

Side Engine Loadalls

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General Information

Service Manual - Side Engine Loadalls

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Introduction

About This Publication

Machine Model and Serial Number

This publication provides information for the following models in the JCB product range:

- 530-70 from S/N 768740
- 532-120 from S/N 774598
- 533-105 from S/N 786756
- 535-60 from S/N 1064599
- 535-95 from S/N 778295
- 535-125 from S/N 1064203
- 535-140 from S/N 1065087
- 537-135 (550) from S/N 774605
- 540-70 from S/N 771065
- 540-140 from S/N 1064723
- 540-170 (5508) from S/N 780925

Using the Service Manual

T11-004

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!

Units of Measurement

T11-001_2

In this publication, the S.I. system of units is used. For example, liquid capacities are given in litres. The Imperial units follow in parentheses () eg 28 litres (6 gal).

Section Numbering

T11-005

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

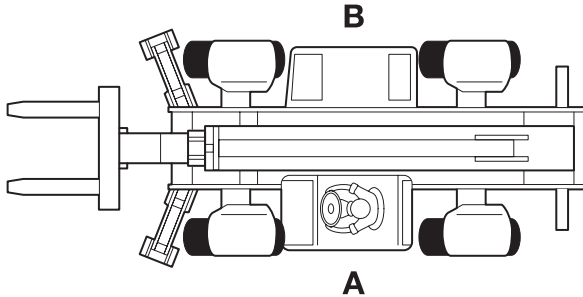


Fig 1.

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, see → [Fig 2.](#) (□ 1-3). The serial numbers of the machine and its major units are stamped on the plate.

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.

Typical Vehicle Identification Number (VIN)

1	2	3	4	5
SLP	535	R	E	0754001

1 World Manufacturer Identification

SLP = JCB

2 Year of Manufacture

P = 1993	V = 1997	1 = 2001
R = 1994	W = 1998	2 = 2002
S = 1995	X = 1999	3 = 2003
T = 1996	Y = 2000	4 = 2004

3 Manufacturer Location

E = England

4 Machine Serial Number

JCB MATERIALS HANDLING LIMITED
 LAKESIDE WORKS, ROCESTER,
 UTTOXETER, UNITED KINGDOM.
 ST14 5JP
 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	ENGINE POWER kW @ RPM	
RATED CAPACITY kg	SALES SPECIAL NUMBER		
MACHINE TYPE	HOMOLOGATION NUMBER		

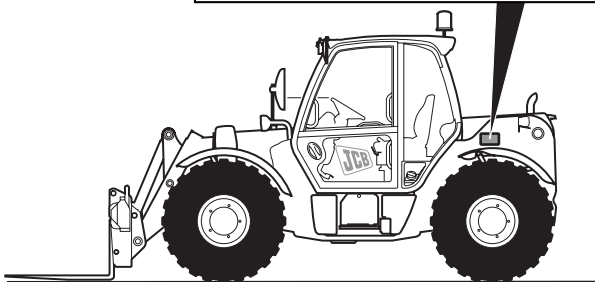


Fig 2.

Component Identification Plates

Typical Engine Identification Number

The engine serial number is stamped on label 3-A which is fastened to the right side of the cylinder block at 3-B, near the fuel filter.

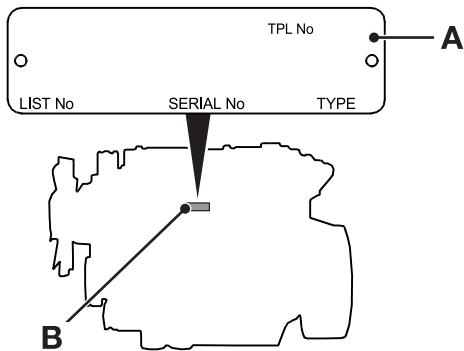


Fig 3.

1	2	3	4	5
RE	50261	U	500405	P

1 Engine Type

A series - low emission, stage 1

AK = 4 cylinder turbo

AR = 4 cylinder naturally aspirated

R series - low emission, stage 2

RE = 4 cylinder naturally aspirated

RG = 4 cylinder turbo

RJ = 4 cylinder air to air charge cooled

2 Build Number

3 Country of manufacture

U = United Kingdom

4 Engine Serial Number

5 Year of Manufacture

Transmission Identification Number

The Transmission serial number is stamped on label 4-A which is mounted on the side face.

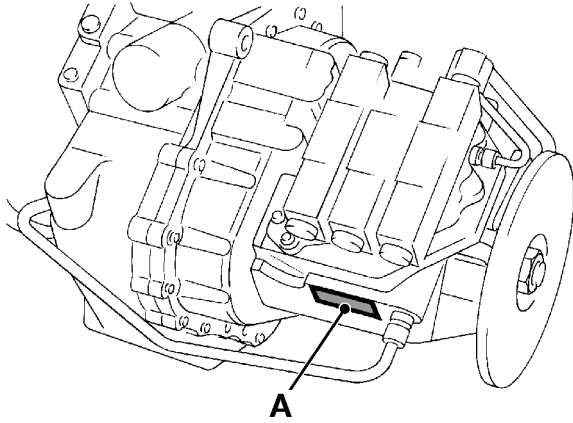


Fig 4.

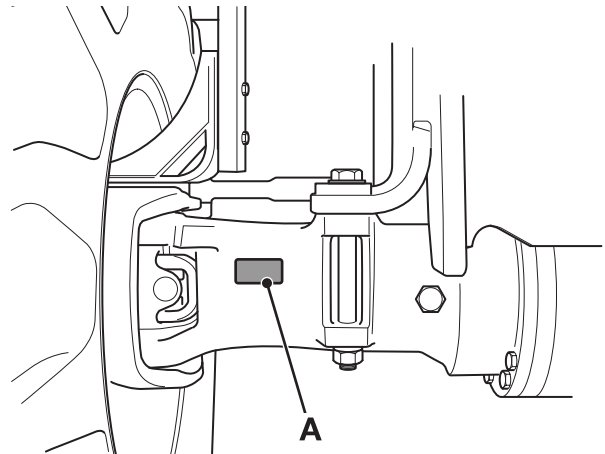


Fig 6.

The rear axle serial number is stamped on plate 5-A mounted to the front face of the axle.

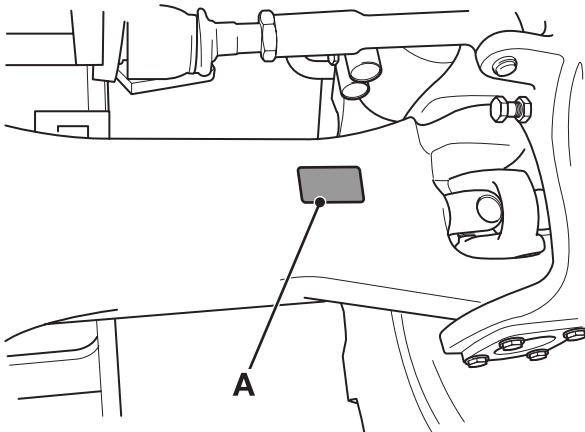


Fig 5.

The front axle serial number is stamped on plate 6-A mounted on the rear face of the axle.

Standard Torque Settings

Zinc Plated Fasteners and Dacromet Fasteners

T11-002

Introduction

Some external fasteners on JCB machines are manufactured using an improved type of corrosion resistant finish. This type of finish is called Dacromet and replaces the original Zinc and Yellow Plating used on earlier machines.

The two types of fasteners can be readily identified by colour and part number suffix. ⇒ [Table 1. Fastener Types](#) (1-6).

Table 1. Fastener Types

Fastener Type	Colour	Part No. Suffix
Zinc and Yellow	Golden finish	'Z' (e.g. 1315/3712Z)
Dacromet	Mottled silver finish	'D' (e.g. 1315/3712D)

Note: As the Dacromet fasteners have a lower torque setting than the Zinc and Yellow fasteners, the torque figures used must be relevant to the type of fastener.

Note: A Dacromet bolt should not be used in conjunction with a Zinc or Yellow plated nut, as this could change the torque characteristics of the torque setting further. For the same reason, a Dacromet nut should not be used with a Zinc or Yellow plated bolt.

Note: All bolts used on JCB machines are high tensile and must not be replaced by bolts of a lesser tensile specification.

Note: Dacromet bolts, due to their high corrosion resistance are used in areas where rust could occur. Dacromet bolts are only used for external applications. They are not used in applications such as gearbox or engine joint seams or internal applications.

Bolts and Screws

Use the following torque setting tables only where no torque setting is specified in the text.

Note: Dacromet fasteners are lubricated as part of the plating process, do not lubricate.

Torque settings are given for the following conditions:

Condition 1

- Un-lubricated fasteners
- Zinc fasteners
- Yellow plated fasteners

Condition 2

- Zinc flake (Dacromet) fasteners
- Lubricated zinc and yellow plated fasteners
- Where there is a natural lubrication. For example, cast iron components

Verbus Ripp Bolts

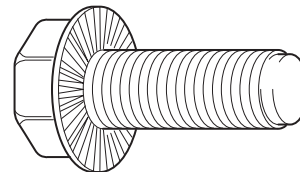


Fig 7.

Torque settings for these bolts are determined by the application. Refer to the relevant procedure for the required settings.

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admin@servicemanualbit.com