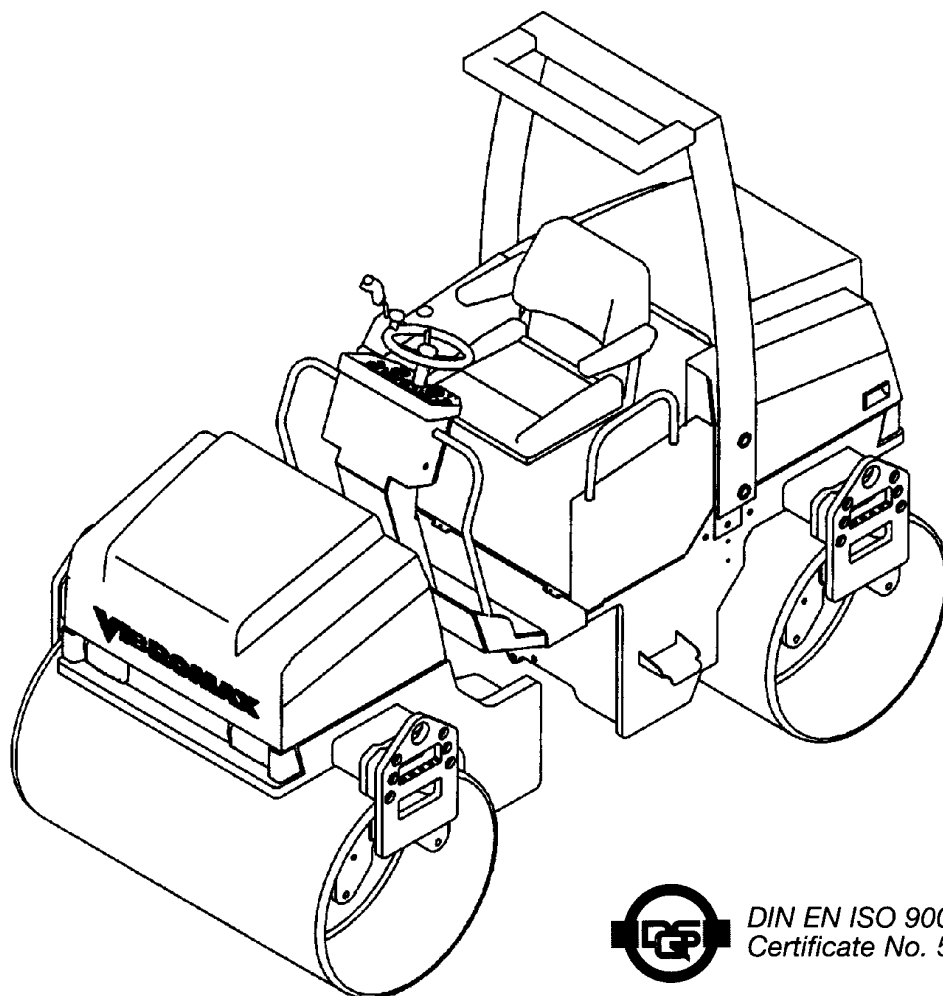


VIBROMAX

355 / 365 TANDEM ROLLER
355K / 365K COMBINATION ROLLER
455 / 465 TANDEM ROLLER
455K / 465K COMBINATION ROLLER

SERVICE MANUAL SM63005

January 2002



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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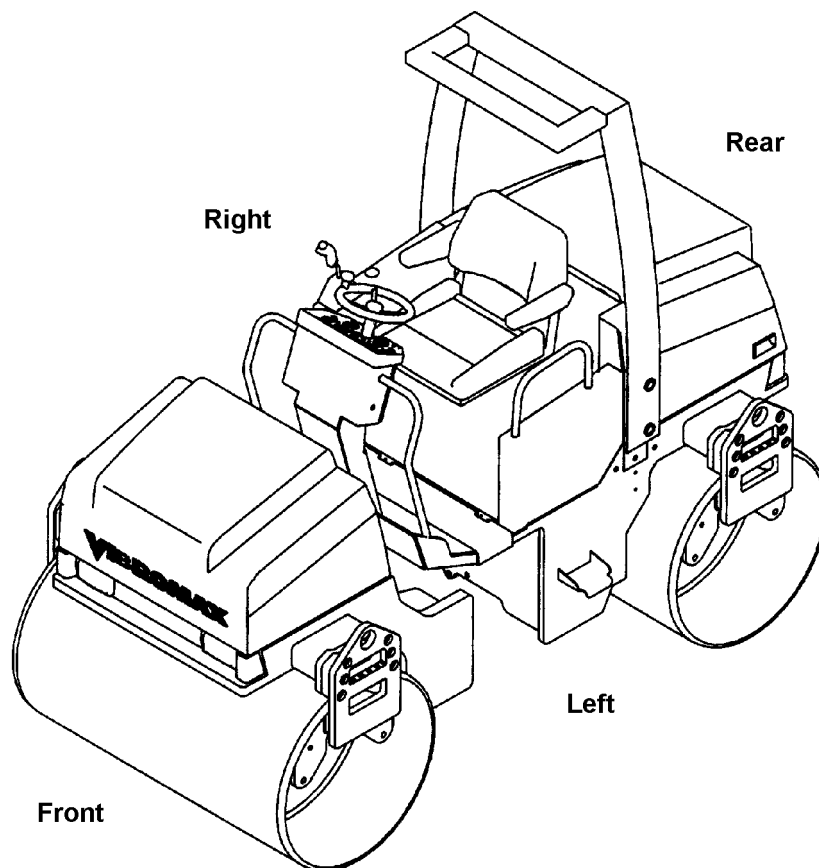
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SECTION ONE

GENERAL INFORMATION

Built with serviceability in mind.



MACHINE DESCRIPTION

The Vibromax Model 355/365 is a 3.5 metric ton tandem drum roller with articulated steering, hydrostatic propulsion and a hydrostatic vibratory system. The Model 455/465 is a larger 4.5 metric ton tandem drum roller. Both the 3.5 and 4.5 ton machines offer a “K” model option. The “K” model is a combination machine offering a steel front drum and pneumatic tires in place of the rear drum.

Power is provided by a 134.4 cubic inch (2197 cc) Kubota, four cylinder diesel engine, Model V2203-E, rated at 46.6 hp SAE net (34.3 kW) at 2600 RPM.

The operator’s platform was designed using modern techniques to assure good visibility and operator comfort. The operator’s seat box can be tilted forward to gain easy access to the machine’s hydraulic pumps and valves.

Both tandem roller models operate at a vibration frequency of 3300 vibrations per minute (55 Hz). Vibratory operation is available for either the front drum or both drums. A two frequency/two amplitude option is available for both the 3.5 and 4.5 metric ton machines. The second vibration frequency is 3000 vpm. (50 Hz). On the “K” model only the front drum will vibrate.

The hydrostatic drive system allows for infinitely variable ground speed. All machines are equipped with a two speed arrangement which provides greater control in the 0 to 4 mph range. The hydrostatic drive system consists of a piston pump and front and rear drum drive motors. Hydraulic release, spring applied parking brakes are incorporated into the design of the drum motors. On the “K” model two smaller hydraulic motors are used to drive the right and left side pneumatic tires. Brakes are also incorporated into “K” model drive motors.

As a factory option, these machines offer an articulation offset of five inches (127 mm) to the left or right of center position. This feature is most useful when compacting asphalt on tight turns.

These machines are equipped with an intermittent sprinkler system for use in asphalt applications. The water tanks are made of a rust proof synthetic material. The system is a pressure spray type with sprinkler tubes fitted with nozzles. The system controls are designed to allow variable off times in the automatic mode to minimize water usage. The pneumatic “K” model offers separate sprinkler systems for the front and rear of the machine to allow the use of special soap solutions on the rear tires. Both systems have variable controls.

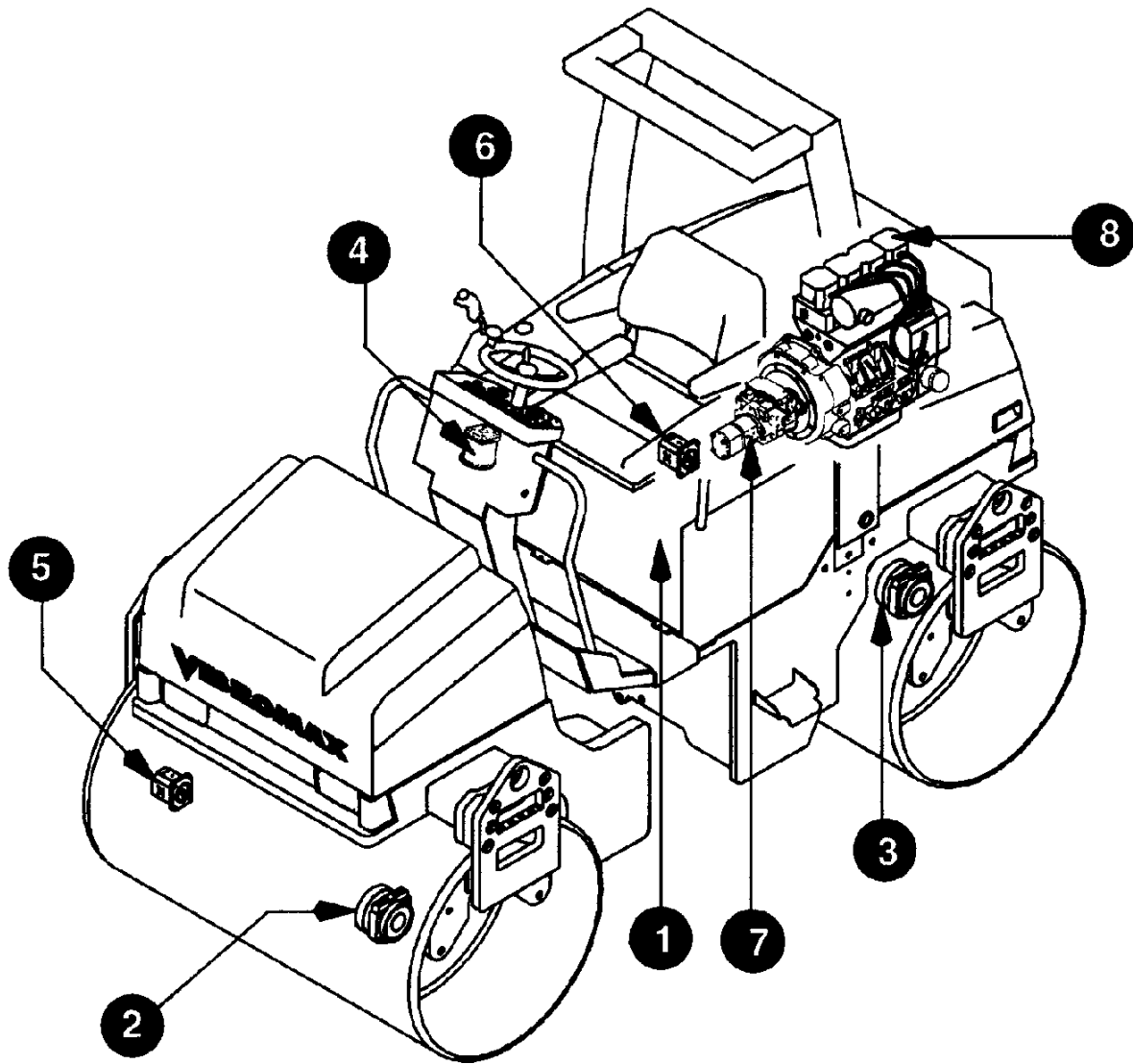
Each drum is equipped with front and rear scrapers. The scrapers are spring loaded against the drum and can easily be moved away from the drum for soil and gravel compaction jobs. Scrapers are also available on the “K” model. A cocoa mat option is also available.

As sold in the United States the machines are fitted with a Roll Over Protective Structure (ROPS). A seat belt is provided as part of the ROPS system.

As sold in the United States the machines are also fitted with a standard Back-up alarm system and an emergency stop system.

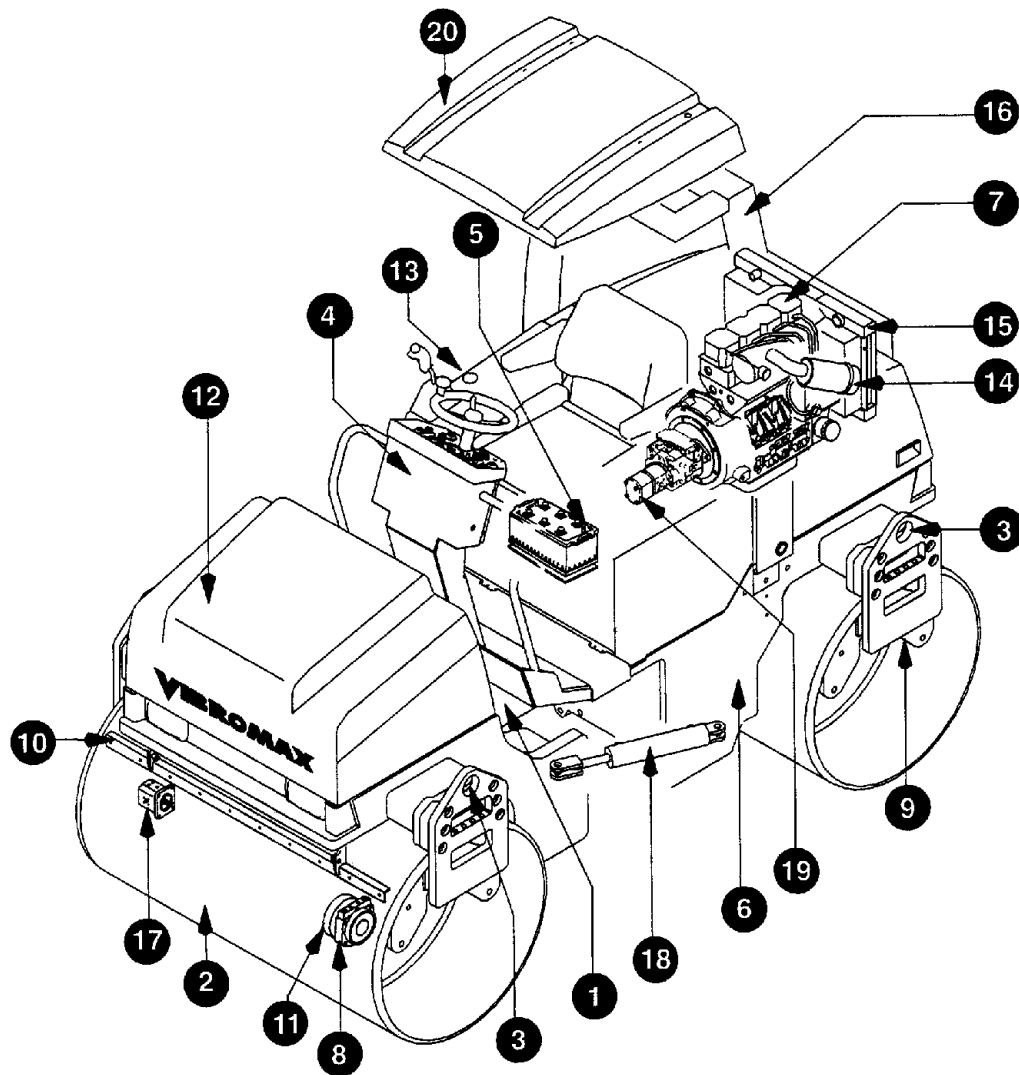
All models include a centralized testing station for quick and easy diagnostics for the various hydraulic systems.

Road lights, work lights, FOPS, and a sun roof are four standard options. Other additional equipment such as beacon lights, slow moving machine signs, etc., are available as special order items. If you have special needs please contact your dealer.



SERIAL NUMBERS

1	Model / Serial Number	
2	Front Drum Drive Motor S/N	
3	Rear Drum Drive Motor S/N	
4	Steering Unit S/N	
5	Front Vibratory Motor S/N	
6	Rear Vibratory Motor S/N	
7	Hydraulic Pumps S/N	
8	Engine S/N	



IDENTIFYING MACHINE COMPONENTS

1	Articulation joint	11	Spring loaded brake
2	Smooth drum	12	Water tank
3	Lifting/tie-down eye	13	Fuel tank
4	Operator's stand	14	Air filter canister
5	Battery	15	Water - oil cooler
6	Hydraulic tank	16	Roll over protection
7	Engine	17	Vibration motor
8	Drum drive motor	18	Steering cylinder
9	Rubber buffer	19	Hydraulic pumps
10	Scraper	20	Sun roof

GENERAL 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.

The following decal is located on the right side of the water tank. Check the decal daily. Clean or replace as needed.



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 SAFETY



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 steps, hand rails, and in the operators compartment can cause accidents and injury. Keep the steps, hand rails, and operator's compartment 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 use the seat belt when operating the machine. Make sure the buckle is fully secured.

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