

VMS 71

[Section 1 - General Information](#)

[Section 2 - Care and Safety](#)

[Section 3 - Routine Maintenance](#)

[Section A - Attachments](#)

[Section C - Electrics](#)

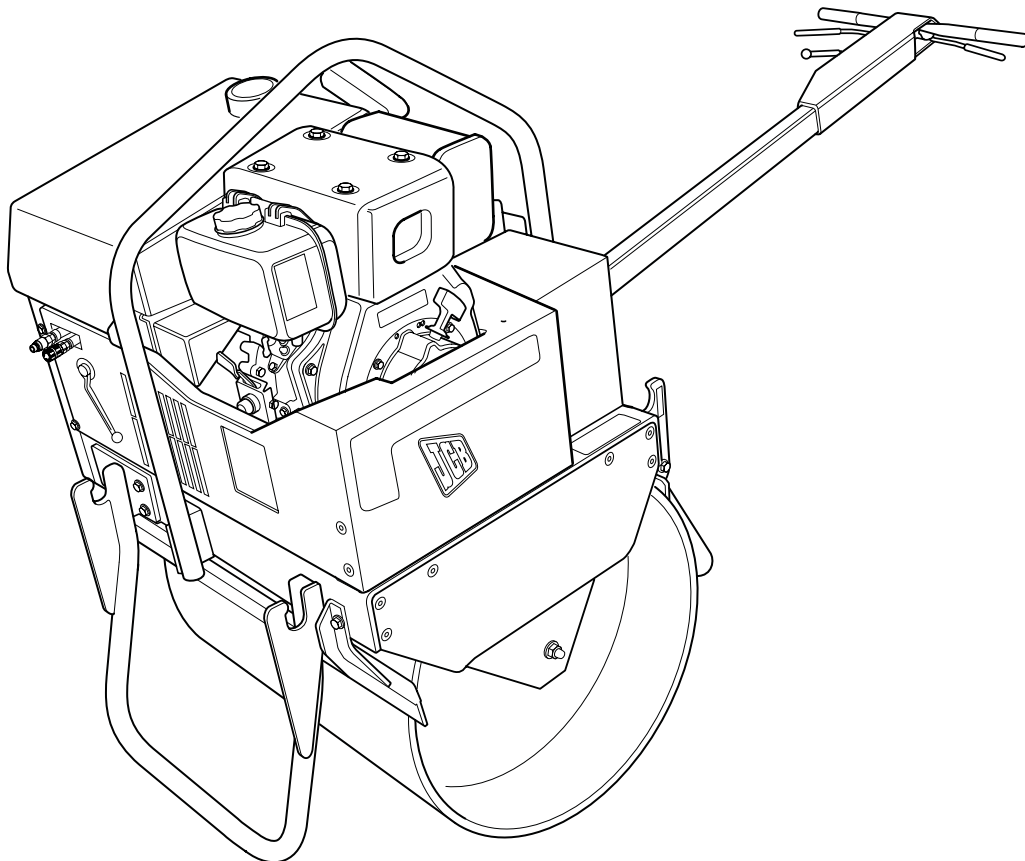
[Section E - Hydraulics](#)

[Section F - Transmission](#)

[Section G - Brakes](#)

[Section K - Engine](#)

[Section L - Vibration](#)



Publication No.
9803/9850-1



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.

Issued by JCB Technical Publications, JCB Aftermarket Training, Woodseat, Rocester, Staffordshire, ST14 5BW, England. Tel +44 1889 591300 Fax +44 1889 591400

World Class
Customer Support



Notes:



Section 1 - General Information

Contents	Page No.
Introduction	
About This Manual	1-1
Machine Model and Serial Number	1-1
Using the Service Manual	1-1
Section Numbering	1-1
Units of Measurement	1-1
Left Side, Right Side	1-1
Cross References	1-2
Identifying Your Machine	1-3
Machine Identification Plate	1-3
Torque Settings	
Zinc Plated Fasteners and Dacromet Fasteners	1-5
Introduction	1-5
Bolts and Screws	1-5
Hydraulic Connections	1-9
'O' Ring Face Seal System	1-9
'Torque Stop' Hose System	1-12
Engine Fastener Torques	1-13
Standard Yanmar Engine Fastener Torques	1-13
Yanmar L70 Diesel Engine Fastener Torques	1-14
Yanmar L100 Diesel Engine Fastener Torques	1-15
Hydraulic Pumps and Motors	1-16
Service Tools	
Numerical List	1-17
Tool Detail Reference	1-18
Section B - Body and Framework	1-18
Section C - Electrics	1-20
Section E - Hydraulics	1-21
Rivet Nuts	1-25
Fitting Procedure	1-26
Slide Hammer Kit	1-27
Fitting Procedure	1-27
Service Consumables	
Sealing and Retaining Compounds	1-29



Section 1 - General Information

Contents

Page No.

Introduction

About This Manual

Machine Model and Serial Number

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

- VMS 71 from SN 1450000 to SN 1450499
- VMS 71-20 (20 litre breaker version) from SN 1450500 to SN 1450999
- VMS71-30 (30 litre breaker version) from SN 1450500 to SN 1450999

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.

Units of Measurement

T11-001.2

In this publication, the S.I. system of units is used. For example, liquid capacities are given in litres. The Imperial units follow in parentheses () eg 28 litres (6 gal).

Left Side, Right Side

In this manual, 'left' and 'right' mean your left and right when you are standing behind the machine, holding the hand grips.



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).

Identifying Your Machine

Machine Identification Plate

Your machine has an identification plate mounted as shown. ⇒ Fig 1. (□ 1-3). The serial numbers of the machine and its engine are stamped on the plate.

The serial number of the engine is also stamped on the engine itself. ⇒ Fig 2. (□ 1-3). If the engine is replaced by a new one, the serial number on the identification plate will be wrong. Either stamp the new number of the engine on the identification plate, or simply stamp out the old number. This will prevent the wrong unit number being quoted when replacement parts are ordered.

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

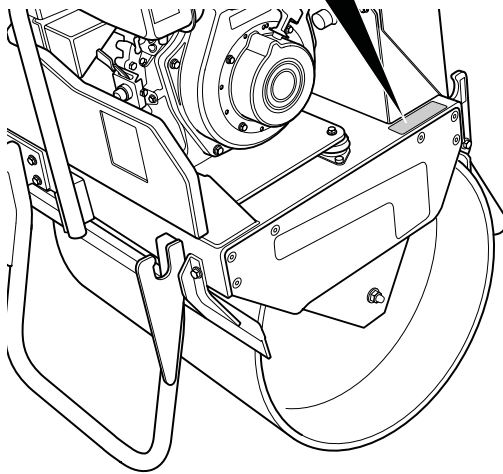
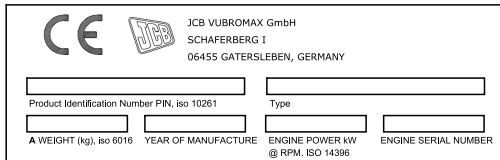


Fig 1.

Typical Product Identification Number (PIN)

JBP VMS71 C 8 1450001
 1 2 3 4 5

1 World Manufacturer Identification (3 Digits)

2 Machine Model (5 Digits)

VMS 71

3 Randomly Generated Check Letter (1 Digit)

4 Year of Manufacture (1 Digit):

8 = 2008

9 = 2009

5 Machine Serial Number (7 Digits)

Each machine has a unique serial number.

Component Identification Plate

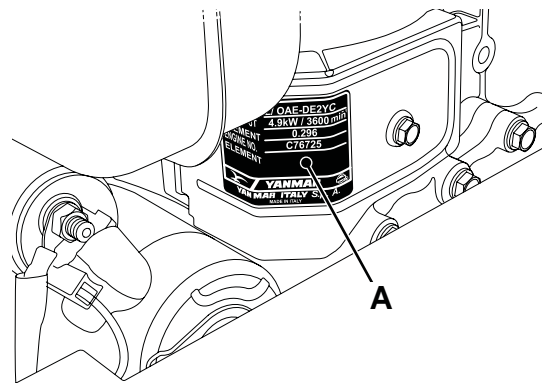


Fig 2.

A Engine Identification Plate Including Serial Number

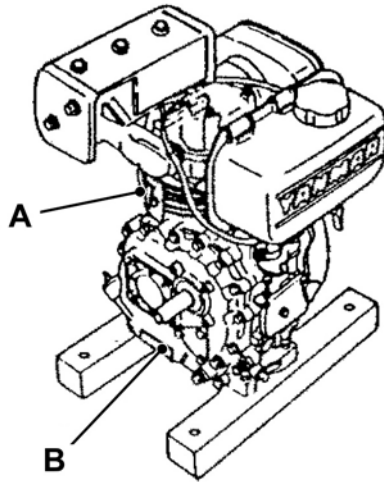


Fig 3.

- A** Engine Identification Plate Including Serial Number
- B** Engine Serial Number Stamped on Crankcase

Torque Settings

Zinc Plated Fasteners and Dacromet Fasteners

T11-002

Introduction

Some external fasteners on JCB machines are manufactured using an improved type of corrosion resistant finish. This type of finish is called Dacromet and replaces the original Zinc and Yellow Plating used on earlier machines.

The two types of fasteners can be readily identified by colour and part number suffix. ⇒ [Table 1. Fastener Types](#) (1-5).

Table 1. Fastener Types

Fastener Type	Colour	Part No. Suffix
Zinc and Yellow	Golden finish	'Z' (e.g. 1315/3712Z)
Dacromet	Mottled silver finish	'D' (e.g. 1315/3712D)

Note: As the Dacromet fasteners have a lower torque setting than the Zinc and Yellow fasteners, the torque figures used must be relevant to the type of fastener.

Note: A Dacromet bolt should not be used in conjunction with a Zinc or Yellow plated nut, as this could change the torque characteristics of the torque setting further. For the same reason, a Dacromet nut should not be used with a Zinc or Yellow plated bolt.

Note: All bolts used on JCB machines are high tensile and must not be replaced by bolts of a lesser tensile specification.

Note: Dacromet bolts, due to their high corrosion resistance are used in areas where rust could occur. Dacromet bolts are only used for external applications. They are not used in applications such as gearbox or engine joint seams or internal applications.

Bolts and Screws

Use the following torque setting tables only where no torque setting is specified in the text.

Note: Dacromet fasteners are lubricated as part of the plating process, do not lubricate.

Torque settings are given for the following conditions:

Condition 1

- Un-lubricated fasteners
- Zinc fasteners
- Yellow plated fasteners

Condition 2

- Zinc flake (Dacromet) fasteners
- Lubricated zinc and yellow plated fasteners
- Where there is a natural lubrication. For example, cast iron components

Verbus Ripp Bolts

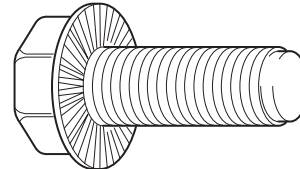


Fig 1.

Torque settings for these bolts are determined by the application. Refer to the relevant procedure for the required settings.

Buy Now



Our support email:

ebooklibonline@outlook.com