

General Information

Service Manual - Side Engine Loadalls

[Section 1 - General Information](#)

[Section 2 - Care and Safety](#)

[Section 3 - Routine Maintenance](#)

[Section B - Body and Framework](#)

[Section C - Electrics](#)

[Section E - Hydraulics](#)

[Section F - Transmission](#)

[Section G - Brakes](#)

[Section H - Steering](#)

[Section K - Engine](#)

[Section M - Electrical and Electronic Data Systems](#)



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Section 1 - General Information

Contents	Page No.
Applications	
Introduction	1-1-1
Tables	1-1-2
Use	
Introduction	1-2-1
Scope	1-2-2
Format	1-2-3
Left and Right Sides	1-2-4
Hydraulic Schematic Codes	1-2-5
Machine Identification	
Introduction	1-3-1
Related Topics	1-3-2
Machine Identification Plate	1-3-3
Component Identification Plates	1-3-7
Torque Settings	
Introduction	1-4-1
Zinc Plated Fasteners and Dacromet Fasteners	1-4-2
Hydraulic Connections	1-4-6
'Positional Type' Hydraulic Adaptors	1-4-10
Service Tools	
Introduction	1-5-1
Numerical List	1-5-2
Tool Detail Reference	1-5-5
Rivet Nuts	1-5-27
Slide Hammer Kit	1-5-29
Service Consumables	
Introduction	1-6-1
Sealing and Retaining Compounds	1-6-2
Fuel	
Introduction	1-7-1
Related Topics	1-7-2
Acceptable and Unacceptable Fuels	1-7-3
Stall Speed Combinations	
Introduction	1-8-1
Related Topics	1-8-2
Specifications	1-8-3

Applications

Introduction

This manual contains topics that relate to JCB Loadall machines in the 5A and 5T groups. There are several machine model codes in the family.

Machine Group	Model Code	Model Name	Serial Number range
5A	A	531-70	TBA
5A	B	535-95	TBA
5A	C	536-60	TBA
5A	D	541-70	TBA
5A	H	533-105	TBA
5A	R	536-70	TBA
5A	S	526-56	TBA
5A	W	550-80	TBA
5T	A	531-T70	TBA
5T	B	541-T70	TBA
5T	C	536-T60	TBA
5T	D	535-T95	TBA
5T	E	536-T70	TBA
5T	W	550-T80	TBA

Machine variants: There are different machine variants within the same model name. This happens because of market requirements, or when the machine specification changes after a period of time. Where applicable information is given to help identify which machine variant is applicable for the given specifications and procedures.

Use the applications tables to see which topics relate to which machine models and variants. Where no variant information is given the topic is applicable to all machine models indicated on the table.

Important: The machine model names are NOT referred to in the topics. You must refer to the applications tables for the applicable machine model. Table entries shaded grey indicate a topic not included in this issue of the manual.

Note: For full details of machine identification refer to **Section 1 - Machine Identification**.

⇒ [Tables \(□ 1-1-2\)](#)

⇒ [Section 1 - General Information \(□ 1-1-2\)](#)

⇒ [Section 2 - Care and Safety \(□ 1-1-2\)](#)

⇒ [Section 3 - Routine Maintenance \(□ 1-1-3\)](#)

⇒ [Section B - Body and Framework \(□ 1-1-4\)](#)

⇒ [Section C - Electrics \(□ 1-1-6\)](#)

⇒ [Section E - Hydraulics \(□ 1-1-7\)](#)

⇒ [Section F - Transmission \(□ 1-1-10\)](#)

⇒ [Section G - Brakes \(□ 1-1-12\)](#)

⇒ [Section H - Steering \(□ 1-1-13\)](#)

⇒ [Section K - Engine \(□ 1-1-14\)](#)

⇒ [Section M - Electronic Data Systems \(□ 1-1-15\)](#)

Use

Introduction

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

⇒ [Scope \(□ 1-2-2\)](#)

⇒ [Personnel \(□ 1-2-2\)](#)

⇒ [Applications \(□ 1-2-2\)](#)

⇒ [Newest Data \(□ 1-2-2\)](#)

⇒ [Format \(□ 1-2-3\)](#)

⇒ [Left and Right Sides \(□ 1-2-4\)](#)

⇒ [Hydraulic Schematic Codes \(□ 1-2-5\)](#)

⇒ [Colour Codes \(□ 1-2-5\)](#)

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. Refer to the **Applications** topic in this section.

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

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

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).

Component Identification Plates

Typical Engine Identification Number

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

A typical engine identification number is explained as follows:

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

1 Engine Type

SD = turbocharged

SE = electronic common rail fuel injection, turbocharged and intercooled.

SF = turbocharged and intercooled.

SH = 4.4 litre electronic common rail fuel injection with Variable Geometry Turbocharger (81kW, 93kW)

SL = 4.4 litre electronic common rail fuel injection with Fixed Geometry Turbocharger (55kW)

DH = 4.8 litre electronic common rail fuel injection with Variable Geometry Turbocharger (108kW)

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

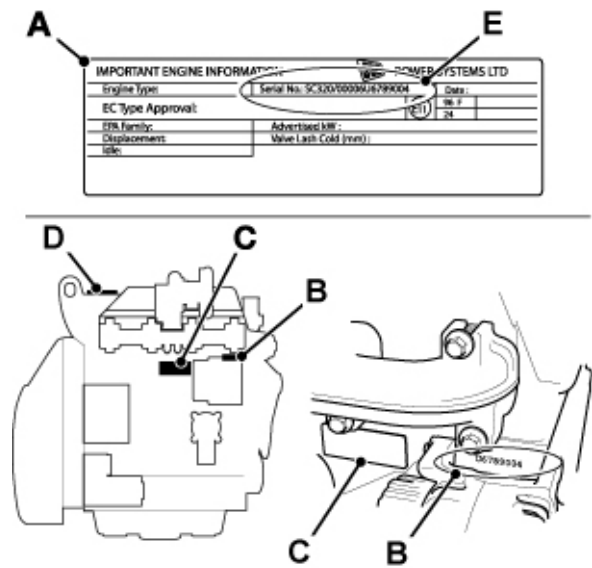


Fig 3. Engine

C007280-C5.jpg

Transmission Identification Numbers

Axles (Excluding 550-80 Machines)

The transmission components have a serial number stamped on a data plate **A** as shown.

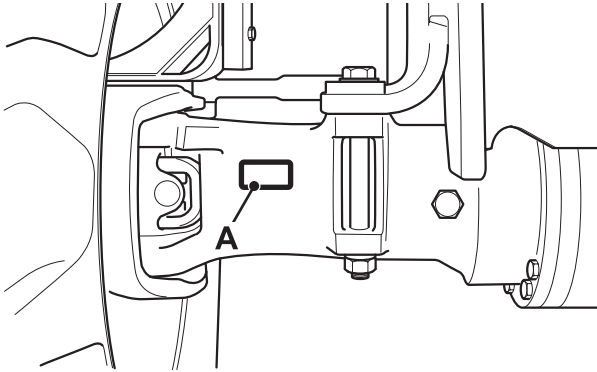


Fig 4. Front Axle

A710840-C1

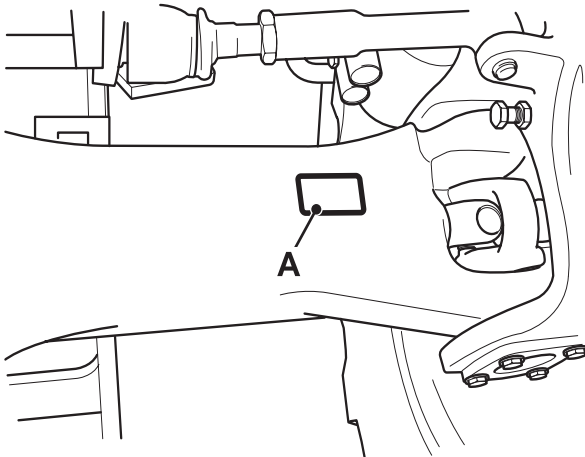


Fig 5. Rear Axle

A710830-C1

Axles (550-80 Machines)

The axles have a serial number stamped on a data plate label **A** as shown.

To view to the front axle data plate remove the cover **B** and the plate will be visible through hole **C**.

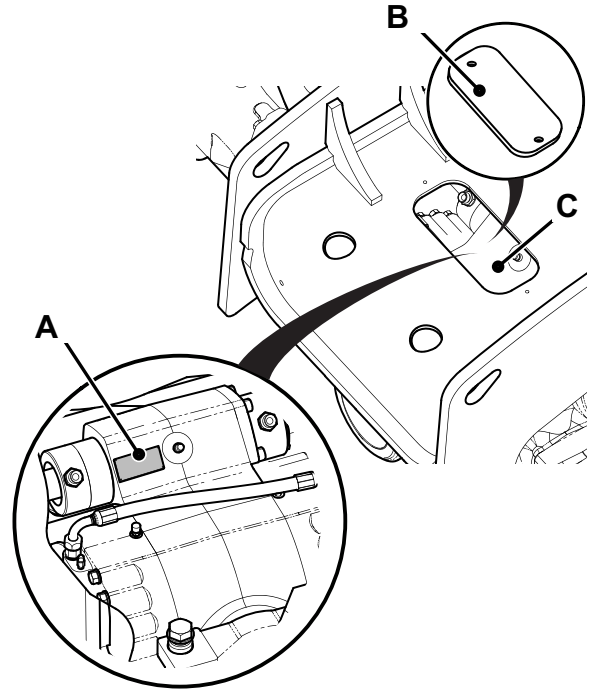


Fig 6. Front Axle

C107510

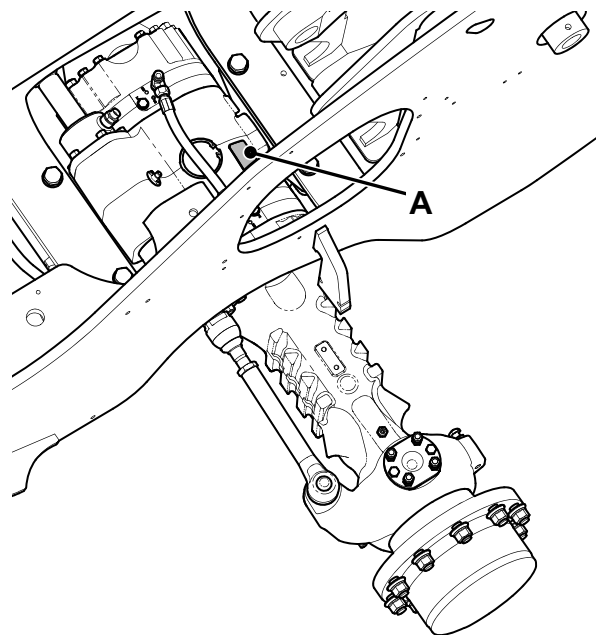


Fig 7. Rear Axle

C107520

Gearbox

The transmission components have a serial number stamped on a data plate **A** as shown.

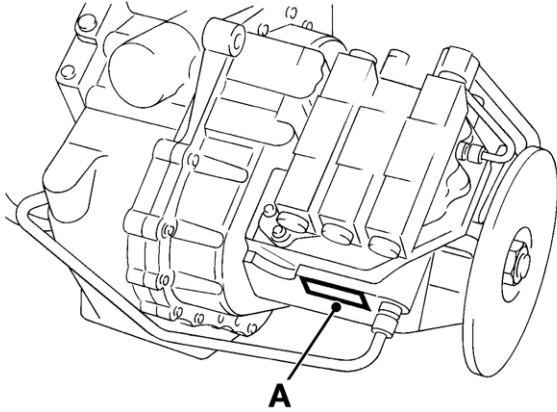


Fig 8. PS750 Powershift Transmission

263370-C1

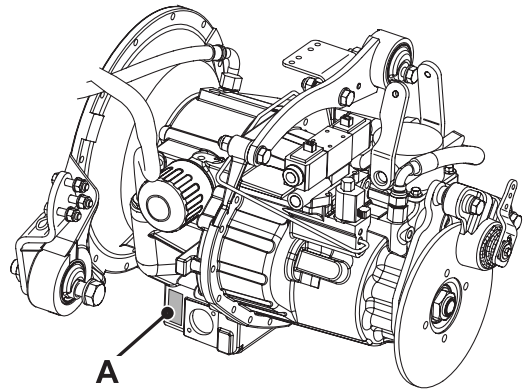


Fig 10. SS700 Transmission

C007640

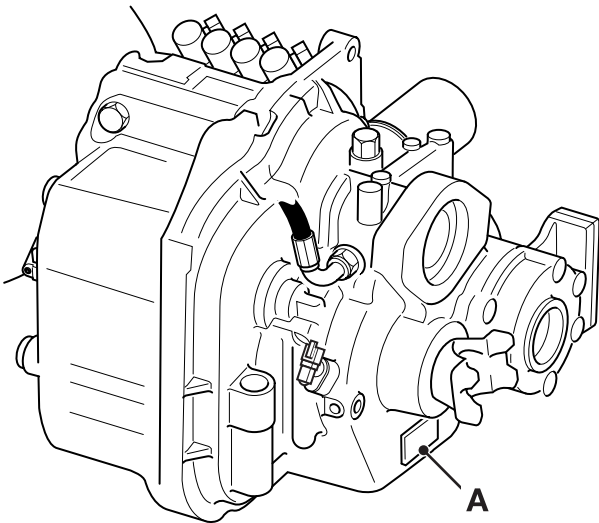


Fig 9. PS760 Powershift Transmission

A401030-C2

HydroStatic Transmission Components

Transmission Pump

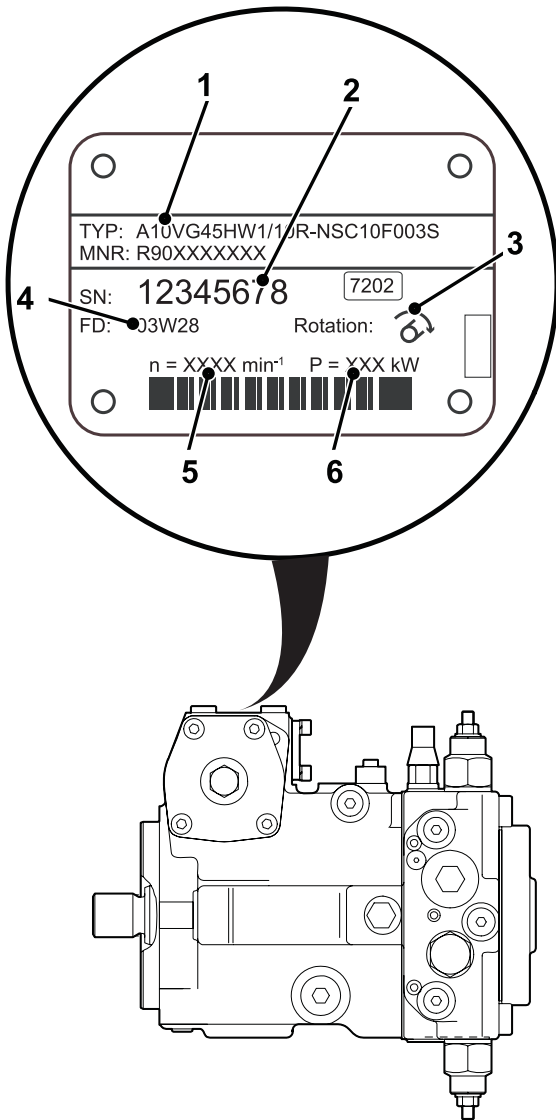


Fig 11.

C094930

1 Ordering Code

Code	Machine
AA4VG56	20 and 34 kph
AA10VG63	25 kph
AA4VG71	40 kph

2 Pump Serial Number (8 Digits)

Each motor has a unique serial number.

3 Direction of rotation - looking at the shaft.

4 Date of manufacture.

5 Speed.

6 Power.

Transmission Motor

1 Motor Serial Number (6 Digits)

Each motor has a unique serial number.

2 Type

3 Date of manufacture.

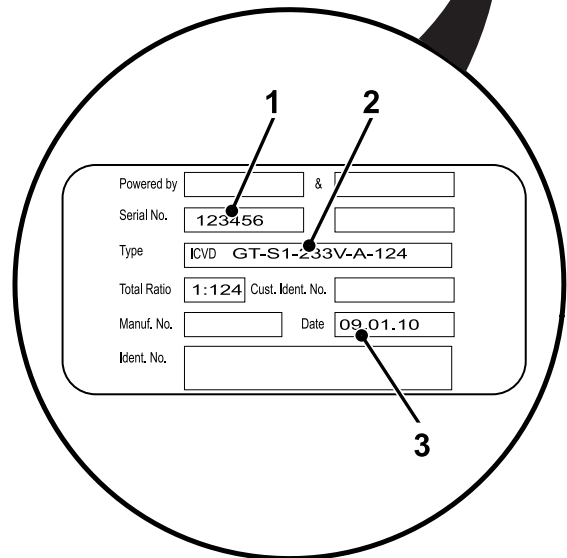
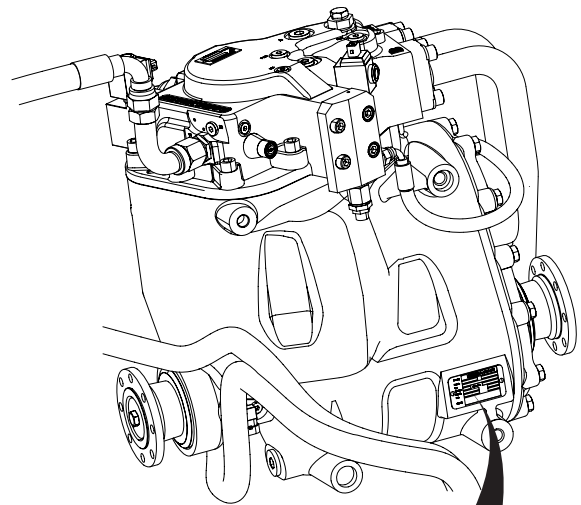


Fig 12.

C094920

ROPS/FOPS and OECD Certification Plates

Machines built to ROPS/FOPS standards have an identification label **A** fitted to the inside of the cab. Machines built to ROPS/FOPS and OECD standards have identification label **B** fitted to the inside of the cab.

Definition of terms:

- ROPS Roll Over Protection Structure
- FOPS Falling Objects Protection Structure
- OECD Organisation for Economic Co-operation and Development.

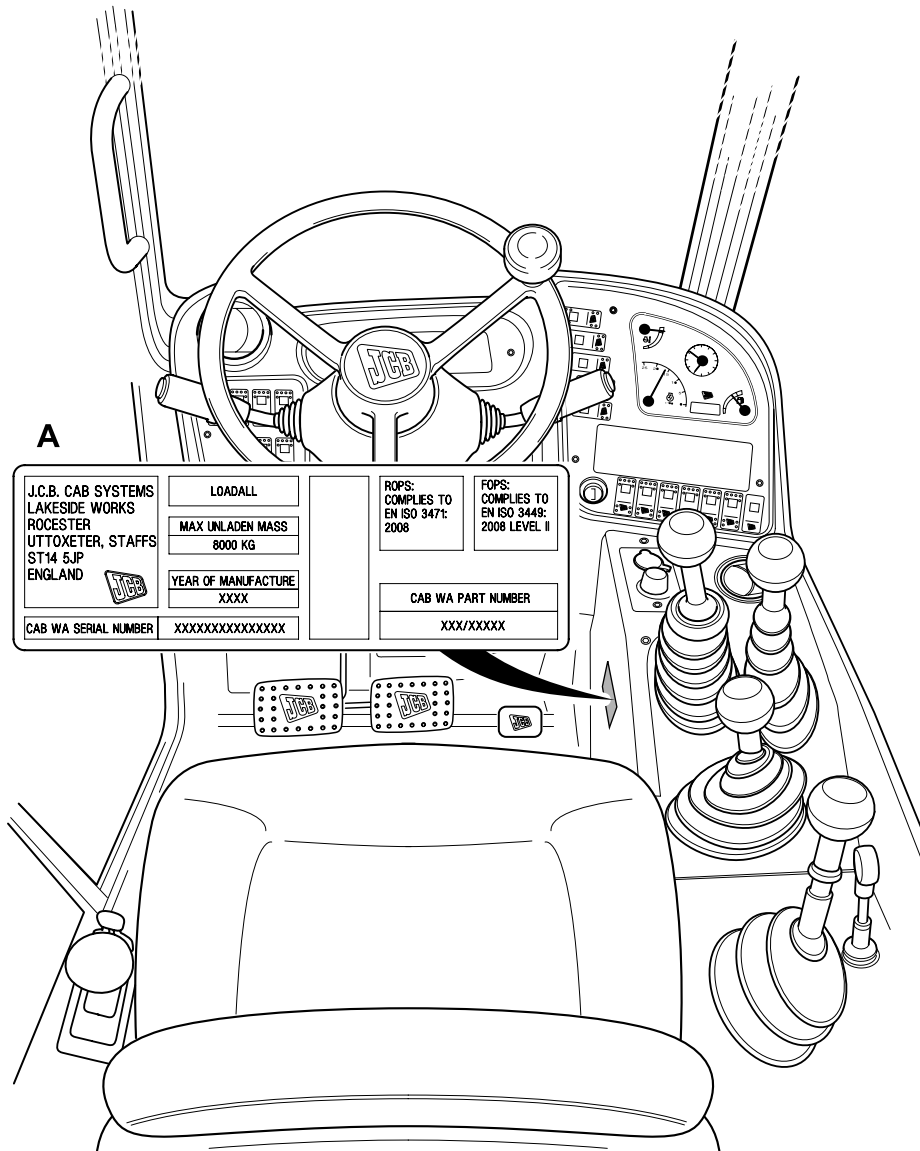


Fig 13. 526-56 and 527-58 machines

T016800-3-C1

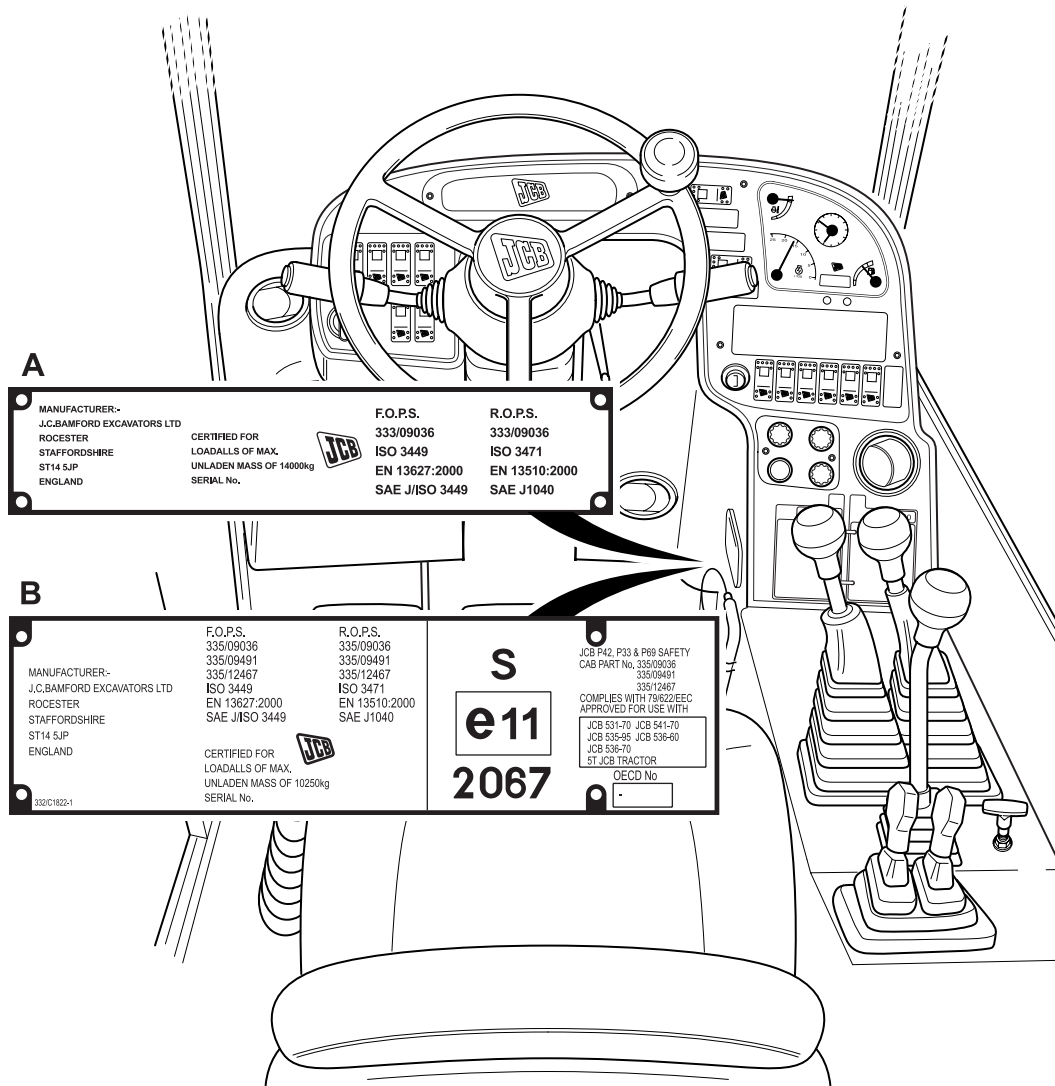


Fig 14. Other Machines

445911-5

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