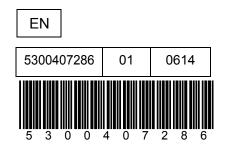
Operator's Manual

Vibroplate MP70





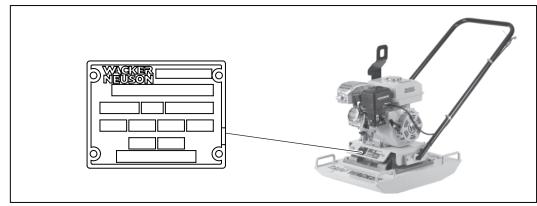
Copyright notice	© Copyright 2014 by Wacker Neuson Corporation. All rights, including copying and distribution rights, are reserved. This publication may be photocopied by the original purchaser of the machine. Any other type of reproduction is prohibited without express written permission from Wacker Neuson Corporation. Any type of reproduction or distribution not authorized by Wacker Neuson Corporation 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 Manila Incorporated Lot 2,Blk 1 Phase 3, PEZA Drive, First Cavite Industrial Estate, Brgy. Langkaan Dasmariñas, Cavite, Philippines 4126 Tel: +63-(0)2-580-7136 Fax: +63-(0)2-580-7122 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

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
MP70	0630243



wpm_gr012086

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 Manila Inc. will be referred to as Wacker Neuson. 	
	 Keep a copy of the Operator's Manual with the machine at all times. 	
 Use the separate Parts Book supplied with the machine to order re parts. 		

 If you are missing any of these documents, please contact Wacker Neuson to order a replacement or visit 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	MP70	
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 <i>approved</i> 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. 	



	Foreword		3
1	Safet	y Information	7
	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	11
2	Labe	ls	14
	2.1	Label Locations	14
	2.2	Label Meanings	15
3	Liftin	g and Transporting	17
4	Oper	ation	18
	4.1	Preparing the Machine for First Use	18
	4.2	Recommended Fuel	18
	4.3	Application	19
	4.4	Before Starting the Machine	19
	4.5	Starting the Machine	20
	4.6	Stopping the Machine	21
	4.7	Operation	21



Table of Contents

5 Maintenance

5.1	Maintaining the Emission Control System	22
5.2	Periodic Maintenance Schedule	22
5.3	Servicing the Spark Plug	24
5.4	Servicing the Air Cleaner	25
5.5	Changing the Engine Oil	26
5.6	Adjusting the Engine Speed	27
5.7	Adjusting the Carburetor	27
5.8	Cleaning the Sediment Cup	28
Troubleshooting		29
Tech	nical Data	30
7.1	Engine Data	

7.2	Machine	31
7.3	Sound and Vibration Measurements	31

6

8 Dimensions

WACKER NEUSON

6

7

22

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

MP70

The Wacker Neuson Vibratory plate is designed for the compaction of sand, gravel, grit, granular materials, segmental brick paving and hot and cold asphalt, (when fitted with the optional water sprinkler system).

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

- Compact design with central mounted, fully closed exciter for an even spread of compactive force over the whole base plate.
- Sturdy 4-stroke petrol or diesel engine with recoil starter is isolated from vibration by rubber dampers.
- Vibration isolated reversible handle with throttle control for ease of operation and reduced operator fatigue.

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

MP70

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.



MP70	Safety Information
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 When refueling the engine: safety

- 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.



MP70	Safety Information
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.



MP70	Safety Information	
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). 	
Precautions	 Always turn the engine off before servicing the machine. If the engine has electric start, disconnect the negative terminal on the battery before servicing 	

the machine.Always let the engine cool before transporting or servicing the machine.



Labels

2 Labels

2.1 Label Locations



wpm_gr012087



2.2 Label Meanings

A	WARNING WARNUNG WWARNUNG ADVERTENCIA AVERTISSEMENT 118085	WARNING! Always wearing hearing and eye protection when operating this machine.
В	A WARNING WARNUNG A ADVERTENCIA A VERTISSEMENT	WARNING Hot surface
С	LwA 100dB	Guaranteed sound power level in dB(A).
D	A WARNING WARNING A WARNUNG A AVERTENCIA A VERTISSEMENT	WARNING Hand injury if caught in moving belt. Always replace beltguard.
E	WARNING Please read the user's manual carefully before operating the product	Read the operator's manual carefully before operating the product.
F	¢2	Throttle control lever: Turtle = Idle or Slow Rabbit = Full or Fast





Labels

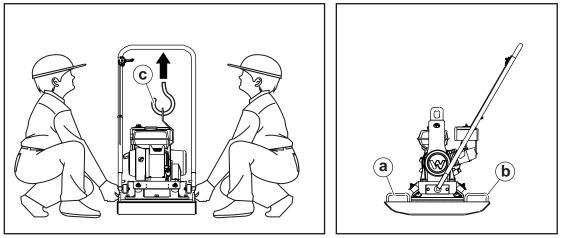
G	A WARNING Gasoline is highly flammable and explosive. Turn engine off and let cool before refueling. The engine emits toxic carbon monoxide. Do not run in an enclosed area. Read Owner's Manual before operation. Image: State of the form of	Engines emit carbon monoxide; operate only in well-ventilated area. Read the operator's Manual No sparks, flames, or burning objects near the machine. Shut off the engine before refueling.
Н		Company logo
1	WACKER NEUSON	Company label
J		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.
К	U.S. PAT. Nos.: OTHER U.S. AND FOREIGN PATENTS PENDING	This machine may be covered by one or more patents.
L	MAINTAIN AIR CLEANER Clean the air filter every 50 hours of use or every 10 hours in very dusty sites. Wash the foam pre-cleaner with cleaning detergents. Clean the paper filter by tapping the element against a hard surface or blowing out the dust with compressed air.Never clean with a brush.	Clean the air filter every 50 hours of use or every 10 hours in a very dusty sites. Wash the foam pre-cleaner with cleaning detergents. Clean the paper filter by tapping the element against a hard surface or blowing out the dust with compressed air. Never clean with a brush.
М	CHORE - RUN CHORE - RUN OFF - ON	Choke lever label



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 vibroplate.

- 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 weightbearing capacity to lift or hold the machine safely.
- Remain aware of the location of other people nearby when lifting the machine.

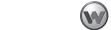


wpm_gr012091

Transporting Observe the following guidelines when transporting the vibroplate 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.
- Do not refuel the machine in or on the transport vehicle. Move the machine to its operating location and then fill the fuel tank.







4 Operation

4.1 **Preparing the Machine for First Use**

- 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.

4.2 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.

The following is the Wacker Neuson approved percentage of oxygenates:

Ethanol (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, 0r 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.



4.3 Application

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 sheepsfoot roller.

4.4 Before Starting the Machine

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

Check

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



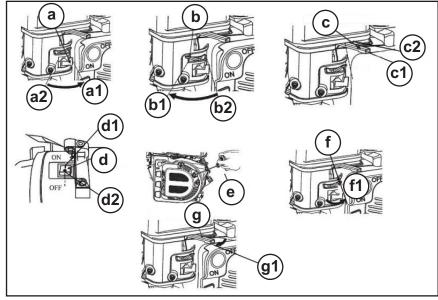
4.5 Starting the Machine

Procedure Perform the procedures below to start the machine.

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

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

- 2. Move the governor lever to left a little (c1).
- 3. Turn the engine switch to "ON" postion. (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)



wpm_gr011255

Result The machine is now ready



4.6 Stopping the Machine

Perform the following procedures to stop the engine.

Procedure

- 2. Turn the engine switch to "OFF" (e2)
- 3. Close the fuel valve by moving the lever to the left (a2).

4.7 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 pickup speed. Depending on the material being compacted, three or four passes are recommended to achieve the best compaction.

1. Reduce the engine rpm to idle by moving the throttle completely to the left (g2).

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 the soil is extremely wet, allow it to dry somewhat before compacting.

If the soil is so dry as to create dust clouds while operating the 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 the plate. This will prevent the 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 the 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

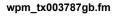
Normal maintenance, replacement, or repair of emission control devices and systems may be performed by any repair establishments or individual; however, warranty repairs must be performed by a dealer service center authorized by WACKER NEUSON. The use of service parts that are not equivalent in performance 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	Every 50 hr	Every 100 hr	Every 300 hr
Check the fuel level.					
Check the engine oil level.					
Inspect the air filter. Replace as needed					
Check the external hardware.					
Clean the air element					
Inspect the shockmounts for damage					
Change the engine oil					
Clean the sediment cup or fuel strainer.					
Check and clean the spark plug.					
Check and adjust the valve clearance.					
Clean the fuel tank					
Check the condition of the fuel lines. Replace when necessary.					
Service more frequently in dusty conditions.					





Machine Maintenance

The chart below lists basic machine maintenance.

	Daily before starting	After first 20 hr	Every 50 hr	Every 100 hr	Every 300 hr
Check the external hardware					
Check and adjust the drive belts					
Inspect the shockmounts for damage					
Replace the shockmounts as needed					
Change the exciter oil					

NOTICE: When the machine is being used on 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

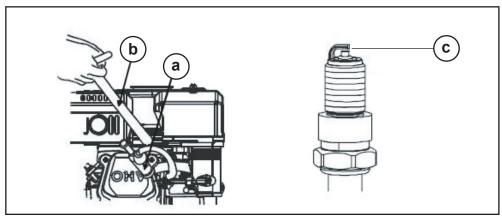
The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Do not touch the muffler while it is hot.

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 cap.
- 2. Clear away the dirt around the spark plug base.
- 3. Dismantle the spark plug with a spark plug wrench.
- 4. Visually check the spark plug. Clean with a steel brush. If the insulator is damaged, replace the spark plug instead.
- 5. Measure the spark plug clearance with a feeler. The clearance should be 0.7 0.8 mm. If adjustment is necessary, bend the side electrode carefully.
- 6. Check if the spark plug gasket is in good conditions. In order to screw thread misplace, screw in by hand.
- 7. Screw on the spark plug to the bottom first by hand and then screw in by a spark plug wrench and compress the gasket.
- 8. If a new spark plug is used, more 1/2 turns after compressing the gasket.
- 9. If reinstalling the used spark plug, just more twist 1/8 1/4 turns.

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



wpm_gr011254

Result The spark plug has now been cleaned and checked.



5.4 Servicing the Air Cleaner

A dirty air cleaner can restrict air flowing into the carburetor. To keep the carburetor in good working conditions, please service the air cleaner periodically. If operating the engine in extremely dust area, the job should be done more often.

NOTICE: Do not clean the air cleaner element with gasoline or low-flash point detergents, or explosion may happen.

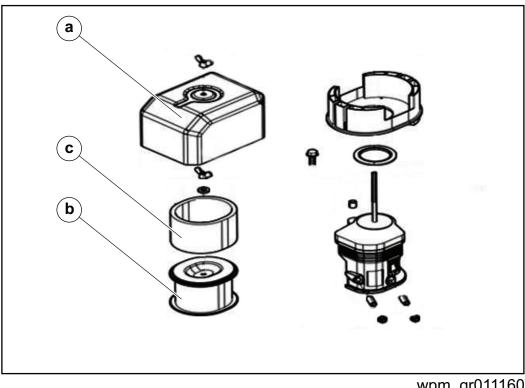
NOTICE: Do not run the engine without an air cleaner, because air with dirt and dust entering the engine can speed up the engine wear.

Procedure Perform the procedure below to service the air cleaner.

- 1. Remove the air cleaner cover (a) off and take the element out.
- 2. Paper element (b): Clean the element using a brush to remove excess dirt. Replace the paper element if it appears heavily soiled.

Foam element (c): Wash the element with detergent and warm water (or non flammable or high-flash point cleansing solvents) and dry up.

- 3. Clean the air cleaner cover and inner surface with wet cloth, be careful not to allow the dust entering into the carburetor.
- 4. Reinstall the element and put the air cleaner cover on.



wpm_gr011160



5.5 Changing the Engine Oil

Requirement The requirements for this procedure are:

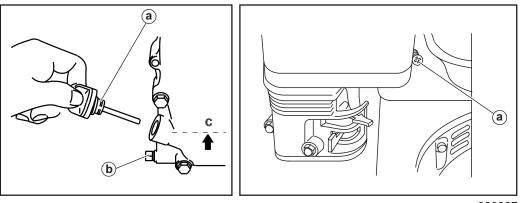
- Engine warm
- Fresh oil

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 through the oil filler opening (b), to the upper mark on the dipstick (c). Do not thread in the dipstick to check the level. See Technical Data for oil quantity and type.
- 5. Install the oil filler plug (a).



wc_gr000087



5.6 Adjusting the Engine Speed

Procedure Perform the procedure below to adjust the engine speed.

- 1. Place machine on a rubber test mat to prevent it from moving.
- 2. Start engine and allow it to warm up for a minute.
- 3. Turn throttle stop screw (a) in to increase speed, out to decrease speed. Make sure throttle lever is touching stop screw before measuring rpm.

NOTICE: Running plate at a speed higher than that listed in *Technical Data* can damage both the plate and the engine.

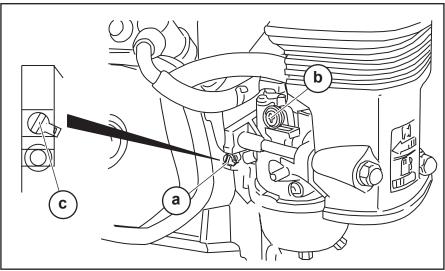
Remember Adjust to a full load speed of 3600 ± 100 rpm

5.7 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.



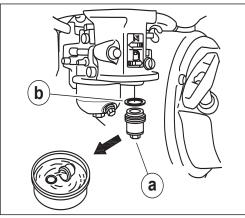
wpm_gr012092



5.8 Cleaning the Sediment Cup

Procedure Perform the procedure below to clean the sediment cup.

- 1. Turn the fuel valve off.
- 2. IRemove the sediment cup (a) and the O-ring (b).
- 3. Wash both thoroughly in a nonflammable solvent. Dry and re-install them.
- 4. Turn the fuel valve on and check for leaks.



wc_gr000029



6 Troubleshooting

Problem	Cause	Remedy		
Plate does not develop full speed. Poor compaction.	 Engine throttle control not completely open. Throttle control not adjusted correctly. Ground too wet, plate sticking. Drive belt loose or worn, slip- ping on pulleys. Exciter bearings binding. Air filter clogged with dust, reducing engine performance. Engine speed is too low. 	 Allow soil to dry before compacting. Adjust or replace belt. Check that engine mounting bolts are tight. Check condition and level of oil in exciter. Check engine speed with tachometer. Adjust or repair engine to run correctly speed. Refer to engine manual. 		
Engine running, no vibration.	 Engine throttle not open. Drive belt loose or broken. Clutch damaged. Engine speed is too low. Too much oil in exciter 	 Adjust or replace the drive belt. Inspect and replace the clutch. Check engine speed. Adjust oit to correct level. 		
Plate jumps or compacts unevenly.	Ground surface too hard.Shockmounts loose or damaged	 Inspect and replace the shockmounts. 		



7 Technical Data

7.1 Engine Data

Engine Power Rating

Net power rating per SAE J1349. Actual power output may vary due to conditions of specific use.

		MP70		
Engine				
Engine make		Wacker Neuson		
Engine model		WN6		
Maximum rated power at rated speed	kW (hp)	3.5 (4.7) @ 3600 rpm		
Spark plug		P6TC		
Electrode gap	mm (in.)	0.6–0.8 (0.024–0.031)		
Operating speed	rpm	3600		
Air cleaner	type	Dual element		
Engine lubrication	oil grade	SAE 15W-40		
Engine oil capacity	ml (oz.)	600 (20)		
Fuel	type	Regular unleaded gasoline		
Fuel tank capacity	L (gal)	3.6 (3.7)		
Valve clearance (cold) Inlet: Outlet:	mm. (in.)	0.10 - 0.15 (0.004 - 0.006) 0.15 - 0.20 (0.006 - 0.008)		



7.2 Machine Data

		MP70		
Plate				
Weight	kg (lbs.)	49 (108)		
Exciter speed	rpm	5800± 100		
Exciter lubrication	ml (oz)	207 (7) Automatic transmission fluid Dextron III/Mercon or equivalent		

7.3 Sound and Vibration Measurements

The required sound specification, Paragraph 1.7.4.f of 89/392/EEC Machinery Directive, is:

- The guaranteed sound power level (L_{WA}) = 108 dB(A)
- ► the sound pressure level at operator location (L_{pA}) = 97 dB(A)

These sound values were determined according to ISO 3744 for the sound power level (L_{WA}) and ISO 6081 for the sound pressure level (L_{pA}) at the operator's location.

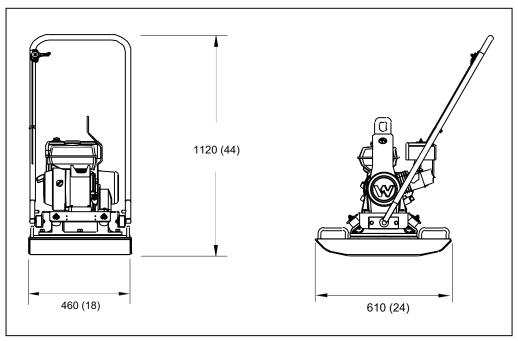
Products are tested for hand/arm vibration (HAV) level in accordance with ISO 5349 Part 1 and ISO 8662 Part 1.

The weighted effective acceleration value, determined according to ISO 5349, is 4.5 m/s²

The sound and vibration measurements were obtained with the machine operating on crushed gravel at nominal engine speed.



8 Dimensions



wpm_gr008416



Wacker Neuson SE, Preußenstraße 41, D-80809 München, Tel.: +49-(0)89-3 54 02-0 Fax: +49 - (0)89-3 54 02-390 Wacker Neuson Production Americas LLC, N92W15000 Anthony Ave., Menomonee Falls, WI 53051 Tel.: (262) 255-0500 Fax: (262) 255-0550 Tel.: (800) 770-0957 Wacker Neuson Limited - Room 1701–03 & 1717–20, 17/F. Tower 1, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hongkong. Tel: (852) 3605 5360, Fax: (852) 2758 0032