## **Service Manual**



# **VMD70/VMD100**

Section 1 - General Information

Section 2 - Care and Safety

Section 3 - Routine Maintenance

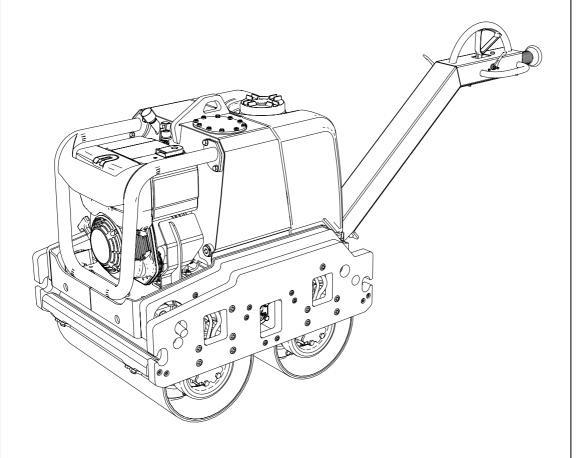
Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section K - Engine

Section L - Vibration



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## **Section 1 - General Information**

Notes:		

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# **Section 1 - General Information**

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# **Section 1 - General Information**

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### Introduction

#### **About This Manual**

#### **Machine Model and Serial Number**

This manual provides information for the following model(s) in the JCB machine range:

 VMD70/100 from SN 1601000 to 1601999 and 2703000 to 2704999.

#### **Using the Service Manual**

T11-004

This publication is designed for the benefit of JCB Distributor Service Engineers who are receiving, or have received, training by JCB Technical Training Department.

These personnel should have a sound knowledge of workshop practice, safety procedures, and general techniques associated with the maintenance and repair of hydraulic earthmoving equipment.

The illustrations in this publication are for guidance only. Where the machines differ, the text and/or the illustration will specify.

General warnings in Section 2 are repeated throughout the manual, as well as specific warnings. Read all safety statements regularly, so you do not forget them.

Renewal of oil seals, gaskets, etc., and any component showing obvious signs of wear or damage is expected as a matter of course. It is expected that components will be cleaned and lubricated where appropriate, and that any opened hose or pipe connections will be blanked to prevent excessive loss of hydraulic fluid and ingress of dirt.

Where a torque setting is given as a single figure it may be varied by plus or minus 3%. Torque figures indicated are for dry threads, hence for lubricated threads may be reduced by one third.

The manufacturer's policy is one of continuous improvement. The right to change the specification of the machine without notice is reserved. No responsibility will be accepted for discrepancies which may occur between specifications of the machine and the descriptions contained in this publication.

Finally, please remember above all else safety must come first!

#### **Section Numbering**

T11-005

The manual is compiled in sections, the first three are numbered and contain information as follows:

- 1 General Information includes torque settings and service tools.
- 2 Care and Safety includes warnings and cautions pertinent to aspects of workshop procedures etc.
- 3 Maintenance includes service schedules and recommended lubricants for all the machine.

The remaining sections are alphabetically coded and deal with Dismantling, Overhaul etc. of specific components, for example:

- **A** Attachments
- **B** Body and Framework, etc.

Section contents, technical data, circuit descriptions, operation descriptions etc. are inserted at the beginning of each alphabetically coded section.

#### Left Side, Right Side

In this manual, 'left' **A** and 'right' **B** mean your left and right when you stand correctly behind the machine and face forwards.



# Section 1 - General Information Introduction

**About This Manual** 

#### **Cross References**

T1-004\_2

In this publication, page cross references are made by presenting the subject title printed in bold, italic and underlined. It is preceded by the 'go to' symbol. The number of the page upon which the subject begins, is indicated within the brackets. For example: 

Cross

References ( 1-2)



# Section 1 - General Information Introduction

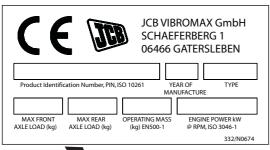
Identifying Your Machine

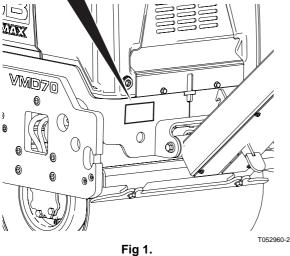
### **Identifying Your Machine**

#### **Machine Identification Plate**

Your machine has an identification plate mounted as shown. ⇒ Fig 1. ( 1-3).

The machine and engine serial numbers can help identify exactly the type of equipment you have.





#### **Typical Product Identification Number (PIN)**

**1 2 3 4**JCB VMD C 02802400

- 1 World Manufacturer Code (JCB)
- 2 Machine Type and Model
- 3 Randomly Generated Check Letter
- 4 Machine Serial Number (02802400)

### **Component Identification Plates**

#### **Engine Identification Plate**

The engine serial number is located on the engine crankcase next to the dipstick.



# Section 1 - General Information Introduction

Identifying Your Machine

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## **Service Tools**

#### **Numerical List**

The tools listed in the table are special tools required for carrying out the procedures described in this manual. These tools are available from JCB Service.

Some tools are available as kits or sets, the part numbers for parts within such kits or sets are not listed here. For full

details of all tools, including the content of kits and sets, refer to *Tool Detail Reference*, *Section 1*.

**Note:** Tools other than those listed will be required. It is expected that such general tools will be available in any well equipped workshop or be available locally from any good tool supplier.

Part Number	Description	See Section
-	Bonded Washers - see Tool Detail Reference (Section 1) for content	E
-	Female Cone Blanking Caps - see Tool Detail Reference (Section 1) for content	E
-	Female Connectors - see Tool Detail Reference (Section 1) for content	E
-	Hydraulic Flow Test Equipment - see Tool Detail Reference (Section 1) for content	E
-	Male Adapters - BSP x BSP - see Tool Detail Reference (Section 1) for content	E
-	Male Adapters - BSP x NPT (USA only) - see <i>Tool Detail Reference (Section 1)</i> for content	E
-	Male Cone Blanking Caps - see Tool Detail Reference (Section 1) for content	E
-	Pressure Test Points - Adaptors - see Tool Detail Reference (Section 1) for content	E
-	Pressure Test Points - 'T' Adaptors - see Tool Detail Reference (Section 1) for content	E
-	Rivet Nut Tool - see Tool Detail Reference (Section 1) for content	В
4104/1310	Hand Cleaner	В
892/00253	Hydraulic Circuit Pressure Test Kit - see Tool Detail Reference (Section 1) for content	E
892/00254	Hose	E
892/00279	Gauge	E
892/00280	Gauge	E
892/00284	Digital Tachometer	С
892/00285	Hyd. Oil Temperature Probe	С
892/00298	Fluke Meter	С
892/00346	Gauge	E
892/00347	Connector	E
892/01246	Vibromax male to JCB female threaded adaptor	E
892/01247	JCB male to Vibromax female threaded adaptor	E
892/12345	Frequency and Vibration Measuring Tool	E
993/68100	Slide Hammer Kit - see Tool Detail Reference (Section 1) for content	В
892/00285	100 amp Shunt	С

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