of hard, non-compressible soils.
- Compaction of non-load-bearing soils.

Use in accordance with the intended purpose also includes the observation of all 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.

Structural changes

Structural modifications may not be undertaken without the written permission of the manufacturer. Unapproved structural changes may result in risks to the operator and/or third parties as well as damage to the machine.

In the case of unauthorized structural changes, the liability and warranty of the manufacturer are no longer applicable.

The following cases are considered structural changes:

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

Spare parts or accessories that originate from Wacker Neuson can be safely mounted.

3.2 Areas of responsibility of the operator

The operator is the individual who personally operates this machine for industrial or commercial purposes or who entrusts a third party with the use. The operator bears legal responsibility for his/her protection as well as that of third parties.

The user must make the operator's manual available to the operator and ensure that this has been read and understood.

The manual must be kept next to the machine or place of use.

The operator must hand over the manual to subsequent operators or owners of the machine.

The country-specific regulations, standards, and guidelines on accident prevention and environmental protection must be observed. The operator's manual must be supplemented with additional instructions that take regulatory, national, or generally applicable safety standards into consideration.

3.3 User responsibilities

- Knowing and implementing the applicable health and safety regulations.
- In a risk assessment, risks resulting from on-site working conditions will be determined.
- Create operating instructions for the operation of this machine.
- Periodically check whether the user instructions correspond to the current state of regulations.
- Clearly regulate and specify responsibilities for operation, troubleshooting, maintenance, and cleaning.
- Regularly train employees and inform them about potential hazards.
- Provide employees with the necessary equipment.

3.4 Personnel qualification

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

Faulty operation, misuse or operation by untrained personnel can endanger the health of the operator or third parties and lead to damage to or total loss of the machine.

In addition, the operator should be:

- Physically and mentally fit.
- Not under the influence of drugs, alcohol or medication that can impair responsiveness.
- Familiar with the safety instructions in this manual.
- Familiar with the intended use of this machine.
- The minimum age (18 years) to operate this machine.
- Able to independently operate the machine.
- Authorized to operate machines and systems independently according to the standards of safety engineering.

3.5 General hazards

Residual risks are special hazards involved with handling machines. Despite safety compliant construction, they cannot be eliminated.

These residual risks are not obvious and can be a source of possible injury or health hazard.

In the case of unforeseen residual risks, immediately stop the machine and inform your supervisor. He/ she will make further decisions and initiate all steps necessary to eliminate the risk.

If required, the machine manufacturer should be informed.

3.6 General Safety Instructions

The safety instructions in this chapter include the "General Safety Instructions", which should be reported in the manual in accordance with the applicable standards. There may be information that is not relevant to this machine.

3.6.1 Working area

- Before starting work, familiarize yourself with the working environment e.g. load-bearing capacity of the floor or obstacles in the environment.
- Make the working area to public transport safe.
- Necessary fuse protection of walls and ceilings e.g. in trenches.
- Keep the work area tidy. Cluttered or dark working areas can lead to accidents.
- Using this machine in an explosive atmosphere is prohibited.
- When using this machine, children and unauthorized individuals must be kept away. Distraction can lead to loss of control of the machine.
- Always protect the machine against tilting, rolling, sliding, and crashing. Risk of injury!

3.6.2 Service

- The machine should only be maintained/repared by technically trained personnel.
- Use only original spare parts and accessories. This ensures the operational safety of the machine.

3.6.3 Personal safety

- Working under the influence of drugs, alcohol, or drugs can lead to serious injuries.
- Protective equipment should be worn for all work. Appropriate personal protective equipment considerably reduces the risk of injury.
- Remove any tools before the machine is put into operation. Tools that are located on a rotating machine part can be ejected and cause serious injury.
- Always ensure good footing.

- In the case of extensive work with this machine, long-term vibration-induced damage cannot be ruled out. For exact values of vibration measurement, refer to the *Technical Data* chapter.
- Wear suitable clothing. Keep loose clothing, gloves, jewelry, and long hair away from moving/rotating machine parts. Danger of being pulled!
- Ensure that no other individuals are in the danger zone!

3.6.4 Handling and use

- Handle machines with care. Do not operate machines with defective components or operator's controls. Immediately replace defective components or operator's controls. Machines with defective components or operator's controls carry a high risk of injury!
- The operator's controls of the machine shall not be improperly locked, manipulated, or changed.
- The machine, accessories, and tools should be used in accordance with these instructions.
- Store unused machines out of reach of children. The machine may only be operated by authorized personnel.
- After operation, store the cooled-down machine in a locked, clean, frost-protected, and dry location that is inaccessible to children and other unauthorized individuals.

3.7 Specific safety instructions – Vibratory plates

3.7.1 External influences

In the case of the following external influences, the vibratory plate may not be operated:

- In heavy rain on sloped surfaces. Risk of slipping!
- Oilfield environments – methane leaks from bottom. Risk of explosion!
- In dry, flammable vegetation. Fire hazard!
- In potentially explosive areas. Risk of explosion!

3.7.2 Operational safety

- When operating the machine, make sure that no gas, water, or electric lines are damaged.
- The machine must not be operated in tunnels or enclosed spaces.
- Pay maximum attention near drops or slopes. Risk of crashing!
- The operator must not leave the machine while it is in operation.
- Do not leave the machine unattended. Risk of injury!
- Delimit spacious workspace and restrict access to unauthorized individuals. Risk of injury!
- The operator of the machine must ensure that all individuals keep a minimum distance of 2 m from the machine while it is in operation.
- Do not use any jumper cable sprays. This can cause misfires and engine damage. Fire hazard!
- When operating the machine on sloped surfaces, always approach slopes from below and always stay above the machine on a slope. The machine could slip or tip over.
- Do not exceed max. allowable slanting position of the machine – possible failure of the engine lubrication, see chapter *Technical Data*.
- Only Wacker Neuson use starter batteries. These are vibration proof and therefore suitable for the high vibration exposure.

3.7.3 Safety distances

Compaction work near buildings can cause damage to buildings. Therefore, all potential effects and vibrations on surrounding buildings must be checked in advance.

The relevant rules and regulations for measuring, evaluating, and reducing vibration emissions – especially the DIN 4150-3 – must be considered.

Wacker Neuson assumes no liability for any damage to buildings.

3.8 Specific safety instructions – remote controlled vibratory plates

- Always keep remote control and receiving units of the machine clean and free from dry, oil, and grease.
- Remote control and receiving units must not be taped over or covered.
- During operation, the remote control should always be aimed directly at the machine. A clear line of sight must be maintained – infrared signals can be reflected.
- The operator should remain at least 5 meters behind the machine.

3.9 General safety instructions – combustion engines

The following instructions must be complied with:

- Before starting work, check the engine to ensure there are no leaks and/or cracks in the fuel lines, tank, and fuel cap.
- Do not operate a defective engine. Replace damaged parts immediately.
- The pre-set engine speed may not be adjusted. This could lead to engine damage.
- Make sure that the exhaust system of the engine is free of debris. Fire hazard!
- Switch off before refueling the engine.
- Use the correct type of fuel. Fuel should not be mixed with any other fluids.
- Use clean filling aids when refueling. Do not spill fuel. Wipe up any spilled fuel immediately.
- The engine must not be started in the vicinity of spilled fuel. Risk of explosion!
- When operating in partially enclosed spaces, adequate ventilation must be ensured. Do not inhale exhaust fumes. Risk of poisoning!
- The engine surface and exhaust system can quickly become extremely hot. Risk of burns!
- Do not open the radiator cap when the engine is hot – Beware of hot coolant!

NOTE

This machine is outfitted with an EPA-certified engine. Changing revolutions per minute (RPM) influence the EPA certification and the emissions. Settings for this engine may only be changed by a professional. For more information, contact the manufacturer or your Wacker Neuson contact person.

3.10 General safety instructions – fuel, lubricants and coolants

The following instructions must be complied with:

- Always wear safety glasses and protective gloves when handling fuel, lubricants and coolants. If hydraulic oil, fuel, oil, or coolant gets into your eyes, consult a physician immediately.
- Avoid direct skin contact with fuel, lubricants and coolants. Immediately rinse skin with soap and water.
- Do not eat or drink while working with fuel, lubricants and coolants.
- Hydraulic oil or fuel contaminated by dirt or water can cause premature wear or failure of the machine.
- Dispose of replaced or spilled fuel, lubricants and coolants in accordance with the applicable provisions for environmental protection.
- If fuel, lubricants and coolants escape from the machine, immediately cease operation and have it repaired by your Wacker Neuson contact partner.

3.11 General safety instructions – starter batteries

The following instructions must be complied with:

- When disconnecting the starter battery, always disconnect the negative terminal first!
- When connecting the starter battery, always connect the positive terminal first! Fasten battery terminal cover!
- Flames, sparks, and smoking are prohibited when handling starter batteries.
- Starter batteries contain corrosive acid. Wear acid-proof protective gloves and safety glasses when handling starter batteries.
- Prevent incorrect connection of the starter battery or bridging of the terminals with tools. Risk of short circuit!

3.12 Maintenance

The following instructions must be complied with:




- This machine may not be maintained, repaired, set, or cleaned while it is switched on. When working on the electrical system – Disconnect starter battery!
- Comply with maintenance intervals.
- After any maintenance or repair, the safety devices on this machine must be replaced.
- Note maintenance schedule. Any work not performed must be undertaken by the service of the Wacker Neuson contact person.
- Worn or damaged machine parts must always be replaced immediately. Only use spare parts from Wacker Neuson.
- Keep the machine clean.

- Missing, damaged, or illegible safety warning labels should be replaced immediately. Safety stickers contain important information for the protection of the operator.
- Maintenance jobs must be carried out in a clean and dry environment (e.g. in a workshop).

3.13 Personal protection equipment

NOTE

To prevent personal injury when handling this machine, personal protective equipment must be worn when working on or around this machine.

Pictogram	Significance	Description
	Wear safety shoes!	Safety shoes provide protection from bruises, falling objects, and slipping.
	Wear protective gloves!	Protective gloves provide protection from abrasion, cuts, punctures, and hot surfaces.
	Wear ear protection!	Ear protection provides protection from permanent hearing impairment.

NOTE

With this machine, the permissible, country-specific noise limit (personal rating level) can be exceeded. Therefore, ear protection must be worn. For exact values of noise emissions, refer to the *Technical Data* section.

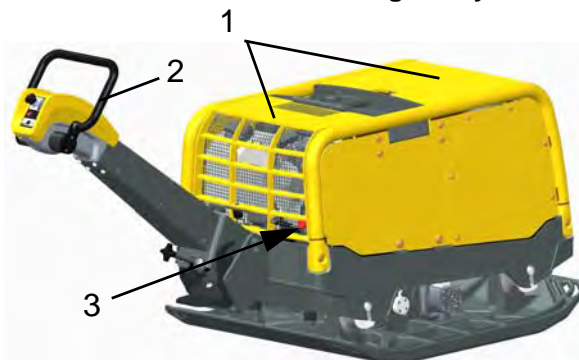
When wearing ear protection, remain alert because your ability to hear noises such as screams or signal tones is restricted.

Wacker Neuson recommends always wearing ear protection.

3.14 Safety equipment

Safety devices protect the user of the machine from potential hazards. These include barriers (guards) or other technical measures. These protect the user from danger. In certain situations, the source of risk is switched off, or the risk is reduced.

This machine has the following safety devices:



Item	Description	Item	Description
1	Protective hood	3	Emergency shutdown switch
2	Automatic central position of control handle		

NOTE

Always tighten loose screw connections using the specified torque setting.

Protective hood

The covers protect the operator from hot engine parts and noise.

Emergency shutdown switch

The emergency shutdown switch is used solely to deactivate the machine in the case of danger. Activating the emergency shutdown switch results in the machine immediately turning off. Operation can only be resumed after unlocking the emergency shutdown switch.

Automatic central position of control handle

If the control handle is released in full load, it automatically returns to the central position and the machine enters stand vibration.

3.14.1 Safety shutdown – Remote-controlled machinery

The machine is operated via an infrared remote control. For safety reasons, it switches off vibration and movement in the following situations:

- When the operator enters the proximity area (approx. 1–2 meters from a receiving unit).
- When the operator leaves the receiving area (a maximum of 20 meters from the machine).
- Interruption of the clear line of sight between the remote control and receiving units of the machine.
- Power failure of remote control and/or machine.

3.15 Behavior in dangerous situations**Preventive measures:**

- Always be prepared for accidents.
- Keep first aid equipment on hand.
- Make sure that all employees are familiar with accident reporting, first aid, and rescue facilities.
- Keep access routes clear for emergency vehicles.
- Make sure that employees receive first aid training.

Measures in the case of an emergency:

- Immediately take the machine out of operation.
- Remove injured and other people from the danger zone.
- Initiate first aid measures.
- Alert rescuers.
- Keep access routes clear for emergency vehicles.
- Inform managers at the site.

4 Safety and information labels



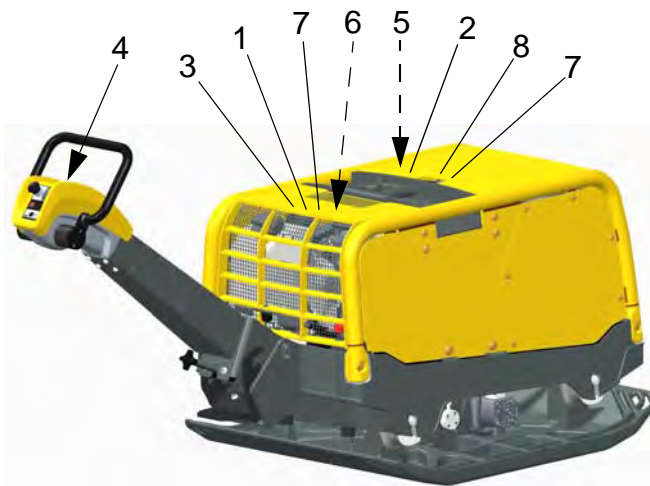
WARNING






Illegible symbols

Over time, labels and signs on the machines can become dirty or otherwise unrecognizable.

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

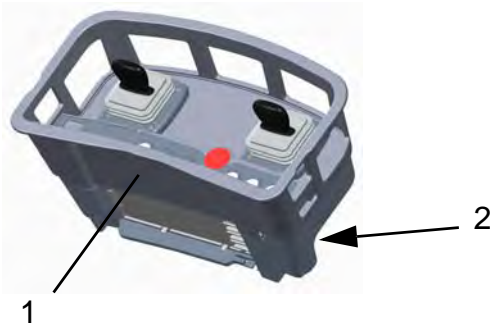
The following labels are found on and in the machines:



Item	Label	Description
1		Use personal protection equipment in order to prevent injuries and health hazards. <ul style="list-style-type: none"> ■ Ear protection. ■ Read operator's manual.
2		Falling machines can cause serious injury. <ul style="list-style-type: none"> ■ Only lift machine at the central lifting point with certified lifting gear and tackle (safety load hook). ■ Do not lift the machine on the central lifting point with an excavator bucket. ■ Do not lift the machine on the central lifting point with a forklift.
3		Guaranteed sound power level.
4		Falling machines can cause serious injury. <ul style="list-style-type: none"> ■ Do not lift the machine with the control handle or center pole.
5		The coolant is under pressure. Hot coolant can spurt out and cause injury from scalding. <ul style="list-style-type: none"> ■ Only open the cover of the radiator after the engine has cooled down.

Item	Label	Description
6		<ul style="list-style-type: none"> Label identifies the remote control in the bracket. Label identifies the connection of the charging cable for charging.
7	US Machines 	Warning.
8		<p>Closing the protective hood can lead to crushing wounds.</p> <ul style="list-style-type: none"> When closing the protective hood, do not grab between the machine and the protective hood.

4.1 Safety and information labels on the remote control
The following labels are found on the remote control:



Item	Label	Description
1	<p>US Machines</p>	<p>To prevent interference of the infrared transmission and possible machine malfunction, do not attach to housing. Clean before transmitter and receiver eye before commissioning!</p>
		<p>Clean remote control and receiving unit before commissioning!</p>
2	<p>US Machines</p>	<p>To prevent damage and possible malfunction of the transmitter unit, do not open housing! See operator's manual!</p>

5 Design and function

5.1 Standard package

The machine is delivered fully assembled and is ready for use out of the box.

The standard package includes:

- Vibratory plate
- Remote control (optional)
- Operator's manual
- Manual for machine configuration (includes PIN data of the machine)

5.2 Application areas

The vibratory plate is used for compacting soil. It is used in gardening and landscaping as well as civil engineering, road construction, and paving.

5.3 Short description

The water-cooled drive motor in the upper mass hydraulically powers the eccentric weight of the base plate.

The exciter is designed as a centrally mounted exciter. This principle enables the modification of the direction of oscillation (by adjusting the eccentric weights) and thus the movement of the machine (forwards, in reverse or on-the-spot vibration).

For the exciter of the remote controlled machine, eccentric weights can be individually adjusted in order to allow steering movements. In addition, spot vibration can be adjusted.

The cooler reduces the temperature of the engine coolant as well as that of the hydraulic oil.

The intake air is aspirated in the cold area between the cooler and the rear protective hood and purified via an air cleaner equipped with a pre-cleaner.

The muffler discharges exhaust fumes from the front.

To start the drive motor automatically, the glow plugs are preheated. The speed of the drive motor is controlled via a lifting magnet. The machine is switched off via an electrically controlled solenoid valve on the fuel filter.

The electrical control unit is located in the electrical box.

The operator's controls are located on the electrical box and the center pole head.

The maintenance-free starter battery is located below the bracket for the remote control.

The machine is controlled with the center pole. For the remote controlled machine, it is controlled exclusively via the remote control.

5.3.1 Remote-control vibratory plate

The machine is controlled exclusively by the remote control.

Within the receiving area, the commands of the remote control are transmitted to the machine via infrared signal.

For trouble-free transmission of the infrared signal, the remote control must always be aimed directly at one of the receiving units of the machine.

The following commands are possible with the remote control:

- Start engine.
- Move machine with simultaneous vibration.
- Switch spot vibration on and off.
- Move machine slow or fast.
- Switch off engine.

Infrared system

If the remote control has been activated by pressing the ON/OFF switch, it permanently sends infrared signals to the respective receiving unit of the machine.

The receiving unit of the machine converts the infrared signal into an electrical signal. The control electronics process the electrical signal and control the machine in accordance with the control command.

In order for the machine to be able to execute the control commands, the remote control and machine must be set to the same transmission channel.

Each machine has its own address for the transmission channel. Upon delivery, the transmitter unit is set to the address of the machine and will only work with this machine. If the transmitter unit operates another machine, this can be adjusted, see *Setting the transmission channel (remote control)* chapter. If multiple remote controlled machines are operated in close proximity, the machines must be set to different transmission channels.

Receiving area

Operation is only possible when the machine is within the receiving area. The receiving area is approximately 20 meters from a receiving unit of the machine.

Within the receiving area, there must always be a clear line of sight between the remote control and the machine. If there is no clear line of sight, the machine will cease all vibration and movement.

Outside of the receiving area, the machine will not receive the commands. The machine will stop vibrating and moving.

Proximity area

If the machine comes within 1–2 meters (proximity area) of the operator, it will cease all vibration and movement. Once the operator leaves the proximity area, the machine is once again able to receive commands.

If the operator is laterally closer than 1–2 meters from the machine or if the infrared signals of the remote control are transmitted via reflection, a stopping of the vibration and movement is not guaranteed.

If another person comes within 1–2 meters (proximity area) of the machine, the machine will not cease vibration and movement. The shutdown in the proximity area only works in conjunction with the remote control unit.

Image in progress

5.3.2 Diagnostic system

The diagnostic system of the machine consists of control electronics and sensors that monitor various components of the machine.

If the diagnostic system detects a fault or an error, this is signaled to the receiving unit by solid or flashing red lights. A fault indication with error code appears on the display.

Each error code stands for a specific fault. The diagnostic system can distinguish between approx. 30 error codes.

In case of serious faults, the error code is entered into the error memory, and the machine will automatically switch off the motor or deactivate itself.

5.3.3 Machine configuration system

In the machine configuration system, machine parameters can be changed by the user (e.g. switching an activation PIN on or off).

5.3.4 Machine protection – installation (optional)

The acceleration load of the upper mass is monitored via a machine protection sensor. When a threshold value corresponding to operation of the vibratory plate on an extremely hard surface (concrete, asphalt) is exceeded, a warning is given to the operator. This warning is that the control lamp on the center pole head or the receiving unit will flash red.

In addition, the machine will respond in one of the following ways (adjustable in the machine configuration):

- Only an entry in the error memory.
- Lowering the excitation speed.
- Shutdown of the machine with entry in the error memory.
- Switching to slow mode.

5.3.5 Compatec – compaction display (optional):

Compatec – compaction display is attached to the rear protective hood and is within the operator's line-of-sight. The display, which consists of eight light-adjusting LEDs, displays the relative compaction progress by successively lighting up. When the number of illuminated LEDs no longer increases, this means that no further compaction can be achieved with the machine. The operator can finish the work and avoid unnecessary passes or over-compaction of the soil.

The overload display indicates if the machine is being operated on too hard of a surface. The operator is notified of this through rapid flashing of all eight LED's.

Compatec – compaction display is suitable for all highly compactable and mixed-grained soils.

NOTE

Compatec – compaction display only supports soil compaction and does not replace the professional measuring of soil density by an expert.

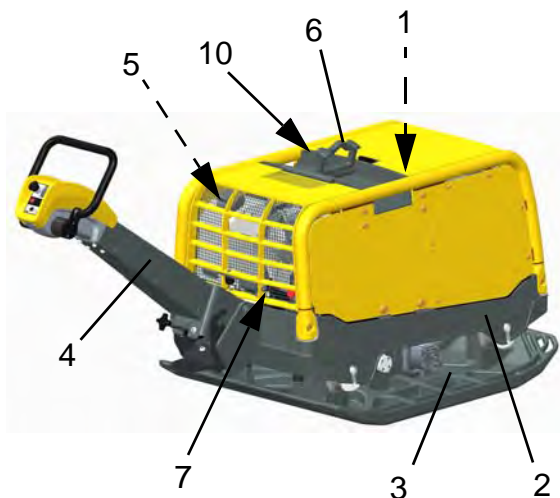
5.4 Versions

This operator's manual covers the following models:

Versions	Description
r	Remote start
m	Machine protection – installation
c	Compatec – compaction display

6 Components and operator's controls

6.1 Components



Item	Designation	Item	Designation
1	Drive motor	6	Central lifting point
2	Upper mass	7	Eyelet for padlock
3	Base plate	8	Receiving units
4	Center pole	9	Bracket for remote control and charging cable
5	Fuel tank	10	Nameplate

Center pole

The center pole can be adjusted to the optimum working height.

Central lifting point

The central lifting point is used to lift the machine. When the overall height is a deciding factor, the central lifting points can be folded.

Receiving units

On the remote controlled machine, there are two receiving units (front and rear) with an integrated status display. Depending on the position of the operator, the front or rear receiving unit receives the commands of the remote controller via infrared signal.

The integrated status display uses lights and flashing signals to indicate the current operating status of the machine.

To better distinguish between the front and rear of the machine, the receiving units have different colors.

Eyelet for padlock

The rear protective hood features a lug for attaching a padlock. The machine is thus protected against unauthorized opening of the rear protective hood as well as unauthorized operation.

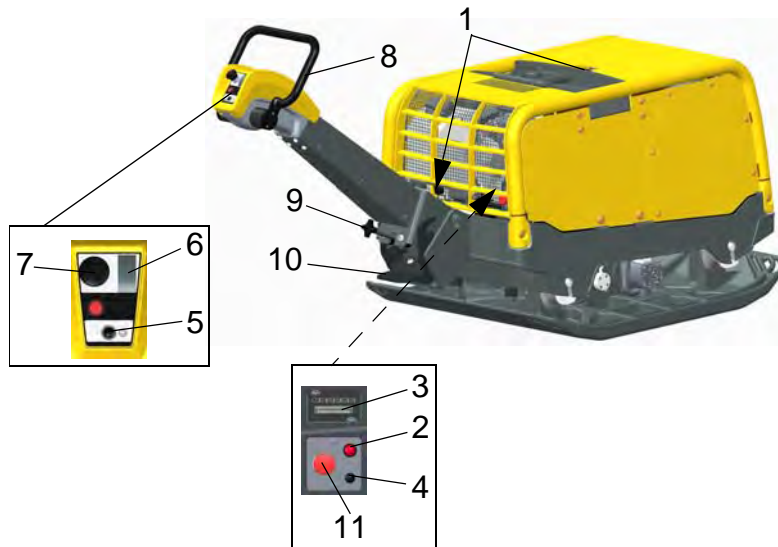
Bracket for remote control and charging cable

The bracket is used to store and charge the remote control unit as well as to protect it against damage and theft.

6.2 Operator's controls

Always keep the display and operator's controls on the machine clean, dry, and free of oil and grease.

Operator's controls such as the ON/OFF switch, and throttle control handles may not be locked, manipulated, or changed without permission.



Item	Designation	Item	Designation
1	Hood opener	7	Vibratory rammer
2	ON/OFF switch (red)	8	Control handle
3	Display and control lamps (diagnostic and configuration menu)	9	Height adjustment mechanism of center pole
4	Adjusting key (black)	10	Footrest of center pole lock
5	Start button	11	Emergency shutdown switch
6	Slow/fast rocker switch		

Control handle

The control handle is used to continuously regulate the speed and travel direction.

Footrest of center pole lock

The footrest of the center pole lock is used to release the center pole from the transport position so that it can be returned to working position. The individually adjusted working height is maintained.

Emergency shutdown switch

The emergency shutdown switch is used solely to deactivate the machine in the case of danger. Activating the emergency shutdown switch results in the machine immediately turning off. Operation can only be resumed after unlocking the emergency shutdown switch.

Height adjustment mechanism of center pole

The center pole height-adjustment mechanism allows for continuous height adjustment in order to adjust the center pole individually to the optimum working height. This is done by turning the star knob.

In addition, by pushing down on the star knob, the center pole can be brought into the lower position e.g. to be able to travel through low passages. If the center pole is raised, the respective optimally adjusted working height is once again active.

ON/OFF switch (red)

With the red ON/OFF switch, the machine is activated for starting with the start button on the center pole head or remote control.

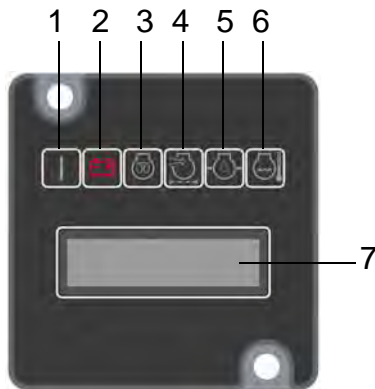
The machine is completely deactivated with the ON/OFF button.

With the ON/OFF switch, the diagnostic and configuration menus can also be called up and menu items can be changed.

Setting key

With the black setting key, digits of the activation PIN, setup PIN, or machine settings can be adjusted.

Display and control lamps



Item	Designation	Item	Designation
1	Control lamp for operation	5	Control lamp for oil pressure
2	Control lamp for charging	6	Control lamp for coolant temperature
3	Control lamp for preheating	7	Display
4	Control lamp for air cleaner		

Control lamp for operation

The control lamp for operation indicates whether the machine has been activated via the ON/OFF switch.

- The control lamp for operation lights up green when the machine has been activated via the ON/OFF switch.
- The control lamp for operation goes out when the machine has been deactivated via the ON/OFF switch.

Control lamp for charging

The control lamp for charging indicates whether the starter battery of the machine is being charged.

- The control lamp for charging lights up red when the machine is activated.
- The control lamp for charging goes out when the engine is running.
- The control lamp for charging lights up red when the starter battery of the machine is no longer charged.

Control lamp for preheating

When the engine is started, the control lamp for preheating indicates whether the glow plugs are being preheated.

- The control lamp for preheating lights up yellow as long as the glow plugs of the engine are preheated during starting.
- The control lamp for preheating goes out when preheating is completed.

Control lamp for air cleaner

The control lamp for the air cleaner displays the maintenance condition of the air cleaner.

- The control lamp for the air cleaner lights up yellow when the air cleaner is dirty.

Control lamp for oil pressure

The oil-pressure control lamp indicates whether the oil pressure is sufficient.

- The control lamp for oil pressure lights up red when the machine is activated.
- The control lamp for oil pressure goes out when the engine is running.
- The control lamp for oil pressure lights up red when the oil pressure is too low.

Control lamp for coolant temperature

The control lamp for coolant temperature indicates whether the coolant temperature is within the permissible range.

- The control lamp for coolant temperature lights up red when the coolant temperature is too high.

Display

The following information is displayed in sequence:

- Number of operating hours.
- The transmission channel set on the machine.
- Error statuses.
- Diagnostic menu.
- Configuration menu.

Diagnostic menu

In the diagnostic menu on the display, the following information about the machine can be accessed:

- Overview of all detected errors (error memory).
- Starter battery voltage.
- Coolant temperature of the engine.
- Hydraulic oil temperature.
- Engine speed.
- Software version (SW version).
- Switch test.
- IR transfer

Configuration menu

NOTE

The operation of the configuration menu is described in the manual for machine configuration.

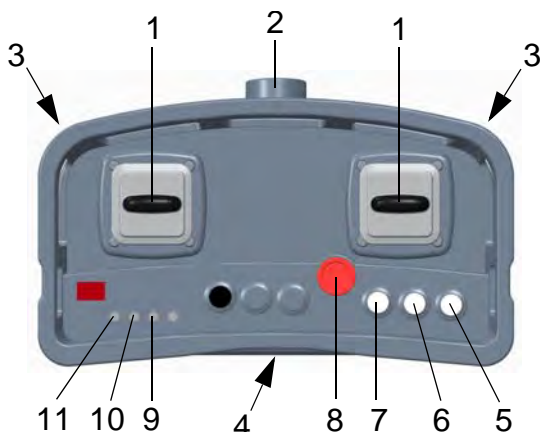


In the configuration menu on the display, the following machine settings can be adjusted:

- Change setup PIN.
- Change/activate/deactivate activation PIN of the machine.
- Setting turn-off time of the machine.
- Select the display language (English, German, French, or Spanish).
- Adjust machine response in the case of overload (overload sensor).
- Setting the hydraulic parameters/centrifugal force.

6.3 Components and operator's controls – remote control unit

The remote control of the DPU 80r and DPU 100r may only be used for these machines.



Item	Designation	Item	Designation
1	Joystick (left, right)	7	Engine start button
2	Socket for charging cable	8	ON/OFF switch
3	Carrying strap	9	Control lamp for charging
4	Rechargeable battery	10	Control lamp for operation
5	Spot compaction button	11	Diagnostic control lamp
6	Button for slow/fast operation		

Joystick (left, right)

By pressing the joystick, the vibration starts, and the machine moves.

ON/OFF switch

The remote control unit is switched on via the ON/OFF switch. When switching off, the remote control and the engine are turned off.

Engine start button

The start button starts the engine.

Button for slow/fast operation

The slow/fast button is used to switch between slow and fast operation. Fast operation is selected by default.

- Quick mode – operating mode for compacting.
- Slow operation – mode with reduced engine speed to traverse highly compacted or hard surfaces.

Spot compaction button

The spot vibration button must remain pressed so that the machine compresses on the spot.

Carrying strap

The carrying strap is used to hang the remote control.

Rechargeable battery

The rechargeable battery powers the remote control unit. The rechargeable battery can be recharged with the charging cable of the machine or with an external battery charger.

Control lamps

Charging

- The control lamp for charging lights up green when the rechargeable battery is charging.
- The control lamp for charging goes out once the rechargeable battery is charged.



Operation

- Operation control lamp flashes green when the remote control is switched on.
- The control lamp for operation flashes green when the remote control is switched on.
- The control lamp for operation flashes red when the charge situation of the battery is low.
- The control lamp for operation lights up red when the rechargeable battery is discharged.

Diagnostics

- The control lamp for diagnosis briefly flashes green when a joystick is moved or a button on the remote control unit is pressed.

7 Transport



WARNING

Improper handling can result in injury or serious material damage.

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



DANGER

Danger from falling.

Falling machines can cause serious injury e.g. through crushing.

- Only use suitable and tested lifting gear and tackle (safety load hooks) of sufficient lifting capacity.
- Only lift the machine from the central lifting point.
- Reliably secure the machine to the lifting gear.
- Do not lift the machine on the central lifting point with a forklift or excavator bucket.
- Do not lift the machine at the control handle.
- Evacuate danger zone while lifting, do not stop under suspended loads.



WARNING

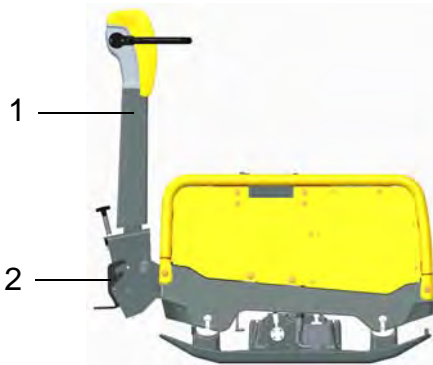
Fire and explosion hazard from fuel.

Leaking fuel can ignite and cause serious burns.

- Lift and transport the machine in an upright position.

7.1 Loading and transport

Carry out preparations

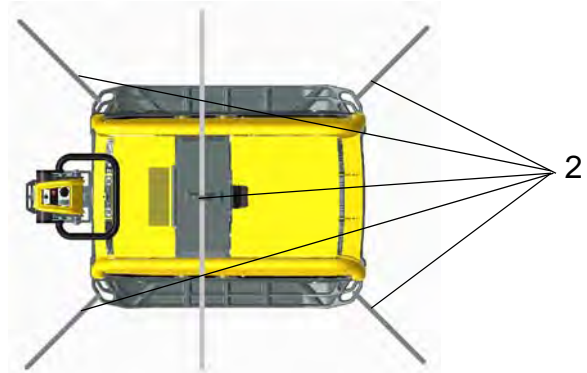


Item	Designation	Item	Designation
1	Center pole	2	Center pole lock

When loading and transporting, the center pole must be locked into place by engaging the center pole lock in the vertical position.

Lift machine**NOTE**

Establish a flagman for a secure lifting process.



Item	Designation	Item	Designation
1	Central lifting point (attachment point)	2	Tie-down lugs

1. Place the central lifting point in the vertical position.
2. To lift the motor, hang suitable tackle at the central lifting point.
3. Carefully load machine into or onto a stable means of transport.
4. After loading the machine, lash down the machine to prevent it from rolling off, slipping, or tipping over. Attach tie-down lugs to the designated lashing points.

8 Operation and use



WARNING

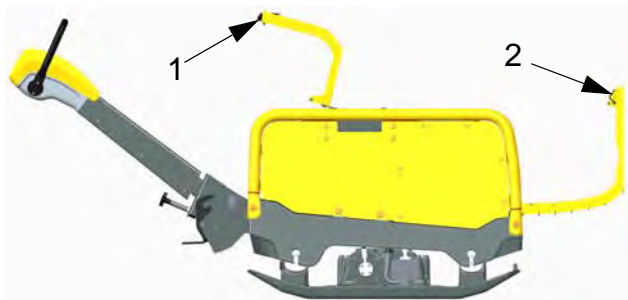
Improper handling can result in injury or serious material damage.

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

8.1 Before commissioning

8.1.1 Inspection before commissioning

Open protective hoods



Item	Designation	Item	Designation
1	Hood opener of rear protective hood	2	Hood opener of front protective hood

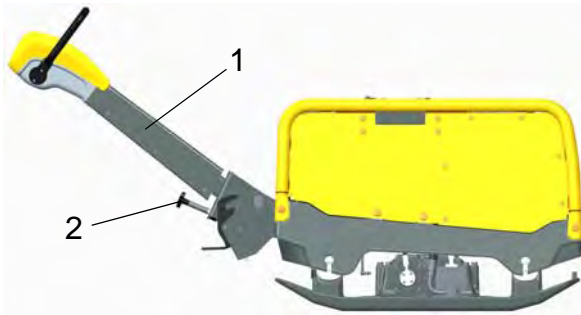
1. Pull hood opener of rear protective hood until it is unlocked. Completely open protective hood.
2. Pull hood opener of front protective hood until it is unlocked. Completely open protective hood.

Complete the following inspections:

- Check machine and components for damage. If there is any visible damage, do not use the machine and immediately contact the Wacker Neuson service.
- Ensure that loose packing material has been removed from the machine.
- Ensure that there are no loose items under the protective hood e.g. gloves or tools.
- Check fuel level.
- Check engine oil level.
- Check hydraulic oil level.
- Check fuel lines for leaks.
- Make sure the screwed connections are firmly in place.
- Receiver units are free of dirt.

NOTE

Perform tests in accordance with maintenance chapter, top up any missing fuel, see technical data chapter.

8.1.2 Set center pole


Item	Designation	Item	Designation
1	Center pole	2	Star knob

The optimum working height of the center pole can be adjusted by turning the star knob.

8.1.3 Remote controlled machine
Remove remote control from the bracket

Image in progress

Item	Designation	Item	Designation
1	Remote control	4	Bracket for charger cable
2	Bracket for remote control	5	Socket with screwed nose cap
3	Charge cable		

1. Pull hood opener of rear protective hood until it is unlocked.
2. Completely open the rear protective hood with the hood opener.
3. Unscrew the charging cable from the remote control.
4. Place charging cable in the bracket.

NOTE

Improper handling can result in damage to the charging cable.

- When placing charging cable in the bracket, make sure it will not get pinched when closing the protective hood.
-

5. Screw screwed nose cap on the connection socket of the remote control.
6. Remove the remote control from the bracket.

Check remote control

- Remote control and carrying strap are undamaged.
- Remote control is free of dirt.

8.2 Notes on operation**WARNING****Danger of tipping**

- There is a serious risk of injury from slipping or tipping over of the machine. Near edges, at least 2/3 of the machine must be on a load-bearing surface.
- If not, decommission the machine and lift back on a load-bearing surface.

**WARNING****Health hazard from exhaust fumes**

- The exhaust fumes of this engine contain chemicals, which the state of California knows can cause cancer, birth defects or other reproductive damage.

Operation on sloped surfaces

- Within the area of a slope, always stand above the machine.
- Only approach gradients from below (a gradient that can be easily driven up can also be driven down without any risk).
- Not stand in the direction of descent of the machine.
- Do not exceed the maximum allowable slanting position (see *Technical Data*) chapter.
- Only operate the machine for a short time in maximum allowable slanting position.

NOTE

If the maximum permissible slanting position is exceeded, this results in a failure of the engine lubrication and therefore inevitably causes a defect of important engine parts.

Remote-controlled machinery – locational information

Image in progress

Item	Designation	Item	Designation
1	Front (transparent receiving unit)	3	Rear (rear receiving unit)
2	Right	4	Left

Remote-controlled machinery – direction of movement

The direction of movement of the machine is independent from the position of the operator. If the joystick of the remote control is pressed forward, the machine moves always forward.


WARNING

Mixing up the direction of movement of the machine poses a danger of crushing for others.

- Operate the machine from behind and maintain a minimum safety distance of at least 2 meters.
- Ensure that no other individuals are in the proximity area or working area of the machine.

Operator behind the machine	Operator in front of the machine
Image in progress	Image in progress
If the operator is located behind the machine and presses both joysticks forward – the machine moves forward away from the operator.	If the operator is located in front of the machine and presses both joysticks forward – the machine moves backward away from the operator.

8.3 Commissioning

DANGER

Fire hazard

Jumper cable sprays are highly flammable; they can ignite and cause severe burns.

- Do not use jumper cable sprays.

8.3.1 Activate machine


Item	Designation	Item	Designation
1	Control lamps	3	ON/OFF switch (red)
2	Display		

1. Pull hood opener of rear protective hood until it is unlocked.
2. Completely open the rear protective hood with the hood opener.
3. Press the ON/OFF switch on the machine.

- When the machine is activated, all control lamps light up for approx. 1 second.

The following are displayed in sequence:

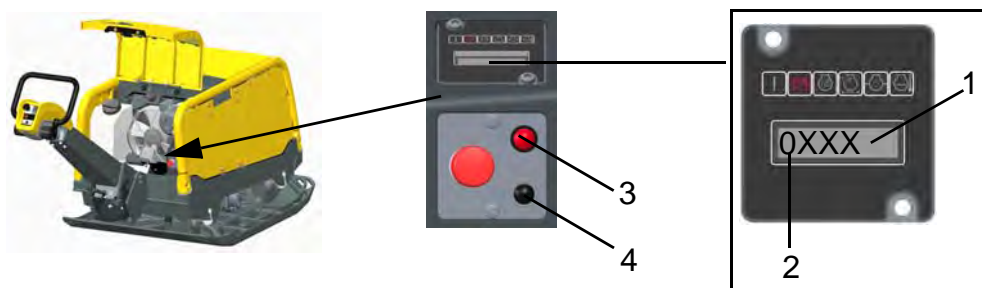
- Auto-engaging status.
 - The transmission channel set on the machine (optional).
 - Possibly the most recent error.
 - Number of operating hours.
4. Close and lock rear protective hood into place.

Enter activation PIN

NOTE

PIN entry is deactivated by default. If the machine should be secured by an activation PIN, this must be set in the configuration menu; see *Manual for Machine Configuration*.

The activation PIN should always be kept secret and never be listed on the machine or remote control.



Item	Designation	Item	Designation
1	Digit of the activation PIN	3	ON/OFF switch (red)
2	Position of the activation PIN	4	Adjusting key (black)

NOTE

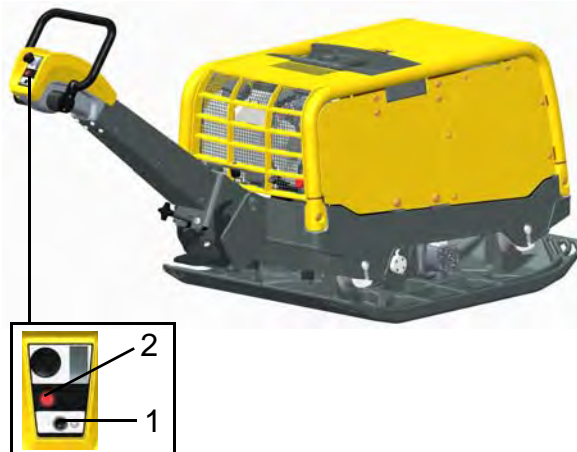
The engine can only be started if the correct activation PIN has been entered with the remote control.

1. When the display prompts you to enter the activation PIN, press the ON/OFF switch.
2. Enter activation PIN:

NOTE

If an incorrect PIN is entered four times in succession, you must wait five minutes before re-entering the PIN. During the wait time, the request to wait is displayed.

- To select the next position, press the ON/OFF switch on the machine.
 - To select the digit, press the selection button repeatedly until the correct value is achieved.
3. Once all of the digits of the activation PIN have been selected, press the ON/OFF switch of the machine.

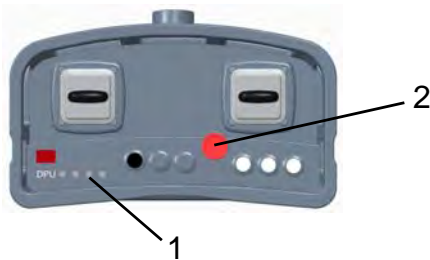
8.3.2 Commission machine (center pole)


Item	Designation	Item	Designation
1	Start button	2	Control lamp

1. The red control lamp on the center pole flashes briefly at intervals of 5 seconds to signal readiness to start.
2. Briefly press start button of the center pole – the motor will start automatically.

NOTE

The starting process can take up to 2 minutes. As long as the control lamp is red, the automatic start up runs. Depending on the operating temperature of the engine, the glow plugs are optionally preheated and warmed up.

8.3.3 Commission machine (remote control)
Switch on remote control unit


Item	Designation	Item	Designation
1	Control lamp for operation	2	ON/OFF switch

1. Press the ON/OFF switch of the remote control unit Operation-control lamp flashes green when the remote control is switched on.

NOTE

If the operation-control lamp flashes or lights red, recharge the rechargeable battery.

2. Hang the remote control with the carrying strap.

Start engine



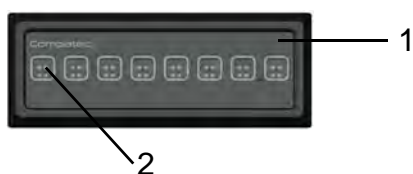
Item	Designation
1	Engine start button

1. Directly aim remote control towards a receiver unit.
2. Briefly press start button of the remote control – the motor will start automatically. When the receiving units flash yellow, the machine is ready.

NOTE

The starting process can take up to 2 minutes. As long as the receiving units light red, the automatic startup will run. Depending on the operating temperature of the engine, the glow plugs are optionally preheated and warmed up.

Machine with Compatec – compaction display (optional)



Item	Designation	Item	Designation
1	Compatec – compaction display	2	LEDs/light progress bar

1. During the first few seconds after starting the machine, a light progress bar appears on Compatec – compaction display.
2. LEDs light up starting from left to right.

NOTE

If all LEDs light up, the system is fault-free. The LEDs will then switch off one after the other.

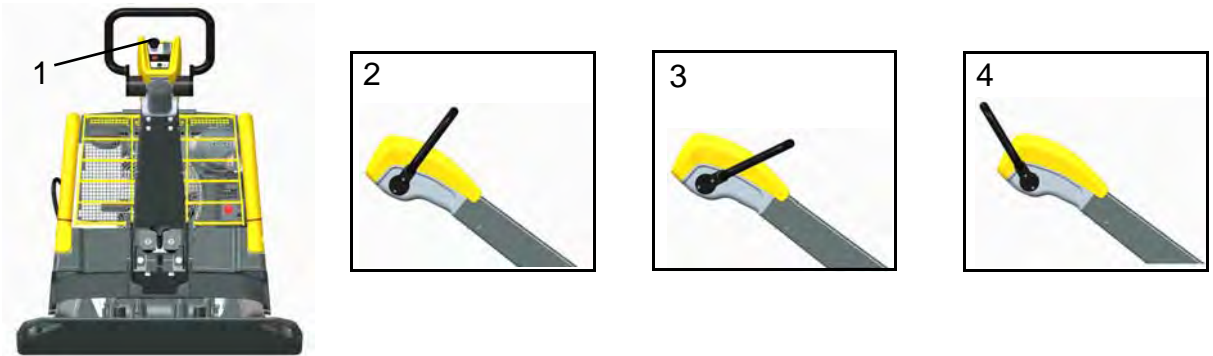
3. All LEDs will briefly light up again at reduced brightness.
4. The sensor is thus successfully tested and Compatec – compaction display is ready for operation.

NOTE

If all LEDs permanently light after initialization, the sensor has not been successfully tested; see troubleshooting chapter.

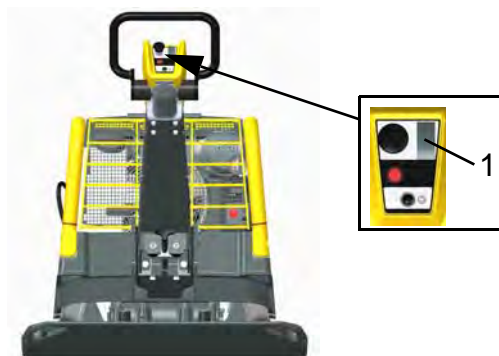
8.4 Operation

- In accordance with the intended purpose, the operator should stand behind the machine.
- Guide and steer machine using the control handle.
- Control machine with remote control.

8.4.1 Operate machines with center pole


Item	Designation	Item	Designation
1	Vibratory rammer	3	Forward
2	Central position of control handle	4	Reverse

1. Pull vibration switch
2. Select travel direction and speed with the control handle.
 - Speed display by lighting of the slow/fast-rocker switch or flashing for intermediate positions.

Switch slow/fast mode on and off


Item	Designation
1	Slow/fast rocker switch










- Slowly press the slow/fast switch up to increase the speed.
 - Slowly press the slow/fast switch down to reduce the speed.
- If the warning vibration-control lamp lights up, the maximum speed is set.
 If the vibration-control lamp lights up, the speed is lower than maximum.

NOTE

To switch from maximum to minimum (or vice versa) speed, the slow/fast operation button must be pressed for approx. 2–3 seconds.

8.4.2 Operating a remote-controlled machine

The following table shows how the machine moves when the respective joystick of the remote control is operated:

No movement 	
Forward 	Reverse 
Forward left turn 	Forward right turn 
Reverse left turn 	Reverse right turn 
Left stand rotation 	Right stand rotation 

Moving and stopping the machine

1. Press the joystick of the remote control to the desired position and hold. The machine starts vibrating and moves in the desired direction – the further the joysticks are pushed forward or backward, the faster the machine moves.
2. Release both joysticks of the remote control. The machine stops moving and vibrating – after approx. 6 seconds, the engine switches to idle.

Switch slow/fast mode on and off

NOTE

Fast operation is selected by default.

The slow mode is only intended for traversing highly compressed or hard surfaces.

1. Press slow/fast mode button to switch between slow and fast operation.
 - When the receiving units flash yellow, the machine is in slow mode.

Switching stand vibration on and off

1. Pressing and holding stand vibration button – The machine compresses on the spot without moving in one direction.
2. Releasing stand vibration button – The machine will return to normal operating condition.

8.4.3 Machine protection – installation

To protect the machine, an warning is activated when compacting:

- The red control lamps on the center pole flash.
- The receiving units flash red.

In addition, a machine response can be set in the configuration menu:

- Switching off the machine.
- Switching to slow mode.
- Reduced power operation.

8.4.4 Reading Compatec – compaction display

This display roughly indicates the progress of the compaction.

NOTE

To protect the machine, Compatec – compaction display warns the operator of over-compaction by quickly flashing all LEDs.

NOTE

The brightness of the LED automatically adjusts to the light conditions of the working area.

- The number of LEDs lit is proportional to the soil density, more illuminated LEDs corresponds to a higher soil density.

NOTE

It is possible to detect non-compactable material if the spot is longer than one meter. In the case of abrupt change from high to low-compacted soil (or vice versa), there is a slow increase or decrease of the LEDs.

NOTE

If the machine is operated in reduced power mode

- Preselected using the slow/fast rocker switch or button.
- Overload setting in the configuration menu.

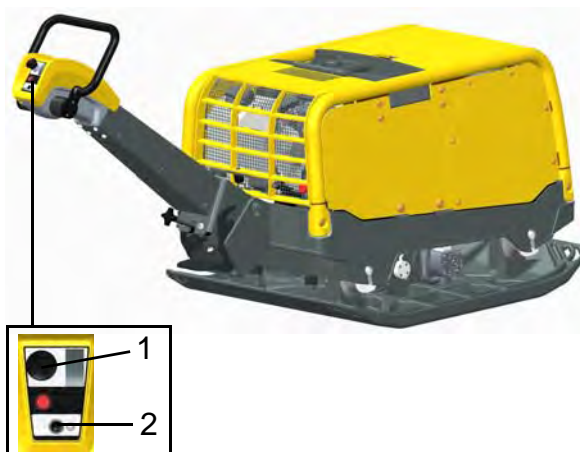
No LEDs of Compatec - compaction display are lit.

NOTE

Functionality of the machine protection - installation see chapter *machine protection - installation*.

8.5 Decommissioning

8.5.1 Decommissioning the machine (center pole)



Item	Designation	Item	Designation
1	Vibratory rammer	2	Start button

1. Press vibration switch – Vibration switches off and machine stops.

2. Press the start button – the engine switches off.

NOTE

Compacec - compaction display automatically switches itself off once the machine is turned off.

8.5.2 Decommissioning the machine (remote control)**Switch off remote control and engine**

Item	Designation	Item	Designation
1	Control lamp for operation	2	ON/OFF switch

1. Release both joysticks of the remote control.
2. Directly aim remote control towards a receiver unit.

NOTE

If the remote control is not directly aimed at the receiving unit, only the remote control will be switched off.

3. Press the ON/OFF switch of the remote control to turn off the engine and remote control – the operation control lamp switches off when the remote control is switched off.

NOTE

The remote control will automatically switch itself off after approx. 10 min.

8.5.3 Deactivate machine**WARNING**

Operation of the machine by unauthorized persons can lead to serious injury.

- Ensure that no unauthorized persons have access to the machine and remote control.
- Always keep the remote control in a safe place, e.g. within the locked machine.



Item	Designation	Item	Designation
1	Control lamps	3	ON/OFF switch (red)
2	Display		

1. Open rear protective hood.
2. Press the ON/OFF switch on the machine in order to deactivate it. If the operation and receiving unit control lamps turn off, the machine is deactivated.
3. Charge rechargeable battery of the remote control with the charger cable.
4. Close rear protective hood.

NOTE

If the machine is not deactivated, it will automatically deactivate after approx. 1 hour (factory default setting).

The turn-off time can be set in the configuration menu.

Decommissioning machine in an emergency situation (emergency stop)

NOTE

The emergency shutdown switch is a safety device and should only be used for the immediate shutdown of the machine in the case of an emergency situation.



Item	Designation
1	Emergency shutdown switch

1. Pressing the emergency shutdown switch – the machine will immediately stop moving and vibration and will automatically deactivate itself.
 - To unlock, turn the emergency shutdown switch to the left. The machine can then be re-activated.

8.5.4 Charge rechargeable battery (remote control)

NOTE

Charging the battery at temperatures below 0°C may not be possible.

Charging rechargeable battery with charging cable

NOTE

After connecting the charging cable to the remote control, the rechargeable battery is loaded. Overcharging the battery is not possible; the charging cable must not be disconnected from the remote control after charging. Note that after a longer downtime/ service life of the machine, the rechargeable battery charges more slowly. It may need to be recharged.

A charging time of 15 min is sufficient to operate the machine for about 1 hour.

Connecting the charging cable

Image in progress

Item	Designation	Item	Designation
1	Remote control	4	Bracket for charger cable
2	Bracket for remote control	5	Socket with screwed nose cap
3	Charge cable		

NOTE

Improper handling can result in damage to the charging cable.

- When using charging cable, make sure it will not get pinched when closing the protective hood.
-

1. Open rear protective hood.
2. Unscrew screwed nose cap from the connection socket of the remote control.
3. Remove the charging cable from the bracket.
4. Plug charger cable into the connector on the remote control and screw in.

NOTE

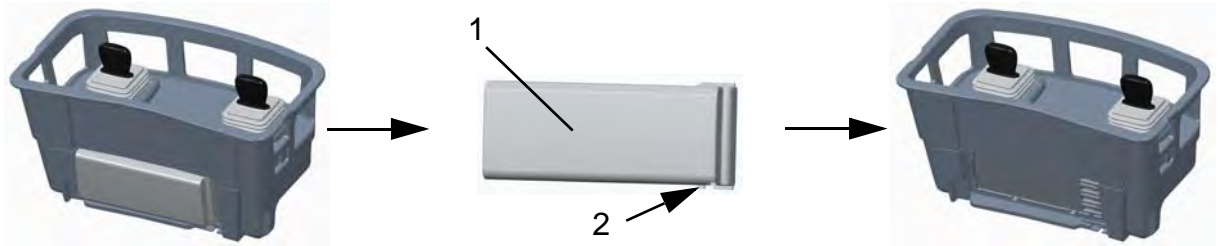
- The loading of the remote control lamp lights up green when the rechargeable battery is charging.
 - The loading of the remote control lamp goes out once the rechargeable battery is charged.
-

5. Place remote control in the bracket.
6. Close rear protective hood.

8.5.5 Rechargeable battery charger with external charging device (optional)

Only use external battery chargers from Wacker Neuson.

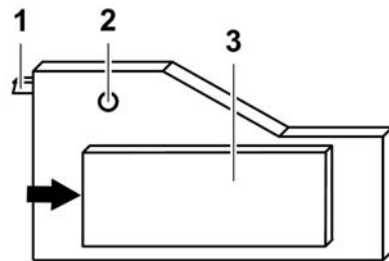
Remove rechargeable battery from the remote control



Item	Designation	Item	Designation
1	Rechargeable battery	2	Clip

1. Press the clip and simultaneously pull the rechargeable battery to the right.

Rechargeable battery charger with external charging device



Item	Designation	Item	Designation
1	Plug receptacle	3	Rechargeable battery
2	Status control lamp		

NOTE

Before the first charging, read the operator's manual for the battery charger.

1. Insert rechargeable battery into external battery charger.
2. Connect country-specific connector to the battery charger.
3. Insert the plug of the battery charger into the plug receptacle.

NOTE

- The status control lamp lights up orange when the rechargeable battery is charging.
- The status control lamp flashes orange when the rechargeable battery is completely charged.

4. Once the rechargeable battery is charged, remove the plug from the socket.
5. Remove rechargeable battery from the external battery charger.

Insert rechargeable battery into the remote control



1. Push rechargeable battery into the remote control until the clip snaps into place.

8.6 Setting the transmission channel (remote control)

The machine can only be operated if the transmission channel of the remote control corresponds to the transmission channel of the machine. The supplied remote control corresponds uniquely with each machine.

The IR address is displayed:

- Label on decoder in the electrical box.
- In the display after the machine activation.

In the following cases, an adjustment of the transmission channel may be required:

- If the remote control has been replaced by another.

Synchronize transmission channel between remote control and machine.

1. Switch on remote control unit.
2. Activate machine.
3. Remove the charging cable from the bracket.
4. Unscrew screwed nose cap from the connection socket of the remote control.
5. Plug charger cable into the connector on the remote control and screw in.
6. Directly aim remote control towards the receiver unit.
 - IR transfer, Address comparison is displayed. If the receiver units flash yellow and the display shows the operating hours, the synchronization of the transmission channel is complete.
7. Unscrew the charging cable from the remote control.
8. Place charging cable in the bracket.

NOTE

After synchronizing the remote control to a machine, only the synchronized machine can be controlled with the remote control.

NOTE

Improper handling can result in damage to the charging cable.

- When using charging cable, make sure it will not get pinched when closing the protective hood.
-

9. Screw screwed nose cap on the connection socket of the remote control.

8.7 Operating the diagnostic menu

Call up diagnostics menu

1. Activate machine.
2. Press ON/OFF switch on machine for at least 3 seconds.
3. Press the ON/OFF switch on the machine until the desired menu item appears on the display.
4. After finishing the configuration, the diagnosis menu is automatically exited.

NOTE

After a short wait, the machine returns to normal operating mode.

Call up error memory

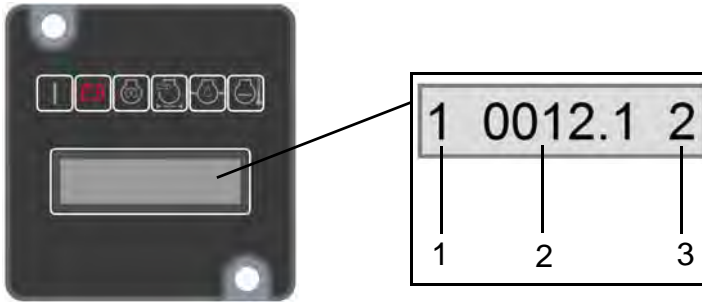
In the error memory, all errors (maximum 56) are stored along with an associated error code. In addition, the operating hour in which the error occurred is stored.

The system assigns a consecutive number for each error. The most recent error is stored under the highest number.

The following information alternately displayed:

- Consecutive number, hour of operation, error code.

- Error message.



Item	Designation	Item	Designation
1	Consecutive number	3	Error code
2	Operating hours		

1. In the diagnostics menu, select the error memory.
2. To select the stored error, repeatedly press the black setting button until the desired area appears.
3. To exit the error memory, press the red ON/OFF switch.

8.8 Operation of the configuration menu

The operation of the configuration menu is described in the manual for machine configuration.

9 Maintenance



WARNING

Improper handling can result in injury or serious material damage.

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



WARNING

Danger of poisoning by exhaust fumes.

Exhaust fumes contain poisonous carbon monoxide, which can lead to loss of consciousness or death.

- Maintenance jobs shall only be performed when the engine is switched off and the machine is decommissioned.



WARNING

Risk of injury from uncontrolled running machine and moving parts.

- Maintenance jobs shall only be performed when the engine is switched off and the machine is decommissioned.



WARNING

Fire and explosion hazard from fuel and fuel vapors

Fuel and fuel vapors can ignite and cause serious burns.

- Do not smoke.
- Do not refuel near open flames.
- Switch off engine and allow to cool before refueling.



WARNING

Warning of hot surfaces

The exhaust system and engine can become extremely hot, which can lead to severe skin burns.

- Always allow the engine to cool down completely after use.
- If there is not enough time to allow the machine to cool down (e.g. in an emergency situation.) – use heat-resistant protective gloves.



WARNING

Risk of injury from non-existent or non-functioning safety devices.

- Only operate the machine if the safety devices are properly fixed and working.
- Do not modify or remove safety devices.

9.1 Maintenance schedule – One-time maintenance job

The following maintenance jobs must only be performed after the first commissioning in accordance with this interval.

Maintenance jobs	After the first 50 hours
Replace engine oil and oil filter of the drive motor.	■

**9.2 Maintenance schedule – daily maintenance jobs**

Maintenance jobs	before operation	after operation
Inspect for completeness.	■	
Visual inspection for damage and leaks.	■	
Check engine oil level and top up if necessary.	■	
Check coolant level and top up if necessary.	■	
Check radiator for dirt and clean if necessary.	■	
Check air cleaner.	■	
Clean machine and remote control.		■

9.3 Maintenance schedule – regular intervals

Maintenance jobs	every 125 h	every 250 h	every 500 h
Make sure the screwed connections are firmly in place: ■ Crossbar ■ Central lifting point ■ Hydraulic oil tank ■ Rubber buffer of the base plate	■		
Check exciter oil level.	■		
Check hydraulic oil level.	■		
Check hydraulic hose lines.*	■		
Check hydraulic oil level on the center pole.	■		
Check rubber buffer.*	■		
Check function of the proximity recognition sensor (remote control).	■		
Check operation of the emergency shutdown switch.	■		
Lubricate latches of the protective hood	■		
Check central lifting point for damage.	■		
Replace engine oil and oil filter of the drive motor.		■	
Replace fuel filter.*		■	
Check coolant hoses and clamps.*		■	
Check anti-frost layer of radiator		■	
Check the hosepipes and clamps of the air intake system.*		■	
Replace air cleaner cartridge. If the control lamp lights up, even before reaching the interval.		■	
Replace exciter oil. *		■	
Check the V-belt of the fan – tighten *.		■	
Replace the hydraulic oil filter with air cleaner.*			■
Check tapped clearance and adjust if necessary. *			■
* Have this work done by the service of Wacker Neuson.			

Maintenance jobs	every 1000 h/every 2 years	every 4000 h/every 4 years	every 6 years
Replace coolant.*	■		
Replace the hydraulic oil.*	■		
Replace the tooth belt pulley of the engine.*		■	
Replace the hydraulic hose lines.*			■
* Have this work done by the service of Wacker Neuson.			

9.4 Maintenance jobs



CAUTION

Health hazard from fuel, lubricants and coolants

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



WARNING

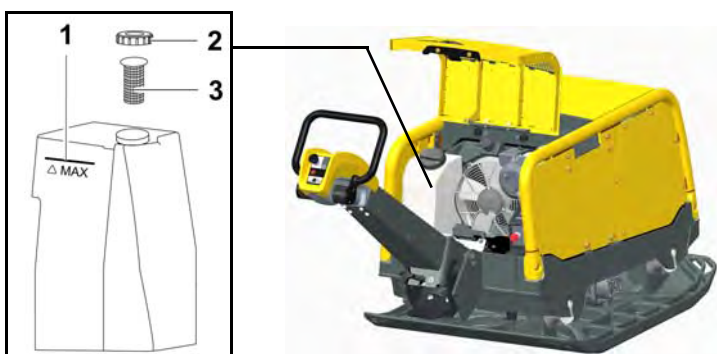
Fire and explosion hazard from fuel and fuel vapors

- Do not smoke.
- Do not refuel near open flames.
- Switch off engine and allow to cool before refueling. Only refuel in a well-ventilated vicinity.

Carry out preparations

1. Place the machine on a level surface.
2. Decommissioning the machine.
3. Deactivate machine.
4. Allow the engine to cool down.

9.4.1 Check the fuel level and top up if necessary



Item	Designation	Item	Designation
1	Limit mark	3	Fuel filter
2	Fuel cap		

1. Open rear protective hood.
2. Remove dirt accumulation in the area of the fuel cap.
3. Unscrew the fuel cap of the fuel tank and remove it.

4. If necessary, remove and clean the dirty fuel filter. Reinsert fuel filter before topping up.
5. Add fuel to the limit mark – for fuel type, see *Technical Data* chapter.
6. Replace fuel cap and tighten.
7. Close rear protective hood.

NOTE

Dispose of impurities of the fuel filter in accordance with the applicable provisions for environmental protection.

9.4.2 Clean machine and remote control**WARNING**

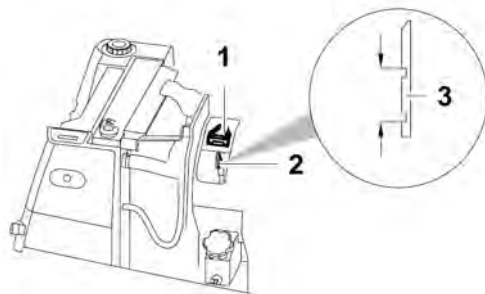
Fire and explosion hazard when using flammable cleaning agents or solvents.

- Do not clean machine, components, or operator's controls with gasoline or other solvents.

NOTE

Permeating water can damage the engine, electrical operator's controls, or components of the machine and remote control. Do not aim high-pressure washers directly at the air intake and electrical components. Clean remote control with only a damp cloth.

1. After cleaning, check switches, levers, cables, hoses, pipes and hardware for leaks, loose connections, abrasions and other damage.
2. Immediately rectify any damage.

9.4.3 Check engine oil level and top up engine oil

Item	Designation	Item	Designation
1	Cover of the oil filler opening	3	Label
2	Oil-level dipstick		

Check engine oil level

1. Open both protective hoods.
2. Remove dirt accumulation in the area of the oil-level dipstick.
3. Pull out oil-level dipstick.
4. Wipe oil-level dipstick with a dry, lint-free cloth.
5. Fully reinsert oil-level dipstick.
6. Pull out oil-level dipstick.
7. Check whether the oil is between the lower and upper mark of the oil-level dipstick.

NOTE

The amount of oil between the upper and lower mark is between 0.6 l (DPU 80) and 1.0 l (DPU 100).

Top up motor oil

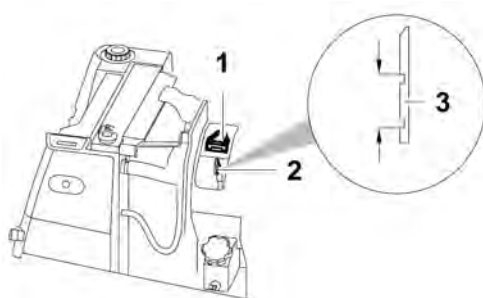
1. Remove dirt accumulation in the area of the oil filler opening.
2. Remove cover of the oil filler opening.
3. If necessary, fill with engine oil until the upper mark of the oil-level dipstick is reached – for oil specification, see *Technical Data* chapter.
4. Put the cover back on the oil filler opening and press firmly.
5. Wipe away any spilled oil.

NOTE

Dispose of oil in accordance with the applicable provisions for environmental protection.

9.4.4 Replace engine oil**NOTE**

Change oil in lukewarm engine so that the oil can drain completely.



Item	Designation	Item	Designation
1	Cover of the oil filler opening	4	Oil filter
2	Oil-level dipstick	5	Oil drain plug
3	Label		

Drain the engine oil and replace the oil filter

1. Open both protective hoods.
2. To protect the floor from leaking oil, cover the working surface with an impermeable foil.
3. Place a sufficiently large collecting container under the oil filter.
4. Unscrew and remove oil filter – when unscrewing, collect any leaking oil.
5. Place collecting container under the oil drain plug.
6. Loosen oil drain plug.
7. When the oil has completely drained, screw in the oil drain plug and tighten.
8. Screw in new oil filter and tighten by hand.

NOTE

Dispose of oil in accordance with the applicable provisions for environmental protection.

Fill motor oil

1. Remove dirt accumulation in the area of the oil filler opening.
2. Remove cover of the oil filler opening.
3. If necessary, fill with oil until the upper mark of the oil-level dipstick is reached – for oil specification and amount of oil, see *Technical Data* chapter.
4. Put the cover back on the oil filler opening and press firmly.
5. Wipe away any spilled oil.
6. Briefly allow the engine to run.
7. Switch off engine.
8. Check oil level and top up if necessary.

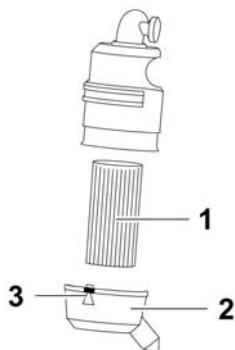
9.4.5 Check/clean/replace air cleaner


Item	Designation	Item	Designation
1	Air cleaner	2	Dust discharge valve

1. Open rear protective hood.

Check air cleaner

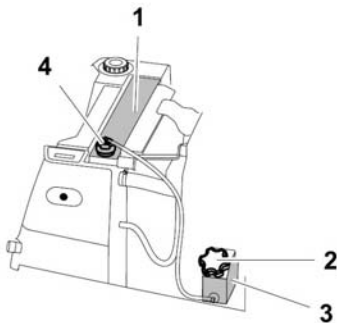
- Check whether the clamps of the air cleaner are tight and the air cleaner is undamaged.
- Check whether the dust discharge valve is dirty. If necessary, squeeze dust discharge valve to remove the dirt.

Replace air cleaner cartridge


Item	Designation	Item	Designation
1	Air cleaner cartridge	3	Clamps (2 pieces)
2	Lower housing part		

2. Loosen clamps and remove lower housing part.
3. Remove air cleaner cartridge.
4. Clean lower housing part.
5. Insert air cleaner cartridge.
6. Replace lower housing part and seal clamps.

9.4.6 Check the coolant level and top up coolant



Item	Designation	Item	Designation
1	Radiator	3	Coolant reservoir
2	Cover of the coolant reservoir	4	Radiator cap

Check the coolant level in the coolant reservoir

1. Open both protective hoods.
2. Remove dirt accumulation in the area of the coolant reservoir.
3. Check that the coolant level is between the upper and mark of the coolant reservoir.

Top up coolant in the coolant reservoir

1. Unscrew and remove cover of the coolant reservoir.
2. If necessary, top up coolant until the coolant level is between the lower and upper mark – for coolant specification, see *Technical Data* chapter.
3. Replace cover of the coolant reservoir and tighten.

Check the coolant level in the radiator



WARNING

- The cooling system is under pressure.
Hot coolant can spurt out and cause injury from scalding.
- Only open the cover of the radiator after the engine has cooled down.

1. Remove dirt accumulation in the area of the radiator cover.
2. Slowly unscrew the radiator cap and remove.
3. Check whether the coolant reaches the upper edge of the filler opening.

Top up coolant in the radiator

NOTE

If the machine is losing coolant, check the cooling system for leaks, and have the machine repaired by the service of the Wacker Neuson contact person.

1. If necessary, top up coolant to the upper edge of the filler opening – for coolant specification, see *Technical Data* chapter.
2. Replace radiator cap and tighten.

9.4.7 Check exciter oil level and top up exciter oil

Image in progress

Item	Designation	Item	Designation
1	Screw plug with seal ring of the oil filler opening	3	Level of exciter oil
2	Screw plug with seal ring of the oil drain opening		

Check exciter oil level

1. Open rear protective hood.
2. To protect the floor from leaking oil, cover the working surface with an impermeable foil.

NOTE

The machine has two exciters. Therefore, the level of exciter oil level must always be checked for both exciters.



WARNING

Hot exciter oil can leak out and cause injury from scalding.

- Do not open the screw plug of the exciter while the exciter oil is still hot.
 - Let the machine cool.
-

3. Remove dirt accumulation in the area of the screw plug.
4. Unscrew screw plug of the oil drain opening and remove together with the seal ring.
5. Check whether the level of exciter oil reaches the lower thread of the tapped bore.

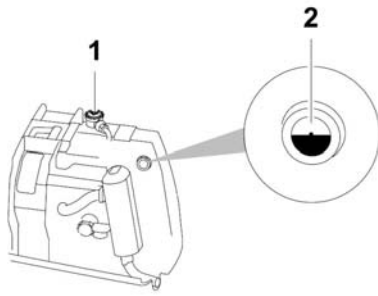
Top up exciter oil

1. Unscrew screw plug of the oil filler opening and remove together with the seal ring.
2. Top up exciter up oil with a clean funnel at the oil filler opening until the exciter oil reaches the lower thread of the oil drain opening – for oil specification, see *Technical Data* chapter.
3. Replace screw plug of the oil drain opening along with a new seal ring and tighten (torque setting of 100 Nm).
4. Replace screw plug of the oil filler opening along with a new seal ring and tighten (torque setting of 100 Nm).
5. Wipe away any spilled oil.

NOTE

Dispose of oil in accordance with the applicable provisions for environmental protection.

9.4.8 Check hydraulic oil level and top up hydraulic oil



Item	Designation	Item	Designation
1	Cover of the hydraulic oil tank	2	Oil level glass

Check hydraulic oil level

1. Open both protective hoods.
2. Check whether the hydraulic oil reaches the upper edge of the oil level glass.

Top up hydraulic oil

NOTE

If the machine is losing hydraulic oil, check the hydraulic line for leaks, and have the machine repaired by the service of the Wacker Neuson contact person.



WARNING

Hot hydraulic oil can cause injury by scalding.

- Do not open the cover of the hydraulic oil tank while the hydraulic oil is still hot.
 - Let the machine cool.
-

3. Remove dirt accumulation in the area of the hydraulic oil tank.
4. Unscrew and remove cover of the hydraulic oil tank.
5. Top up hydraulic oil until the hydraulic oil reaches the middle of the oil level glass – for oil specification, see *Technical Data* chapter.
6. Replace cover of the hydraulic tank and tighten (torque setting of 10 Nm) – make sure that the seal of the cover fits properly.

9.4.9 Screwed connection

For the vibratory plates, the screwed connections must be regularly checked for tightness.

10 Troubleshooting


DANGER

Unauthorized troubleshooting can be life threatening.

- In the case of any faults that do not appear in this manual, please contact the manufacturer. Do not try to rectify them yourself.




10.1 Troubleshooting table – machine

Fault	Possible causes	Remedial measure
Motor will not start.	Emergency shutdown switch is pressed.	Unlock emergency shutdown switch.
	Air cleaner is dirty.	Replace air cleaner.
	Machine is not activated.	Activate machine.
	Discharge starter battery.	Load starter battery or perform jump-start with donor starter.
	Low oil level.	Top up oil and actuate valve hood on the oil filter housing.
	Low fuel.	Top up fuel.
	Fuel filter is dirty.	Replace fuel filter.*
	Defective starter motor.	Have the machine repaired.*
	Remote control, decoder, or wiring harness is defective.	
Engine runs unevenly.	Fuel filter is dirty.	Replace fuel filter.
	Air cleaner is dirty.	Clean or replace air cleaner.
Vibration will not start.	Electrical system defective.	Have the machine repaired.*
Engine smokes and does not perform.	Air cleaner is dirty.	Replace air cleaner.
Another machine is controlled by the remote control.	Both machines are set to the same transmission channel.	Set one of the machines to a different transmission channel.
Machine cannot be deactivated.	Incorrect activation PIN entered.	Enter the correct activation PIN.
		Deactivate machine with emergency shutdown switch.
	Electrical system defective.	1. Deactivate machine with emergency shutdown switch. 2. Have the machine repaired.*
Diagnostics menu cannot be called up.	ON/OFF switch of the machine not pushed long and/or hard enough.	Continuously press the ON/OFF switch of machine for at least three seconds.
Comptec - compaction display (optional): If all LEDs permanently flash after initialization, the sensor has not been successfully tested.	Switch-on with the engine running.	Have the machine repaired.*
	Sensor is defective.	
* Have this work done by the service of Wacker Neuson.		







10.2 Troubleshooting table – receiving units

Fault	Possible causes	Remedial measure
Receiver units light up yellow. Machine does not respond to commands from the remote control.	Remote control is switched off.	Switch on remote control unit.
	Rechargeable battery of the remote control is discharged.	Load or replace rechargeable battery of the remote control.
	Remote control is defective.	Have remote control replaced or repaired.*
	Transmission channel of the remote control has been incorrectly set.	Set the transmission channel.
	Operator is outside of the receiving area.	Enter the receiving area of the machine.
	No clear line of sight between the remote control and receiver unit.	Establish a clear line of sight with the receiving unit.
	Receiving units or remote control is dirty.	Clean remote control and receiving units.
	Decoder, receiver unit, or electrical connection is defective.	Have the machine repaired.*
Receiver units flash yellow in rapid succession. Machine does not respond to commands from the remote control.	Operator is located in the proximity area.	Leave the proximity area of the machine.
Receiver units light up red.	Machine is in the warm-up phase.	Wait until the warm-up phase has completed.
	Diagnostic system has detected an error.	Check control lamps and fault indications on the display.
Receiver units flash red.	Machine is overloaded because the soil cannot be compacted any further.	<ul style="list-style-type: none"> ■ Avoid operation on non-compactable soil. ■ Reduce compaction performance through lower deflection of the joystick of the remote control. ■ Switching from fast to slow operation.
* Have this work done by the service of Wacker Neuson.		

10.3 Troubleshooting chart – remote control

Pictogram	LED under pictogram	Possible causes	Remedial measure
	Control lamp lights red and the diagnosis control lamp flashes green.	Joystick is defective.	Have joystick replaced. *
		Remote control is defective.	Have remote control replaced or repaired. *
	Control lamp flashes or lights up red operation.	Rechargeable battery of the remote control is discharged.	Load or replace rechargeable battery of the remote control. Operate machine with charging cable (for simultaneous loading of the rechargeable battery).
		After switching on the remote control, the operation control lamp does not flash.	Rechargeable battery of the remote control is discharged.
		Remote control is defective.	Have remote control replaced or repaired.*
	Charging control lamp flashes green.	The rechargeable battery is automatically being pre-warmed for charging. Charging the battery at temperatures below 0°C may not be possible.	<ul style="list-style-type: none"> ■ Wait until the charging control lamp is green and charging begins. ■ Rechargeable battery at temperatures above 0°C.
Remote control switches itself off – if no button on the remote control is pressed, the remote control will automatically switch off after 10 minutes.			
* Have this work done by the service of Wacker Neuson.			

10.4 Troubleshooting table – display

Pictogram	LED under pictogram	Possible causes	Remedial measure
	Control lamp for operation.		
	Charging control lamp lights up red when the engine is running.	Error in the electric system.	Have the machine repaired.*
	Warm up control lamp lights up yellow.	Machine is in the startup process.	Wait until the engine starts.
	Air cleaner control lamp lights up yellow.	Air cleaner cartridge is dirty.	Replace air cleaner cartridge.
	Oil-pressure control lamp lights up when the engine is running.	Engine oil level is too low.	Top up motor oil.
		Oil pressure switch or electrical connection is defective.	Have the machine repaired.*
	Coolant-temperature control lamp lights red.	Cooling fins of the cooler are dirty.	Blow cooling fins with compressed air from the inside to the outside from a safe distance.
		Coolant level is too low.	Top up coolant.
		Cooling system is leaking.	Have the machine repaired.*
* Have this work done by the service of Wacker Neuson.			

Fault indications on the display

The last error is briefly displayed after each activation of the machine. If the error is corrected, the error message should be acknowledged in the diagnostic menu because the error is no longer relevant for further operation.

To acknowledge the last error, the diagnostic menu must be called up and exited. After the machine is activated, the corrected error will no longer appear in the display.



Error code	Display	Possible causes	Remedial measure
1	Oil pressure shutdown	Engine oil level is too low.	1. Deactivate machine. 2. Top up motor oil.
		Oil pressure switch or electrical connection is defective.	Have the machine repaired.*
2	Excess temperature shutdown	Coolant level is too low.	Top up coolant.
		Cooling system is leaking.	Have the machine repaired.*
		Engine is overheated.	Allow the engine to cool down.
		Cooling fins of the cooler are dirty.	Blow cooling fins with compressed air from the inside to the outside from a safe distance.
		Temperature sensor is defective.	Have the machine repaired.*
		Fan wheel is broken.	
V-belt of the fan wheel is defective or not tight enough.			
3	Overvoltage shutdown	Charge controller or electrical connection is defective.	
4	Battery error	Alternator, charge controller, battery, or electrical connection is defective.	
5	Charge controller/generator shutdown.	Alternator, charge controller, or electrical connection is defective.	
6	Battery error	Alternator, charge controller, battery, or electrical connection is defective.	
7	Check air cleaner	Air cleaner cartridge is dirty.	Replace air cleaner cartridge.
		Electrical connection of the air cleaner sensor is defective.	Have the electrical connection of the air cleaner sensor checked.*
8	Air cleaner error	Air cleaner sensor is defective.	Have the machine repaired.*
		Electrical connection of the air cleaner sensor is defective.	Have the electrical connection of the air cleaner sensor checked.*
9	Oil pressure switch shutdown	Oil pressure switch or electrical connection is defective.	Have the machine repaired.*
10	Charge controller error	Charge controller or electrical connection is defective.	
11	Charge controller/generator error.	Alternator, charge controller, or electrical connection is defective.	
12	Overload shutdown	Machine is overloaded because the soil cannot be compacted any further.	Deactivate the machine and then re-activate it.
		To prevent overload, observe the following rules: <ul style="list-style-type: none"> ■ Avoid operation on non-compactable soil. ■ Reduce compaction performance through lower deflection of the joystick of the remote control. ■ Switching from fast to slow operation. 	

Error code	Display	Possible causes	Remedial measure
13	Machine overloaded	Machine is overloaded because the soil cannot be compacted any further.	Deactivate the machine and then re-activate it.
		To prevent overload, observe the following rules: <ul style="list-style-type: none"> ■ Avoid operation on non-compactable soil. ■ Reduce compaction performance through lower deflection of the joystick of the remote control. ■ Switching from fast to slow operation. 	
14	Overload sensor shutdown	Overload sensor or electrical connection is defective.	Have the machine repaired.*
15	Address comparison of IR transfer	No fault. Transmission channel is synchronized between remote control and machine.	
16	Incorrect transmitter unit for IR transfer	Incorrect model of remote control.	Use correct model of remote control.
17	Incorrect address for IR transfer	Transmission channel on the remote control has been incorrectly set.	Synchronize transmission channel between remote control and machine.
18	Allow the machine to cool down.	Coolant level is too low.	Top up coolant.
		Engine is overheated.	Allow the engine to cool down.
		Cooling fins of the cooler are dirty.	Blow cooling fins with compressed air from the inside to the outside from a safe distance.
		Cooling system is leaking.	Have the machine repaired.*
		Temperature sensor is defective.	
19	Excess temperature of the machine	Coolant level is too low.	Top up coolant.
		Engine is overheated.	Allow the engine to cool down.
		Cooling fins of the cooler are dirty.	Blow cooling fins with compressed air from the inside to the outside.
		Cooling system is leaking.	Have the machine repaired.*
		Temperature sensor is defective.	
20	Temperature sensor error	Temperature sensor or electrical connection is defective.	Have the machine repaired.*
		At very low external temperatures, the coolant does not reach the required temperature of 55°C during the warm-up phase. The machine will cancel the warm-up phase but is ready for operation.	
21	Automatic start error	Fuel tank is empty.	Top up fuel.
		<ul style="list-style-type: none"> ■ Defect in fuel system. ■ Engine, diesel valve, or electrical connection of the diesel valve is defective. 	Have the machine repaired.*

Error code	Display	Possible causes	Remedial measure
22	Charge controller/ start error.	Charge controller, starter motor, or electrical connection is defective.	Have the machine repaired.*
		Battery is discharged or defective.	Charge or replace battery.
23	Diesel valve error	Diesel valve is defective. Machine cannot be switched off.	Have the machine repaired.*
24	Gas adjuster error	Fuel tank is empty.	Top up fuel.
		<ul style="list-style-type: none"> ■ Gas adjuster or electrical connection is defective. ■ Cable of the gas adjuster is defective. ■ 80 A fuse has blown. 	Have the machine repaired.*
25	Hydraulic temperature sensor error	Hydraulic temperature sensor outside of the valid range.	
26	Oil pressure shutdown	Engine oil level is too low.	1. Deactivate machine. 2. Top up motor oil.
		Oil pressure switch or electrical connection is defective.	Have the machine repaired.*
27	Overload sensor error	Overload sensor or electrical connection is defective.	
28	IR receiver error	Incorrect current value.	
29	IR receiver error	No power/not connected.	
30	Error center pole unit	No signal/not connected.	
-	Decoder error	Electrical connection in the electrical box is defective.	1. Deactivate machine with emergency shutdown switch. 2. Have the machine repaired.*

* Have this work done by the service of Wacker Neuson.

10.5 Perform jump start with donor starter battery

If the starter battery of the machine is discharged and the engine does not start, a jump-start with a donor battery is possible.



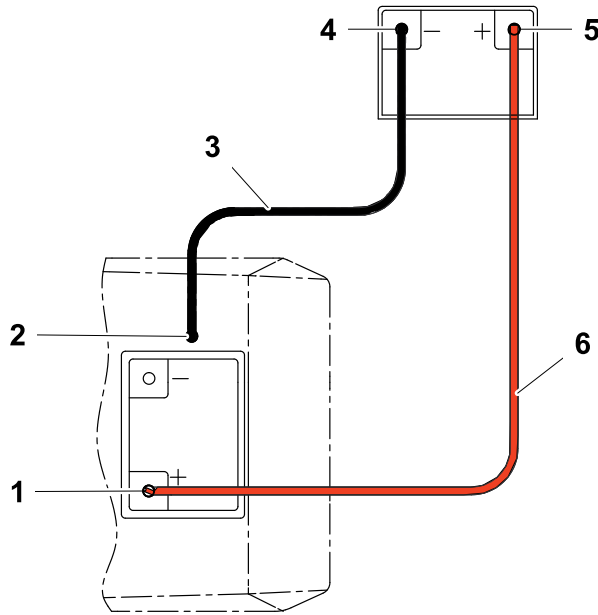
WARNING

Risk of explosion from explosive gas.
Risk of injury from splashing acid.

- Wear safety glasses and protective gloves.
- The donor battery and starter battery of the machine must have the same voltage (12 V)
- Avoid short circuit from reverse polarity (plus to plus, minus to minus).
- Use correct sequence when connecting the jumper cables.

NOTE

Use only insulated jumper cables with a conductor cross-section of at least 16 mm².



Item	Designation	Item	Designation
1	Positive terminal of the discharged starter battery	4	Negative terminal of the donor starter battery
2	Negative terminal at the grounding point	5	Positive terminal of the donor starter battery
3	Black jumper cables	6	Red jumper cables

1. Connect clamping tongs of the red jumper cable to the positive terminal of the discharged starter battery.
2. Connect clamping tongs of the red jumper cable to the positive terminal of the discharged donor battery.
3. Connect clamping tongs of the black jumper cable to the negative terminal of the discharged donor battery.
4. Reconnect second clamping tongs of the black jumper cable to a grounding point of the machine, e.g. at the engine block.

Perform jump start

5. Start engine.
If the engine does not start after more than two minutes, inform your Wacker Neuson contact person.
6. Run engine for a few minutes.

Disconnect the jumper cable

7. Disconnect clamping tongs of the black jumper cable from the grounding point of the machine.
8. Disconnect second clamping tongs of the black jumper cable from the donor starter battery.
9. Disconnect clamping tongs of the red jumper cable from the positive terminal of the discharged starter battery.
10. Disconnect clamping tongs of the red jumper cable from the positive terminal of the discharged donor battery.

11 Disposal

11.1 Disposal of batteries

For customers in EU countries

The unit contains one or more batteries or rechargeable batteries (hereinafter referred to as "the battery"). This battery is subject to the European Directive on (old) batteries (old) rechargeable batteries and the respective national laws. The battery directive outlines the framework for an EU-wide treatment of batteries.



The battery is marked with the following symbol of a crossed-out garbage bin. Below this symbol, there is also the name of the pollutants contained i.e. "Pb" for lead, "Cd" for cadmium, and "Hg" for mercury.

Batteries may not be disposed of with normal household waste. As end-user, you may only dispose of used batteries via the manufacturer or specially equipped collection facilities (statutory obligation to return); the delivery is free. Retailers and manufacturers are obliged to take back these batteries and properly recycle them or dispose of them as hazardous waste (legal obligation). Of course, after use, batteries purchased from us may also be returned free of charge. If you do not personally return the batteries to one of our offices, please ensure adequate postage. Please also note any information in the sales contract or in the terms and conditions of purchase.

Proper disposal of the battery prevents negative effects on individuals and the environment, follows the specific treatment of pollutants, and ensures the recycling of useful raw materials.

For customers in other countries

The unit contains one or more batteries or rechargeable batteries (hereinafter referred to as "the battery"). Proper disposal of the battery prevents negative effects on individuals and the environment, follows the specific treatment of pollutants, and ensures the recycling of useful raw materials. We recommend that you do not dispose of the battery in normal household waste but rather in a separate environmentally friendly collection facility. National laws may also have provisions for the separate disposal of batteries. Please ensure that you safely dispose of your battery safely in accordance with the applicable laws of your country.

12 Accessories



CAUTION

Spare parts and accessories that do not originate from Wacker Neuson can increase the risk of injury and damage to the machine.

- If other spare parts and accessories are used, Wacker Neuson shall not be held liable.
-

A wide range of accessories is offered for the machine.

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

Rechargeable battery

A replacement rechargeable battery is especially useful when the machine should be used for long periods without interruption.

External battery charger

The external battery charger charges the rechargeable battery when it cannot be charged via the charging cable of the machine.

The external battery charger has a country-specific plug to connection to various current networks.

**13 Technical data****13.1 DPU**

Designation	Unit	DPU 80Le	DPU100Le
Item number		5100018444	5100018445
Centrifugal force	kN	80	100
Vibrations	Hz	56.4	59.6
	RPM	3,380	3,580
Compaction performance	m ² /h		
Travel speed*	m/min		
Reverse travel*	m/min		
Gradeability	%		
Length (center pole in working position)	mm	2,223	2,223
Width	mm	670/770	870/970
Height	mm	833	833
Operating weight	kg		
Under-clearance	mm	833	833
Rated power	kW	11.0	16.0
Nominal speed	RPM	3,000	2,700
Coding possibilities		-	-
Maximum range of remote control	m	-	-
Maximum transmission time of remote control	h	-	-
Recommended battery type		-	-
Battery charging time	h	-	-
Working pressure of hydraulics	bar	165	193
Maximum allowable hydraulic pressure	bar	230	230
Coolant volume	l	1.9	1.9
Type of coolant		SAE J1034: water (1:1)	SAE J1034: water (1:1)
Exciter oil quantity	l	1.35	1.35
Type of exciter oil		SAE 75W90	SAE 75W90
Hydraulic oil volume	l	17.7	17.7
Type of hydraulic oil		MR 520	MR 520
Storage temperature range	°C	-20 to +50	-20 to +50
Operating temperature range	°C	-10 to +50	-10 to +50

Designation	Unit	DPU 80Le	DPU100Le
Sound pressure level At location of operation L_{pA}	dB(A)	97	97
Standard		EN 500-4	
Sound power level L_{wa} measured guaranteed	dB(A)	108 109	108 109
Standard		EN 500-4, 2000/14/EG	
Vibration total value a_{HV}	m/s^2	< 2.5	< 2.5
Standard		EN 500-4	
Uncertainty of measurement of the vibration total value a_{HV}	m/s^2	0.5	0.5
* Dependent on soil conditions.			

Designation	Unit	DPU 80rLe	DPU 100rLe
Item number		5100016604	
Centrifugal force	kN	80	100
Vibrations	Hz	56.4	59.6
	RPM	3,380	3,580
Compaction performance	m^2/h		
Travel speed*	m/min		
Reverse travel*	m/min		
Gradeability	%		
Length (center pole in working position)	mm	1,201	1,201
Width	mm	670/770	870/970
Height	mm	833	833
Operating weight	kg		
Under-clearance	mm	833	833
Rated power	kW	11.0	16.0
Nominal speed	RPM	3,000	2,700
Coding possibilities		-	-
Maximum range of remote control	m	20	20
Maximum transmission time of remote control	h	16	16
Recommended battery type		Ni-MH 7.2 V/2000 mAh	Ni-MH 7.2 V/2000 mAh
Battery charging time	h	2	2
Working pressure of hydraulics	bar	165	193



Designation	Unit	DPU 80rLe	DPU 100rLe
Maximum allowable hydraulic pressure	bar	230	230
Coolant volume	l	1.9	1.9
Type of coolant		SAE J1034: water (1:1)	SAE J1034: water (1:1)
Exciter oil quantity	l	1.35	1.35
Type of exciter oil		SAE 75W90	SAE 75W90
Hydraulic oil volume	l	17.7	17.7
Type of hydraulic oil		MR 520	MR 520
Storage temperature range	°C	-20 to +50	-20 to +50
Operating temperature range	°C	-10 to +50	-10 to +50
Sound pressure level At location of operation L_{pA} **	dB(A)	87	87
Standard		EN 500-4	
Sound power level L_{wa} measured guaranteed	dB(A)	108 109	108 109
Standard		EN 500-4, 2000/14/EG	
Vibration total value a_{hv}	m/s^2	0	0
Standard		EN 500-4	
Uncertainty of measurement of the vibration total value a_{hv}	m/s^2	-	-
* Dependent on soil conditions.			
** Measured at 5 m distance (remote controlled machine).			

13.2 Combustion engine

Designation	Unit	DPU 80	DPU 100
Manufacturer		Kohler	
Type of engine		KDW 702	KDW 1003
Combustion process		Four-cycle	Four-cycle
Cooling		Water cooling	Water cooling
Cylinders		2	2
Displacement	cm ³	686	1,028
Maximum slanting position	°	25.0	25.0
Fuel type		Diesel	Diesel
Fuel consumption	l/h	2.7	3.3
Tank capacity	l	7.2	7.2
Oil specification		SAE 10W40	SAE 10W40
Maximum oil filling	l	1.6	2.4
Max. performance	kW	11.5	18.5
RPM	RPM	3,600	3,600
Standard		DIN ISO 3046 IFN	
Rated power	kW	11.0	16.0
Nominal speed	RPM	3,000	2,700
Standard		DIN ISO 3046 IFN	
Rated power output	kW	9.6	12.0
Operating speed	RPM	3,000	2,700
Standard		DIN ISO 3046 IFN	
Upper engine speed without load	RPM	3,100	2,800
Air cleaner		Dry-type air cleaner	Dry-type air cleaner
Type of starter		Electric starter	Electric starter
Voltage of starter battery	V	12	12
Battery capacity (nominal value)	Ah	50	50

**13.3 US combustion engine**

Designation	Unit	DPU 80 US	DPU 100 US
Manufacturer		Kohler	
Type of engine		KDW 702 US	KDW 1003 US
Combustion process		Four-cycle	Four-cycle
Cooling		Water cooling	Water cooling
Cylinders		2	2
Displacement	cm ³	686	1,028
Maximum slanting position	°	25.0	25.0
Fuel type		Diesel	Diesel
Fuel consumption	l/h	2.7	3.3
Tank capacity	l	7.2	7.2
Oil specification		SAE 10W40	SAE 10W40
Maximum oil filling	l	1.6	2.4
Max. performance	kW	11.5	18.5
RPM	RPM	3,600	3,600
Standard		DIN ISO 3046 IFN	
Rated power	kW	9.6	13.3
Nominal speed	RPM	3,000	2,700
Standard		DIN ISO 3046 IFN	
Rated power output	kW	9.6	12.0
Operating speed	RPM	3,000	2,700
Standard		DIN ISO 3046 IFN	
Upper engine speed without load	RPM	3,100	2,800
Air cleaner		Dry-type air cleaner	Dry-type air cleaner
Type of starter		Electric starter	Electric starter
Voltage of starter battery	V	12	12
Battery capacity (nominal value)	Ah	50	50

14 Emission control systems information and warranty

The Emission Control Warranty and associated information is valid only for the U.S.A., its territories, and Canada.

Emission control systems warranty statement

See the *engine owner's manual* for the applicable exhaust and evaporative emission warranty statement.



EC Declaration of conformity

Manufacturer

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

Product

Product	DPU 80Le	DPU 100Le
Product type	Vibratory plate	
Function of product	Soil compaction	
Item number	5100018444	5100018445
Net installed power	11.0 kW	16.0 kW
Measured sound power level	108 dB(A)	108 dB(A)
Guaranteed sound power level	109 dB(A)	109 dB(A)

Conformity assessment procedure

In accordance with 2000/14/EG, Appendix VIII, 2005/88/EC.

Agency

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

Guidelines and standards

We hereby declare that this product complies with the requirements of the following guideline and standards:
2006/42/EC, 2000/14/EC, 2005/88/EC

Person responsible for technical documents

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

Munich, 01.06.2015

Helmut Bauer
Managing Director



EC Declaration of conformity

Manufacturer

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

Product

Product	DPU 80rLe	DPU 100rLe
Product type	Vibratory plate	
Function of product	Soil compaction	
Item number	5100016604	
Net installed power	11.0 kW	16.0 kW
Measured sound power level	108 dB(A)	108 dB(A)
Guaranteed sound power level	109 dB(A)	109 dB(A)

Conformity assessment procedure

In accordance with 2000/14/EG, Appendix VIII, 2005/88/EC.

Agency

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

Guidelines and standards

We hereby declare that this product complies with the requirements of the following guideline and standards:
2006/42/EC, 2000/14/EC, 2005/88/EC, 2004/108/EC, EN13309:2000

Person responsible for technical documents

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

Munich, 01.06.2015

Helmut Bauer
Managing Director

