## **Service Manual**



# TM180/220

Section 1 - General Information

Section 2 - Care and Safety

Section 3 - Maintenance

Section A - Attachments

Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section G - Brakes

Section H - Steering

Section K - Engine



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Notes:		

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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 ( 1-1-2)

⇒ Personnel ( 1-1-2)

⇒ Applications ( 1-1-2)

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Scope

#### Scope

#### **Personnel**

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. 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. ⇒ *Applications* ( 1-7-63)

#### **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 three are numbered and contain information as follows:

- 1 General Information Use the Applications Tables at the front of the section to see which topic in the manual is applicable to which machine model. The section also includes general information such as torque settings and service tools.
- 2 Care & Safety includes warnings, cautions and general procedures related to aspects of workshop procedures contained in the manual.
- 3 Routine 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.

The sections contain topics. Each topic is a self contained set of data about a machine System or Device.

Some topics are only applicable to some machine models. Use the **Applications Tables** in this section to see which topic is applicable to which machine model.

Each topic contains data such as specifications, descriptions, fault finding and test procedures. Device topics also contain removal, replacement, dismantle and assemble procedures.

Some topics 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 in the introduction of each topic contains information to help you identify the correct specifications or procedures.

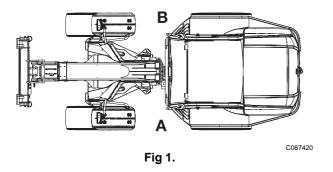
Each topic also contains a **Related Topics** table. This table lists all the topics that contain related data. For example a hydraulic system contains devices such as valves and pumps. These devices have their own topics and they are listed in the system related topics table.



Left and Right Sides

## **Left and Right Sides**

'Left Hand' sand 'Right Hand' are as viewed from the rear of the machine facing forwards.





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).



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