

0217755en	004
04.2011	

Vibrating plate

DPU 25..

DPU 30..

DPU 37..



Operator's manual



Manufacturer

Wacker Neuson SE

Preußenstraße 41

80809 München

www.wackerneuson.com

Tel.: +49-(0)89-354 02-0

Fax: +49-(0)89-354 02-390

Translation of the original operator's manual in German



**WACKER
NEUSON**

1	Foreword	5
2	Introduction	6
	2.1 Means of representation for this operator's manual	6
	2.2 Wacker Neuson representative	7
	2.3 Described machine types	7
	2.4 Identification of the machine	8
3	Safety	9
	3.1 Principle	9
	3.2 Qualification of the operating personnel	12
	3.3 Protective gear	13
	3.4 Transport	13
	3.5 Operating safety	14
	3.6 Safety during the operation of vibratory plates	16
	3.7 Safety during the operation of combustion engines	18
	3.8 Safety during the operation of hydraulic machines	20
	3.9 Maintenance	20
	3.10 Safety and information labels	22
4	Scope of delivery	24
5	Structure and function	25
	5.1 Application	25
	5.2 Functional description	25
6	Components and operator's controls	27
7	Transport	29
	7.1 Transporting the machine	30
8	Use and operation	31
	8.1 Prior to starting the machine	31
	8.1.1 Checks before startup	31
	8.2 Starting up	32
	8.2.1 Starting the engine with recoil starter	32
	8.2.2 Starting the engine with electronic starter	33
	8.3 Operating the machine	34
	8.3.1 Operating in the forward and reverse direction	34
	8.3.2 Compacting on a slope	34
	8.4 Decommissioning	35

9	Maintenance	36
9.1	Maintenance schedule	37
9.1.1	One-time maintenance after initial operation	37
9.1.2	Daily maintenance work	37
9.1.3	Regular maintenance	38
9.2	Maintenance work	39
9.2.1	Cleaning machine	39
9.2.2	Check the air cleaner maintenance indicator	39
9.2.3	Cleaning the air cleaner	40
9.2.4	Checking the water separator	41
9.2.5	Checking engine oil level	42
9.2.6	Changing the engine oil	43
9.2.7	Checking / filling hydraulic oil level	44
9.2.8	Checking exciter oil level	45
9.2.9	Re-tighten exciter V-belt	47
10	Malfunctions	49
10.1	Boost	50
11	Disposal	52
11.1	Disposal of batteries	52
12	Accessories	53
13	Technical data	54
	EC Declaration of Conformity	61

1 Foreword

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

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

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

Defective machine parts must be replaced immediately!

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

All rights reserved, especially reproduction and distribution rights.

Copyright 2011 Wacker Neuson SE

No part of this publication may be reproduced in any form or by any means, electronic or mechanical, including photocopying, without the expressed written permission of Wacker Neuson.

Any type of reproduction, distribution or storage on data media of any type and form not authorized by Wacker Neuson represents an infringement of copyright and will be prosecuted.

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

2 Introduction

2.1 Means of representation for this operator's manual

Warning symbols

This operator's manual contains safety information of the categories: DANGER, WARNING, CAUTION, NOTICE.

They should be followed to prevent danger to life and limb of the operator or damage to equipment and exclude improper service.



DANGER

This warning notice indicates immediate hazards that result in serious injury or even death.

- ▶ Danger can be avoided by the following the actions mentioned.
-



WARNING

This warning notice indicates possible hazards that can result in serious injury or even death.

- ▶ Danger can be avoided by the following the actions mentioned.
-



CAUTION

This warning notice indicates possible hazards that can result in minor injury.

- ▶ Danger can be avoided by the following the actions mentioned.
-

NOTICE

This warning notice indicates possible hazards that can result in material damage.

- ▶ Danger can be avoided by the following the actions mentioned.
-

Notes

Note: Complementary information will be displayed here.

Instructions

- ▶ This symbol indicates there is something for you to do.
- 1. Numbered instructions indicate that you have to carry out something in a defined sequence.
- This symbol is used for lists.

2.2 Wacker Neuson representative

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

You can find the addresses in the Internet at www.wackerneuson.com.

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

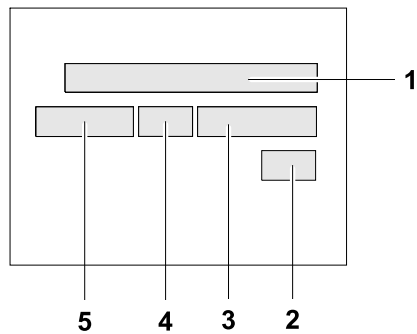
2.3 Described machine types

This operator's manual is valid for different machine types from a product range. Therefore some figures can differ from the actual appearance of your machine. It is also possible that the descriptions include components which are not a part of your machine.

Details for the described machine types can be found in the chapter *Technical data*.

2.4 Identification of the machine

Nameplate data



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

- ▶ Enter the information of your machine into the following table:

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

3 Safety

3.1 Principle

State of the art

This machine has been constructed with state-of-the-art technology according to the recognized rules of safety. Nevertheless, when used improperly, dangers to the life and limb of the operator or to third persons or damage to the machine or other materials cannot be excluded.

Proper use

The machine must only be used for the following purposes:

- Compaction of soils.
- Compaction of asphalt.
- Shaking in of paving stones.

The machine may not be used for the following purposes:

- Compaction of intensely cohesive soils.
- Compaction of frozen soils.
- Compaction of hard, non-compactable soils.
- Compaction of soils that are not capable of bearing a load.

Its proper use also includes the observance of all instructions contained in this operator's manual as well as complying with the required service and maintenance instructions.

Any other use is regarded as improper. Any damage resulting from improper use will void the warranty and the liability on behalf of the manufacturer. The operator assumes full responsibility.

Structural modifications

Never attempt to modify the machine without the written permission of the manufacturer. To do so will endanger your safety and the safety of other people! In addition, this will void the warranty and the liability on behalf of the manufacturer.

Especially the following are cases of structural modifications:

- Opening the machine and the permanent removal of components from Wacker Neuson.
- Installing new components which are not from Wacker Neuson and not equivalent to the original parts in design and quality.
- Installation of accessories which are not from Wacker Neuson.

It is no problem to install spare parts from Wacker Neuson.

It is no problem to install accessories that are available in the Wacker Neuson product range of your machine. Please refer to the installation regulations in this operator's manual.

Requirements for operation

The ability to operate the machine safely requires:

- Proper transport, storage and setup.
- Careful operation.
- Careful service and maintenance.

Operation

Operate the machine only as intended and only when in proper working condition.

Operate the machine in a safety-conscious manner with all safety devices attached and enabled. Do not modify or disable any safety devices.

Before starting operation, check that all control and safety devices are functioning properly.

Never operate the machine in a potentially explosive environment.

Supervision

Never leave the machine running unattended!

Maintenance

Regular maintenance work is required in order for the machine to operate properly and reliably over time. Failure to perform adequate maintenance reduces the safety of the machine.

- Strictly observe the prescribed maintenance intervals.
- Do not use the machine if it requires maintenance or repairs.

Malfunctions

If you detect a malfunction, you must shut down and secure the machine immediately.

Eliminate the malfunctions that impair safety immediately!

Have damaged or defective components replaced immediately!

For further information, refer to chapter *Troubleshooting*.

Spare parts, accessories

Use only spare parts from Wacker Neuson or such that are equivalent to the original parts in design and quality.

Only use accessories from Wacker Neuson.

Non-compliance will exempt the manufacturer from all liability.

Exclusion of liability

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

- Structural modifications.
- Improper use.
- Failure to comply with this operator's manual.
- Improper handling.
- Using of spare parts which are not from Wacker Neuson and not equivalent to the original parts in design and quality.
- Using of accessories which are not from Wacker Neuson.

Operator's manual

Always keep the operator's manual near the machine or near the worksite for quick reference.

If you have misplaced the operator's manual or require an additional copy, contact your Wacker Neuson representative or download the operator's manual from the Internet (www.wackerneuson.com).

Always hand over this operator's manual to other operators or to the future owner of the machine.

Country-specific regulations

Observe the country-specific regulations, standards and guidelines in reference to accident prevention and environmental safety, for example those pertaining to hazardous materials and wearing protective gear.

Complement the operator's manual with additional instructions taking into account the operational, regulatory, national or generally applicable safety guidelines.

Operator's controls

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

Operating elements such as ON/OFF switch, gas handles etc. may not be locked, manipulated or changed without authorization.

Cleaning

Always keep the machine clean and be sure to clean it each time you have finished using it.

Do not use gasoline or solvents. Danger of explosion!

Do not use high pressure washers. Permeating water can damage the machine. When electrical equipment is present, this can pose a serious injury risk from electric shocks.

Checking for signs of damage

Inspect the machine when it is switched off for any signs of damage at least once per work shift.

Do not operate the machine if there is visible damage or defects.

Have any damage or defects eliminated immediately.

3.2 Qualification of the operating personnel

Operator qualifications

Only trained personnel are permitted to start and operate the machine. The following rules also apply:

- You are at least 18 years of age.
- You are physically and mentally fit.
- You have received instruction on how to independently operate the machine.
- You have received instruction in the proper use of the machine.
- You are familiar with required safety devices.
- You are authorized to start machines and systems in accordance with the standards governing safety.
- Your company or the operator has assigned you to work independently with this machine.

Incorrect operation

Incorrect operation or misuse by untrained personnel can endanger the health and safety of the operator or third persons and also cause machine and material damage.

Operating company responsibilities

The operating company must make the operator's manual available to the operator and ensure that the operator has read and understood it.

Work recommendations

Please observe the recommendations below:

- Work only if you are in a good physical condition.
- Work attentively, particularly as you finish.
- Do not operate the machine when you are tired.
- Carry out all work calmly, circumspectly and carefully.
- Never operate the machine under the influence of alcohol, drugs or medication. This can impair your vision, reactions and your judgment.
- Work in a manner that does not endanger others.
- Ensure that no persons or animals are within the danger zone.

3.3 Protective gear

Work clothing

Clothing should be appropriate, i.e. should be close-fitting but not restrict your movement.

When on construction sites, do not wear long hair loosely, loose clothing or jewelry including rings. These objects can easily get caught or be drawn in by moving machine parts.

Only wear clothing made of material that is not easily flammable.

Personal protective gear

Wear personal protective gear to avoid injuries or health hazards:

- Non-skid, hard-toed shoes.
- Work gloves made of durable material.
- Overalls made of durable material.
- Hard hat.
- Ear protection.

Ear protection

This machine generates noise that exceeds the country-specific permissible noise levels (individual rating level). It may therefore be necessary to wear ear protection. You can find the exact value in the chapter *Technical Data*.

When wearing ear protection while working, you must pay attention and exercise caution because your hearing is limited, e.g. in case someone screams or a signal tone sounds.

Wacker Neuson recommends that you always wear ear protection.

3.4 Transport

Switching off the machine

Before you transport the machine, it must be switched off, and the engine must be given sufficient time to cool down.

Center pole in transport position

Before commencing transport, move the center pole to the transport position. Let the center pole latch into its lock.

Observing hazardous materials regulations

Observe the national safety guidelines and the hazardous materials regulations that apply to the respective means of transportation.

Lifting

When lifting the machine, observe the following instructions:

- Designate a skilled person to guide you for the lifting procedure.
- You must be able to see or hear this person.
- Use only suitable and certified hoisting gear, lifting tackle and load-bearing equipment with sufficient lifting capacities.
- Only use the attachment points described in the operator's manual.
- Attach the machine securely to the hoisting gear.
- Ensure that no one is nearby or under the machine.
- Do not climb onto the machine.

Loading the machine

Loading ramps must be able to bear the load and be in a stable position.

Make sure that no one can be endangered if the machine slips away or tips over or if machine parts suddenly move upward or downward.

Put the operating controls and moving parts in their transport position.

Secure the machine with load-securing straps so that it cannot tip over, fall down or slide away. Only use the attachment points described in the operator's manual.

Transport vehicle

Use only suitable transport vehicles with sufficient load-carrying capacity and suitable tie-down lugs.

Transporting the machine

Secure the machine on the transport device against tilting, falling or slipping.

Only use the lashing points listed in the operating instructions.

Also observe the country-specific regulations, standards and guidelines.

Restarting

Machines, machine parts, accessories or tools that were detached for transport purposes must be re-mounted and fastened before restarting.

Only operate in accordance with the operating instructions.

3.5 Operating safety

Explosible environment

Never operate the machine in a potentially explosive environment.

Work environment

Familiarize yourself with your work environment before you start work. This includes e.g. the following items:

- Obstacles in the work and traffic area.
- Load-bearing capacity of the ground.
- The measures needed to cordon off the construction site from public traffic in particular.
- The measures needed to secure walls and ceilings.
- Options available in the event of an accident.

Safety in the work area

When working with the machine especially pay attention to the following points:

- Electric lines or pipes in work area.
- Gas lines or water lines in the work area.

Starting the machine

Observe the safety information and warning notices located on the machine and in the operator's manual.

Never attempt to start a machine that requires maintenance or repairs.

Start the machine as directed in the operator's manual.

Vertical stability

Always ensure that the machine is vertically stable and cannot tip over, roll or slide away.

Proper operator position

Do not leave the proper operator position while operating the machine.

The proper operator position is behind the center pole of the machine.

Leaving the danger area

Injury may be caused by moving machines or flying materials.

Ensure that other persons observe a minimum safety distance of 2 m from the machine.

Caution with movable parts

Keep your hands, feet and loose clothing away from moving or rotating machine parts. Parts of your body being pulled in or crushed can cause serious injuries.

Switching off the machine

Switch off the engine in the following situations:

- Before breaks.
- If you are not using the machine.

Store the machine in such a way that it cannot tilt, fall or slip.

Storage location

After operation, allow the machine to cool and then store it in a sealed-off, clean and dry location protected against frost and inaccessible to children.

Not using starter sprays

Highly flammable starter sprays pose a fire hazard.

Do not use any starter sprays.

Starter sprays are highly flammable and can cause backfiring and engine damage.

Vibrations

When manually operated machines are intensively used, long-term damage caused by vibrations cannot be precluded.

Observe the relevant legal instructions and guidelines to minimize vibration stress.

Details on vibration stress associated with the machine can be found in the chapter *Technical Data*.

3.6 Safety during the operation of vibratory plates

Integrated driving mechanism

Machines with integrated driving mechanism must not be set down or stored on the transport device. The driving mechanism is only intended for transport.

Belt guard

Never operate the machine without a belt guard!

Exposed belts and belt pulleys are dangerous and can cause serious injuries if they pull in any part of your body or if parts are ejected.

Danger of falling over

Operate the machine so that it cannot tip over or fall down from bordered areas, edges and steps.

Load-carrying capacity of the ground

Keep in mind that the load-carrying capacity of the earth to be compressed or bed can be greatly reduced by the effects of vibration, for example near slopes.

Avoiding crushing

When operating the machine, pay particular attention to avoid being squeezed between the machine and an obstacle. Always look in the direction of travel!

Compacting on slopes

The following points must be observed if you plan to compact inclined surfaces (slopes, escarpments):

- Always stand above the machine on a slope.
- Start at the bottom of a slope (slopes that can be easily managed in an upward direction can be safely traveled in a downward direction also).
- Never stand in a position where the machine could possibly fall. A slipping or tipping machine can cause serious injuries.

Not exceeding the maximum tilt position

- Do not exceed the maximum tilt position (see chapter *Technical Data*).
- Only operate the machine at maximum tilt for short periods of time.

If you exceed the maximum tilt, the engine lubrication system will fail and thus inevitably damage important engine parts.

Check the effects of vibration

Compacting work in the vicinity of buildings can lead to structural damage. For this reason you must always check the possible effects of vibrations on surrounding buildings in the run-up to work.

You must take the following points into special consideration when evaluating the effects of vibration:

- Vibration behavior, sensitivity and resonance frequency of surrounding buildings.
- Distance of the buildings from the vibrationsite (= worksite).
- Condition of the soil.

You may need to carry out measurements to determine the vibration speed.

You must also comply with the relevant guidelines and regulations, particularly DIN 4150-3.

The foundation must also have sufficient load-bearing capacity to withstand the compaction energy. In case of doubt involve a soil mechanics specialist in the evaluation.

Wacker Neuson is not liable for any structural damage.

3.7 Safety during the operation of combustion engines

Checking for signs of damage

Check the engine while switched off for leaks and cracks in the fuel line, tank and fuel cap at least once per work shift.

Do not operate the machine if there is visible damage or defects.

Have any damage or defects eliminated immediately.

Dangers during operation

Combustion engines can be dangerous, particularly during operation and when refueling.

Read and follow all safety instructions. Otherwise there is a risk of personal injury and/or damage to property!

Do not start the engine near spilt fuel or if you smell fuel – this may cause an explosion!

- Remove the machine from such areas.
- Remove the spilt fuel immediately!

Not changing the engine speed

Do not change the preset engine speed, as this may cause engine damage.

Preventing fires

Open flames and smoking are strictly prohibited in the immediate vicinity of the machine.

Make sure that waste, such as paper, dry leaves or grass do not accumulate around the exhaust muffler. The waste materials may ignite.

Safety precautions when refueling

Please observe the following safety-relevant instructions when refueling:

- Do not refuel near open flames.
- Do not smoke.
- Turn off the engine before refueling and allow it to cool down.
- Refuel in a well-ventilated environment.
- Wear fuel-proof protective gloves and, if there is the possibility of spraying, protective goggles and clothing.
- Do not inhale fuel vapors.
- Avoid skin and eye contact with fuel.
- For refueling, use clean tools such as a hopper.
- Do not spill fuel, especially onto hot parts.
- Remove any spilt fuel immediately.
- Use the correct fuel grade.
- Do not mix fuel with other liquids.
- Fill the tank only up to the maximum marking. If there is no Maximum marking, do not fill up the tank completely.
- Lock the fuel cap securely after refueling.

Operation in closed rooms

In closed or partially closed rooms such as tunnels, drifts or deep trenches, ensure sufficient ventilation and extraction by, for example, providing a powerful exhaust air fan.

Danger of poisoning! Do not inhale exhaust fumes. They contain toxic carbon monoxide that can lead to unconsciousness or death.

Caution with hot parts

Do not touch any hot parts such as the engine block or exhaust muffler during operation or directly afterwards. These parts can become very hot and cause severe burns.

Shutting off the fuel tap

When the machine stops, shut off the fuel tap.

Cleaning the engine

Clean the engine when it is cool to remove any dirt.

Do not use gasoline or solvents. Danger of explosion!

3.8 Safety during the operation of hydraulic machines

Hydraulic oil

Hydraulic oil is harmful to health.

Wear safety glasses and safety gloves when handling hydraulic oil.

Avoid direct skin contact with hydraulic oil. Remove hydraulic oil from the skin immediately with soap and water.

Make sure that no hydraulic oil comes gets in the eyes or on the body. See a physician immediately if hydraulic oil gets into the eyes or is swallowed.

Do not eat and drink while handling hydraulic oil.

Make sure to have extreme cleanliness. Contamination of the hydraulic oil with dirt or water can cause premature wear or failure of the machine.

Dispose of left over and spilled hydraulic oil according to the applicable regulations for environmental protection.

3.9 Maintenance

Maintenance work

Service and maintenance work must only be carried out to the extent described in these operating instructions. All other procedures must be performed by your Wacker Neuson representative.

For further information, refer to chapter *Maintenance*.

Switching off the engine

Before carrying out care or maintenance work, switch off the engine and allow it to cool down.

For gasoline powered engines, you must pull off the spark plug cap.

Disconnecting the battery

For machines with electric starter, you must disconnect the battery before working on the electronic parts.

Using only a Wacker Neuson battery

Use only Wacker Neuson batteries to replace defective batteries, see chapter *Technical Data*.

Only the Wacker Neuson battery is vibration resistant and thus suitable for the high vibratory stresses.

Working on the battery

Always take the following safety measures when working with the battery:

- No fire, sparks, or smoking while working with batteries.
- Batteries contain corrosive acid. Use acid-proof protective gloves and protective goggles when working with batteries.
- Avoid short circuits due to improper connection or bypassing with tools.
- Disconnect the negative terminal first when disconnecting the battery.
- Connect the positive terminal first when connecting the battery.
- Re-fasten terminal covers after connecting the battery.

Assembling safety devices

If it was necessary to dismantle safety devices, they must be reassembled and checked immediately after completing maintenance work.

Always tighten loosened screw connections, complying with prescribed starting torque.

Handling operating fluids safely

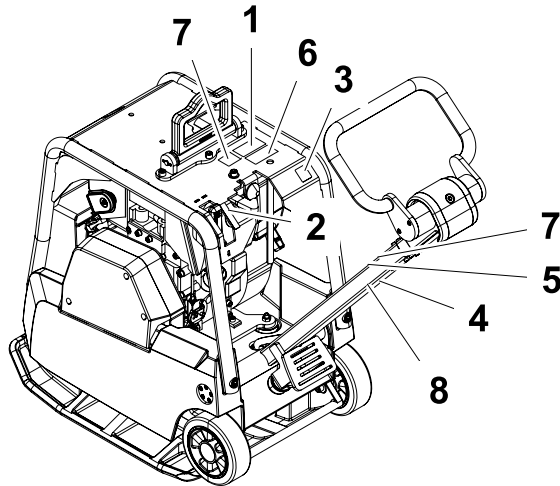
Observe the following points when handling operating fluids, e.g. fuels, oils, greases, coolants etc.:




- Always wear personal safety clothing.
- Avoid skin and eye contact with operating fluids.
- Do not inhale or swallow operating fluids.
- In particular, avoid contact with hot operating fluids. Burn and scalding hazard.
- Dispose of replaced or spilled operating fluids according to the applicable regulations for environmental protection.
- If operating fluids escape from the machine, cease operation of the machine and have it repaired immediately by your Wacker Neuson representative.






3.10 Safety and information labels

Your machine has adhesive labels containing the most important instructions and safety information.

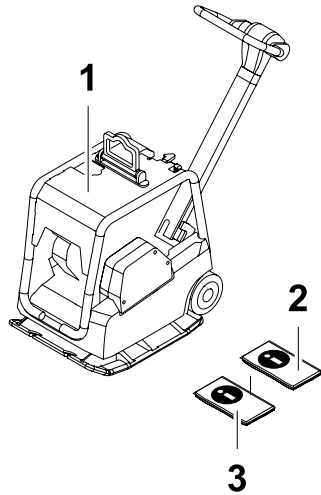
- Make sure that all the labels are kept legible.
- Replace any missing or illegible labels.
The item numbers for the labels are in the parts book.



Pos.	Label	Description
1		If the machine falls, it can cause severe crushing injuries. <ul style="list-style-type: none"> ▶ Only lift the machine with certified hoist and lifting tackle (safety load hook). ▶ Do not lift the machine with the excavator shovel by the central suspension.
2		Start-Stop.
3		Guaranteed sound power level.

Pos.	Label	Description
4		<p>Improper handling can cause serious damage to the engine.</p> <ul style="list-style-type: none"> ▶ When using the integrated wheels, always turn off the engine. <p>If the engine is running, engine lubrication cannot be ensured in the transport position. There is also a danger that oil may leak out of the engine crankcase breather.</p>
5		<p>If the machine falls, it can cause severe crushing injuries.</p> <ul style="list-style-type: none"> ▶ Do not lift the machine by the guide handle or the center pole.
6		<p>Wear personal protective gear to avoid injuries or health hazards:</p> <ul style="list-style-type: none"> ■ Ear protection. <p>Read the operator's manual before start-up.</p>
7	<p>US machines</p> 	Warning.
8	<p>US machines</p> 	Caution.

4 Scope of delivery



Item	Designation	Item	Designation
1	Machine	3	Parts book
2	Operator's manual		

The machine is delivered fully assembled and after unpacking it is ready for operation.

The scope of delivery includes:

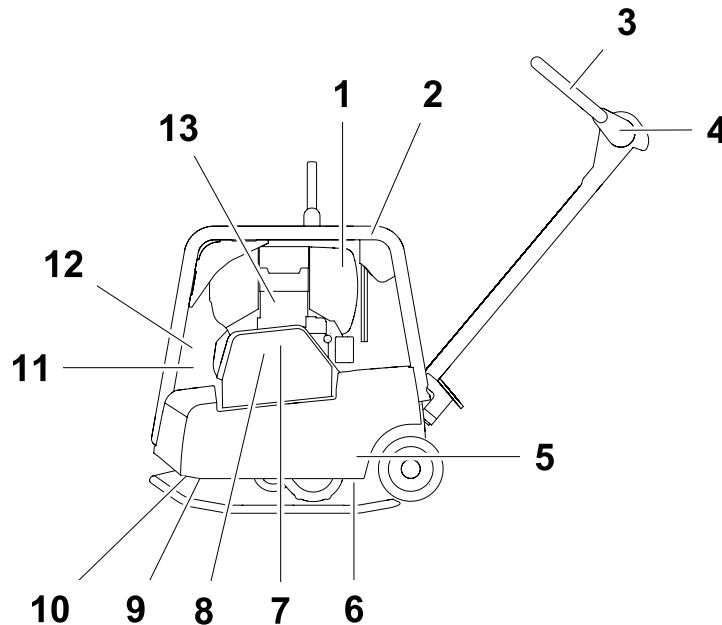
- Machine.
- Operator's manual.
- Parts book.

5 Structure and function

5.1 Application

Use the machine only as intended, see chapter Safety, Proper use.

5.2 Functional description



Item	Designation	Item	Designation
1	Air cleaner	8	Exciter V-belt
2	Throttle lever	9	Exciter
3	Control handle	10	Base plate
4	Guide handle head	11	Battery
5	Upper mass	12	Starter
6	Vibration dampers	13	Drive motor
7	Centrifugal clutch		

The vibration required for compaction is generated by the exciter (9) that is permanently attached to the base plate (10). The exciter (8) is designed as a central vibrator with directional vibrations.

This principle allows you to change the direction of vibration by simply turning the eccentric weights (9). This makes a gradual transition possible between the vibration states: moving forward, moving in reverse and in a stationary position.

This procedure is hydraulically controlled with the control handle (3) on the guide handle head (4).

The drive motor (13) attached to the upper mass (5) powers the exciter (9). The torque is transferred non-positively by the centrifugal clutch (7) and the exciter V-belt (8).

When the motor speed is low, the centrifugal clutch (7) interrupts the power flow to the exciter (9) which allows the drive motor (13) to idle properly. The speed of the drive motor (13) can be varied at the throttle lever (2).

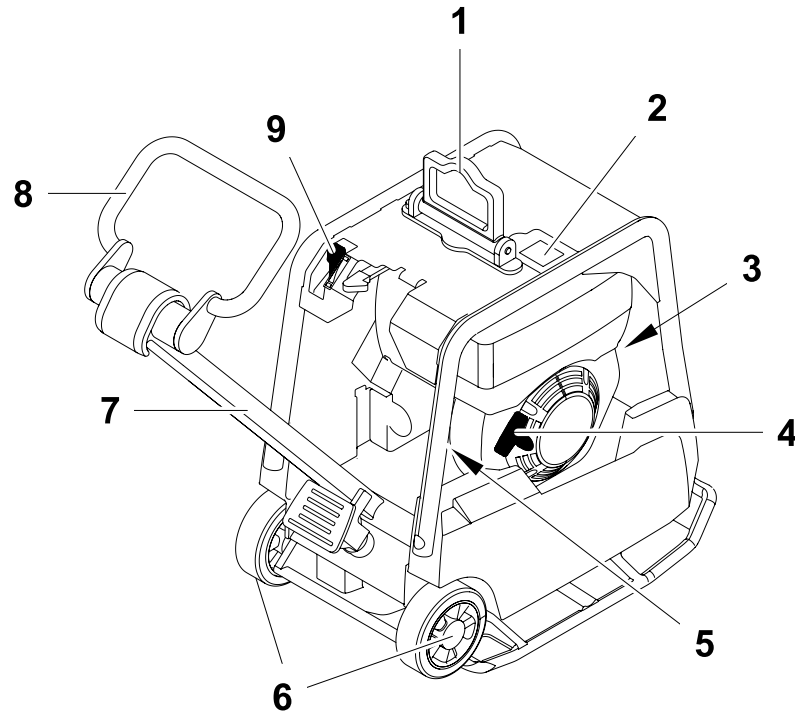
The upper mass (5) and the base plate (10) are connected to each other via 4 vibration-damping vibration dampers (6). This damping prevents very high frequencies from being transferred to the upper mass (5). This maintains proper functioning of the drive motor (13) despite a high compaction capacity.

Depending on machine type, the drive motor may also include an electronic starter in addition to the recoil starter.

The combustion air is aspirated via an air cleaner. The condition of the air cleaner can be checked using the air cleaner maintenance indicator.

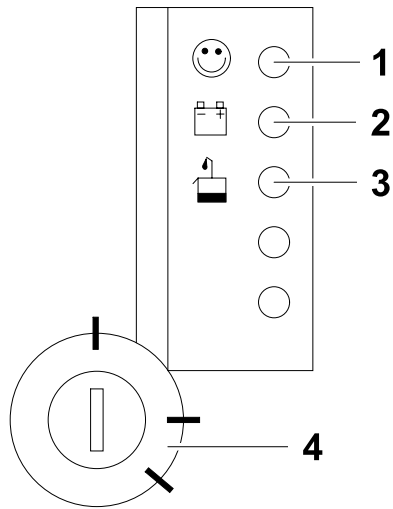
6 Components and operator's controls

Machine



Item	Designation	Item	Designation
1	Central suspension	6	Integrated driving mechanism
2	Fuel tank	7	Guide handle
3	Battery	8	Control handle
4	Recoil starter	9	Throttle lever
5	Electronic starter		

Electronic starter (only certain machine types)



Item	Designation	Item	Designation
1	Operation control lamp	3	Oil pressure control lamp
2	Charging control lamp	4	Ignition lock

7 Transport



WARNING

Improper handling can result in injury or serious material damage.

- ▶ Read and follow all safety instructions of this operator's manual, see chapter *Safety*.
-



WARNING

Danger due to the machine falling.

If the machine falls, it can cause severe injury such as crushing.

- ▶ Only use suitable and tested hoisting gear and lifting tackle (safety load hooks) of sufficient lifting capacity.
 - ▶ Only lift the machine by the central suspension.
 - ▶ Attach the machine firmly to the hoisting gear.
 - ▶ Do not lift the machine with the excavator shovel or the forklift by the central suspension.
 - ▶ Do not lift the machine by the handle.
 - ▶ Leave the danger area while lifting.
-



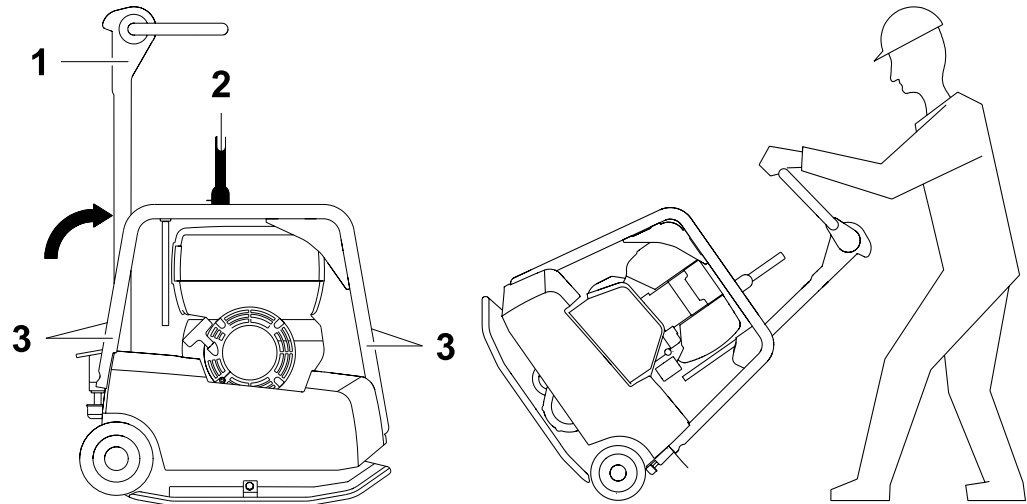
DANGER

Danger of fire and explosions by fuel.

Any fuel that escapes can ignite and cause severe burns.

- ▶ Lift and move the machine in the upright position.
-

7.1 Transporting the machine



Item	Designation	Item	Designation
1	Guide handle	3	Tie-down lugs (protective frame)
2	Central suspension (attachment point)		

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Vertically set guide handle head and lock into place.
4. Fasten suitable lifting tackle to the central suspension (2) provided.
5. Lift the machine evenly with the hoist.
6. Carefully set the machine down on a suitable transport vehicle.
7. If you transport the vibrating plate compactor on the cargo area of a vehicle, strap it down securely at the protective frame (3).

NOTICE

If the engine is running, engine lubrication cannot be ensured in the transport position. This can cause serious engine damage.

There is also a danger that oil may leak out of the engine crankcase breather.

- ▶ When using the integrated driving mechanism, you must turn off the engine.

8 Use and operation



WARNING

Improper handling can result in injury or serious material damage.

- ▶ Read and follow all safety instructions of this operator's manual, see chapter *Safety*.
-

8.1 Prior to starting the machine

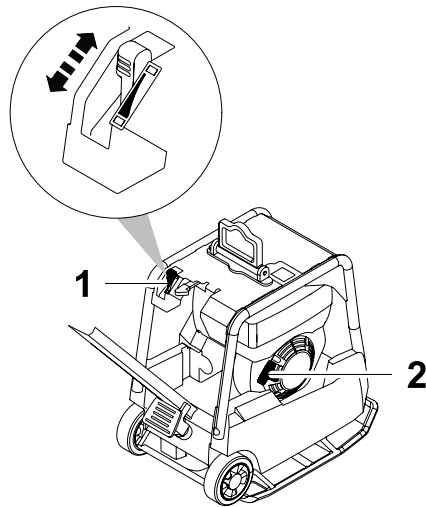
8.1.1 Checks before startup

Before you start the engine, check the following:

- Fuel level.
- Motor oil level.
- Air cleaner.
- Water separator
- Fuel lines for leaks.
- External screw connections for tightness.

8.2 Starting up

8.2.1 Starting the engine with recoil starter

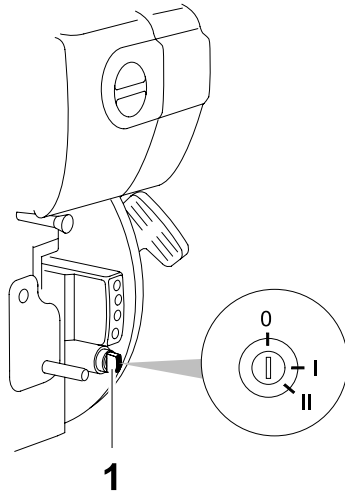


Item	Designation
1	Throttle lever
2	Recoil starter

Note: Do not start the engine until you are sure that it is vertically stable.

1. Set throttle lever to position 1.
2. Slowly pull out the recoil starter until you feel compression.
3. Let the cable rewind from this compression point.
4. Start now by gradually accelerating the engine via the cable (not in a jerking manner as with gasoline engines). Use the entire length of the cable.

8.2.2 Starting the engine with electronic starter



Item	Designation
1	Ignition lock

1. Set throttle lever to position 1.
2. Insert the key into the ignition lock.
3. Turn key to position II and release when the engine has started.

Note: Abort the start attempt after no more than 15 seconds.

Note: Do not turn the key to position 0 or remove the key while the engine is running, as this will stop the battery charging.

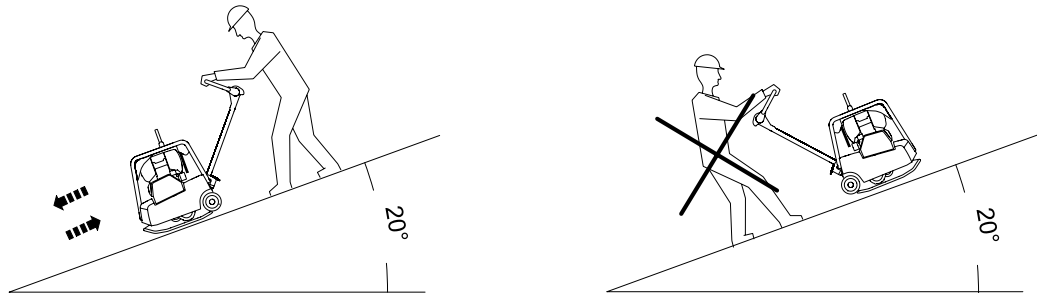
8.3 Operating the machine

8.3.1 Operating in the forward and reverse direction

- ▶ Press the control handle in the direction of travel.

Note: The forward and reverse speed can be continuously varied.

8.3.2 Compacting on a slope



Compacting on slopes

The following points must be observed if you plan to compact inclined surfaces (slopes, escarpments):

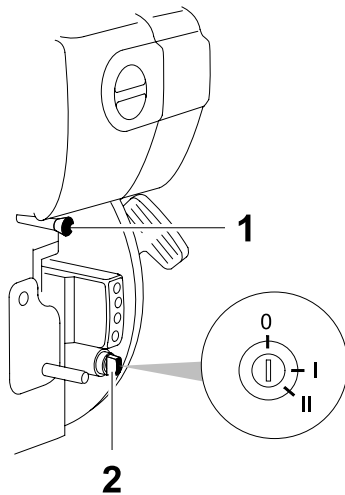
- Always stand above the machine on a slope.
- Start at the bottom of a slope (slopes that can be easily managed in an upward direction can be safely traveled in a downward direction also).
- Never stand in a position where the machine could possibly fall.

Not exceeding the maximum tilt position

- Do not exceed the maximum tilt position (see chapter *Technical Data*).
- Only operate the machine at maximum tilt for short periods of time.

If you exceed the maximum tilt, the engine lubrication system will fail and thus inevitably damage important engine parts.

8.4 Decommissioning



Item	Designation
1	Off switch
2	Ignition lock

Turning off the engine

1. Set throttle lever to position 0.
 2. Press the OFF switch.
- Only for machine types with electronic starter:
3. Turn key to position 0.
 4. Remove key if necessary.

Note: To prevent battery discharge, always remove the key or turn it to position 0.

9 Maintenance



WARNING

Improper handling can result in injury or serious material damage.

- ▶ Read and follow all safety instructions of this operator's manual, see chapter *Safety*.
-



WARNING

Injury may be caused by uncontrolled startup and moving parts.

- ▶ Carry out maintenance work only when the engine is off.
-



WARNING

Danger of poisoning by exhaust fumes.

Exhaust fumes contain toxic carbon monoxide that can lead to unconsciousness or death.

- ▶ Carry out maintenance work only when the engine is off.
-

9.1 Maintenance schedule

9.1.1 One-time maintenance after initial operation

Note: The following maintenance tasks need only be performed after initial operation at this interval.

Maintenance work	After the first 25 hours
Change engine oil.	■
Check the valve clearance, set to 0.10 mm when the engine is cold. *	■

* Have these tasks carried out by the service department of your Wacker Neuson contact person.

9.1.2 Daily maintenance work

Maintenance work	Daily before operation	Daily after operation
Check the intake area of the combustion air and cooling air.	■	
Check engine oil level.	■	
Check water separator.	■	
Check fuel tank: - Fuel level. - Leaks. - Lines for leaks. - Check the tank seal for leaks – change, if necessary.	■	
Check the air cleaner maintenance indicator while the engine is running. Clean or replace the filter element as needed.	■	
Check that Bowden cable moves freely.	■	
Clean the machine.		■

9.1.3 Regular maintenance

Maintenance work	Monthly	Every 150 hours	Every 250 hours	Every 500 hours	Every 1000 hours
Check exciter oil - fill if necessary.	■				
Check hydraulic oil - fill if necessary.	■				
Check the V-belt tension - tighten as needed.	■				
Check that the fastening screws are tight: Protective frame. Central suspension.	■				
Check exciter oil - fill if necessary.		■			
Change engine oil.			■		
Change exciter oil. *			■		
Check that the fastening screws are tight: Drive motor. *			■		
Check the valve clearance, set to 0.10 mm when the engine is cold. *			■		
Replace the fuel filter. *				■	
Replace air cleaner.				■	
Clean oil filter. *					■

* Have these tasks carried out by the service department of your Wacker Neuson contact person.

9.2 Maintenance work

9.2.1 Cleaning machine



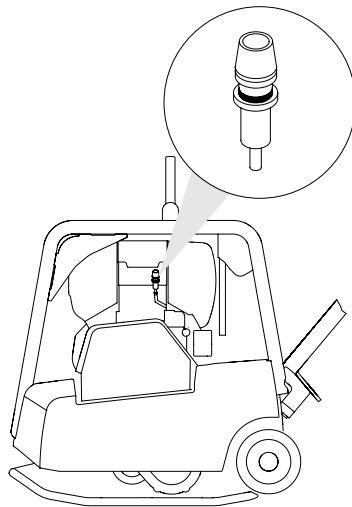
WARNING

Use of improper cleaning agents may lead to fire or explosion.

- ▶ Do not use gasoline or any other solvents to clean components.

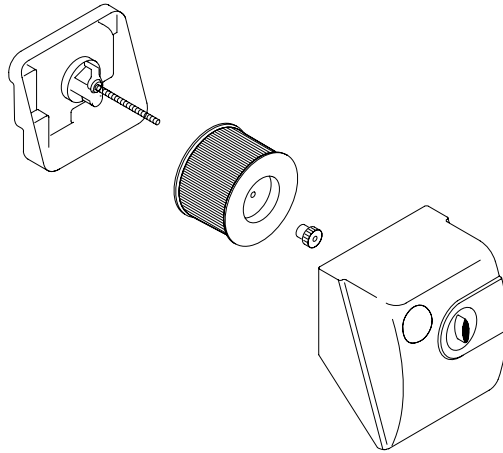
- ▶ Clean the machine with water after each use.
High pressure washers or chemical agents must not be used.

9.2.2 Check the air cleaner maintenance indicator



- ▶ Rev the engine briefly to its maximum speed. If the rubber bellows contract and cover the green field "2" in the process, the air cleaner system must be serviced. If you are working in dusty conditions, check the rubber bellows several times a day.

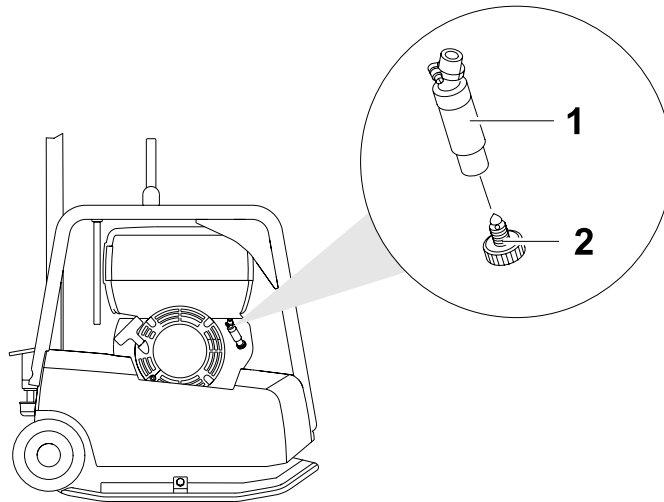
9.2.3 Cleaning the air cleaner



Note: If the motor starts smoking and if the motor output drops at the same time, this indicates that the filter is clogged.

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Remove and clean cartridge. Tap lightly against the cartridge so that dust falls out of the paper element.
4. Do not use compressed air. Clean instead by hand with a clean cloth! Ensure that you do not wipe any dirt from the housing into the engine intake.

9.2.4 Checking the water separator

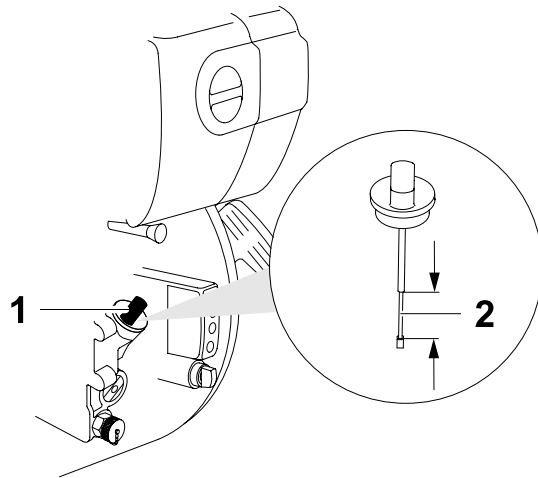


Item	Designation
1	Inspection glass
2	Drain plug

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Check whether there is water in the inspection glass of the water separator.
4. If necessary, unscrew drain plug and catch water in a collecting container.
If fuel comes out rather than water, re-tighten the drain plug.

Note: Dispose of the water in accordance with the applicable environmental regulations.

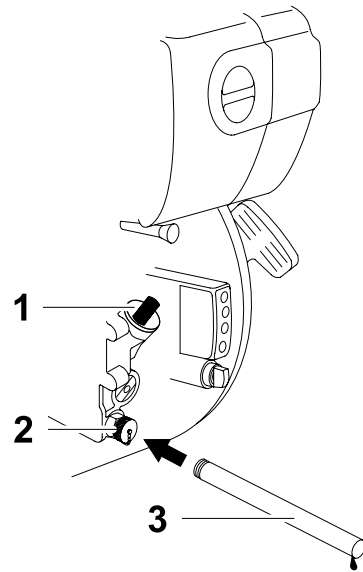
9.2.5 Checking engine oil level



Item	Designation
1	Oil level dipstick
2	Mark

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Remove any dirt around the oil level dipstick.
4. Remove the oil level dipstick and wipe it with a clean, lint-free cloth.
5. Screw the oil level dipstick all the way back in and pull it out again.
6. Check: The motor oil level must be between the lower and upper marks.
7. If necessary, pour new engine oil into the opening until the upper mark is reached on the oil level dipstick (see chapter *Technical data* for oil type).
8. Screw in the oil level dipstick and tighten it by hand.

9.2.6 Changing the engine oil



Item	Designation	Item	Designation
1	Oil level dipstick	3	Oil drain hose
2	Oil change valve		

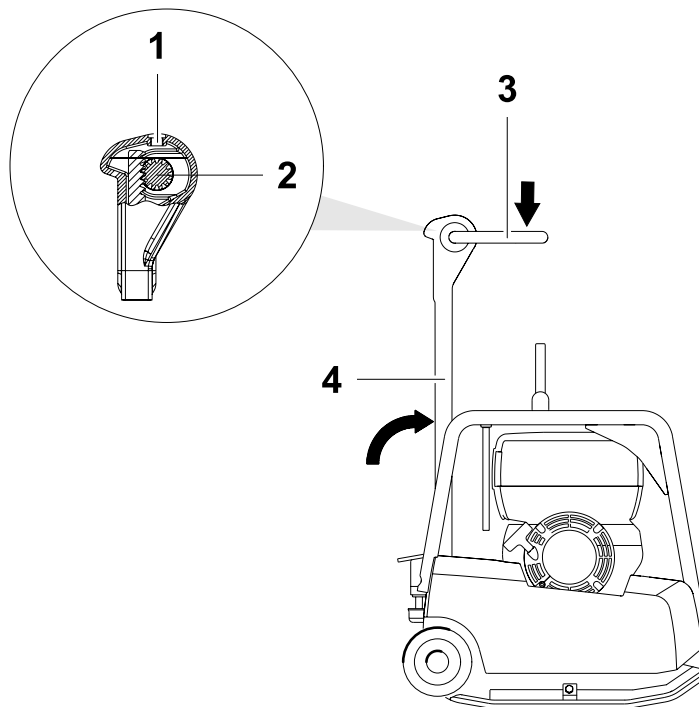
Note: The work area should be covered with a waterproof sheet to protect the floor (protection of the environment).

Note: Drain the oil while the engine is still hot. This ensures that the oil will be drained quickly and completely.

1. Place the machine upright on a flat surface.
2. Bring the engine to a hand warm temperature, either by letting it cool down or running it until it is warm.
3. Switch off the engine.
4. Unscrew and remove the oil level dipstick.
5. Screw the oil drain hose onto the oil change valve.
Collect the oil with a suitable container and dispose of properly.
6. Top up oil via the filler neck and check oil level.
See the chapter *Technical data* for oil quantity and oil specification.
7. Unscrew oil drain hose and screw on oil change valve.
8. Screw in the oil level dipstick and tighten it by hand.

Note: Dispose of the used oil in accordance with the applicable regulations.

9.2.7 Checking / filling hydraulic oil level

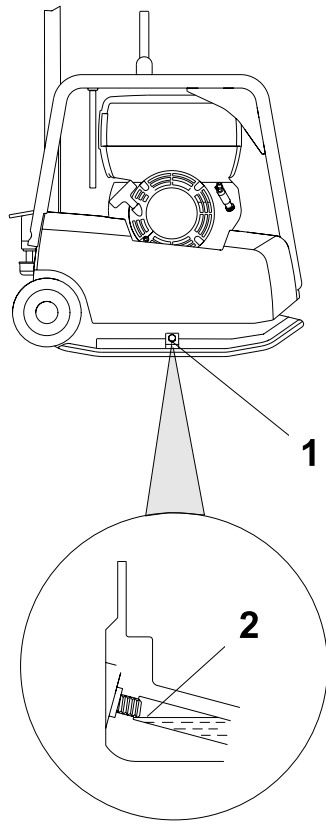


Item	Designation	Item	Designation
1	Filler hole	3	Control handle
2	Gear	4	Guide handle

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Let machine cool off.
4. Vertically set guide handle head and lock into place.
5. Press the control handle in the advance travel position.
6. Remove any dirt around the filler hole.
7. Check: Oil level must reach upper edge of the gear.
8. Open filler hole.
9. If necessary, add new hydraulic oil through the filler hole up to the upper edge of the gear wheel.
See the chapter *Technical data* for the oil specification.
10. Close the filler hole and tighten.

Note: The hydraulic control is self-bleeding.

9.2.8 Checking exciter oil level



Item	Designation
1	Filler hole
2	Start of thread

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Let machine cool off.
4. Remove any dirt around the filler hole.



WARNING

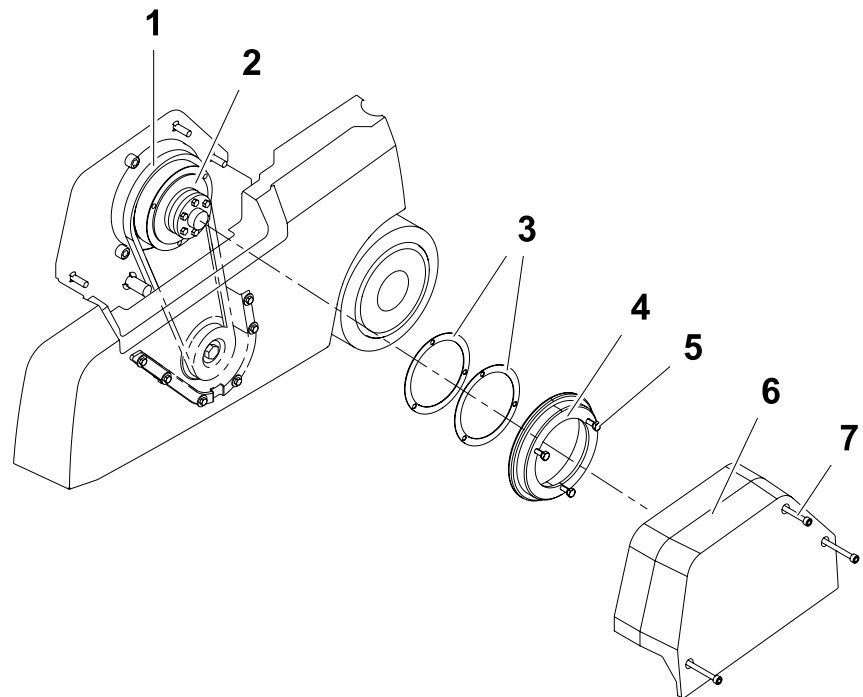
Hot exciter oil can spill, causing scalding injuries.

- ▶ Do not open the screw plug on the exciter while the exciter oil is hot.
- ▶ Let machine cool off.

5. Open filler hole.
6. Check: Oil level must reach the start of the thread of the filler hole.
7. If necessary, fill exciter oil through the filler hole.

8. Close filler hole and use a torque wrench to tighten it to 100 Nm.

9.2.9 Re-tighten exciter V-belt



Item	Designation	Item	Designation
1	V-belt	5	Screws (3 pieces)
2	Engine V-belt disc	6	Belt guard
3	Disc	7	Screws (3 pieces)
4	V-belt pulley half		

1. Place the machine upright on a flat surface.
2. Switch off the engine.
3. Let machine cool off.
4. Remove V-belt protector.
5. Unscrew screws at the engine V-belt disc and remove external V-belt pulley half.
6. Remove the necessary number of washers (normally the removal of one disc suffices).
7. Mount the removed washers on the outside of the V-belt pulley half.
8. Attach V-belt pulley half and tighten with 3 screws to 10 Nm.
Note: Turn the V-belt pulley half in the process to avoid pinching the V-belt.
9. Remount V-belt protector. Tighten screws with a torque wrench to 10 Nm.
10. Let the machine run for a short while.

11. If necessary retighten the screws.

10 Malfunctions

Please refer to the following table if the machine does not work properly. It contains potential faults, their causes and remedies.

Notify your Wacker Neuson contact in case of malfunctions you cannot or may not remedy yourself.

Malfunction	Cause	Remedy
Reverse travel speed too low.	Insufficient hydraulic oil in the guide handle head.	Add hydraulic oil.
Advance travel speed too low.	Too much hydraulic oil in the guide handle head.	Adjust oil level according to the fill level mark.
No advance travel.	Mechanical malfunction.	Have the machine repaired. *
Loss of hydraulic oil.	Leaks, hydraulic hose is defective.	Have the machine repaired. *
Engine will not start.	Throttle lever in position 0.	Set throttle lever to position 1.
	No fuel at the injection pump.	Fill the tank with fuel. Check the entire fuel system.
		Check the supply line to the engine and fuel filter. *
	Valve clearance is incorrectly set.	Check the valve clearance and adjust as needed. *
	Valves are worn.	Have the machine repaired. *
	Cylinder and/or piston ring wear.	
Injector is not functioning properly.		
No vibration while engine is running.	V-belt is worn out.	Replace V-belt.
	Clutch linings are worn out.	Replace the clutch linings. *
Charging control lamp does not go out.	Generator defective.	Have the machine repaired. *
	Controller defective.	
Oil control lamp does not go out.	Motor oil level is too low.	Top up with engine oil.

* Have these tasks carried out by the service department of your Wacker Neuson contact person.

10.1 Boost



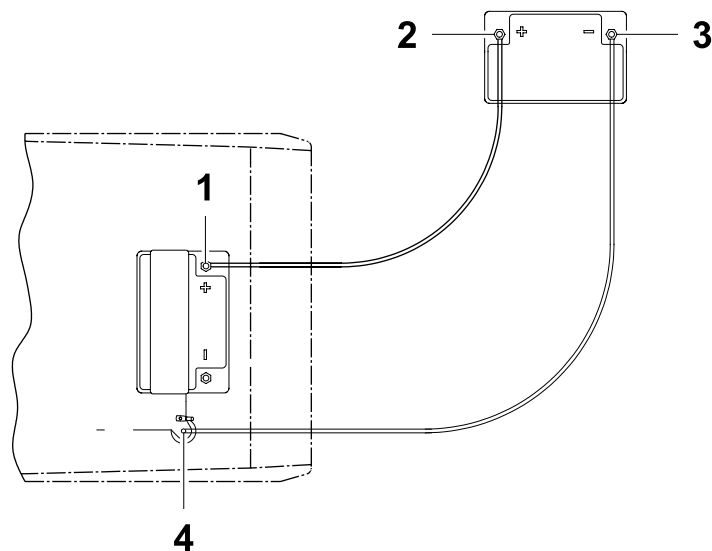
WARNING

Danger of explosion due to detonating gas.

Injury may result from spraying acid.

- ▶ Wear safety glasses and acid-proof protective gloves.
 - ▶ The donor battery and the machine's battery must have the same voltage (12 V).
 - ▶ Avoid short circuit due to voltage reversal (positive to positive, negative to negative).
 - ▶ Follow the booster cable connection sequence.
-

Note: Use only insulated booster cables with a cross section of at least 16 mm².



The following connection sequence must be used when starting with an external battery:

1. Clamp red booster cable to positive pole (1) of the discharged battery using a pair of clamping pliers.
2. Clamp the other pair of clamping pliers of the red booster cable to the donor battery's positive pole (2).
3. Clamp black booster cable to negative pole (3) of the donor battery using a pair of clamping pliers.
4. Attach the other clamping pliers of the black booster cable to the ground connector (4) of the equipment, e.g. the engine support.
5. Start the engine and allow it to warm up (max. 15 seconds).

6. Follow these steps in reverse to remove all clamped on cables - first the black and then the red booster cable.

11 Disposal

11.1 Disposal of batteries

For customers in EU countries

This device contains one or more batteries or rechargeable batteries (hereafter referred to as "batteries"). This battery is subject to the European Directive 2006/66/EC on (waste) batteries, as well as the corresponding national legislation. The battery directive outlines the procedure for handling batteries across the EU.



The battery is labelled with the symbol of a crossed out dustbin shown here. Below this symbol is a list of all the harmful substances it contains, namely "Pb" for lead, "Cd" for cadmium and "Hg" for mercury.

Batteries may not be disposed of with normal household waste. As the end user, only dispose of waste batteries via the manufacturer, the dealer or special collection points for this purpose (legal obligation to return), which is free of charge. Dealers and manufacturers are obliged to accept the return of the batteries and to use them properly or to dispose of them as hazardous waste (legal obligation to accept). You can also return any used batteries you obtained from us free of charge. If you do not return the batteries to one of our branches personally, make sure you have paid sufficient postage for its return. Please also note any information in the sales contract and the general terms and conditions from the point of sales.

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

For customers in non-EU countries

This device contains one or more batteries or rechargeable batteries (hereafter referred to as "batteries"). The proper disposal of the battery prevents the occurrence of any negative effects on people or the environment, follows the specific procedures for handling harmful substances and enables valuable raw materials to be recycled. Therefore, we recommend that this battery is disposed of in a separate, environmentally-friendly waste collection and not with normal household waste. In some cases, national legislation stipulates the separate disposal of batteries. Please ensure you dispose of this battery in accordance with the valid regulations in your country.

12 Accessories

There is a wide range of accessories available for the machine.

For more information on the individual accessories, visit the following website:

www.wackerneuson.com.

13 Technical data

Machine

Designation	Unit	DPU 2540H	DPU 2550H	DPU 2560H	DPU 2560Hts
Item no.		0610035	0610036	0610037	0610038
Length x width x height (guide handle in transport position)	mm (ft)	733 x 400 x 1,170 (2.4 x 1.3 x 3.8)	733 x 500 x 1,170 (2.4 x 1.6 x 3.8)	733 x 600 x 1,170 (2.4 x 1.9 x 3.8)	
Operating weight	kg (lb)	160 (353)	166 (366)	171 (377)	
Advance and reverse travel	m/min (ft/min)	21 (68.9)	20 (65.6)	19 (62.3)	23 (75.5)
Area capacity	m ² /h (ft ² /h)	504 (5425)	600 (6458)	684 (7362)	828 (8913)
Maximum permissible tilt	°	25			
Sound pressure level L _{pA} at operator's station	dB(A)	94			
Total vibration value of the acceleration a _{hv} *	m/s ²	3.1			3.2
Uncertainty of measure- ment of the vibration total value of the acceleration a _{hv}	m/s ²	1.0			

* Determined according to DIN EN ISO 5349.

Designation	Unit	DPU 3050H	DPU 3050He	DPU 3060H	DPU 3060Hts
Item no.		0610039, 5100000310	0610298	0610040	0610042
Length x width x height (guide handle in transport position)	mm (ft)	733 x 500 x 1,170 (2.4 x 1.6 x 3.8)		733 x 600 x 1,170 (2.4 x 1.9 x 3.8)	
Operating weight	kg (lb)	181 (399)	206 (454)	190 (419)	
Advance and reverse travel	m/min (ft/min)	21 (65.6)		19 (62.3)	23 (75.5)
Area capacity	m ² /h (ft ² /h)	630 (6781)		684 (7362)	828 (8913)
Maximum permissible tilt	°	25			
Sound pressure level L _{pA} at operator's station	dB(A)	95			
Total vibration value of the acceleration a _{hv} *	m/s ²	3,6	3,2		3,3
Uncertainty of measure- ment of the vibration total value of the acceleration a _{hv}	m/s ²	1.0			

* Determined according to DIN EN ISO 5349.

13 Technical data

Designation	Unit	DPU 3060Hets	DPU 3070H
Item no.		0610302	0610041
Length x width x height (guide handle in transport position)	mm (ft)	733 x 600 x 1,170 (2.4 x 1.9 x 3.8)	733 x 700 x 1,170 (2.4 x 2.3 x 38)
Operating weight	kg (lb)	215 (474)	195 (430)
Advance and reverse travel	m/min (ft/min)	23 (75.5)	18 (59.1)
Area capacity	m ² /h (ft ² /h)	828 (8913)	756 (8138)
Maximum permissible tilt	°	25	
Sound pressure level L _{pA} at operator's station	dB(A)	95	
Total vibration value of the acceleration a _{hv} *	m/s ²	3.2	3.2
Uncertainty of measure- ment of the vibration total value of the acceleration a _{hv}	m/s ²	1.0	

* Determined according to DIN EN ISO 5349.

Designation	Unit	DPU 3750Hts	DPU 3750Hets	DPU 3760Hts	DPU 3760Hets
Item no.		0610321, 5100000311	0610322	0610358	0610359
Length x width x height (guide handle in transport position)	mm (ft)	733 x 500 x 1,170 (2.4 x 1.6 x 3.8)		733 x 600 x 1,170 (2.4 x 1.9 x 3.8)	
Operating weight	kg (lb)	247 (544)	265 (584)	256 (564)	274 (604)
Advance and reverse travel	m/min (ft/min)	27 (88.5)		26 (85.3)	
Area capacity	m ² /h (ft ² /h)	810 (8719)		936 (10075)	
Maximum permissible tilt	°	25			
Sound pressure level L _{pA} at operator's station	dB(A)	95			
Total vibration value of the acceleration a _{hv} *	m/s ²	2,4			
Uncertainty of measure- ment of the vibration total value of the acceleration ahv	m/s ²	1.0			

* Determined according to DIN EN ISO 5349.

Drive motor

Designation	Unit	DPU 25..	DPU 30..	DPU 37..
Manufacturer		HATZ		
Type		1B20	1B30	
Engine displacement	cm ³ (in ³)	243 (14.8)	347 (21.2)	
Rated output*	kW	3.1	4.2	
Operating power	kW	1.5	1.9	1,7
Operating blade speed	rpm	2,800		
Fuel type		Diesel according to DIN EN 590		
Fuel consumption	l/h (qt/h)	0.4 (0,42)	0.6 (0.63)	
Tank capacity	l (qt)	3.0 (3.17)	5.0 (5.28)	
Oil specification		Fuchs Titan Unic 10W40 MC (SAE 10W40)		
Oil quantity	l (qt)	0.9 (0,95)	1.1 (1.16)	

* Equivalent to the installed power output in accordance with the directive 2000/14/EC.

Exciter

Designation	Unit	DPU 25..	DPU 30..	DPU 37..
Vibrations	rpm (Hz)	5,400 (90)		
Centrifugal force	kN	25	30	37
Oil specification		Fuchs Titan Unic 10W40 MC (SAE 10W40)		
Oil quantity	l (qt)	0.6 (0.63)		

Hydraulic

Designation	Unit	DPU 25..	DPU 30..	DPU 37..
Oil specification		Fuchs Renolin MR 520		
Oil quantity	l (qt)	0,4 (0.42)		

Electrical

Designation	Unit	DPU 3050He, DPU 3060Hets, DPU 3750Hets, DPU 3760Hets
Battery type		Special Wacker Neuson battery for vibration plates, 12 V - 18 Ah, maintenance free



EC Declaration of Conformity

Manufacturer

Wacker Neuson SE
Preußenstraße 41, 80809 München

Product

Type		DPU 25..	DPU 30..	DPU 37..
Product type		Vibrating plate		
Item no.		0610035, 0610036, 0610037, 0610038	0610039, 0610298, 0610040, 0610041, 0610302, 0610042	0610321, 0610322, 0610358, 0610359
Installed power output	kW	3,1	4,2	
Measured sound power level	dB(A)	107		
Guaranteed sound power level	dB(A)	108		

Conformity assessment procedure acc. to 2000/14/EC, Appendix VIII, 2005/88/EC at following test center:

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

Guidelines and standards

This is to certify that this product meets and complies with the relevant regulations and requirements of the following guidelines and standards:

2006/42/EC,

2000/14/EC, 2005/88/EC

Authorized person for technical documents: Axel Häret

Munich, 08.03.2010

Franz Beierlein
Head of product management

Dr. Michael Fischer
Head of Research and Development

