



**WACKER  
NEUSON**

Operator's Manual

**Vibratory plate  
BPS1550Gw-c  
BPS2050Gw-c**



EN

5100081479

05

0126



5 1 0 0 0 8 1 4 7 9

**Copyright  
notice**

© Copyright 2024 by Wacker Neuson Machinery (China) Co., Ltd.

All rights, including copying and distribution rights, are reserved.

This publication may be photocopied by the original purchaser of the machine. Any other type of reproduction is prohibited without express written permission from Wacker Neuson Machinery (China) Co., Ltd.

Any type of reproduction or distribution not authorized by Wacker Neuson Machinery (China) Co., Ltd. represents an infringement of valid copyrights. Violators will be prosecuted.

---

**Trademarks**

All trademarks referenced in this manual are the property of their respective owners.

---

**Manufacturer**

Wacker Neuson Machinery (China) Co., Ltd.

No. 1688 Xinkai Road, Pinghu Economic Development Zone,

Pinghu City, Zhejiang Province, P.R. China

[www.wackerneuson.com](http://www.wackerneuson.com)

---

**Original  
instructions**

This Operator's Manual presents the original instructions. The original language of this Operator's Manual is American English.

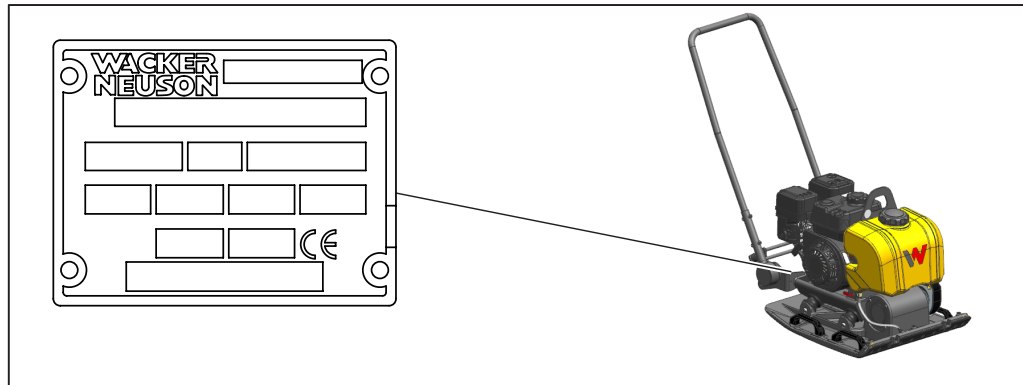
# Foreword

## Foreword

SAVE THESE INSTRUCTIONS—This manual contains important instructions for the machine models listed below. These instructions must be followed during installation and maintenance of the machine (and battery, if equipped).

### Machines covered in this manual

Machine	Item Number
BPS1550Gw-c CE	5100079312
BPS2050Gw-c CE	5100079313



### Machine identification

A nameplate listing the model number, item number, revision number, and serial number is attached to this machine. The location of the nameplate is shown above.

### Serial number (S/N)

For future reference, record the serial number in the space provided below. You will need the serial number when requesting parts or service for this machine.

Serial Number:

### Machine documentation

- From this point forward in this documentation, Wacker Neuson Machinery (China) Co., Ltd. will be referred to as Wacker Neuson.
- Keep a copy of the Operator's Manual with the machine at all times.
- If you are missing any of these documents, please contact Wacker Neuson to order a replacement or visit [www.wackerneuson.com](http://www.wackerneuson.com).
- When ordering parts or requesting service information, be prepared to provide the machine model number, item number, revision number, and serial number.

## Foreword

### Expectations for information in this manual

- This manual provides information and procedures to safely operate and maintain the above Wacker Neuson model(s). For your own safety and to reduce the risk of injury, carefully read, understand, and observe all instructions described in this manual.
- Wacker Neuson expressly reserves the right to make technical modifications, even without notice, which improve the performance or safety standards of its machines.
- The information contained in this manual is based on machines manufactured up until the time of publication. Wacker Neuson reserves the right to change any portion of this information without notice.
- The illustrations, parts, and procedures in this manual refer to Wacker Neuson factory-installed components. Your machine may vary depending on the requirements of your specific region.

### CALIFORNIA Proposition 65 Warning

Combustion exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### Laws pertaining to spark arresters

---

**NOTICE:** State Health Safety Codes and Public Resources Codes specify that in certain locations spark arresters be used on internal combustion engines that use hydrocarbon fuels. A spark arrester is a device designed to prevent accidental discharge of sparks or flames from the engine exhaust. Spark arresters are qualified and rated by the United States Forest Service for this purpose. In order to comply with local laws regarding spark arresters, consult the engine distributor or the local Health and Safety Administrator.

---

### Manufacturer's approval

This manual contains references to *approved* parts, attachments, and modifications. The following definitions apply:

- **Approved parts or attachments** are those either manufactured or provided by Wacker Neuson.
- **Approved modifications** are those performed by an authorized Wacker Neuson service center according to written instructions published by Wacker Neuson.
- **Unapproved parts, attachments, and modifications** are those that do not meet the approved criteria.

Unapproved parts, attachments, or modifications may have the following consequences:

- Serious injury hazards to the operator and persons in the work area
- Permanent damage to the machine which will not be covered under warranty

Contact your Wacker Neuson dealer immediately if you have questions about approved or unapproved parts, attachments, or modifications.

<b>Foreword</b>	<b>3</b>
<b>1 Safety Information</b>	<b>7</b>
1.1 Signal Words Used in this Manual .....	7
1.2 Machine Description and Intended Use .....	8
1.3 Operating Safety .....	9
1.4 Operator Safety while Using Internal Combustion Engines .....	11
1.5 Service Safety .....	12
<b>2 Labels</b>	<b>14</b>
2.1 Label Locations .....	14
2.2 Label Meanings .....	15
<b>3 Lifting and Transporting</b>	<b>18</b>
3.1 Wheel kit assembly and operation .....	19
3.2 Beacon (Optional) .....	20
<b>4 Operation</b>	<b>21</b>
4.1 Preparing the Machine for First Use .....	21
4.2 Handle Assembly .....	21
4.3 Recommended Fuel .....	22
4.4 Application .....	22
4.5 Before Starting the Machine .....	22
4.6 Starting the Machine .....	23
4.7 Stopping the Machine.....	23
4.8 Operation .....	24

# Table of Contents

<b>5</b>	<b>Maintenance</b>	<b>25</b>
5.1	Maintaining the Emission Control System .....	25
5.2	Periodic Maintenance Schedule .....	25
5.3	Servicing the Spark Plug .....	27
5.4	Servicing the Air Cleaner .....	28
5.5	Changing the Engine Oil .....	29
5.6	Adjusting the Carburetor .....	30
5.7	Servicing the Drive Belt .....	31
5.8	Cleaning the Plate .....	32
5.9	Storage .....	32
<b>6</b>	<b>Troubleshooting</b>	<b>33</b>
<b>7</b>	<b>Technical Data</b>	<b>34</b>
7.1	Engine Data.....	34
7.2	Machine Data .....	35
7.3	Sound Measurements .....	35
<b>8</b>	<b>Dimensions</b>	<b>36</b>



## 1 Safety Information

### 1.1 Signal Words Used in this Manual

This manual contains DANGER, WARNING, CAUTION, *NOTICE*, and NOTE signal words which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal hazards.  
▶ Obey all safety messages that follow this symbol.



#### **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

- ▶ To avoid death or serious injury from this type of hazard, obey all safety messages that follow this signal word.



#### **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

- ▶ To avoid possible death or serious injury from this type of hazard, obey all safety messages that follow this signal word.



#### **CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

- ▶ To avoid possible minor or moderate injury from this type of hazard, obey all safety messages that follow this signal word.

**NOTICE:** Used without the safety alert symbol, NOTICE indicates a situation which, if not avoided, could result in property damage.

**Note:** A Note contains additional information important to a procedure.

## 1.2 Machine Description and Intended Use

The Wacker Neuson vibratory plate offers functionality and performance. The compact design allows for compaction of mixed soils in the narrowest of spaces even in extremely narrow trenches.

This machine is optimally suited for a variety of compaction applications with high speed and simple maneuverability. It has:

- Long life base plate made of high grade ductile iron.
  - Exciter housing integrated in ductile iron base plate: higher durability than bolted-on exciter housings.
  - Integrated water slots for equal distributions of water.
  - Side lift handles for easy lifting.
  - Straight edges for perfect controllability along walls and edges.
- 

This machine has been designed and built strictly for the intended use described above. Using the machine for any other purpose could permanently damage the machine or seriously injure the operator or other persons in the area. Machine damage caused by misuse is not covered under warranty.

The following are some examples of misuse:

- Using the machine as a ladder, support, or work surface
  - Using the machine to carry or transport passengers or equipment
  - Operating the machine outside of factory specifications
  - Operating the machine in a manner inconsistent with all warnings found on the machine and in the Operator's Manual.
- 

This machine has been designed and built in accordance with the latest global safety standards. It has been carefully engineered to eliminate hazards as far as practicable and to increase operator safety through protective guards and labeling. However, some risks may remain even after protective measures have been taken. They are called residual risks. On this machine, they may include exposure to:

- Heat, noise, exhaust, and carbon monoxide from the engine
- Fire hazards from improper refueling techniques
- Fuel and its fumes
- Personal injury from improper lifting techniques

To protect yourself and others, make sure you thoroughly read and understand the safety information presented in this manual before operating the machine.

## 1.3 Operating Safety

### Operator training

Before operating the machine:

- Read and understand the operating instructions contained in all manuals delivered with the machine.
- Familiarize yourself with the location and proper use of all controls and safety devices.
- Contact Wacker Neuson for additional training if necessary.

When operating this machine:

- Do not allow improperly trained people to operate the machine. People operating the machine must be familiar with the potential risks and hazards associated with it.

Only trained personnel are permitted to start, operate, and shut down the machine. They also must meet the following qualifications:

- have received instruction on how to properly use the machine
- are familiar with required safety devices

The machine must not be accessed or operated by:

- children
  - people impaired by alcohol or drugs
- 

### Application area

Be aware of the application area.

- Keep unauthorized personnel, children, and pets away from the machine.
- Remain aware of changing positions and the movement of other equipment and personnel in the application area/job site.

Be aware of the application area.

- Do not operate the machine in areas that contain flammable objects, fuels, or products that produce flammable vapors.
- 

### Safety devices, controls, and attachments

Only operate the machine when:

- All safety devices and guards are in place and in working order.
- All controls operate correctly.
- The machine is set up correctly according to the instructions in the Operator's Manual.
- The machine is clean.
- The machine's labels are legible.

To ensure safe operation of the machine:

- Do not operate the machine if any safety devices or guards are missing or inoperative.
  - Do not modify or defeat the safety devices.
  - Only use accessories or attachments that are approved by Wacker Neuson.
-

## Safe operating practices

When operating this machine:

- Remain aware of the machine's moving parts. Keep hands, feet, and loose clothing away from the machine's moving parts.

When operating this machine:

- Do not operate a machine in need of repair.
- 

## Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while operating this machine:

- Close-fitting work clothes that do not hinder movement
  - Safety glasses with side shields
  - Hearing protection
  - Safety-toed footwear
- 

## Transporting and installing the machine

- Never allow untrained personnel to operate or service the vibrator plate.
  - Do not stand under the machine while it is being hoisted or moved.
  - Do not attach equipment to the machine when it is suspended.
  - Always transport the machine in an upright position.
  - Always position and operate the machine on a firm, noncombustible, level surface.
  - Always make certain the machine is well-grounded and securely fastened to a good earthen ground per national and local regulations.
- 

## General Safety

- Do not operate the machine when open containers of fuel, paint, or other flammable liquids are near.
  - Do not operate the machine, or tools attached to the machine, with wet hands..
  - Do not enclose or cover the machine when it is in use or when it is hot.
  - Do not operate the machine in snow, rain, or standing water.
  - Do not stand on the machine.
- 

## Machine vibration

Vibratory plate vibrate in normal use. During and after the use of the machine, inspect the machine before storing it.

- Have damaged items repaired or replaced as necessary.
- 

## After use

- Store the machine properly when it is not being used. The machine should be stored in a clean, dry location out of the reach of children.
- 

## Cleaning

When cleaning and servicing the machine:

- Keep the machine clean and free of debris such as leaves, paper, cartons, etc.
- Keep the labels legible.

When cleaning the machine:

- Do not clean the machine while it is running.
  - Never use gasoline or other types of fuels or flammable solvents to clean the machine. Fumes from fuels and solvents can become explosive.
-

## 1.4 Operator Safety while Using Internal Combustion Engines



---

### WARNING

Internal combustion engines present special hazards during operation and fueling. Failure to follow the warnings and safety standards could result in severe injury or death.

- ▶ Read and follow the warning instructions in the engine owner's manual and the safety guidelines below.
- 

### Refueling safety

When refueling the engine:

- Do not smoke.
- Do not refuel if the machine is sitting in a truck fitted with a plastic bed liner. Static electricity can ignite the fuel or fuel vapors.
- Do not refuel a hot or running engine.
- Do not refuel the engine near an open flame.

When refueling the engine, always:

- Refill the fuel tank in a well-ventilated area.
  - Replace the fuel tank cap after refueling.
- 

### Operating safety

When operating the machine:

- Check the fuel lines and the fuel tank for leaks and cracks before starting the engine.
- Do not run the machine if fuel leaks are present or the fuel lines are loose.
- Do not run the engine near open flames.
- Do not start the engine if fuel has spilled or a fuel odor is present. Move the machine away from the spill and wipe it dry before starting.
- Do not smoke while operating the machine.

## 1.5 Service Safety

### Service training

Before servicing or maintaining the machine:

- Read and understand the instructions contained in all manuals delivered with the machine.
- Familiarize yourself with the location and proper use of all controls and safety devices.
- Only trained personnel shall troubleshoot or repair problems occurring with the machine.
- Contact Wacker Neuson for additional training if necessary.

When servicing or maintaining this machine:

- Do not allow improperly trained people to service or maintain the machine. Personnel servicing or maintaining the machine must be familiar with the associated potential risks and hazards.

### Precautions

Follow the precautions below when servicing or maintaining the machine.

- Read and understand the service procedures before performing any service to the machine.
- All adjustments and repairs must be completed before operating the machine. Do not operate the machine with a known problem or deficiency.
- All repairs and adjustments shall be completed by a qualified technician.
- Turn off the machine before performing maintenance or making repairs.
- Remain aware of the machine's moving parts. Keep hands, feet, and loose clothing away from the machine's moving parts.
- Re-install the safety devices and guards after repair and maintenance procedures are complete.

---

### Machine modifications

When servicing or maintaining the machine:

- Use only accessories/attachments that are approved by Wacker Neuson.

When servicing or maintaining the machine:

- Do not defeat safety devices.
- Do not modify the machine without the express written approval of Wacker Neuson.

---

### Replacing parts and labels

- Replace worn or damaged components.
  - Replace all missing and hard-to-read labels.
  - When replacing electrical components, use components that are identical in rating and performance to the original components.
  - When replacement parts are required for this machine, use only Wacker Neuson replacement parts or those parts equivalent to the original in all types of specifications, such as physical dimensions, type, strength, and material.
-

### Cleaning

When cleaning and servicing the machine:

- Keep the machine clean and free of debris such as leaves, paper, cartons, etc.
- Keep the labels legible.

When cleaning the machine:

- Do not clean the machine while it is running.
  - Never use gasoline or other types of fuels or flammable solvents to clean the machine. Fumes from fuels and solvents can become explosive.
- 

### Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while servicing or maintaining this machine:

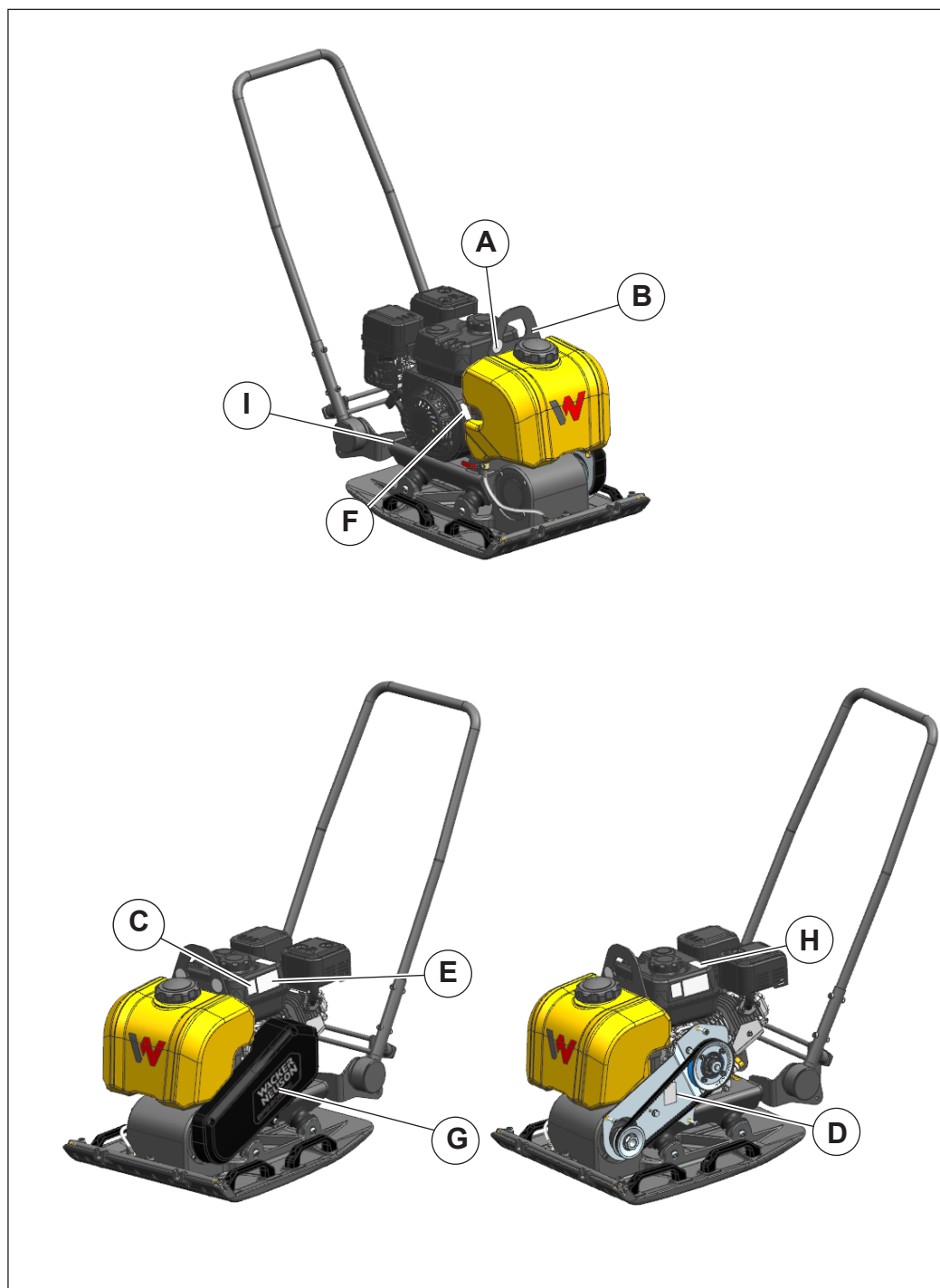
- Close-fitting work clothes that do not hinder movement
- Safety glasses with side shields
- Hearing protection
- Safety-toed footwear

In addition, before servicing or maintaining the machine:





- Tie back long hair.
- Remove all jewelry (including rings).





2 Labels

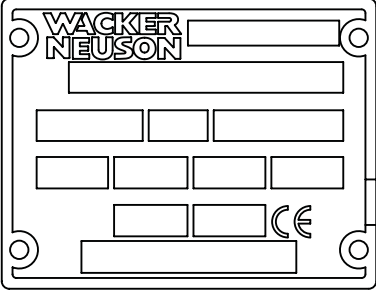
2.1 Label Locations



2.2 Label Meanings

<p>A</p>		<p><b>WARNING!</b> Always wear hearing and eye protection when operating this machine.</p>
<p>B</p>		<p><b>NOTICE</b> Only lift the machine at the central lifting point with tested lifting gear and sling (safety load hook).</p>
<p>C</p>		<p>Guaranteed sound power level in dB(A).</p>
<p>D</p>		<p><b>WARNING</b> Hand injury if caught in moving belt. Always replace beltguard.</p>

<p>E</p>		<p><b>DANGER!</b></p> <ul style="list-style-type: none"> <li>■ Asphyxiation hazard.</li> <li>■ Engines emit carbon monoxide.</li> <li>■ Do not run the machine indoors or in an enclosed area.</li> <li>■ NEVER use inside a home or garage, EVEN IF doors and windows are open.</li> <li>■ Only use OUTSIDE and far away from windows, doors, and vents.</li> <li>■ Read the Operator's Manual.</li> <li>■ No sparks, flames, or burning objects near the machine.</li> <li>■ Stop the engine before refueling.</li> <li>■ Use only clean, filtered fuel.</li> </ul>
<p>F</p>		<p>Engine ON / OFF Turn to start or stop the engine.</p>
<p>G</p>		<p>Machine label</p>
<p>H</p>		<p><b>CAUTION!</b> Risk of burn due to hot surface!</p>

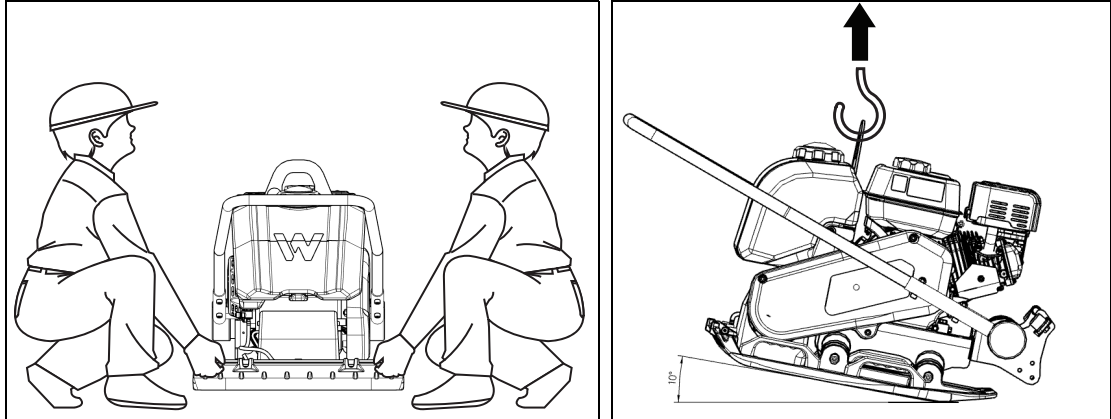
<p>I</p>	 <p>The diagram shows a rectangular nameplate with rounded corners and four mounting holes. At the top left, the text 'WACKER NEUSON' is printed. To the right of this text is a long horizontal rectangular field. Below this field are two rows of three smaller rectangular fields each. At the bottom left, there are two more rectangular fields, and at the bottom right, there is a CE mark. A long horizontal rectangular field is located at the very bottom of the plate.</p>	<p><b>Nameplate</b></p> <p>A nameplate listing the model number, item number, revision number, and serial number is attached to each unit. Please record the information found on this nameplate so it will be available should the nameplate become lost or damaged. When ordering parts or requesting service information, you will always be asked to specify the model number, item number, revision number, and serial number of the unit.</p>
----------	--	---

## 3 Lifting and Transporting

### Lifting the Machine

This machine is heavy enough to cause injury if proper lifting techniques are not used. Observe the following guidelines when lifting the vibratory plate.

- Do not attempt to lift the machine unassisted. Use appropriate lifting equipment such as slings, chains hooks, ramps or jacks.
- Make sure lifting equipment is attached securely and has enough weight-bearing capacity to lift or hold the machine safely.
- Remain aware of the location of other people nearby when lifting the machine.
- Fold down the guide handle during lifting and transport.

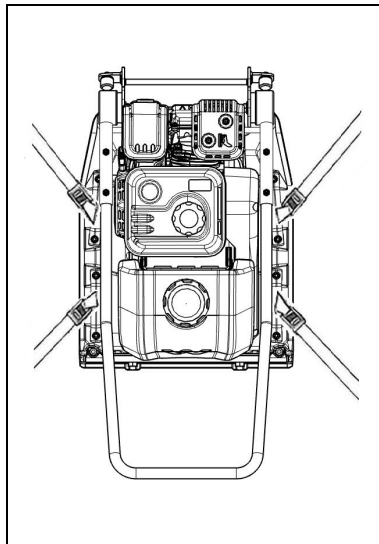


### Transporting the Machine

Observe the following guidelines when transporting the vibratory plate to and from the job site.

- Drain the fuel tank before transporting the machine.
- Ensure that the machine is securely strapped down in the transport vehicle to prevent it from sliding or tipping.

#### Tie-down points:

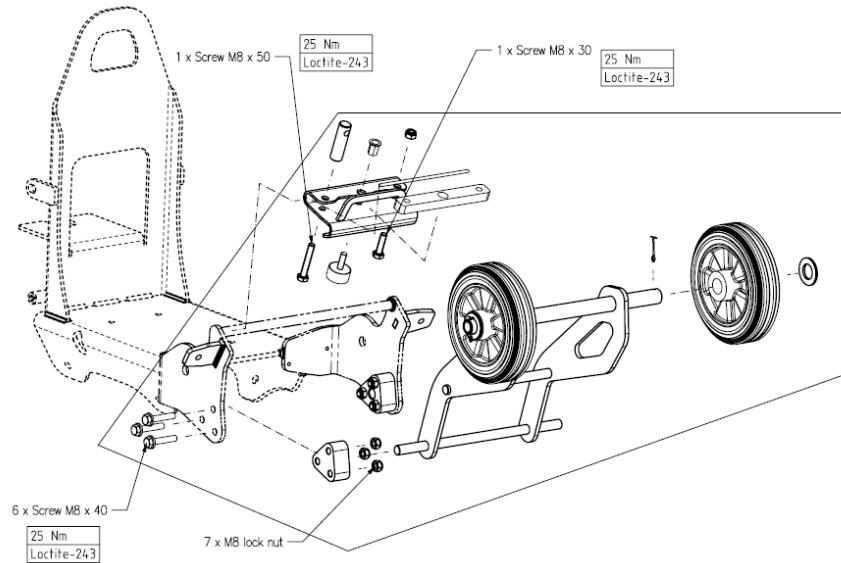


- Do not refuel the machine in or on the transport vehicle. Move the machine to its operating location and then fill the fuel tank.

## 3.1 Wheel Kit Assembly

**Procedure** This is a schematic of the wheel kit assembly if equipped.

- Assemble the wheel kit to the machine as shown according to the target torque requirements.



A: 5100080858 Wheel kit.

### Operation

Observe the following guidelines when operating the wheel kit.

- Turn OFF the engine before using the transport wheel kit.
- Swivel the pin using your foot to dis-engage the wheel kit.
- Swivel the pin on the hook and make sure the hook grabs the metal handle's rod.
- Slowly slide the wheel kit under the base plate until its secured in place.
- Step on the wheel kit rod and place the handle to normal position to maneuver the machine.
- Reverse this procedure to return the wheel kit on engage position.



## 3.2 Beacon (Optional)

With the Bluetooth module, operating data can be recorded and transmitted to a terminal device. It also enables the machine to be identified.

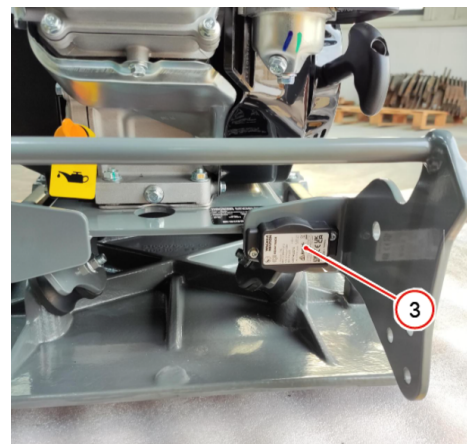
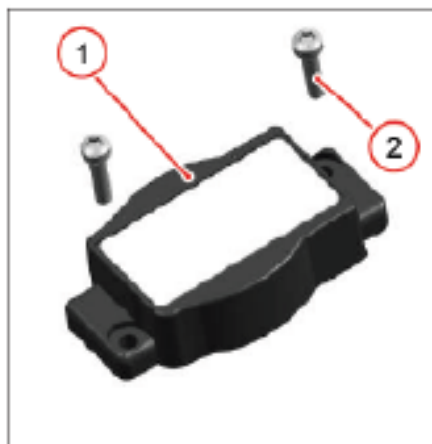


- Procedure**
- Turn OFF the engine. Allow the machine to cool down sufficiently in order to prevent burns.
  - Place the machine upright and stable on a level surface with sufficient load-bearing capacity.
  - Secure the machine against overturning.
  - Mount beacon **1** with two screws and nuts **2** on the mounting holes provided on the back of the engine mounting **3**.
  - Tightening torque 2Nm.



### WARNING

The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Do not touch the muffler while it is hot.



## 4 Operation

### 4.1 Preparing the Machine for First Use

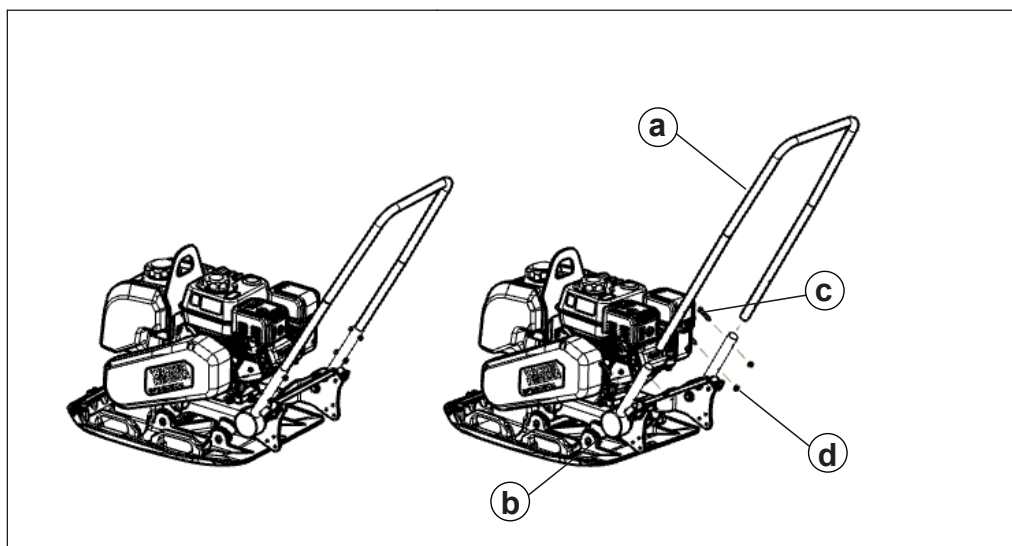
- Procedure** Perform the procedure below to prepare the machine.
1. Make sure all loose packaging materials have been removed from the machine.
  2. Check the machine and its components for damage. If there is visible damage, do not operate the machine! Contact your Wacker Neuson dealer immediately for assistance.
  3. Take inventory of all items included with the machine and verify that all loose components and fasteners are accounted for.
  4. Attach component parts not already attached.
  5. Add fluids as needed and applicable, including fuel, engine oil, and battery acid.
  6. Move the machine to its operating location.

---

**Result** The vibratory plate is now ready to use.

### 4.2 Handle Assembly

**Procedure** Perform the procedure below to prepare and assemble the handle to machine.



1. Align the upper handle **(a)** pipe to the lower handle **(b)** pipe, then shoot the upper handle into the lower handle.
2. Tighten the upper handle and lower handle with screw **(c)** and nut **(d)** at 25NM torque.

## Operation

### 4.3 Recommended Fuel

The engine requires regular grade unleaded gasoline. Use only fresh, clean gasoline. Gasoline containing water or dirt will damage the fuel system. Consult the engine owner's manual for complete fuel specifications.

---

#### Use of oxygenated fuels

Some conventional gasolines are blended with alcohol. These gasolines are collectively referred to as oxygenated fuels. If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, confirm the fuel's contents. Some states and provinces require this information to be posted on the fuel pump.

---

#### Ethanol

The following is the Wacker Neuson approved percentage of oxygenates: (Ethyl or grain alcohol) 10% by volume. You may use gasoline containing up to 10% ethanol by volume (commonly referred to as E10). Gasoline containing more than 10% ethanol (such as E15, or E85) may not be used because it could damage the engine.

If you notice any undesirable operating symptoms, try another service station, or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates above are not covered under warranty.

### 4.4 Application

#### Overview

This plate is designed for compacting loose, granular soils, gravel, and paving stones. It is intended to be used in confined areas and areas next to structures such as walls, curbs, and foundations. Plates equipped with water tanks can be used for compacting asphalt.

This plate is not recommended for compacting cohesive soils with a heavy clay content. For cohesive soil, use a vibratory rammer or sheepfoot roller.

### 4.5 Before Starting the Machine

#### Check

Read and understand the safety and operating instructions at the beginning of this manual.

- Oil level in the engine
- Fuel level
- Condition of the air cleaner
- Tightness of the external fasteners
- Condition of the fuel lines



## 4.6 Starting the Machine

**Procedure** Perform the procedures below to start the machine.

1. Turn the fuel cock to the "ON" (OPEN) position **(a1)**.

**Note:** *If engine is cold, move choke lever to close position **(b1)**. If engine is hot, set choke to open position **(b2)**.*

2. Move the governor lever to left a little **(c1)**.

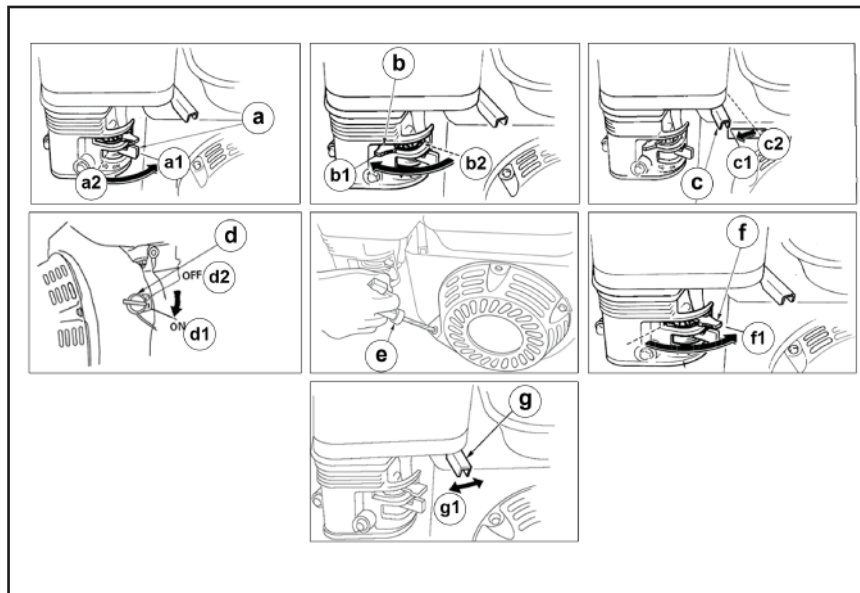
3. Turn the engine switch to "ON" position. **(d1)**

4. Pull the starter rope **(e)**.

5. **Note:** *Don't allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.*

6. Preheat the engine and push back the choke lever to the "OPEN" position **(f1)**.

7. Move the throttle lever to proper position to make the gasoline engine run at required velocity. **(g1)**



**Result** The machine is now ready

## 4.7 Stopping the Machine

**Procedure** Perform the following procedures to stop the engine.

1. Reduce the engine rpm to idle by moving the throttle completely to the left **(g)**.

2. Turn the engine switch to "OFF" **(d2)**

3. Close the fuel valve by moving the lever to the left **(a2)**.

# Operation

## 4.8 Operation

Run the engine at full throttle and allow the plate to pull itself along at its normal speed. When operating on an incline it may be necessary to assist the plate by pushing it forward slightly. When operating downhill hold the plate back slightly, if it begins to pick up speed. Depending on the material being compacted, three or four passes are recommended to achieve the best compaction.

While a certain amount of moisture in the soil is necessary, excessive moisture may cause soil particles to stick together and prevent good compaction. If soil is extremely wet, allow it to dry somewhat before compacting.

If soil is so dry as to create dust clouds while operating plate, some moisture should be added to the ground material to improve compaction. This will also reduce service to the air filter.

For compacting asphalt, use a water tank to wet the asphalt and the underside of plate. This will prevent asphalt material from sticking. Two passes are usually sufficient to ensure good compaction.

When using the plate on paving stones, attach a pad to the bottom of the plate to prevent chipping or grinding surface of stones. A special polyurethane pad designed for this purpose is available as an optional accessory.

**NOTICE:** DO NOT operate the plate on concrete or on extremely hard, dry, compacted surfaces. The plate will jump rather than vibrate and could damage both the plate and the engine.

## 5 Maintenance

### 5.1 Maintaining the Emission Control System

Normal maintenance, replacement, or repair of emission control devices and systems may be performed by any repair establishments or individual; however, warranty repairs must be performed by a dealer service center authorized by WACKER NEUSON. The use of service parts that are not equivalent in performance and durability by authorized parts may impair the effectiveness of the emission control system and may have a bearing on the outcome of a warranty.

### 5.2 Periodic Maintenance Schedule

#### Engine Maintenance

The chart below lists basic engine maintenance. Refer to the engine manufacturer's Operation manual additional information.

	Daily before starting	After first 20 hr or 1mo.	Every 50 hr or 3 mo.	Every 100 hr or 6 mo.	Every 300 hr or 1 yr.
Check the fuel level.	■				
Check the engine oil level.	■				
Inspect the fuel lines	■				
Inspect the air filter. Replace as needed	■				
Clean the air cleaner element			■		
Change the engine oil		■		■	
Clean the engine cooling fins				■	
Clean the sediment cup or fuel filter.				■	
Check and clean the spark plug.				■	
Check and adjust the valve clearance.					■

## Machine Maintenance

The chart below lists basic machine maintenance.

	Daily before starting	Every 50 hr or 3 mo.	Every 100 hr or 6 mo.	Every 300 hr or 1 yr.
Check the external hardware	■			
Check the drive belt			■	
Inspect the shockmounts for damage		■		
Replace the shockmounts as needed				■

**NOTICE:** When the machine is being used in asphalt, it is highly recommended that shockmounts are replaced every year or after 300 hours of usage.

### 5.3 Servicing the Spark Plug

Clean or replace the spark plug as needed to ensure proper operation. Refer to your engine operator's manual.

**WARNING**

The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Do not touch the muffler while it is hot.

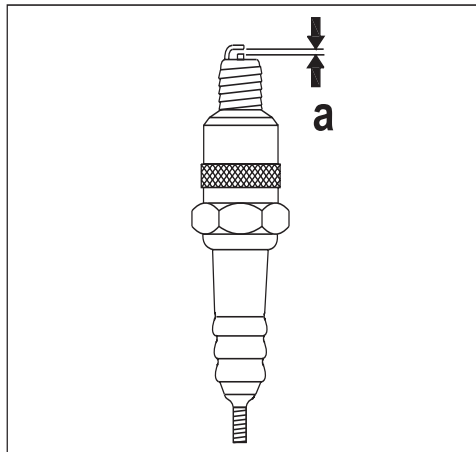
**NOTICE:** Refer to section "Technical Data" for the recommended spark plug type and the electrode gap.

**Procedure**

Perform the procedure below to service the spark plug.

1. Remove the spark plug and inspect it.
2. Replace the spark plug if the insulator is cracked or chipped.
3. Clean the spark plug electrodes with a wire brush.
4. Set the electrode gap (**a**).
5. Tighten the spark plug securely.

**NOTICE:** A loose spark plug can become very hot and may cause engine damage.

**Result**

The spark plug has now been cleaned and checked.

## 5.4 Servicing the Air Cleaner

**Background** A dirty air filter element can restrict air flowing into the carburetor. To keep the carburetor in good working conditions, service the air filter element periodically. If operating the engine in extremely dusty area, the job should be done more often.



**WARNING**

Explosion hazard and fire hazard.

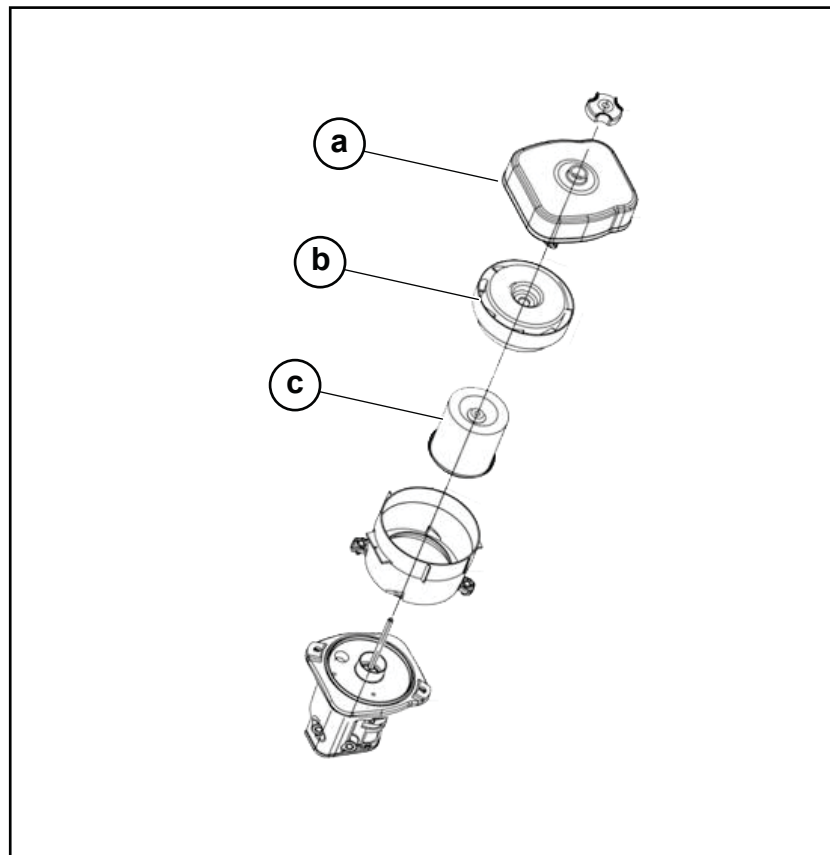
- ▶ Do not clean the air filter element with gasoline or low-flash point detergents.

**NOTICE:** Do not run the engine without an air filter element; doing so will damage the engine.

**Procedure**

Perform the procedure below to service the air filter element.

1. Remove air cleaner cover **(a)**. Remove both elements and inspect them for holes or tears. Replace damaged elements
2. Wash foam element **(b)** in solution of mild detergent and warm water. Rinse thoroughly in clean water. Allow element to dry thoroughly. Soak element in clean engine oil and squeeze out excess oil.
3. Tap paper element **(c)** lightly to remove excess dirt. Replace paper element if it appears heavily soiled.



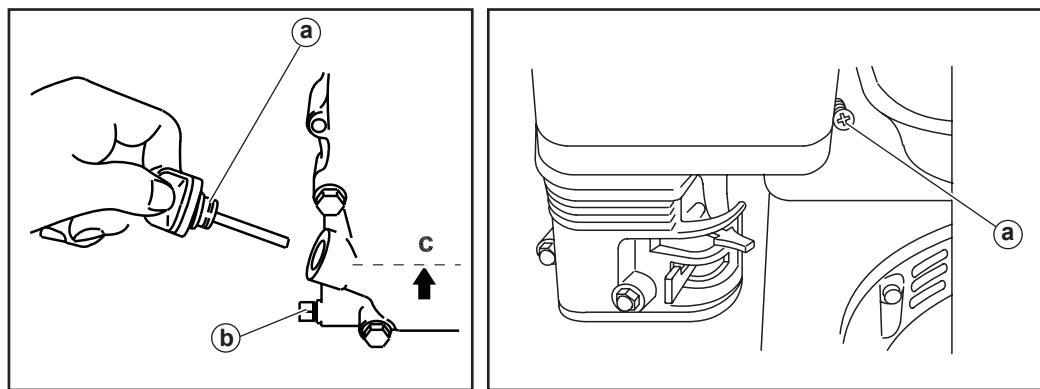
## 5.5 Changing the Engine Oil

**Procedure** Perform the procedure below to change the engine oil.

1. Drain the oil while the engine is still warm.
2. Remove the oil filter plug **(a)** and the drain plug **(b)** to drain the oil.

**Note:** *In the interest of environmental protection, place a plastic sheet and a container under the machine to collect any liquid that drains off. Dispose of this liquid in accordance with environmental protection legislation.*

3. Install the drain plug.
4. Fill the engine crankcase with the recommended oil up to the level of the lug opening **(c)**. See chapter *Technical Data* for oil quantity and type.
5. Install the oil filler plug.

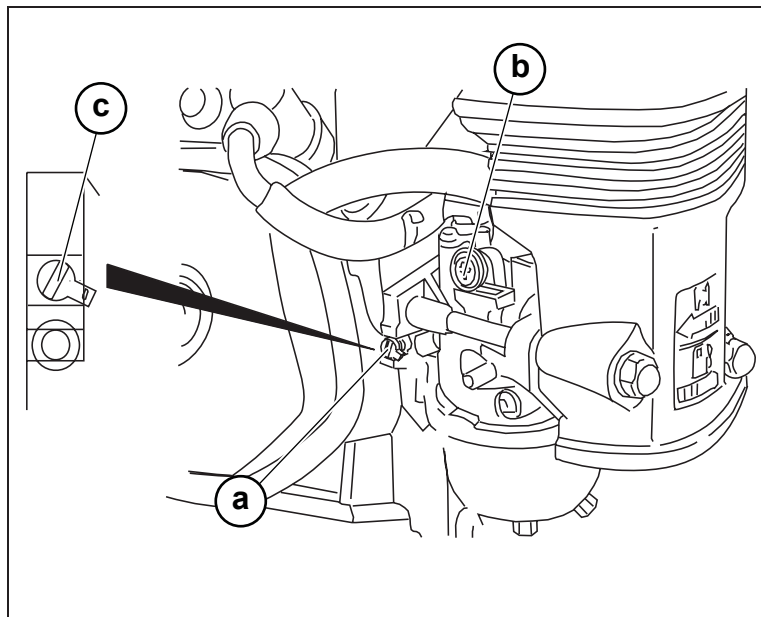


## 5.6 Adjusting the Carburetor

**Procedure** Perform the procedure below to adjust the carburetor.

1. Start the engine and allow it to warm up to operating temperature.
2. Set the pilot screw **(a)** two turns out. See *Note*.
3. With the engine idling, turn the pilot screw **(a)** in or out to the setting that produces the highest rpm.
4. After the pilot screw is adjusted, turn the throttle stop screw **(b)** to obtain the standard idle speed. See *Technical Data*.

**Note:** On some engines the pilot screw is fitted with a limiter cap **(c)** to prevent excessive enrichment of the air-fuel mixture in order to comply with emission regulations. The mixture is set at the factory and no adjustment should be necessary. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the pilot screw.

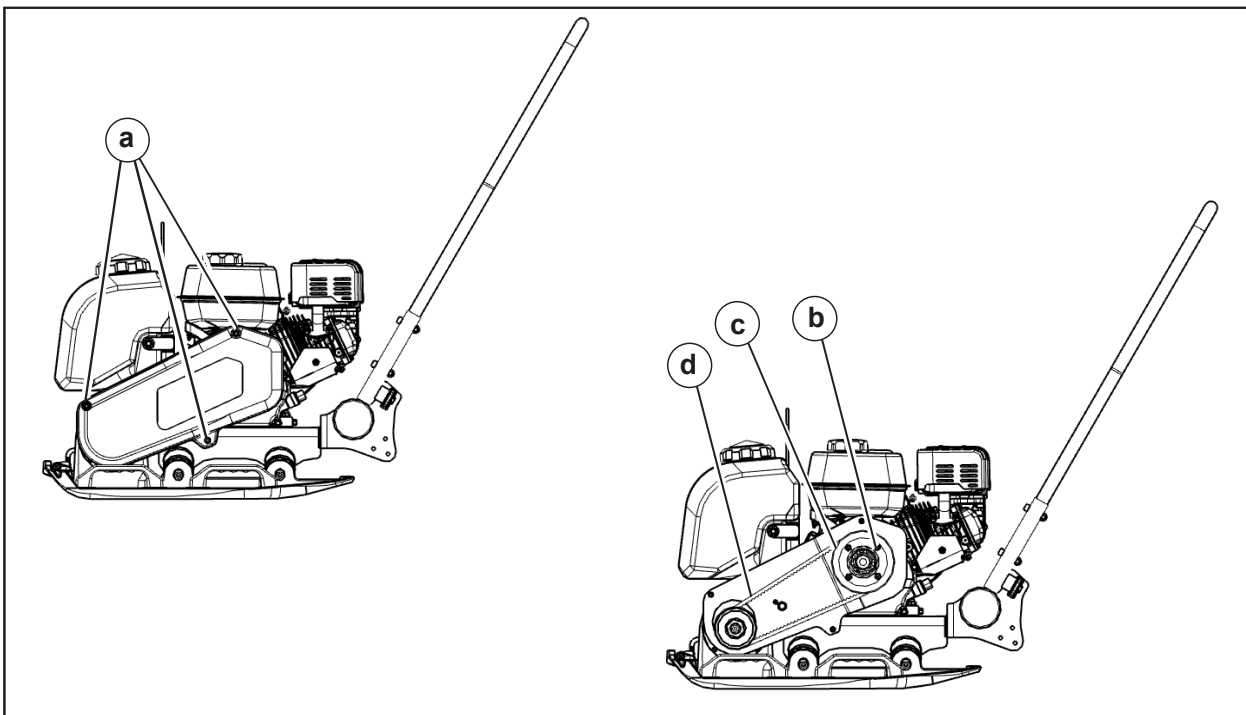


## 5.7 Servicing the Drive Belt

**Check** On new machines or after installing a new belt, check the belt tension after first 20 hours of operation. Check the belt every 100 hours thereafter.

**Procedure** Perform the procedure below to service the drive belt.

1. Loosen the three screws (a) on the beltguard, then remove the beltguard, keeping the screw assemblies captured on the beltguard.
2. Remove the 4 x M6 nuts (b) on the clutch.
3. Remove the clutch cover (c).
4. Replace the belt (d) manually.
5. Assemble the clutch cover (c).
6. Put the 4 x M6 (b) nuts manually , then rotate the clutch position and make one nut on the bottom position. Fix the bottom nut , then rotate another nut to the bottom and fix the nut one by one.
7. Set the 4 x M6 (b) nuts torque to 10NM.
8. Assemble the beltguard, then fix the three M8 screws (a) . Set the screws' torque to 15 NM.



**Result** The drivebelt has now been changed.

## 5.8 Cleaning the Plate

Clean the plate after use to remove dirt, stones, and mud caught under the engine console. If the plate is being used in a dusty area, check the engine cylinder cooling fins for heavy dirt accumulation. Keep the engine cylinder fins clean to prevent it from overheating.

## 5.9 Storage

**Procedure** If the plate is being stored for more than 30 days:

1. Remove loose stones and dirt from the plate.
2. Clean the engine cylinder cooling fins.
3. Clean or replace the air filter.
4. Change the exciter oil.
5. Change the engine oil and follow the procedures described in engine manual for engine storage.
6. Cover the plate and engine and store in a clean, dry area.

# Troubleshooting

## 6 Troubleshooting

Problem	Cause	Remedy
Plate does not develop full speed. Poor compaction.	<ul style="list-style-type: none"> <li>• Engine throttle control not completely open.</li> <li>• Throttle control not adjusted correctly.</li> <li>• Ground too wet, plate sticking.</li> <li>• Drive belt loose or worn, slipping on pulleys.</li> <li>• Exciter bearings binding.</li> <li>• Air filter clogged with dust, reducing engine performance.</li> <li>• Engine speed is too low.</li> </ul>	<ul style="list-style-type: none"> <li>• Allow soil to dry before compacting.</li> <li>• Adjust or replace belt.</li> <li>• Check that engine mounting bolts are tight.</li> <li>• Check condition and level of oil in exciter.</li> <li>• Check engine speed with tachometer.</li> <li>• Adjust or repair engine to run correctly speed. Refer to engine manual.</li> </ul>
Engine running, no vibration.	<ul style="list-style-type: none"> <li>• Engine throttle not open.</li> <li>• Drive belt loose or broken.</li> <li>• Clutch damaged.</li> <li>• Engine speed is too low.</li> <li>• Too much oil in exciter</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust or replace the drive belt.</li> <li>• Inspect and replace the clutch.</li> <li>• Check engine speed.</li> <li>• Adjust oil to correct level.</li> </ul>
Plate jumps or compacts unevenly.	<ul style="list-style-type: none"> <li>• Ground surface too hard.</li> <li>• Shockmounts loose or damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Inspect and replace the shockmounts.</li> </ul>



## 7 Technical Data

### 7.1 Engine Data

Machine		BPS1550Gw-c CE	BPS2050Gw-c CE
<b>Engine</b>			
Engine make		Loncin	
Engine model		G210FA	
Maximum rated power at rated speed	kW	4.4 @ 3600 rpm	
Spark plug		F7RTC or equivalent	
Electrode gap	mm (in.)	0.70–0.80 (0.028–0.032)	
Operating speed	rpm	3600	
Air cleaner	type	3 stage filter (Cyclone)	
Engine lubrication	oil grade	SAE 10W-30,API SE or SF, for general use	
Engine oil capacity	ml (oz.)	600 (20)	
Fuel	type	Gasoline	
Fuel tank capacity	L (gal)	3.0 (0.8)	
Valve clearance (cold) Inlet: Outlet:	mm.	0.15 ± 0.02 0.20 ± 0.02	
Exhaust-emission level		EU Stage V	
CO2 emission*	g/kWh	880.5	
*Determined value of the CO2 emission during engine certification without consideration of the applications on the machine.			

## 7.2 Machine Data

Machine		BPS1550Gw-c CE	BPS2050Gw-c CE
<b>Plate</b>			
Centrifugal force	kN	15	20
Gradeability	%	30	30
Exciter frequency	Hz	93 Hz	93 Hz
Exciter lubrication	ml (oz)	250 (8.45) SAE 75W-90	250 (8.45) SAE 75W-90
Forward speed*	m/min	20 - 25	25 - 30
Water tank capacity	l (qts.)	10 (8.8)	10 (8.8)
Operating weight	kg (lbs.)	87 (192)	95 (209.4)
Operating temperature	°C	-15 to +45	
Storage temperature	°C	-15 to +40	

\* Depends on the soil conditions.

## 7.3 Sound and Vibration Measurements

The required sound specification, EU Noise Directive 2000/14/EC Annex VI & 2005/88/EC Basic noise emission standard EN ISO 3744: 1995 and EN 500-4 rev.1:1998 Annex C.

Operation condition in according to point 8 Prt B

Annex III EU-RL 2000/14/EC and EN 500-4 rev.1:1998 Annex C

- ▶ The measured sound power level ( $L_{WA}$ ) = 105.6 dB(A)
- ▶ The guaranteed sound power level ( $L_{WA}$ ) = 108 dB(A)

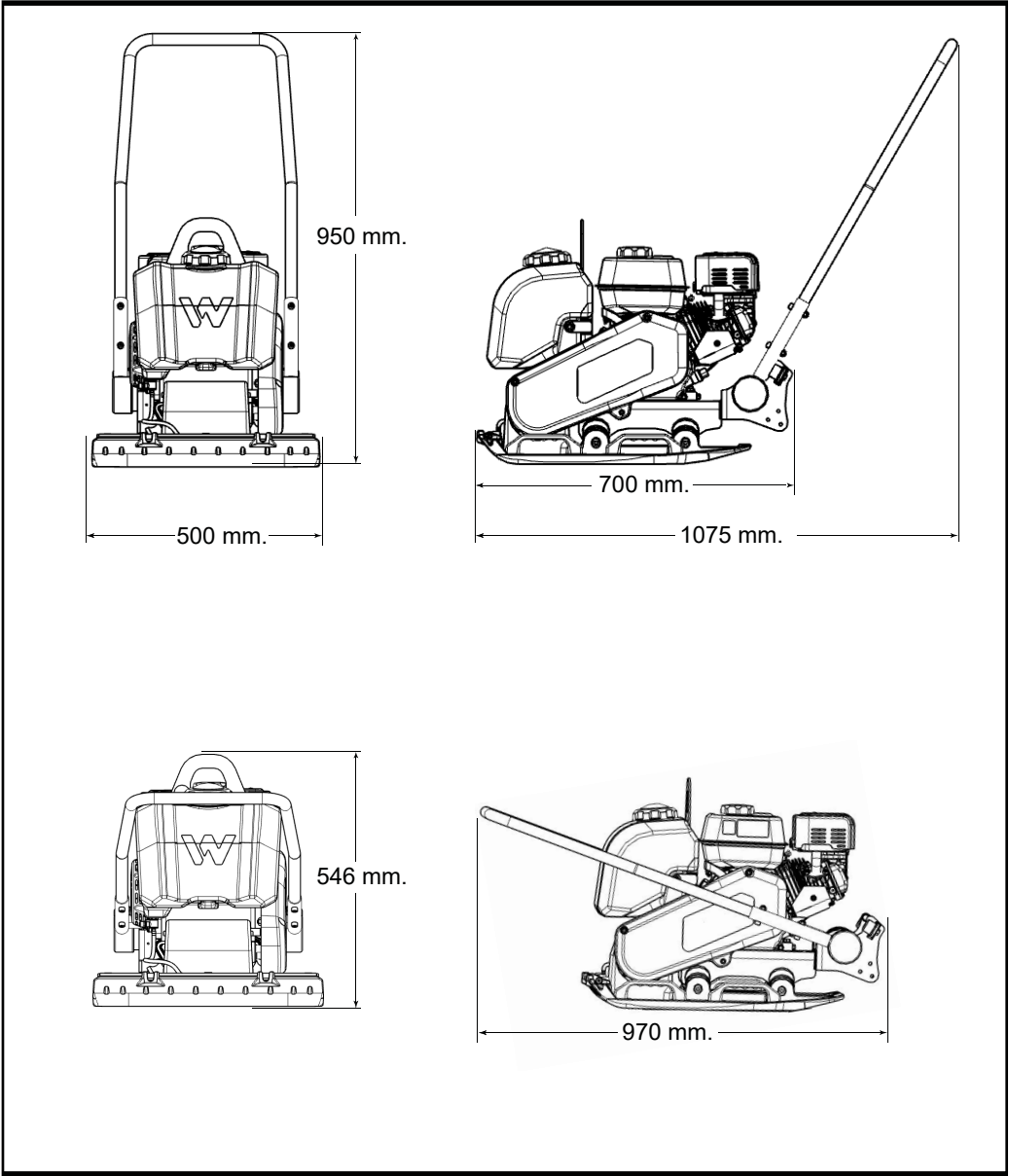
### BPS1550Gw-c CE

The weighted effective acceleration value, determined according to handheld vibration standard EN 500-4: 2011 Annex C is approximately  $5.81 \text{ m/s}^2$ .

### BPS2050Gw-c CE

The weighted effective acceleration value, determined according to handheld vibration standard EN 500-4: 2011 Annex C is approximately  $8.05 \text{ m/s}^2$ .

8 Dimensions





**WACKER  
NEUSON**

*all it takes!*

## EU Declaration of Conformity

### Manufacturer

Wacker Neuson Machinery (China) Co. Ltd., No. 1688 Xinkai Road, Pinghu Economic Development Zone, Pinghu City, Zhejiang Province, P.R. China

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Product	BPS1550Gw-c CE	BPS2050Gw-c CE
Product type	Vibratory plate	
Function of product	Soil compaction	
Material number	5100079312	5100079313
Net installed power	4.4 kW	
Measured sound power level	105.6 dB(A)	
Guaranteed sound power level	108 dB(A)	
Serial number		

### Conformity assessment procedure

2000/14/EC, Annex VI

### Notified body

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch, 3-13F, No. 151 Heng Tong Road Shanghai 200070 (CN) (NB 0036)

### Directives and standards

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

2006/42/EC • 2000/14/EC • 2014/30/EU • EN 500-1:2006 + A1:2009 • EN 500-4:2011  
EN ISO 13766-1:2018 • EN ISO 13766-2:2018

### Person responsible for technical documents

Wacker Neuson Produktion GmbH & Co. KG, Wackerstraße 6, 85084 Reichertshofen (DE)

Pinghu (CN), 1/5/2026

Marc Scheib  
Managing Director





**WACKER  
NEUSON**

