

## 1 Safety Information

This manual contains DANGER, WARNING, CAUTION, *NOTICE* and NOTE callouts 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 injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER**

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



**WARNING**

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



**CAUTION**

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

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

**Note:** *Contains additional information important to a procedure.*

## 1.1 Operating Safety

**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.



Familiarity and proper training are required for the safe operation of the machine. Machines operated improperly or by untrained personnel can be hazardous. Read the operating instructions contained in this manual and the engine manual, and familiarize yourself with the location and proper use of all controls. Inexperienced operators should receive instruction from someone familiar with the machine before being allowed to operate it.

- 1.1.1 DO NOT drive over curbs or other uneven objects that will result in the machine and operator being shaken.
- 1.1.2 DO NOT attempt to start the machine when standing alongside it. Only start the engine when seated in the driver's seat and with the forward/reverse control in the neutral position.
- 1.1.3 Do not allow anyone to operate this equipment without proper training. People operating this equipment must be familiar with the risks and hazards associated with it.
- 1.1.4 Do not touch the engine or muffler while the engine is on or immediately after it has been turned off. These areas get hot and may cause burns.
- 1.1.5 Do not use accessories or attachments that are not recommended by Wacker Neuson. Damage to equipment and injury to the user may result.
- 1.1.6 NEVER leave the machine running unattended.
- 1.1.7 NEVER operate the machine with the fuel cap loose or missing.
- 1.1.8 NEVER carry passengers on the machine. Danger of crushing—keep clear of the articulated steering joint between the front and rear frames.
- 1.1.9 NEVER use or attempt to repair damaged safety belts or ROPS. Replace only with Wacker Neuson spare parts.
- 1.1.10 ALWAYS disengage and stow the locking bar for the articulated steering joint before operating the machine. The machine cannot be steered when the locking bar is engaged.
- 1.1.11 ALWAYS check that all controls are functioning properly immediately after start-up! DO NOT operate the machine unless all controls operate correctly.

- 1.1.12 ALWAYS remain aware of changing positions and the movement of other equipment and personnel on the job site.
- 1.1.13 ALWAYS remain seated and wear the seat belt at all times while operating the machine.
- 1.1.14 ALWAYS remain aware of changing surface conditions and use extra care when operating over uneven ground, on hills, or over soft or coarse material. The machine could shift or slide unexpectedly.
- 1.1.15 ALWAYS use caution when operating the machine near the edges of pits, trenches or platforms. Check to be sure that ground surface is stable enough to support the weight of the machine with operator and that there is no danger of the roller sliding, falling or tipping.
- 1.1.16 ALWAYS wear protective clothing appropriate to the job site when operating the machine.
- 1.1.17 ALWAYS keep hands, feet, and loose clothing away from moving parts of the machine.
- 1.1.18 Read, understand, and follow procedures in the Operator's Manual before attempting to operate the machine.
- 1.1.19 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.
- 1.1.20 Always operate the machine with all safety devices and guards in place and in working order.
- 1.1.21 ALWAYS be sure that all other persons are at a safe distance from the machine. Stop the machine if people step into the working area of the machine.

## 1.2 Operator Safety while using Internal Combustion Engines



**WARNING**

Internal combustion engines present special hazards during operation and fueling. Read and follow the warning instructions in the engine owner's manual and the safety guidelines below. Failure to follow the warnings and safety standards could result in severe injury or death.

- 1.2.1 Do not smoke while operating the machine.
- 1.2.2 Do not smoke when refueling the engine.
- 1.2.3 Do not refuel a hot or running engine.
- 1.2.4 Do not refuel the engine near an open flame.
- 1.2.5 Do not spill fuel when refueling the engine.
- 1.2.6 Do not run the engine near open flames.
- 1.2.7 Do not run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell. Exposure to carbon monoxide can cause loss of consciousness and **CAN KILL YOU IN MINUTES.**
- 1.2.8 Refill the fuel tank in a well-ventilated area.
- 1.2.9 Replace the fuel tank cap after refueling.
- 1.2.10 **ALWAYS** keep the area around a hot exhaust pipe free of debris to reduce the chance of an accidental fire.
- 1.2.11 **ALWAYS** 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.

### 1.3 Service Safety

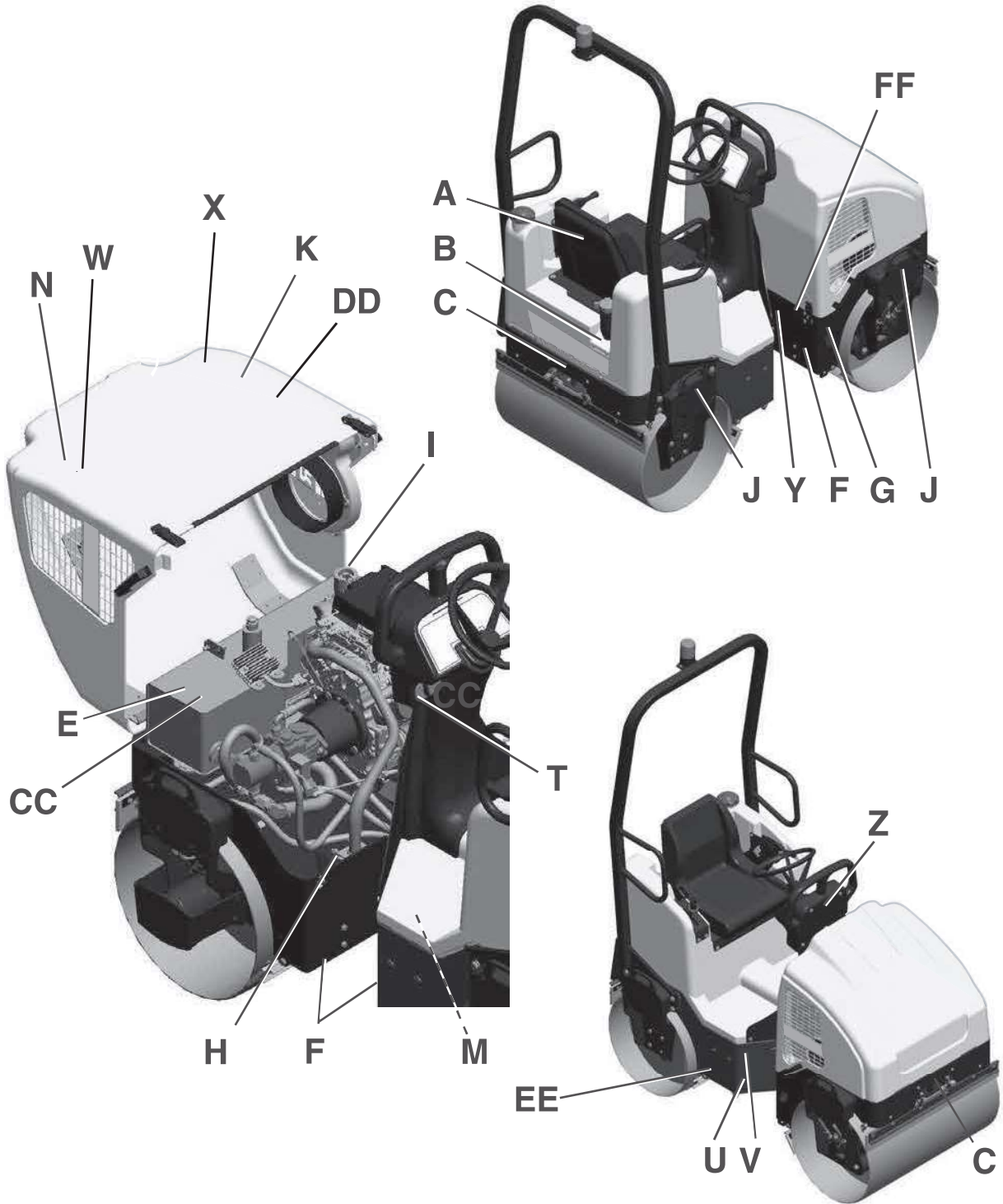


A poorly maintained machine can become a safety hazard! In order for the machine to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

- 1.3.1 Some service procedures require that the machine's battery be disconnected. To reduce the risk of personal injury, read and understand the service procedures before performing any service to the machine.
- 1.3.2 All adjustments and repairs **MUST** be completed before operation. Do not operate the machine with a known problem or deficiency! All repairs and adjustments should be completed by a qualified technician.
- 1.3.3 Do not attempt to clean or service the machine while it is running. Rotating parts can cause severe injury.
- 1.3.4 Do not crank a flooded engine with the spark plug removed on gasoline-powered engines. Fuel trapped in the cylinder will squirt out the spark plug opening.
- 1.3.5 Do not test for spark on gasoline-powered engines if the engine is flooded or the smell of gasoline is present. A stray spark could ignite the fumes.
- 1.3.6 Do not use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.
- 1.3.7 Do not modify the machine without the express written approval of the manufacturer.
- 1.3.8 **DO NOT** stand under the machine while it is being hoisted or moved.
- 1.3.9 **DO NOT** get onto the machine while it is being hoisted or moved.
- 1.3.10 **DO NOT** use the machine as a ladder. Use safe ladders and platforms designed for this purpose.
- 1.3.11 **DO NOT** modify, weld, or drill safety frames (ROPS) fitted as original equipment. **DO NOT** loosen or remove bolts. **DO NOT** weld, drill or modify a broken safety frame.
- 1.3.12 **DO NOT** open the hydraulic lines or loosen the hydraulic connections while the engine is running! Before dismantling the hydraulic connectors or hoses, ensure that all pressure has been bled from the circuit. Hydraulic fluid under pressure can penetrate the skin, cause burns, blind, or create other personal injury hazards. Set all controls in neutral, turn engine off, and allow the fluids to cool before loosening hydraulic fittings or attaching test gauges.
- 1.3.13 **ALWAYS** check all external fasteners at regular intervals.

- 1.3.14 Keep the area around the muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite the debris and start a fire.
- 1.3.15 Replace worn or damaged components with spare parts designed and recommended by Wacker Neuson Corporation.
- 1.3.16 Disconnect the spark plug on machines equipped with gasoline engines, before servicing, to avoid accidental start-up.
- 1.3.17 Keep the machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.
- 1.3.18 ALWAYS do periodic maintenance as recommended in the Operator's Manual.
- 1.3.19 ALWAYS turn the engine off before performing maintenance or making repairs.
- 1.3.20 ALWAYS keep hands, feet and loose clothing away from moving parts.
- 1.3.21 ALWAYS make sure slings, chains, hooks, ramps, jacks and other types of lifting devices are attached securely and have enough weight-bearing capacity to lift or hold the machine safely. Always remain aware of the location of other people in the area when lifting the machine.
- 1.3.22 ALWAYS make sure hose connections have been reconnected back to the correct fitting. Failure to do so may result in damage to the machine and/or injury to person on or near the machine.
- 1.3.23 ALWAYS secure the articulated steering joint using the locking bar before lifting, jacking, and servicing the machine. The machine halves could swing together unexpectedly and cause a serious injury.
- 1.3.24 ALWAYS lock the lifting cylinders in the open position when the seat pedestal is raised.
- 1.3.25 Before you start the machine, ensure that all tools have been removed from the machine and that replacement parts and adjusters are firmly tightened.
- 1.3.26 Fluid leaks from small holes are often practically invisible. DO NOT use your bare hands to check for leaks. Check for leaks using a piece of cardboard or wood.

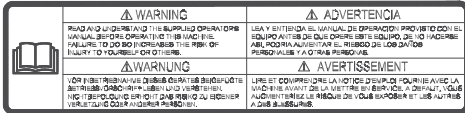
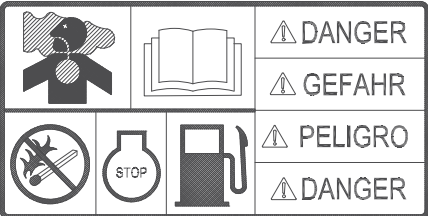
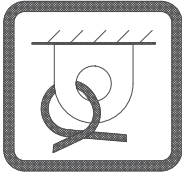
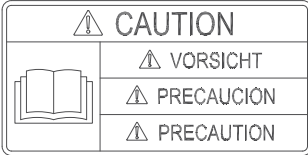

1.4 Label Locations





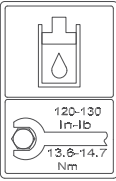

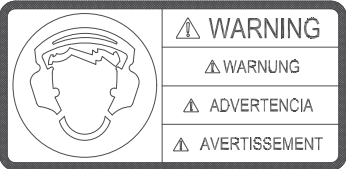

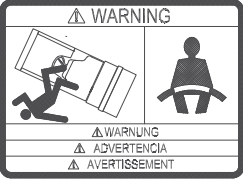
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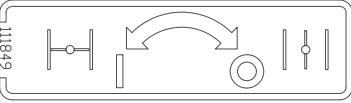
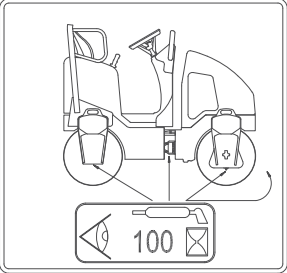
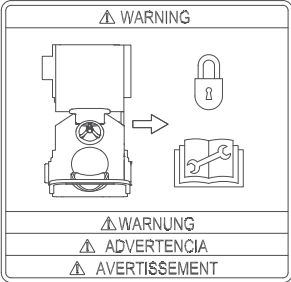
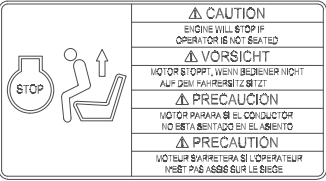

1.5 Safety and Operating Labels

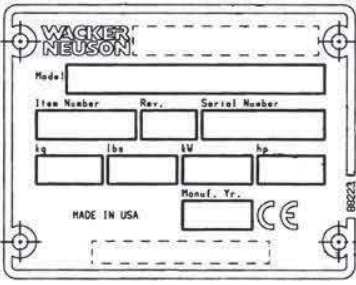
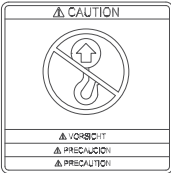


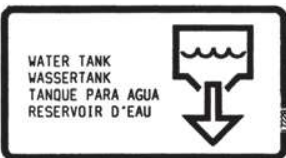
Wacker Neuson machines use international pictorial labels where needed. These labels are described below:


Ref.	Label	Meaning
A		<p><b>WARNING!</b> Read and understand the supplied Operator's Manual before operating the machine. Failure to do so increases the risk of injury to yourself or others.</p>
B	 <p>117034</p>	<p><b>DANGER!</b> 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.</p>
C		<p>Tie-down point</p>
E		<p><b>CAUTION!</b> Read and understand the supplied Operator's Manual before operating this machine. Failure to do so increases the risk of injury to yourself or others.</p>
F	 <p>110176</p>	<p><b>WARNING!</b> Pinch point.</p>



Ref.	Label	Meaning
G		WARNING! Hot surface!
H		WARNING! Hot surface!
I		Hydraulic oil reservoir fill tube. Torque nuts to 13.6-14.7 Nm (120-130 in.lbs.) maximum.
J		CAUTION Lifting point.
K		WARNING! To prevent hearing loss, wear hearing protection when operating this machine.
M		WARNING! Disconnect battery before servicing. Read Repair Manual for instructions. Battery contains caustic acid and potentially explosive hydrogen gas.
N		WARNING! Always wear seat belt when operating roller.

Ref.	Label	Meaning
T		<p>Choke: 0 = Open  I = Closed</p>
U		<p>Grease points: Inspect and lubricate every 100 hours of operation.</p>
V		<p><b>WARNING!</b></p> <p>Avoid crushing area. Articulated steering joint locking location. Lock the articulated steering joint before servicing the machine. Read Repair Manual.</p>
W		<p>Engine will stop without operator seated.</p>
X		<p>Guaranteed sound power level in dB(A).</p>

Ref.	Label	Meaning
Y		<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 plate 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>
Z		<p>No lift point.</p>
CC		<p>CAUTION! Electric shock hazard at auxiliary battery positive terminal. Never touch this terminal and a metal portion of the machine simultaneously.</p>
DD		<p>WARNING! Read and understand the supplied Operator's Manual before operating the machine. Failure to do so increases the risk of injury to yourself or others.</p>
EE		<p>Water tank</p>

Ref.	Label	Meaning
FF		<p>This machine may be covered by one or more patents.</p>

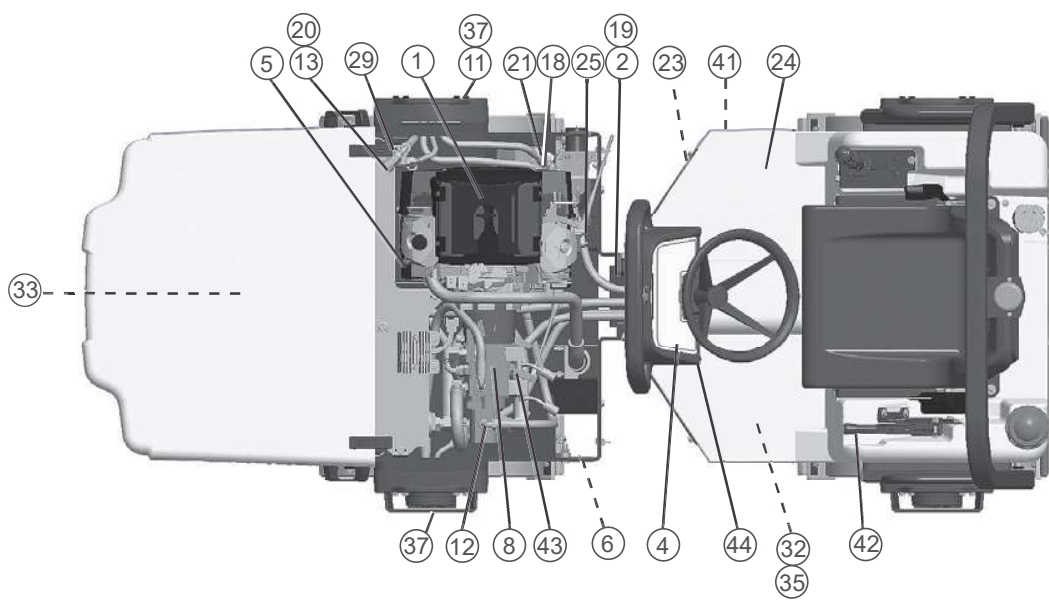
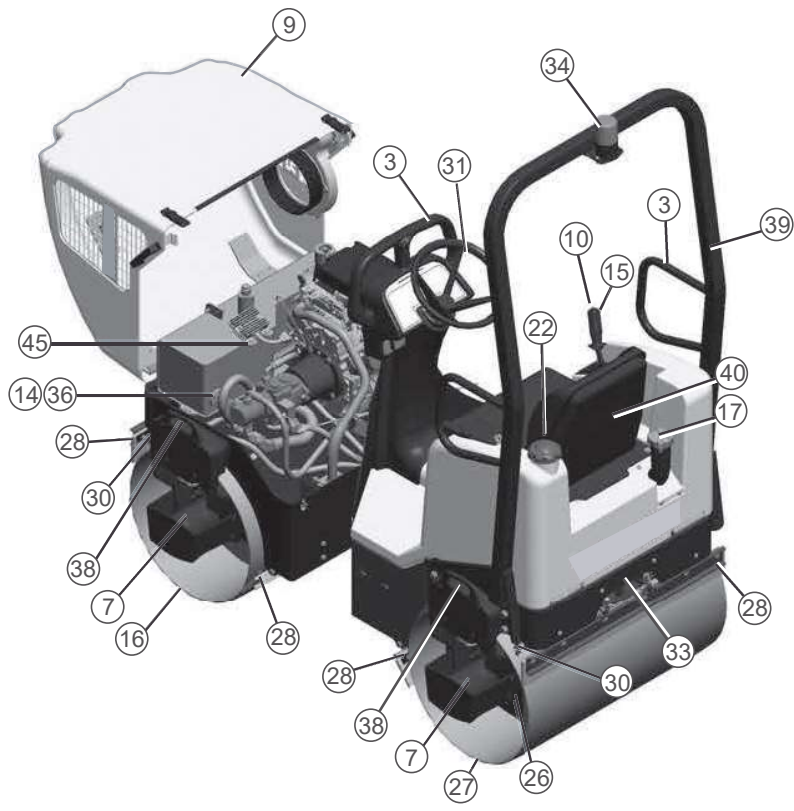
**Notes**

2 Operation

2.1 Operation and Service Locations

See Graphic: wc\_gr002946

Ref.	Description	Ref.	Description
1	Air cleaner	24	Operator's platform
2	Articulated joint	25	Engine oil filter
3	Hand holds	26	Rear drum fill/drain plug
4	Control panel	27	Rear drum—static
5	Dipstick	28	Scraper bar (4 places)
6	Drain hose—hydraulic tank	29	Sightglass—hydraulic tank
7	Drive motor	30	Sprinkler tube (2)
8	Drive pump	31	Steering wheel
9	Engine hood	32	Steering cylinder (under floor panel)
10	Vibration control button	33	Tiedown (2 places)
11	Exciter motor	34	Beacon light (optional)
12	Exciter/Steering pump	35	Battery (under floor panel)
13	Hydraulic filter—return line	36	Hydraulic suction line
14	Hydraulic strainer—suction line	37	Grease fitting—exciter (2 places)
15	Forward / Reverse control	38	Lifting eye (4 places)
16	Front drum—vibratory	39	ROPS
17	Fuel tank fill cap	40	Seat with seatbelt
18	Fuel filter	41	Water drain
19	Grease fittings—articulated joint (4 places)	42	Parking brake
20	Hydraulic tank fill port	43	Tow valve
21	Hydraulic manifold block	44	Choke lever
22	Water tank fill cap	45	Auxiliary battery positive terminal
23	Lockarm	-	---



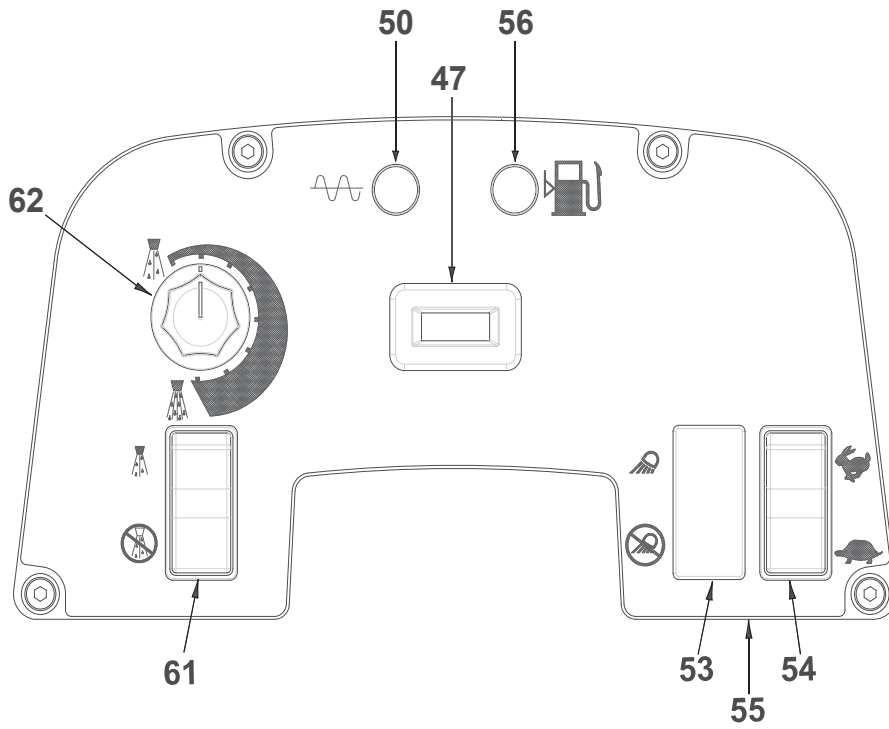
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**2.2 Control Panel**

*See Graphic: wc\_gr004114*

<b>Ref.</b>	<b>Description</b>	<b>Ref.</b>	<b>Description</b>
47	Hour meter	55	Ignition switch
50	Vibration ON indicator	56	Low fuel indicator
53	Lights switch - ON and OFF (if equipped)	61	Water spray switch - ON and OFF
54	Throttle switch - HIGH and LOW	62	Water spray dial





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## 2.3 Vibration

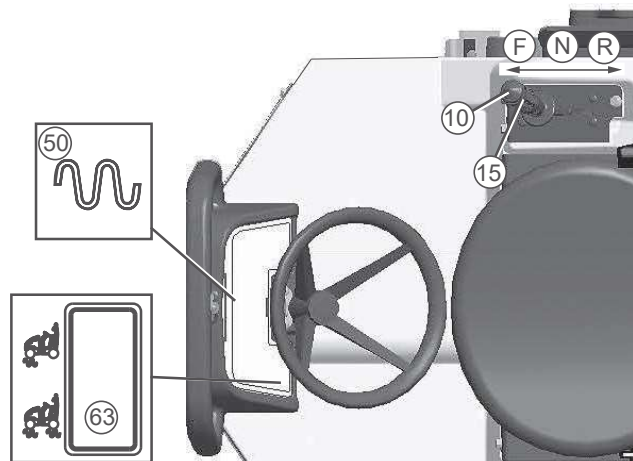
See Graphic: *wc\_gr002955*

The vibration is turned ON or OFF by a push button (10) located on the forward/reverse control (15). Press the button to turn vibration ON; press it again to turn it OFF. The vibration ON indicator (50) will light when vibration is on. The vibration can be turned on while operating in either forward or reverse and will remain on until it is turned off.

On the RD 16, select either the front drum vibration or dual drum vibration by pressing the vibration switch (63) on the control panel.

**CAUTION:** If the machine has been turned off with the vibration on, the vibration will come on as soon as the machine is restarted. Therefore, for easier starting and to keep the surface finish smooth, be ready to switch vibration off should it come on while cranking the engine.

**Note:** *The vibration will remain on even when the forward/reverse control (15) is in NEUTRAL. When operating on asphalt and in order to keep the surface finish smooth, turn the vibration off before stopping the roller.*



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## 2.4 Water Spray System

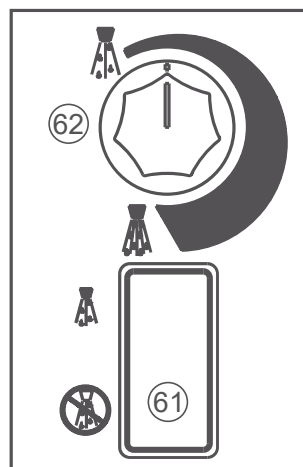
See Graphic: *wc\_gr002946, wc\_gr003638*

Water from the tank is fed to the spray bars by an electric pump. The flow of the water is controlled by a switch and a rotary dial.

Press the upper half of the water spray switch **(61)** to turn the water pump on. Turn the water spray dial **(62)** clockwise to increase the spray frequency. Turn the water spray dial counter-clockwise to decrease the spray frequency. Press the lower half of the water spray switch **(61)** to turn the water pump off.

Only use clean water. Dirty water, even when filtered, will rapidly clog the tubes of the spraying equipment.

During winter, or when temperatures drop to below 0°C (32°F), drain the water tank and spraying equipment. Run the water pump to remove excess water from the system. Drain the water through the water drain plug **(41)** located near the bottom of the rear frame, through the sprayer end plugs, and the water filter. Freezing water may cause broken hoses, filters and water pumps and may deform the water tank.



wc\_gr003638

## 2.5 Starting

See Graphic: wc\_gr002951



### WARNING

Exhaust gases are toxic. Do not start the engine in an enclosed space.

- 2.5.1 Sit down in the operator's seat and fasten the seat belt.
- 2.5.2 Set the forward/reverse control **(15)** in the neutral position.
- 2.5.3 If the engine is cold, move the choke lever **(44)** to the left into the CLOSED position. If the engine is warm, move the choke control to the right in the OPEN position.

**Note:** *The roller will not start unless the forward/reverse control is in the NEUTRAL position.*

- 2.5.4 Check that the parking brake **(42)** is set. To set the brake, pull the brake lever up until the brake pad engages the drum. To release the brake lever, lower the lever. Always set the parking brake before leaving the machine.
- 2.5.5 Turn the ignition switch **(55)** to start the engine. If the vibration indicator light **(50)** is on, turn the vibration off by pressing the vibration control button **(10)**.

**NOTICE:** Do not crank the engine starter for more than 15 seconds at one time. Longer cranking cycles could lead to starter damage.

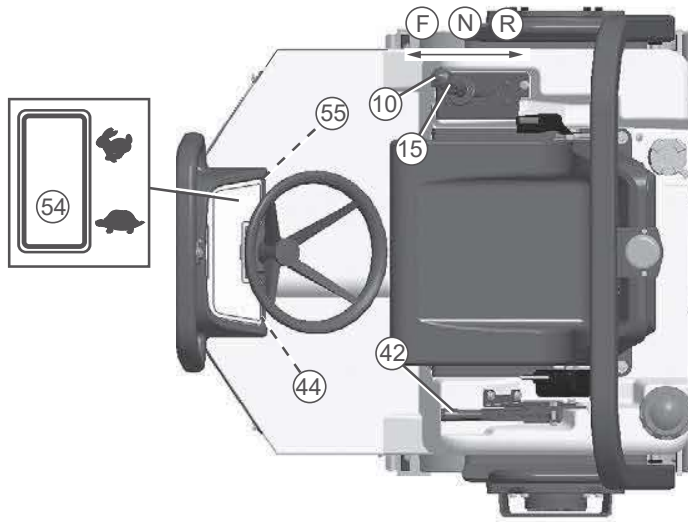
**Note:** *The ignition switch has an anti-restart feature. If the engine does not start, the switch will need to be turned to the OFF position before it will allow the engine to be cranked again.*

- 2.5.6 Gradually place the choke lever in the OPEN position as the engine warms up. Allow the engine to warm up for a few minutes before operating the roller.
- 2.5.7 Before moving the machine, release the parking brake by lowering the brake lever.
- 2.5.8 Quickly press and release the upper half of the throttle switch **(54)** to bring the engine to high throttle.



### WARNING

Prolonged exposure to high noise levels can damage your hearing. Wear appropriate hearing protection while operating the roller.



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2.6 Stopping/Parking

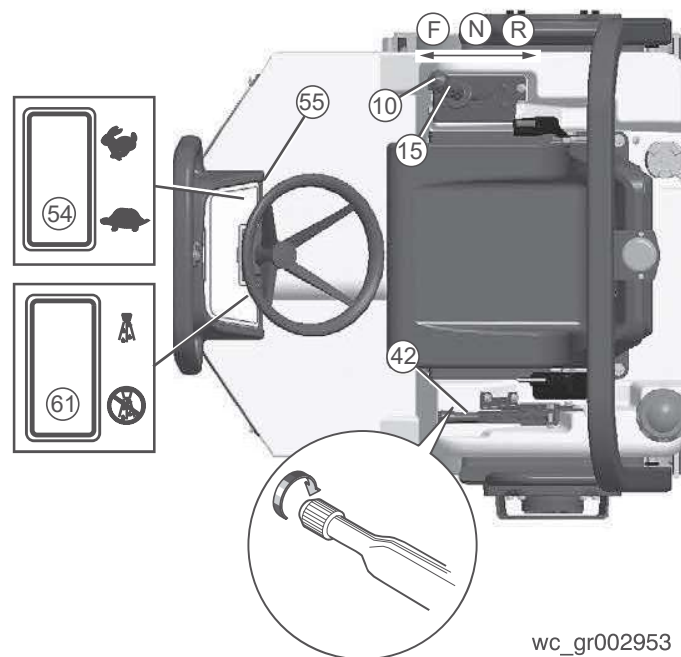
See Graphic: wc\_gr002953

- 2.6.1 Stop the machine on a flat surface with a suitable load bearing capacity.
  - 2.6.2 Turn the vibration off by pressing the vibration control button (10) on the forward/reverse lever (15).
  - 2.6.3 Press the water spray switch to the OFF position (61).
  - 2.6.4 Set the forward/reverse control (15) to the NEUTRAL position.
  - 2.6.5 Return the engine throttle to idle by pressing the lower half of the throttle switch (54) and allow the engine to cool down.
  - 2.6.6 Set the parking brake (42). To set the parking brake, pull the brake lever up until the brake pad engages the drum. To release the brake, lower the brake lever. Always set the parking brake before leaving the machine.
- Note:** The parking brake engages the rear drum only.
- 2.6.7 Stop the engine by turning the ignition switch (55) to the OFF position.



If the vehicle constitutes a hazard or obstacle to traffic when parked, it should be marked with signs, lights, and other warnings.

If the machine must be parked on a sloping surface, chock the drums with wedges to prevent any vehicle movement.



wc\_gr002953

## 2.7 Auxiliary Battery Positive Terminal

This machine is equipped with an auxiliary battery positive terminal (45) located on top of the hydraulic tank (RD 12) or above the battery disconnect stud (RD 16).



CAUTION

CAUTION! Electric shock hazard. Never touch this terminal and a metal portion of the machine simultaneously.



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