Service Manual



VM 115 - TIER III

Service Manual - VM 115 - TIER III

Section 1 - General Information

Section 2 - Care and Safety

Section 3 - Maintenance

Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section H - Steering

Section K - Engine

Section L - Vibration



Publication No. **9813/0700**



Copyright © 2004 JCB SERVICE. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB SERVICE.

World Class Customer Support



Section 1 - General Information

Notes:			

1-0 9813/0700 **1-0**



Section 1 - General Information

Contents Page No.).
Introduction	
About this Manual 1-1	1
Machine Model and Serial Number1-1	1
Using the Service Manual1-1	
Section Numbering1-1	
Left Side, Right Side1-2	
Cab/Canopy1-2	
Cross References1-2	2
Identifying Your Machine1-3	3
Machine Identification Plate1-3	3
Component Identification Plates1-4	4
JCB Engine Identification1-5	5
Service Tools	
Numerical List 1-7	-
Tool Detail Reference	
Section B - Body and Framework1-9	
Section C - Electrics1-13	3
Section E - Hydraulics1-14	4
Torque Settings	
Zinc Plated Fasteners and Dacromet Fasteners 1-19	9
Introduction1-19	9
Bolts and Screws1-19	
Vibromax Specific Torque Settings 1-23	3
Hydraulic Connections 1-25	5
'O' Ring Face Seal System1-25	5
'Torque Stop' Hose System1-28	8

1-i 1-i



Introduction

About this Manual

Machine Model and Serial Number

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

- VM 115 from SN 1705097 onwards.

Using the Service Manual

T11-00

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:

- 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.

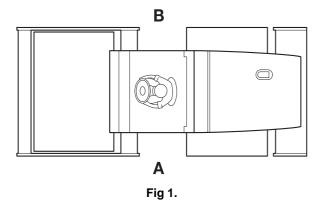
Section contents, technical data, circuit descriptions, operation descriptions etc. are inserted at the beginning of each alphabetically coded section.



About this Manual

Left Side, Right Side

In this manual, 'left' ${\bf A}$ and 'right' ${\bf B}$ mean your left and right when you are seated correctly in the machine.



Cab/Canopy

T1-003_2

This manual frequently makes references to the cab. For instance, 'do not operate the machine without a manual in the cab'. It should be noted that these statements also apply to canopy build machines.

Cross References

T1-004_

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).



Identifying Your Machine

Identifying Your Machine

Machine Identification Plate

Your machine has an identification plate mounted as shown. ⇒ *Fig 2.* (1-3).

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

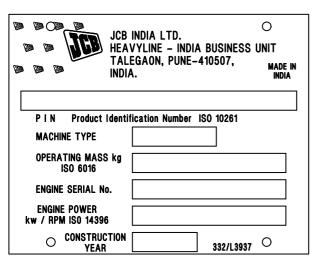


Fig 2.

Typical Product Identification Number (PIN)

1 2 3 4JCB VM115 C 01801240

- 1 World Manufacturer Identification (JCB)
- 2 Machine Type and Model (VM115 = VM115)
- 3 Randomly Generated Check Letter
- 4 Machine Serial Number (01801240)

Identifying Your Machine

Component Identification Plates

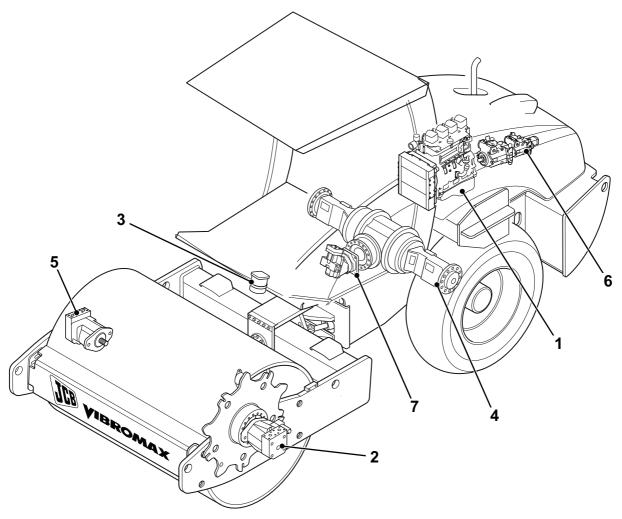


Fig 3.

844210-2

- 1 Engine serial number
- 2 Drum drive motor serial number
- 3 Steering unit serial number
- 4 Rear axle serial number
- 5 Vibration motor serial number
- 6 Hydraulic pump serial number
- 7 Axle hydraulic drive motor serial number



Identifying Your Machine

JCB Engine Identification

Engine Data Plate

Each JCB Engine has an emissions legislation lable. ⇒ Fig 4. (1-5)

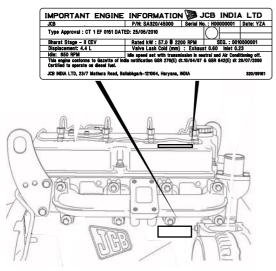


Fig 4.

D021990

1-5 9813/0700 **1-5**



Identifying Your Machine

Page left intentionally blank



Our support email: ebooklibonline@outlook.com