

TM310

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Notes:



Section 1 - General Information

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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:

- TM310, TM310S and TM310WM from machine serial number 1314700.

Using the Service Manual

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

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.

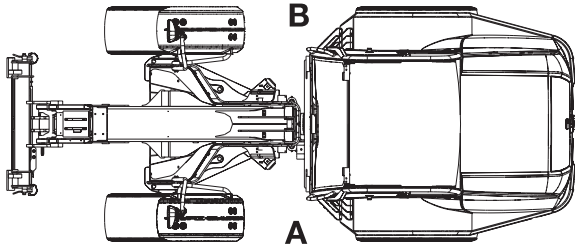
The remaining sections are alphabetically coded and deal with Dismantling, Overhaul etc. of specific components, for example:

- 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.

Left Side, Right Side

In this manual, 'left' **A** and 'right' **B** mean your left and right when you are seated correctly in the machine.



C087420

Fig 1.

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

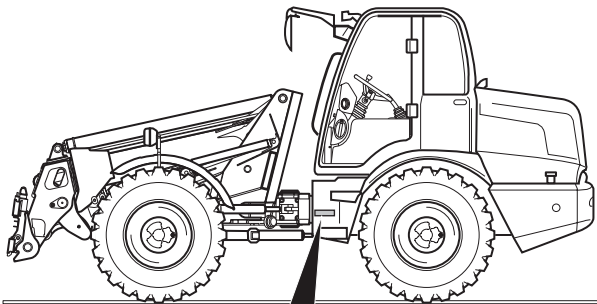
Machine Identification Plate

Your machine has an identification plate mounted as shown. The serial numbers of the machine and its major units are stamped on the plate.

Note: The machine model and build specification is indicated by the VIN (earlier machines) or PIN (later machines). Refer to **Typical Vehicle Identification Number (VIN)** or **Typical Product Identification Number (PIN)**.

The serial number of each major unit is also stamped on the unit itself. If a major unit is replaced by a new one, the serial number on the identification plate will be wrong. Either stamp the new number of the unit 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.

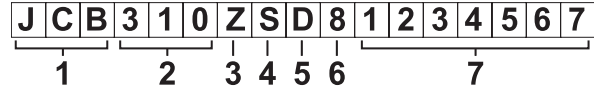


JCB MATERIALS HANDLING LIMITED LAKEVIEW WORKS, ROCESTER, WILTSHIRE, UNITED KINGDOM. S114 S1P CONSTRUCTOR	
VIN Vehicle Identification Number	PIN Product Identification Number
ENGINE SERIAL NUMBER	FRONT AXLE SERIAL NUMBER
TRANSMISSION SERIAL NUMBER	REAR AXLE SERIAL NUMBER
WEIGHT kg	YEAR OF CONST
RATED CAPACITY kg	ENGINE POWER kW @ RPM
MACHINE TYPE	SALES SPECIAL NUMBER
HOMOLOGATION NUMBER	

Fig 2.

C051170-C1

Typical Product Identification Number (PIN)



T033160-1.

Fig 3.

- World Manufacturer Identification (3 Digits)
- Model Number (3 Digits)
- Loader End Type (1 Digit)

O = HT Loader End
 Z = ZX Loader End

- Designation (1 Digit)

S = Farmmaster
 O = None Farmmaster
 I = India

- Check Letter (1 Digit)

The Check Letter is used to verify the authenticity of the machine's PIN.

- Year of Manufacture (1 Digit)

7 = 2007	A = 2010
8 = 2008	B = 2011
9 = 2009	C = 2012

- Machine Serial Number (7 Digits)

Each machine has a unique serial number.

Typical Vehicle Identification Number

1	2	3	4	5
SLP	TM310	3	E	1314700

- World Manufacturer Identification (SLP = JCB)
- Machine Type (TM310, TM-W)
- Year of Manufacture (1 = 2001, 2 = 2002, 3 = 2003, 4 = 2004, 5 = 2005, 6 = 2006, 7 = 2007)
- Manufacturers Location (E = England)
- Machine Serial Number (1314700)

Component Identification Plates

Typical Engine Identification Number

T1-005_3

Engine data labels **A** are located on the cylinder block at position **C** and rocker cover **D** (if fitted). → Fig 4. (□ 1-4). The data label contains important engine information and includes the engine identification number **E**.

A typical engine identification number is explained as follows:

SA	320/40001	U	00001	04
1	2	3	4	5

1 Engine Type

S = 4.4 litre series.

JCB Dieselmex (Tier 2)

A = Naturally aspirated

B = Turbocharged

C = Turbocharged and intercooled

JCB Dieselmex (Tier 3)

D = Turbocharged

E = Electronic common rail fuel injection

F = Turbocharged and after-cooled

2 Engine part number

3 Country of manufacture

U = United Kingdom

4 Engine Serial Number

5 Year of Manufacture

The last three parts of the engine identification number are stamped on the cylinder block at position **B**.

U 00001 04

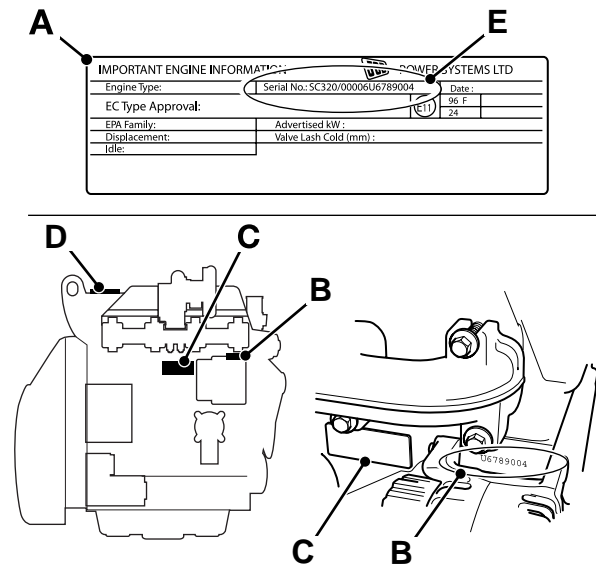


Fig 4. Engine

C007820-C2

Transmission Identification Numbers

The transmission serial number is stamped on label **A** which is mounted on the front face.

The drop box serial number is stamped on plate **B** mounted on the drop box.

The axle serial number is stamped on plate **C** mounted on the axle.

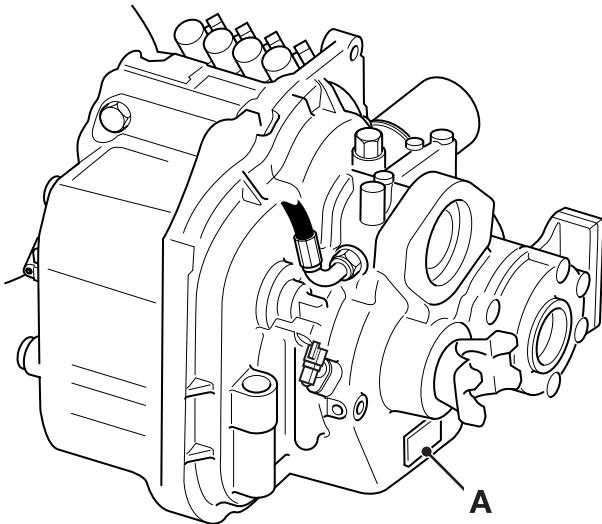


Fig 5.

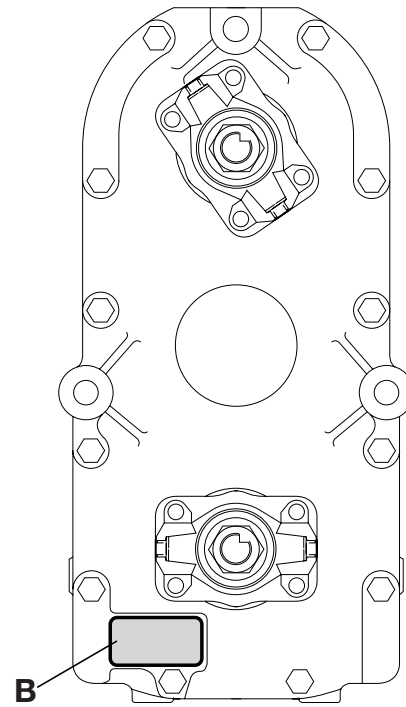


Fig 6.

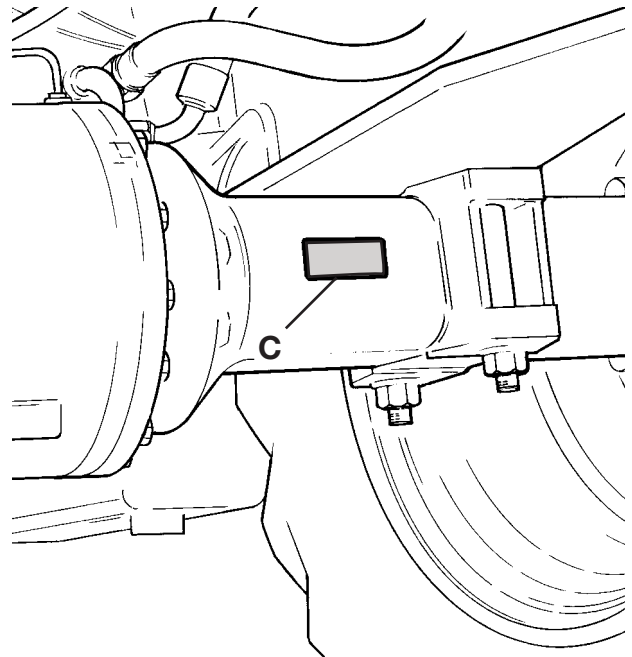


Fig 7.

FOPS Data Plate

WARNING

Do not use the machine if the falling objects protection level provided by the structure is not sufficient for the application. Falling objects can cause serious injury.

8-2-8-17

If the machine is used in any application where there is a risk of falling objects then a falling-objects protective structure (FOPS) must be installed. For further information contact your JCB Dealer

The falling objects protection structure (FOPS) is fitted with a dataplate. The dataplate indicates what level protection the structure provides.

There are two levels of FOPS:

- **Level I Impact Protection** - impact strength for protection from small falling objects (e.g. bricks, small concrete blocks, hand tools) encountered in operations such as highway maintenance, landscaping and other construction site services.
- **Level II Impact Protection** - impact strength for protection from heavy falling objects (e.g. trees, rocks) for machines involved in site clearing, overhead demolition or forestry.

ROPS Data Plate

WARNING

You could be killed or seriously injured if you operate a machine with a damaged or missing ROPS/FOPS. If the Roll Over Protection Structure (ROPS)/Falling Objects Protection Structure (FOPS) has been in an accident, do not use the machine until the structure has been renewed. Modifications and repairs that are not approved by the manufacturer may be dangerous and will invalidate the ROPS/FOPS certification.

INT-2-1-9_6

WARNING

Seat Belts

The ROPS/FOPS is designed to give you protection in an accident. If you do not wear your seat belt, you could be thrown out of the machine and crushed. You must wear a seat belt when using the machine. Fasten the seat belt before starting the engine.

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Machines built to FOPS/ROPS standards have a data plate attached to the inside of the cab.

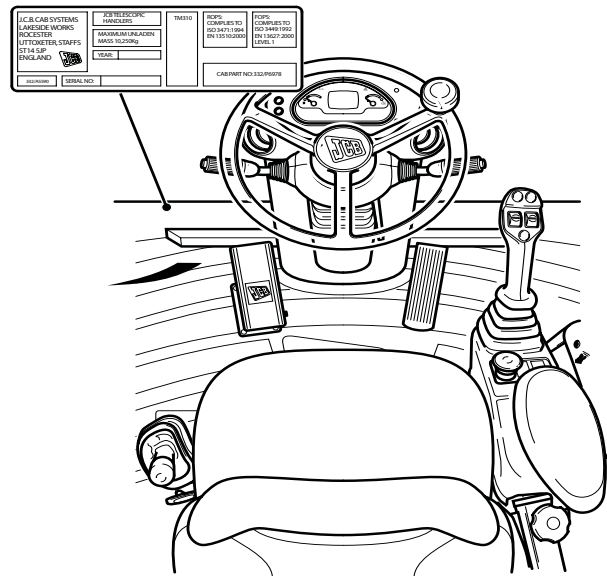


Fig 8.

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