

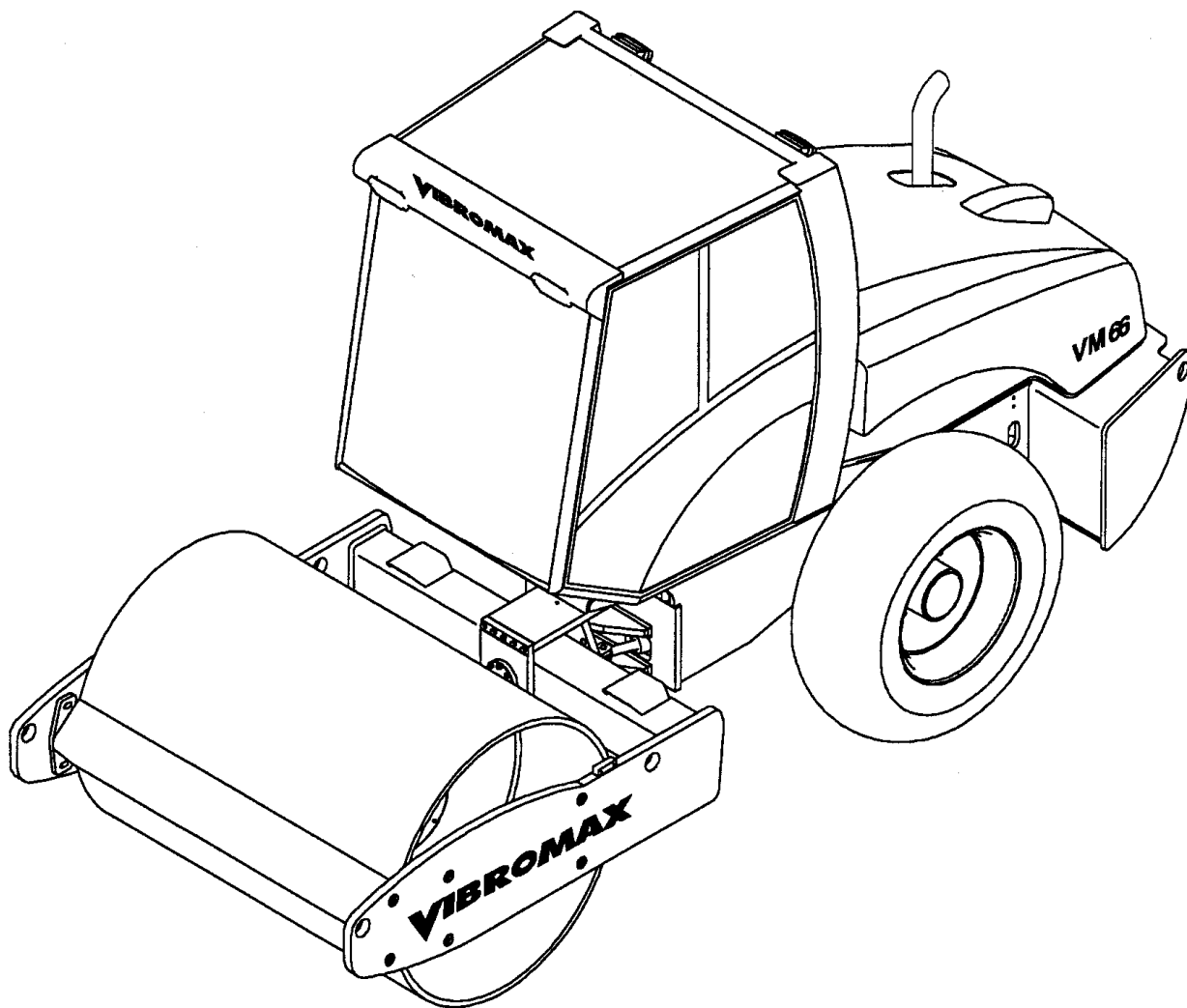


SINGLE DRUM ROLLER

SERVICE MANUAL SM86066

June 2004

Model VM 66



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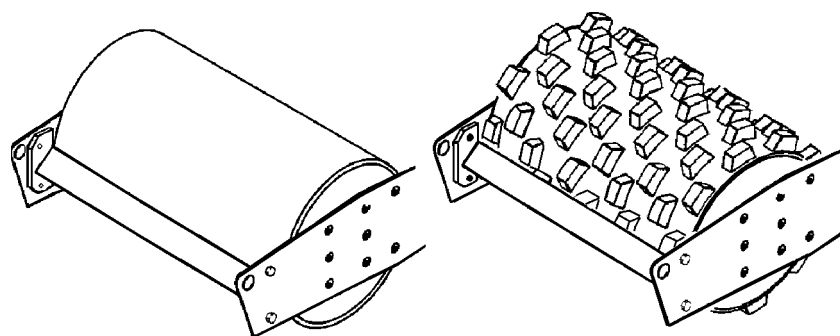
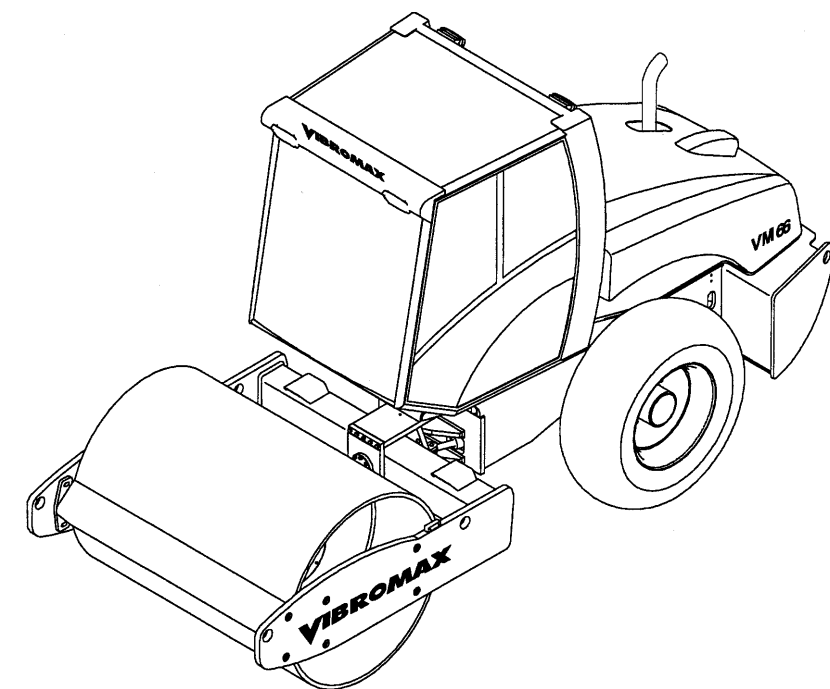
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SECTION ONE

GENERAL INFORMATION

MACHINE DESCRIPTION



SMOOTH DRUM

PADFOOT DRUM

This book introduces the new Vibromax 6 series single drum rollers. Included within the pages of the book are materials covering the Model VM66.

The new roller uses the Cummins 3.3 liter 4 cylinder engine. The engine is turbocharged and tuned to meet the latest EPA emissions standards.

A Mannesman Rexroth variable displacement, axial piston hydrostatic pump, used for machine propulsion, is mounted to the flywheel end of the engine. It provides oil to a Rexroth 2 speed drum drive motor and a 2 speed axle drive motor in a parallel path. The Rexroth drum motor is mounted on the left side of the drum, drives through a L&S planetary gearbox and is isolated from the drum by rubber buffers. This arrangement is used in the heavy roller models with a great deal of success. The axle drive motor is attached directly to the intermediate gearbox incorporated into the rear axle.

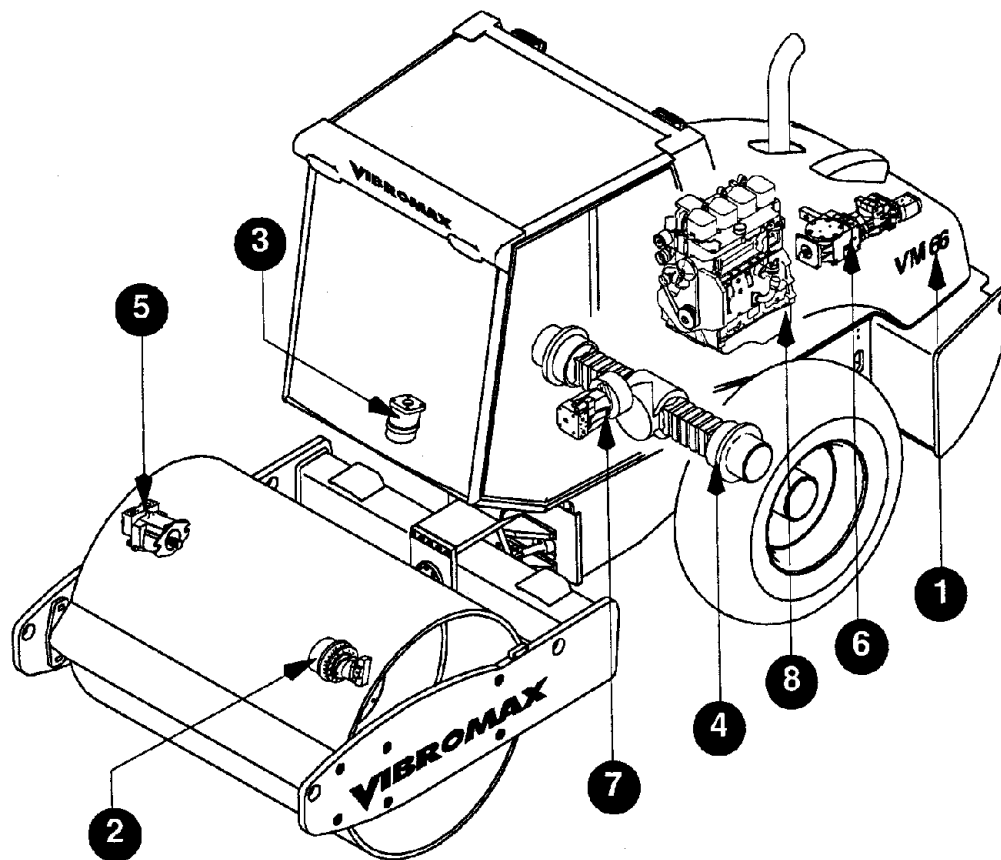
The vibration system on the VM66 uses a Rexroth hydrostatic pump mounted directly behind the propulsion pump. It is similar in design to the propulsion pump. The vibratory pump supplies oil to a Rexroth hydrostatic motor mounted at the right side of the drum. This operates at frequencies of 1740 or 2160 vibrations per minute on both the smooth drum and pad foot versions.

A steering pump, mounted to the rear of the vibratory pump, provides the oil needed for steering. The steering pump also acts as the charge pump in the propulsion and vibration systems. The steering pump draws oil from the reservoir, passes it through the steering control valve, through the inline hydraulic filter, and into the charge circuit.

This machine comes standard with parking brakes at both the front drum and the rear axle. A spring applied-hydraulically released multi disc brake is part of the drum drive motor gearbox. The axle uses a spring applied hydraulically released multiple disc brake at each axle shaft.

Pressure testing has been made easier by placing all the test ports at a centrally located test station under the engine hood.

The electrical system consists of a 12 volt battery, starter, alternator system, optional lighting and standard instrumentation.

**SERIAL NUMBERS**

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



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