Service Manual



JS370 - Tracked Excavators - Tier 2 JCB DieselMax Engine

Section 1 - General Information

Section 2 - Operator's Manual

Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track and Running Gear

Section K - Engine

Section M - Electronic Data Systems



Publication No. **9813/4850-1**



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.

World Class

Section 1



General Information

Service Manual - JS370 - Tracked Excavators - Tier 2 JCB DieselMax Engine

Section 1 - General Information

Section 2 - Operator's Manual

Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track and Running Gear

Section K - Engine

Section M - Electronic Data Systems



Publication No. **9813/4850-1**



World Class Customer Support

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.



Contents Pag	e No.
Introduction	
Identifying Your Machine	1-1-1
,	
Safety	
Introduction	1-2-3
	•
Use	
Introduction	1-3-5
Scope	
Personnel	
Applications	
Newest Data	
Format	
Left Side, Right Side	
Hydraulic Schematic Codes	
Colour Codes	
0010u1 00u03	100
Routine Maintenance	
Maintenance Schedules 1	-4-11
Maintonando Conodico	
General Procedures	
Introduction	-5-13
Parking the Machine and Making it Safe 1	
Venting the Hydraulic Pressure	
Connecting/Disconnecting Hydraulic Hoses	
Battery Disconnection/Connection	
Removing and Replacing Components	
Preparation1	
Original Components1	
New Components1	
Torques and Fixings1	
Battery Charging System Precautions	
Replacement1	
·	
Charging1	-5-20
Standard Torque Settings	
Zinc Plated Fasteners and Dacromet Fasteners	1 22
Introduction	
Bolts and Screws	
Hydraulic Connections	
'O' Ring Face Seal System	
· · · · · · · · · · · · · · · · · · ·	
'Torque Stop' Hose System	
JCB Standard Torque Settings	
B.S.P. Port Connection (Colour Coded)	
Hose Ends and Flanged Fittings (Colour Coded)	. 1-32
Sarvina Concumables	
Service Consumables	6 22
Introduction	
Sealing and Retaining Compounds 1	-0-34
Service Tools	
Numerical List 1	-7-35
	, 00

1-1 1-1



Section 1 - General Information Contents

Contents	Page No.
Tool Detail Reference	1-7-38
Section B - Body and Framework	1-7-38
Section C - Electrics	
Section E - Hydraulics	1-7-43
Section K- Engine	1-7-58

1-2



Introduction

Identifying Your Machine

For information about identifying your machine and its main components, refer to **Section 2, About the Machine, Machine and Component Identification**.



Safety

Introduction

In this manual and on the machine there are safety notices.

The safety notices have different signal words as follows:

- DANGER
- WARNING
- CAUTION
- Notice

For an explanation of the safety notice signal words, refer to **Section 2**, **Introduction**, **Safety**.

For general safety notices, refer to **Section 2, Introduction, Safety**.

For maintenance safety notices, refer to **Section 2, Maintenance, Maintenance Safety**.

For safety notices specific to maintenance procedures, refer to the relevant procedure.

If you do not fully understand a safety notice ask your employer to explain it.



Use

Introduction

This topic contains information about the structure of the manual and how to use the manual.

```
⇒ Scope ( 1-3-6)

⇒ Personnel ( 1-3-6)

⇒ Applications ( 1-3-6)

⇒ Newest Data ( 1-3-6)

⇒ Format ( 1-3-7)

⇒ Left Side, Right Side ( 1-3-8)

⇒ Hydraulic Schematic Codes ( 1-3-9)

⇒ Colour Codes ( 1-3-9)
```



Scope

Scope

Personnel

This manual 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. Finally, please remember above all else SAFETY MUST COME FIRST!

Applications

This manual contains data relevant to a range of machines. Make sure you reference the data for the correct machine.

Newest Data

From time to time new machines, systems or devices require the manual to be re-issued. Make sure you have the newest issue.

Always check the on-line JCB data system for relevant technical information.



Format

Format

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

- 1 **General Information** The section includes general information such as torque settings and service tools.
- 2 Operator Manual The section contains a copy of the applicable machine Operator Manual. Refer to this section when necessary for information about the main machine components and controls. Refer also to the safety and daily / weekly maintenance information.

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

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

Each section contains data such as technical data, descriptions, fault finding and test procedures.

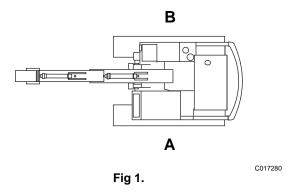
Some sections contain **procedures and specifications for different variants**. This happens because of market requirements, or when the machine specification changes after a period of time. Where applicable, a table contains information to help you identify the correct data and procedures.



Left Side, Right Side

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.





Hydraulic Schematic Codes

Hydraulic Schematic Codes

Colour Codes

The following colour coding, used on illustrations to denote various conditions of oil pressure and flow, is standardised throughout JCB Service Publications.

Red	Full Pressure : Pressure generated from operation of a service. Depending on application this may be anything between neutral circuit pressure and LSRV operating pressure.
Pink	Pressure: Pressure that is above neutral circuit pressure but lower than that denoted by Red.
Orange	Pilot: Oil pressure used in controlling a device (Pilot).
Blue	Neural: Neutral circuit pressure.
Green	Exhaust:
Light Green	Cavitation: Oil subjected to a partial vacuum due to a drop in pressure (cavitation).
Yellow	Lock Up: Oil trapped within a chamber or line, preventing movement of components (lock up).



Routine Maintenance

Maintenance Schedules

This publication contains procedures for carrying out the routine maintenance tasks listed on the maintenance schedules. Refer to **Section 2**, **Maintenance Schedules**.

The procedures for the daily and weekly (10 and 50 hour) tasks are given in **Section 2**, **Maintenance**.

The procedures for the 100 hour and above tasks are given in the related sections of this publication. For example the procedures for engine related tasks are given in Section K.



General Procedures

Introduction

When work is done on the machine it is important that the correct care is taken. This will help to prevent personal injury and reduce the risk of component failure.

As part of the procedures in this manual you will need to do some general procedures. Two examples of these general procedures are; parking the machine and making it safe, and venting hydraulic pressure.

These procedures are given here as an alternative to again and again in the manual. Where applicable you will see a cross reference to this section so that you can refer to the detailed procedures.

- ⇒ Parking the Machine and Making it Safe (1-5-14)
- ⇒ Venting the Hydraulic Pressure (1-5-15)
- ⇒ Connecting/Disconnecting Hydraulic Hoses (1-5-16)
- ⇒ Battery Disconnection/Connection (1-5-17)
- ⇒ Removing and Replacing Components (1-5-18)
- ⇒ Battery Charging System Precautions (1-5-19)
- ⇒ Gas Hydraulic Bladder Accumulators (1 1-5-20)



Section 1-5 - General Information General Procedures

Parking the Machine and Making it Safe

Parking the Machine and Making it Safe

For the correct procedures to park and make the machine safe, refer to **Section 2, Maintenance, Maintenance Positions**.

1-5-14 9813-4850-1 **1-5-14**



Our support email: ebooklibonline@outlook.com