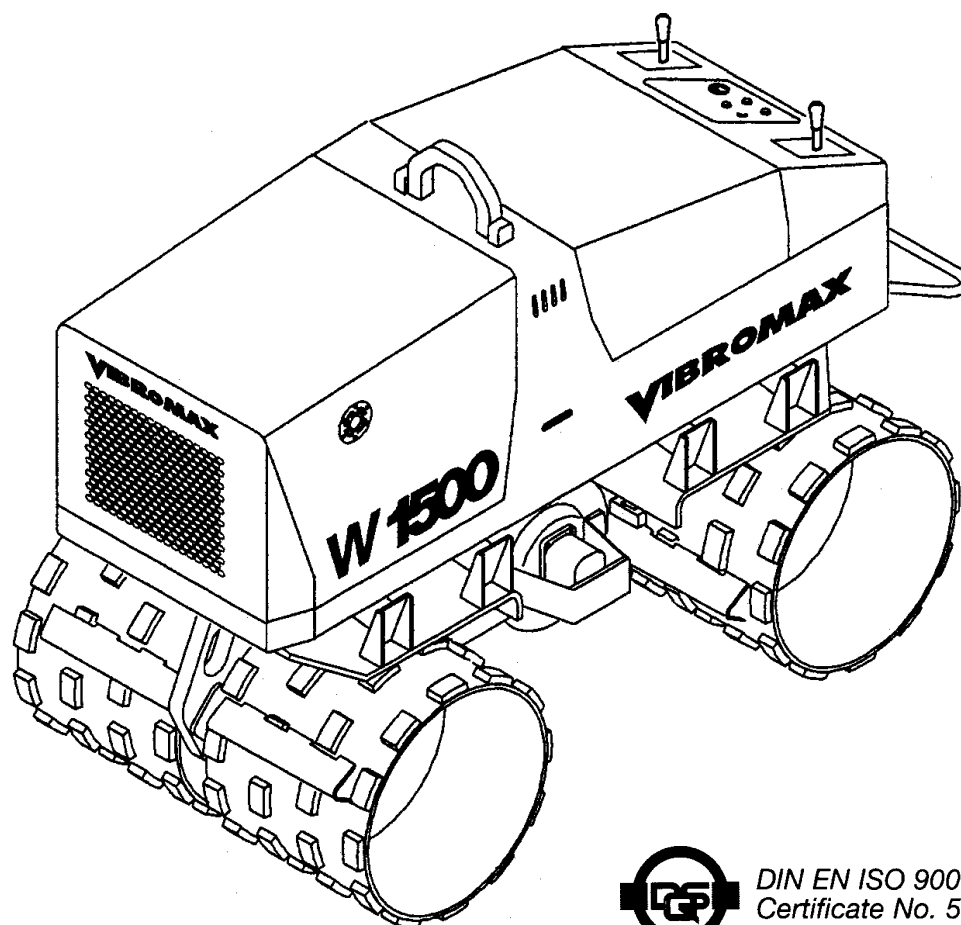


# VIBROMAX

## W1500 TRENCH ROLLER

SERVICE MANUAL SM35001

April 2003



DIN EN ISO 9001  
Certificate No. 59557-01

**CALIFORNIA**

**Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

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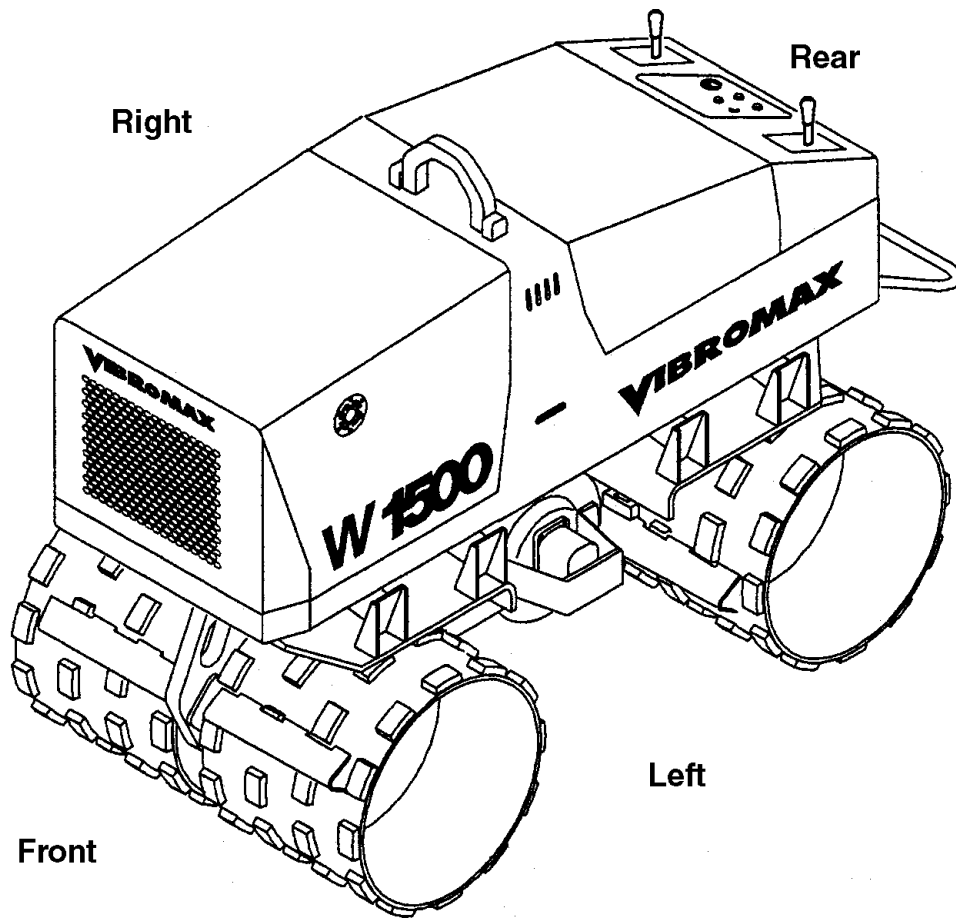
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# SECTION ONE

## GENERAL INFORMATION



**MACHINE DESCRIPTION**

The Vibromax Model W1500 Trench Roller is a 1.5 metric ton tandem drum roller with hydrostatic propulsion and a hydrostatic vibratory system. The machine is available with either a 24.8 inch (630 mm) or a 33.5 inch (850 mm) drum.

The machines can be ordered with manual or remote controls.

Power is provided by a 61 cubic inch (1000 cc) Kubota, three cylinder water cooled diesel engine, Model D1005/-BB-EC, rated at 22.5 hp (16.8 kW) at 3000 RPM.

The W1500 trench roller operates at a vibration frequency of 1860 vibrations per minute (31 Hz). The machine is designed with a single vibratory shaft mounted between the front and rear drum.

The hydrostatic drive system is designed for two ground speeds. The hydrostatic drive system consists of two gear pumps, left and right drum drive motors with hydraulic brakes, and the system control valves. The left side drums are independently operated from the right side. This feature allows the machine to be steered.

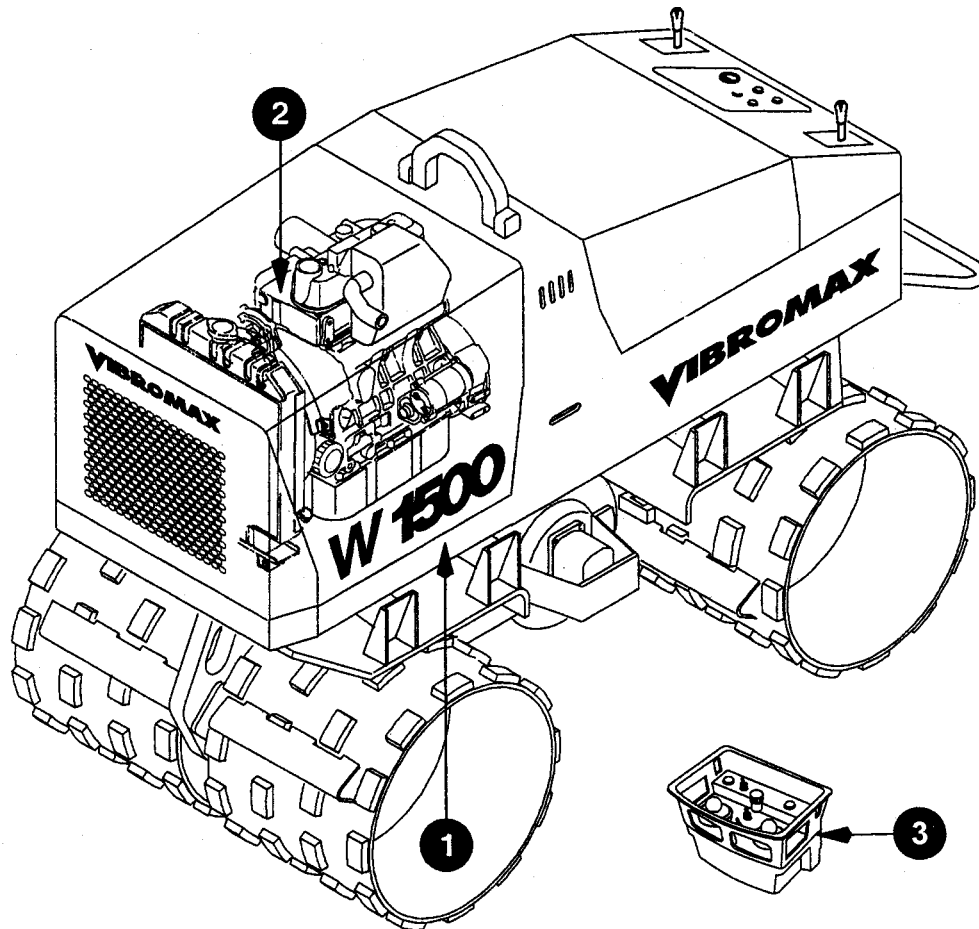
All models include pressure test ports for quick and easy diagnostics of the various hydraulic systems.

Remote controlled units are operated either manually or by using the radio controlled remote system. Remote controlled machines are equipped with an auxiliary battery for the remote controller and a battery charger to insure a fully charged battery is always available.



**MACHINE SERIAL NUMBERS**

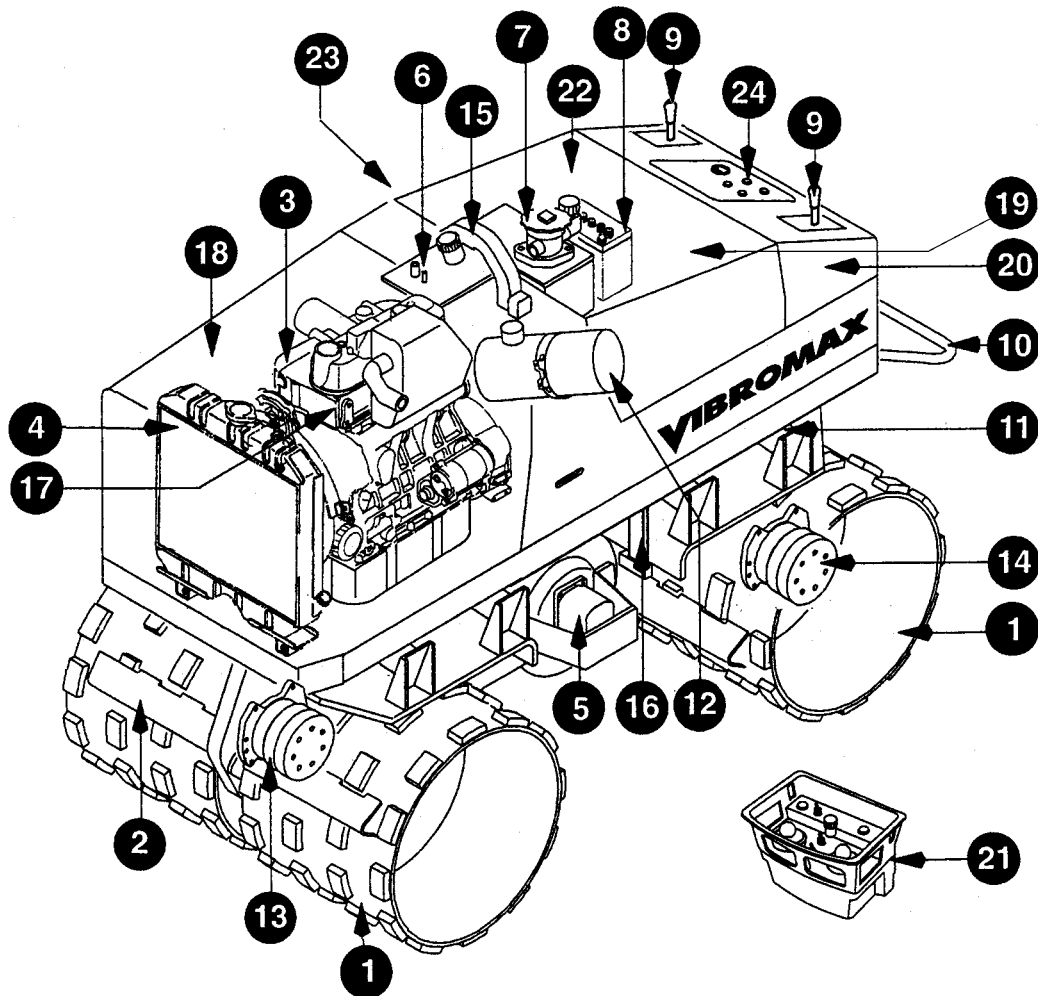
Enter the machine and components serial numbers on the following lines. When ordering spare parts or requesting information on the machine, have these numbers available for your dealer.



Make a copy of these numbers and keep them in a safe place. If the machine is stolen, these numbers should be made available to the investigating authorities.

- #1 Make and Model
- #2 Engine ID. Numbers
- #3 Remote Control Serial Number  
Remote Control Frequency Number  
(numbers located under remote battery)

**COMPONENT IDENTIFICATION**



1	drum	13	drum motor
2	drum scraper	14	drum motor with brake
3	diesel engine	15	lifting point
4	radiator	16	safety strap
5	vibratory shaft	17	engine oil dipstick
6	fuel tank	18	engine hood
7	hydraulic oil tank	19	rear hood
8	battery	20	control panel cover
9	drive controls	21	remote control transmitter
10	emergency stop bar	22	remote receiver
11	platform buffers	23	remote battery charger
12	air filter	24	control panel

## SAFETY

The information in this manual does not replace any safety rules and laws used in your area. Before operating this machine, learn the rules and laws for your area and make sure your machine has the correct equipment according to these rules and regulations. Before starting the engine study the operator's manual.

- Know the location and function of all machine controls.
- Clear the area of other persons before you start the engine.
- Check all controls in a safe area before you operate the machine.
- Understand the limits of the machine.
- Do not try to do too much too fast.
- Keep the machine under control at all times.

## SPARK ARRESTER

**NOTE:** *Rules or laws in some areas may require that this machine be equipped with a spark arrester or spark arrester muffler. Check the rules or laws in your area.*

## PERSONAL



***Loose clothing and jewelry can cause an accident. Do not wear loose clothing or jewelry that can catch on controls, etc. Do wear safety shoes, hard hat, heavy gloves, etc. when required for your protection.***

***Foreign materials and loose objects on the machine can cause accidents and injury. Keep the machine clear at all times.***

***Know and understand the arrangements for movement of trucks, machines, and persons on your job site. Understand and follow the instructions of flagmen, road signs, or signals.***



***Check machine controls for proper operation prior to starting the machine.***

***A fire can cause injury or death. Always have a fire extinguisher on the job site near the machine. Make sure the fire extinguisher is serviced according to the manufacturer's***

*instructions.*

***Holes, obstructions, debris, and other work area hazards can cause injury or death. Always walk-around and look for these and other hazards before you operate your machine in a new work area.***

***Lack of, or incomplete, machine inspection and maintenance can cause accidents. Always follow the instructions in this manual for machine inspection and maintenance.***

***Always wear the proper ear protection when operating this machine. Permanent hearing loss can result from extended exposure to loud noises.***

The following decal is located on the control panel to the right side of the main gauge cluster. Check the decal daily. Clean or replace as needed.

**MACHINE OPERATION**

***Dust, smoke, fog, etc. can decrease your vision and cause an accident. Always stop or slow the machine until you can clearly see your work area and the surrounding traffic.***



*Sparks from the electrical system or engine exhaust can cause a fire or explosion. Before you operate this machine in an area with flammable dust or vapors, use good ventilation to remove the flammable dust or vapors.*

*Engine exhaust fumes can cause injury or death. If you operate this machine in an enclosed area, use good ventilation to replace the exhaust fumes with fresh air.*

*The vibrations from this machine can cause the walls of a trench or high bank to collapse. Make sure the walls of the trench or bank are braced. If you do not follow these instructions, you can cause personal injury. or death to persons working in these areas.*



*A machine out of control can cause injury or death. You must make a judgement if weather and earth conditions will permit safe operation on a hill, ramp, or rough ground. Adjust machine operation accordingly.*

*Operating this machine too close to High Voltage electrical lines can cause injury or death. Follow the guide lines listed below.*

**NOTE: IF THE CLEARANCES IN THE SPECIFICATIONS BELOW ARE LESS THAN THE CLEARANCES GIVEN IN THE RULES AND LAWS OF YOUR AREA, YOU MUST FOLLOW THE RULES AND LAWS OF YOUR AREA!**

**Table 1: Electrical Safety Rules**

Cable Voltage	Minimum Clearance From Cable When Machine is Working	Minimum Clearance From Cable When Transporting Machine
50,000 volts or less	10 feet (3 meters)	4 feet (1.2 meters)
50,000 volts to 345,000 volts	10 feet (3m) plus 1/2 inch (13mm) for every 1000 volts over 50,000 volts	10 feet (3 meters)
345,000 volts to 750,000 volts	10 feet (3m) plus 1/2 inch (13mm) for every 1000 volts over 50,000 volts	16 feet (5 meters)

## MAINTENANCE



***Engine fuel is flammable and can cause a fire or an explosion. Do not fill the fuel tank or service the fuel system while the machine is running, or near an open flame, welding, burning cigars and cigarettes, etc.***

***Machine movement without an operator can cause injury or death. If you must service this machine with the engine running, have another person help you and follow the instructions in the machine manuals. Lock the articulation joint and do not leave the machine when the engine is running.***

***Improper service or repair can cause injury or death. If you do not understand the service procedures for this machine, see your Vibromax dealer.***

***Flammable cleaning solvents can cause injury or death. Use nonflammable cleaning solvents for cleaning purposes.***

***Missing shields, guards, or access panels can cause injury or death. Always install all shields, guards, or access panels before you start the engine.***

***Metal chips or debris can cause eye injury. Wear eye protection when you service this machine. If you use a hammer to drive hardened pins or for other service, use a hammer with a soft face (brass, plastic, etc.).***

***Unauthorized modifications to cast iron parts can cause injury or death. Welding can cause cast iron parts to break. Do not use welding to repair or attach items to cast iron parts on this machine.***

***Batteries produce explosive gases. Keep away from flames. Ventilate when charging. Always wear eye protection when working near batteries. Do not wear jewelry or watch bands when working on batteries.***

***When you install a battery or use a booster battery, connect the negative ground cable last. When you remove a battery or booster battery, disconnect the negative ground cable first.***

***Unauthorized modifications to this machine can cause injury or death. Never make modifications to this machine without prior written approval from Vibromax.***

**Buy Now**



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