JCB VIBROMAX

TÜV CERT
DIN EN ISO 9001 : 2000
QA-Nr.: 0410020032178

VMT 270 / 280

Vibratory Tandem Roller

Instruction Manual

07131/28035A

PREVIEW - YOUFIXTHIS.COM

Edition: November 2005

Valid from serial no.: **JCB 17 000 00**

Download full manual at youfixthis.com

CONTENTS

Operators Manual

1.0 Foreword to the Operating Instructions 3
2.0 Brief Description of the Machine 4
3.0 Product Identification and Serial Numbers 5
4.0 Identifying the Machine Parts 6
5.0 Basic Safety Notes 8
Warning Notes and Symbols 8
Basics; Use as Intended 8
Organizational Measures 10
Selection of Staff and Staff Qualifications; Basic Duties 11
Safety Notes for Particular Phases of Operation 12
Special Tasks During Use of the Machine and Maintenance Work and Fault Elimination During the Course of Work; Disposal 13
Notes on Special Types of Dangers 15
Transport and Towing; Renewed Start–Up 17
6.0 Technical Data 18
7.0 Stickers 22
8.0 Hand Signals 24

Operating Instructions

9.0 Instrument Panel 26
10.0 Driving/Steering Equipment and Emergency Off–Switch 30
11.0 Engine speed / Travel speed 31
12.0 Operator’s Seat 32
13.0 Instructions for Safe Operation 33
Before Starting the Engine 34
Engine Starting Aids 35
Starting the Engine 35
Engine Speed 36
14.0 Machine Operation 37
Machine Operation without Vibration 38
Machine Operation with Vibration 38
15.0 Parking the Machine 39
Stopping the Machine 40
16.0 Towing the Machine 40
17.0 Preparing the Machine for Transport 42

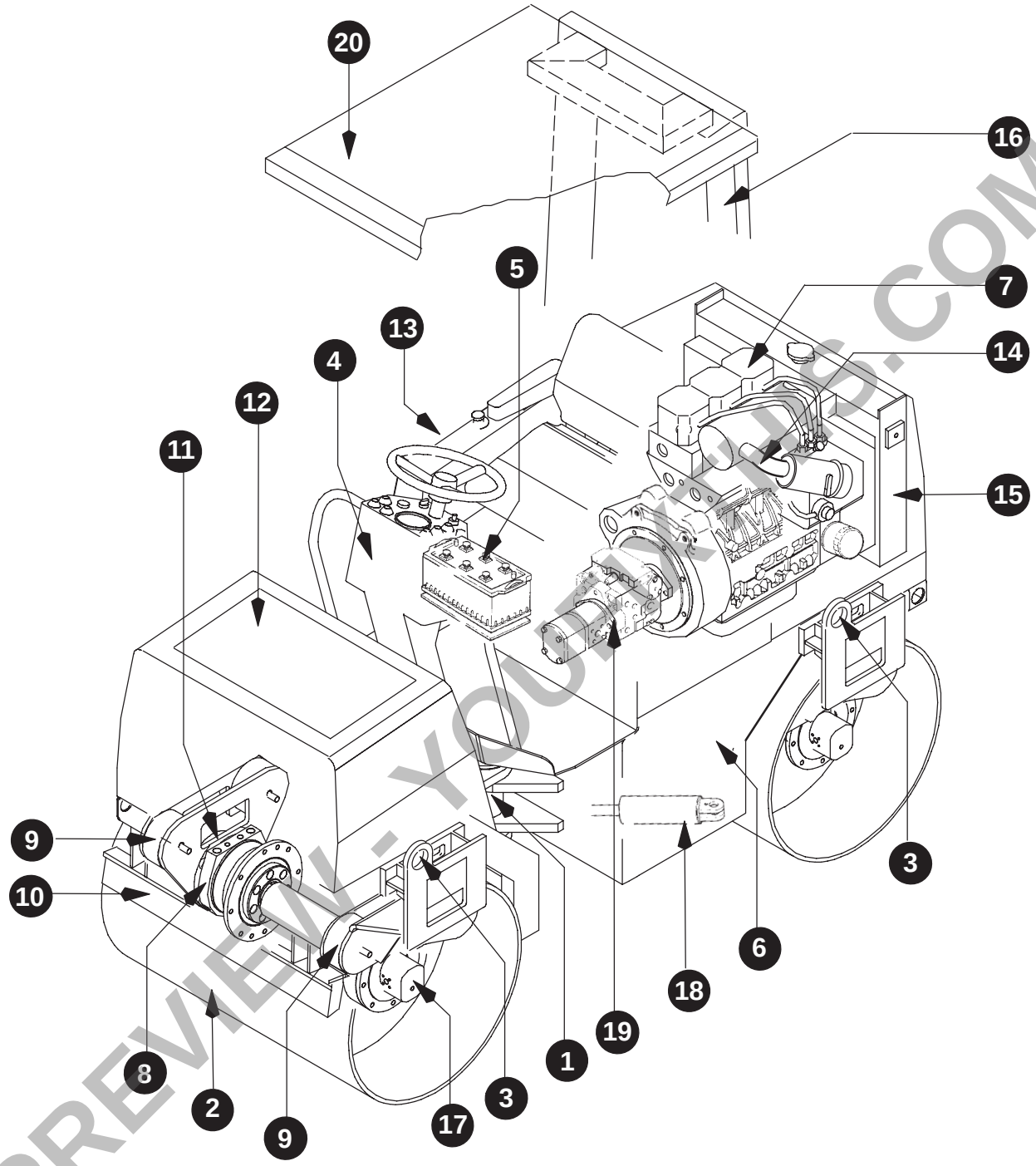
Maintenance Instructions

18.0 Before Maintenance/Lubrication 42
19.0 Notes for Safe Operation 44
Diesel Fuel 44
Fuel Storage 45

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4.0 IDENTIFYING THE MACHINE PARTS



1. Articulated joint
2. Smooth drum
3. Lifting eye
4. Operator's stand
5. Battery
6. Hydraulic oil tank
7. Engine
8. Drive motor (drum)
9. Rubber pad
10. Scraper
11. Spring loaded brake
12. Water tank
13. Fuel tank
14. Air filter
15. Water–oil cooler
16. Roll–over protection bow
17. Vibration motor
18. Steering cylinder
19. Hydropump block
20. Sun roof

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5.0 BASIC SAFETY NOTES

WARNING NOTES AND SYMBOLS

In the instruction manual, the following designations or signs are used for especially important information:

Note: *Special information relating to economical use of the machine.*

Caution: *Special information or orders or bans for preventing damage.*

Danger: *Information or orders or bans for preventing personal injury or serious damage to property.*

BASICS; USE AS INTENDED

1. The machine is built according the state of the art and in accordance with the recognized safety rules. Nevertheless, its use can cause danger to life and limb of the user or third parties or damage to the machine and other material assets.

2. Use the machine only when it is in technically perfect condition. Use it in the manner for which it was intended. Be aware of safety measures and possible hazards. Always observe the instruction manual. In particular, immediately eliminate faults which could impair safety (or have them eliminated).

3. The machine intended solely for the compaction of beds of earth or bituminous construc–tion materials when running over the subgrade in the forward or reverse direction with or without vibration.

   These building materials include soil types ranging from stones to silty sand and having water contents ranging from 40% to 110% of the optimum water content according to the standard Proctor test as given in DIN 18127.

   Fine–grained soils or soils having higher water contents require a qualified trial compaction.

   The machine is intended to be used only on a subgrade gradient up to the permissible gradient.

   Definition of grade ability

   The grade ability of a roller is the gradient angle of a firm, hard and level roadway on which a roller of the basic–equipment version with its longitudinal axis pointing in the incline direction can start in the forward and reverse directions by means of its own propulsion and then travel further for a short period.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Filling quantities

Fluids and lubricants . . . . . See page 46

Electrical system

Type of construction . . . . . 12 V–system with negative mass
Battery . . . . . (1) 12 V; 88 Ah

Engine

Manufacturer and model . . . . . Kubota D–1403 B
Type . . . . . tree cylinder engine, liquid–cooled, four–stroke diesel
Injection sequence 1–2–3
Bore x stroke . . . . . 80 x 92,4 mm
Capacity . . . . . 1393 cm^3
Compression ratio 23
Diesel fuel . . . . . See page 44
Power B DIN 6271 . . . . . 21,5 kW at 2600 rpm

Engine speeds
Operating speed . . . . . 2600 rpm
Idling speed . . . . . 1600 to 1610 rpm

Valve clearance when engine cold
Inlet valve . . . . . 0,18 mm
Exhaust valve . . . . . 0,22 mm

Weights

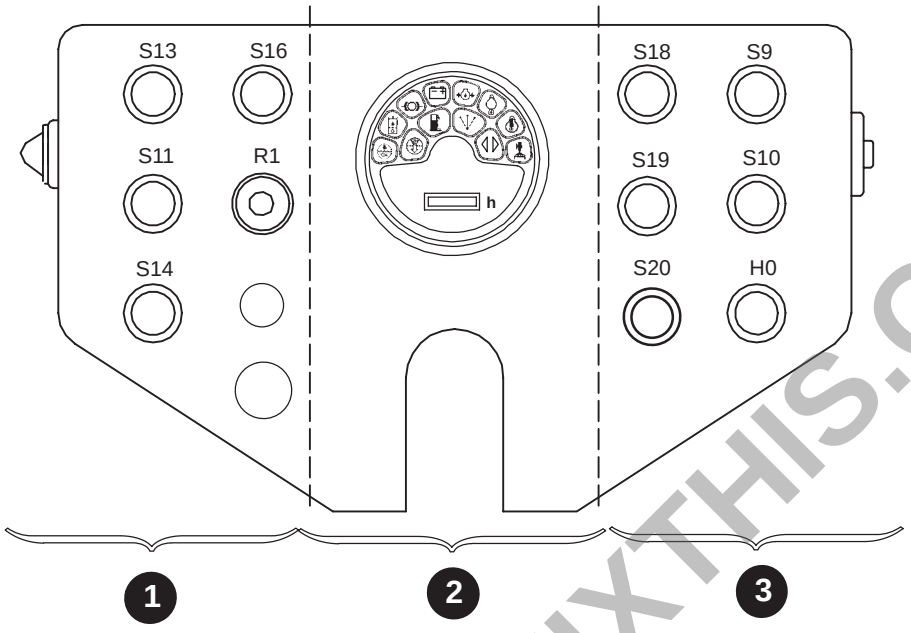
	W=1000	w=1200
Operating axle load, front	1250 kg	1300 kg
Operating axle load, rear	1250 kg	1300 kg
Operating weight	2500 kg	2600 kg
Operating weight, max.	2650 kg	2750 kg

PREVIEW - YOUFIXTHIS.COM

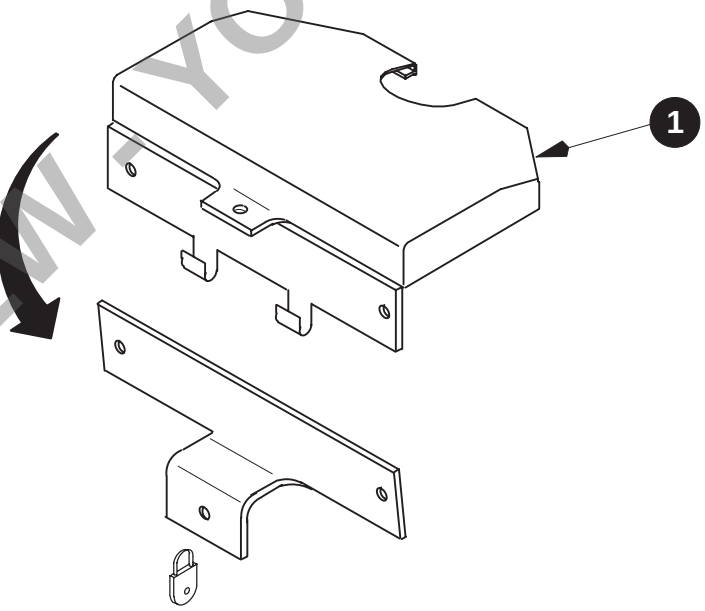
Download full manual at youfixthis.com

9.0 INSTRUMENT PANEL

Overview



1. Instrument panel Left–hand side
2. Combination Indicator Right–hand side
3. Instrument panel



Protective cover for instrument panel (special accessory)

This cover (1) serves to prevent unauthorized operation of the machine. Take off the top and hang down at upper support. Secure below with the lock.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

14.0 MACHINE OPERATION

General instructions

General practical advice concerning this machine is given below. Ask a Vibromax 2000 dealer if you require additional information regarding specific problems or special applications.

1. The operator's seat is positioned in such a manner that the operator has a good view of the work area, of the edge of the drum and of the wheels.



Know the limits of the machine. Keep the machine under control at all times. Do not perform too many operations at once.



Always pay attention. Keep the work area clear of persons who are not entitled to be in the vicinity of the machine. Know the positions of authorized persons in the work area.



If the operator looses control of a machine, injury or death can result. The operator must decide whether the weather and the soil conditions permit safe handling on a slope, a gradient or uneven ground. On a slope, a gradient or uneven ground, the machine may be driven only at a low speed.



If the machine starts to move without an operator, injury or death can result. Before leaving the operator's area, actuate the parking brake and stop the engine. See PARKING THE MACHINE on page 39 of this instruction manual.



When compacting a new road bed or a new road surface, drive on the filling material or the bituminous layer with the full width of the machine. The machine can tip over if is not resting on the surface with its full width.



Operation on a gradient can be dangerous. Rain, snow, loose crushed rock, soft ground etc. change the soil conditions. The operator must judge whether the machine can be driven on a gradient or ramp. Thus, before driving on a gradient or ramp, inspect the work area and then drive at low speed, as the machine can otherwise go out of control and tip over.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

17.0 PREPARING THE MACHINE FOR TRANSPORT

Before transporting a machine, observe the safety rules and laws. Ensure that the transport vehicle and the machine are equipped with the correct safety equipment.

1. Secure the wheels of the transport vehicle with blocks.

Note: *Ensure that the ramp can support the weight of the machine.*

2. Reverse the machine onto the transport vehicle.

3. Push the parking brake switch and stop the engine.

4. Secure the transport mounting in the locking position.

5. Secure the machine with blocks at the front and rear.

6. Lash the machine to the transport vehicle with chains attached to the lifting and towing eyes.

7. Ensure that all doors and access covers are closed and locked.

8. Measure the total height of the transport vehicle and the machine. It is necessary to know this measurement.



Warning: *Before driving the machine onto the transport vehicle, remove all ice, oil or grease from the transport vehicle and the ramp.*



Warning: *Drive the machine squarely over the ramp onto and off the transport vehicle in order to prevent the machine from driving off the side and tipping over.*

18.0 BEFORE MAINTENANCE/LUBRICATION



If the machine is not inspected and serviced properly, accidents can result. Always follow the inspection and maintenance instructions in this instruction manual.



If maintenance and repair work is not carried out properly, injury or death can result. If you do not understand the maintenance procedures for this machine, consult your VIBROMAX dealer or your workshop manual.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 8 of 87 pages

The full manual includes:

- All 87 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Jcb Vibromax VMT 270, VMT 280, Vibratory Tandem Roller Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual