

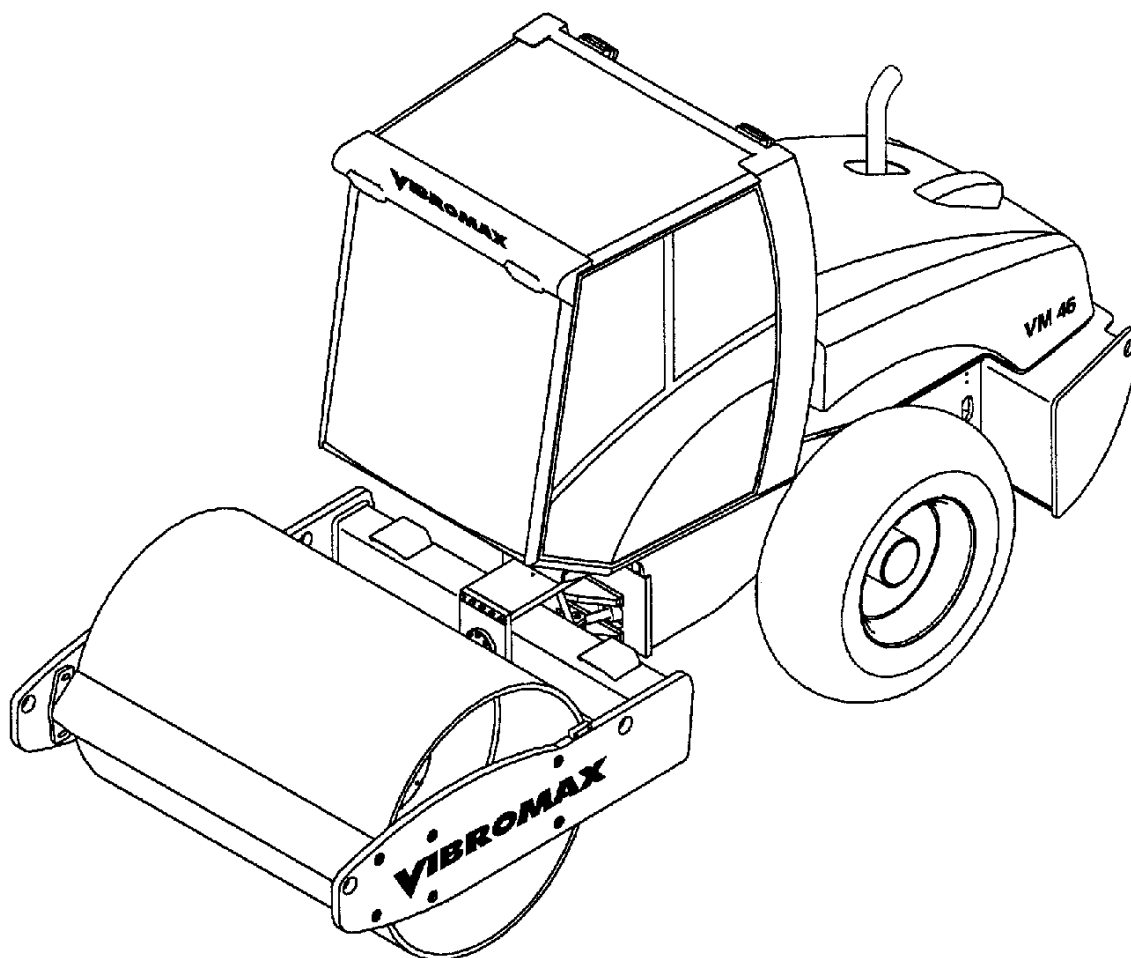
VIBROMAX

SINGLE DRUM ROLLER

SERVICE MANUAL SM86046

August 2004

Model VM 46



SECTION ONE

GENERAL INFORMATION

MACHINE DESCRIPTION	1 - 3
SERIAL NUMBERS.....	1 - 5
IDENTIFYING MACHINE COMPONENTS	1 - 6
FLUID SPECIFICATIONS.....	1 - 7
MACHINE SPECIFICATIONS.....	1 - 8
DIESEL FUEL SPECIFICATION.....	1 - 12
ENGINE OIL SPECIFICATION.....	1 - 13
SAFETY, GENERAL.....	1 - 14
SPARK ARRESTER	1 - 14
PERSONAL.....	1 - 15
MACHINE OPERATION	1 - 16
MAINTENANCE	1 - 19
MAINTENANCE SCHEDULE	1 - 23

SECTION TWO

ENGINE

CUMMINS ENGINE WARRANTY.....	2 - 2
------------------------------	-------

SECTION THREE

ELECTRICAL

GENERAL INFORMATION.....	3 - 3
FUSES	3 - 4
RELAYS.....	3 - 5
INSTRUMENT PANEL.....	3 - 6
UNDERSTANDING ELECTRICAL SCHEMATICS	3 - 11
UNDERSTANDING RELAYS.....	3 - 14
STARTER/CHARGING CIRCUIT	3 - 17
EMERGENCY STOP	3 - 17
UNDERSTANDING BATTERIES.....	3 - 17
UNDERSTANDING ALTERNATORS	3 - 19
UNDERSTANDING STARTERS.....	3 - 22
INSTRUMENTATION PANEL.....	3 - 27
BRAKE SWITCH.....	3 - 29
HIGH SPEED CIRCUIT	3 - 31
VIBRATION CIRCUIT	3 - 33
ROAD LIGHTING CIRCUIT	3 - 35
WORK LIGHTS & ACCESSORY PLUG	3 - 37

CAB CIRCUITS.....	3 - 39
ELECTRICAL SCHEMATICS	3 - 40
PLUG CONNECTORS.....	3 - 48
INSTRUMENT HARNESS 7242/80435	3 - 49
WIRE CHART 7242/80435	3 - 51
RELAY/FUSE HARNESS 7242/80415	3 - 54
WIRE CHART 7242/80415	3 - 56
REAR HARNESS 7222/80510.....	3 - 60
WIRE CHART 7222/80510	3 - 62

SECTION FOUR

HYDRAULIC

HYD. COOLER LINES	4 - 2
HYD. LEAKAGE LINES	4 - 4
HYD. CHARGE SYSTEM	4 - 6
HYD. TEST STATION.....	4 - 8
HYDRAULIC TEST FITTINGS.....	4 - 10
PROPULSION SYSTEM.....	4 - 11
PROPULSION SCHEMATIC	4 - 13
PROPULSION SYSTEM DIAGNOSTICS.....	4 - 15
VIBRATION SYSTEM	4 - 17
VIBRATION SYSTEM SCHEMATIC.....	4 - 19
VIBRATION AMPLITUDE	4 - 20
VIBRATION FREQUENCY	4 - 20
VIBRATORY SYSTEM DIAGNOSTICS.....	4 - 21
STEERING SYSTEM	4 - 22
STEERING SYSTEM SCHEMATIC.....	4 - 24
PARKING BRAKE SYSTEM	4 - 26
PARKING BRAKE SCHEMATIC.....	4 - 28
TOWING YOUR MACHINE	4 - 30
TOWING PROCEDURE.....	4 - 31
PUMP CONTROL VALVE.....	4 - 32
HYDRAULIC COMPONENTS.....	4 - 34
HYDRAULIC SCHEMATIC	4 - 35

SECTION FIVE

POWER TRAIN

DRUM ASSEMBLY	5 - 2
DRUM REMOVAL.....	5 - 7
DRUM INSTALLATION.....	5 - 7
RIGHT SIDE BEARING COVER.....	5 - 8
DRUM DRIVE BEARING REMOVAL.....	5 - 8
DRUM DRIVE BEARING ASSEMBLY	5 - 10
DRUM DRIVE MOTOR REPAIRS	5 - 11
DRUM DRIVE GEARBOX.....	5 - 12
GFT 17 T2/312 2 GEARBOX	5 - 14

SECTION SIX

PARKING BRAKE SYSTEM

PARKING BRAKE SYSTEM	6 - 2
PARKING BRAKE SCHEMATIC.....	6 - 4
TOWING YOUR MACHINE	6 - 6
TOWING PROCEDURE.....	6 - 7

SECTION SEVEN

VIBRATION SYSTEM

LIFTING DEVICE	7 - 3
VIBRATION SYSTEM	7 - 4
VIBRATORY SYSTEM DIAGNOSTICS.....	7 - 8
DRUM DRAWING	7 - 9
DRUM - LEFT SIDE	7 - 10
DRUM - RIGHT SIDE.....	7 - 13
DRUM REMOVAL.....	7 - 16
DRUM INSTALLATION.....	7 - 16
RIGHT SIDE BEARING COVER.....	7 - 17
EXCITER BEARING REMOVAL.....	7 - 18
EXCITER BEARING ASSEMBLY	7 - 20

SECTION EIGHT

STEERING SYSTEM

STEERING SYSTEM	8 - 2
STEERING SYSTEM SCHEMATIC.....	8 - 4
SPECIAL TOOLS.....	8 - 6
ARTICULATION JOINTS	8 - 7
JOINT DISASSEMBLY	8 - 9
JOINT ASSEMBLY	8 - 13

SECTION NINE

CHASSIS

SECTION TEN

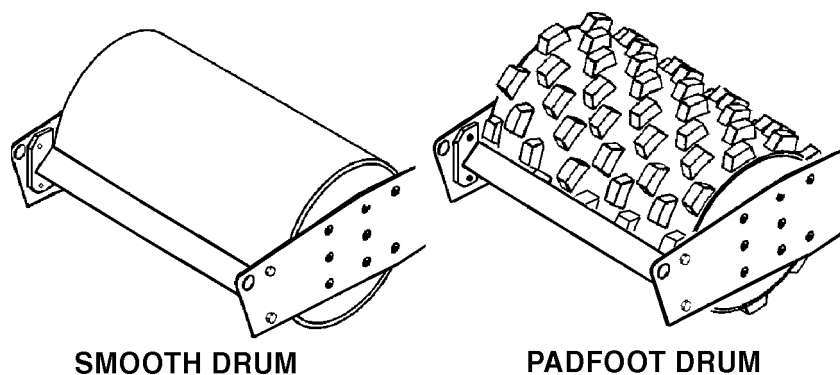
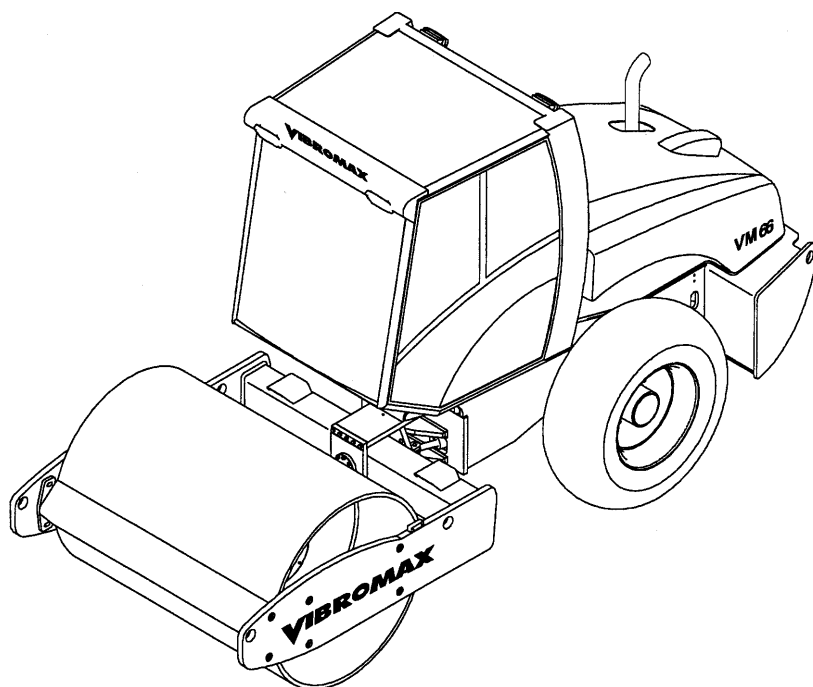
ATTACHMENTS

ROLL OVER PROTECTION STRUCTURE.....	10 - 2
ROPS TIGHTENING TORQUES).....	10 - 2

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 VM46.

The new roller uses the Cummins 3.3 liter 4 cylinder engine. The engine is 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 gearbox incorporated into the rear axle.

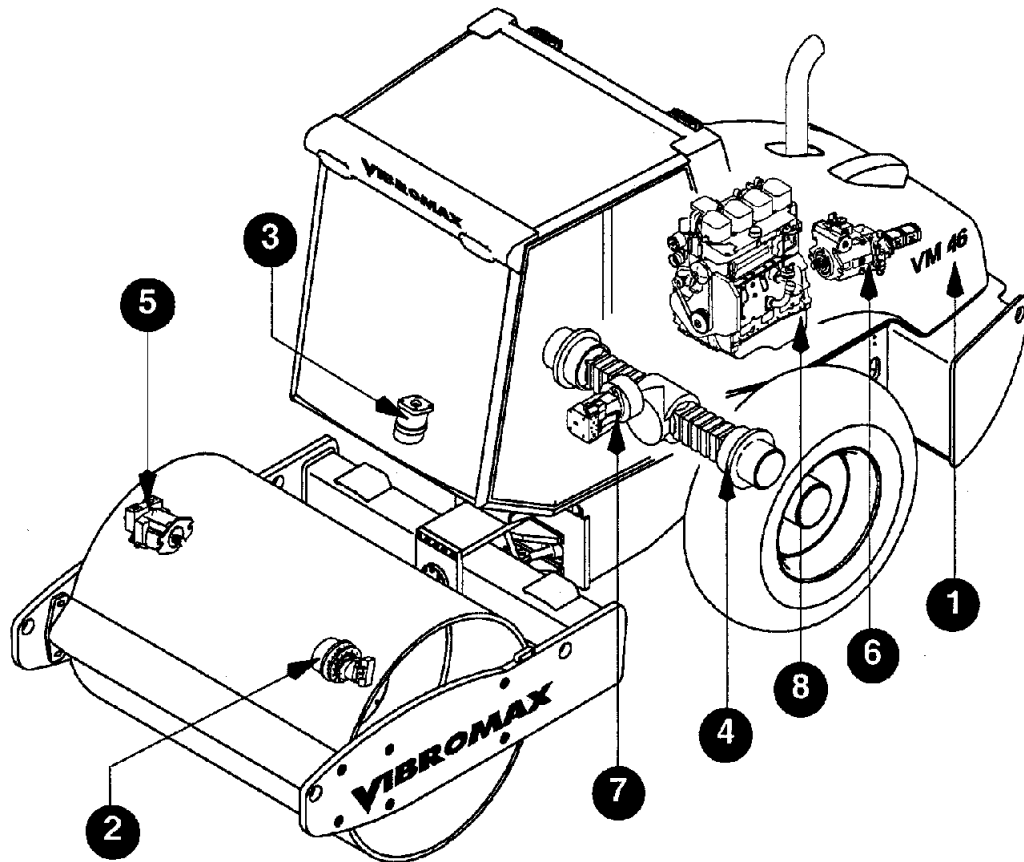
The vibration system on the VM46 uses a Rexroth gear pump mounted directly behind the propulsion pump. The vibratory pump supplies oil through the vibration control valve to a Rexroth hydrostatic motor mounted at the right side of the drum. This operates the exciter shaft at a single frequency of 32 Hz or 1920 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 system. 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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