## **Service Manual**



# JS200W - Wheeled Excavators - Tier 2 and Tier 4i Engines

Section 1 - General Information

Section 2 - Operator's Manual

Section B - Body & Framework

Section C - Electrics

Section D - Controls

Section E - Hydraulics

Section F - Transmission

Section K - Engine



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World Class

## **Section 1**



## **General Information**

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## 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**.

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## **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.

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### Use

#### Introduction

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

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⇒ Scope ( 1-6)

⇒ Personnel ( 1-6)

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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.

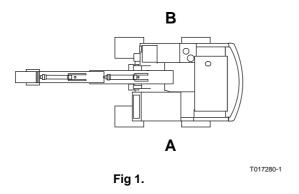
Some sections contain **procedures and specifications for different variants**. This happens because of market requirements, or when the machine specification changes after a period of time. Where applicable, a table contains information to help you identify the correct data and procedures.



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	<b>Full Pressure</b> : Pressure generated from operation of a service. Depending on application this may be anything between neutral circuit pressure and LSRV operating pressure.
Pink	<b>Pressure:</b> 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.

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



#### Section 1 - 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**.

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