

Service Manual



528-70 & 528S Machines

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Introduction

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.

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. Finally, please remember above all else **SAFETY MUST COME FIRST!**

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 & Safety** includes warnings and cautions pertinent to aspects of workshop procedures etc.
- **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 & Framework ...etc.

The page numbering in each alphabetically coded section is not continuous. This allows for the insertion of new items in later issues of the manual.

Section contents, technical data, circuit descriptions, operation descriptions etc are inserted at the beginning of each alphabetically coded section.

READ the section contents to locate machine types, machine type identification IS NOT listed on individual pages.

All sections are listed on the front cover; tabbed divider cards align directly with individual sections on the front cover for rapid reference.

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.

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

This Service Manual covers the following machines:

528-70 AWS (All Wheel Steering) machine from machine serial number 796000

528S (All Wheel Steering) machine from machine serial number 796102

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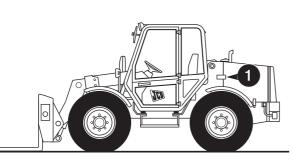
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Machine Identification

Your machine has an identification plate **1** mounted as shown. The serial numbers of the machine and its major units are stamped on the plate.

Explanation of Vehicle Identification Number (VIN)



A314930

Ε

SLP 528-67 XE 796000

В

Α

CD

			—
Α	World Manufacture	er Identification	SLP = JCB
в	Machine Model		528-70
С	Year of Manufactu P = 1993 R = 1994 S = 1995 T = 1996	re: V = 1997 W = 1998 X = 1999 Y = 2000	$ \begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
D	Manufacturing Location		E = England
Е	Machine Serial Number		796000

Machine Model Explanation

528 - 70 FG H

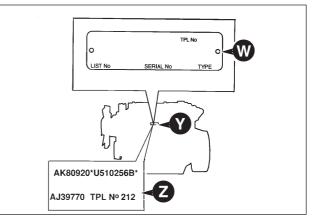
- F 500 Series machine range
- **G** 2.86 tonnes lift capacity

H 6.75 meters lift height

Unit Identification

The engine serial number is stamped on label W which is fastened to the right side of the cylinder block at Y, near the fuel filter.

Explanation of Engine Identification Number



Typical Engine Identification Number

AA	50261	U	500405	Ρ
Α	В	С	D	Е

A Engine Type:

~ ^	COLIDE	
	series	

 AK = 4 cylinder turbo - low emission, stage 1
 AR = 4 cylinder naturally aspirated - low emission, stage 1

R Series

- RE = 4 cylinder naturally aspirated, low emission, stage 2 RG = 4 cylinder turbo, low emission stage 2
- B Build Number
- C Country of Manufacture
- D Engine Serial Number
- E Year of Manufacture

If service information or parts are required, the complete engine number should be quoted.

If there is also a number marked 'TPL No', this should be quoted also.

If a short engine has been fitted in service, two engine serial numbers and a TPL No. are stamped on the serial number plate as at Z. All the numbers should be quoted when requiring parts or information.

Note: Where the procedures in this service manual differ according to engine types, the text and/or illustrations will specify which engine types apply.

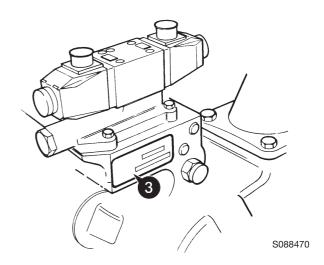
Transmission and axle identification is shown on the next page.

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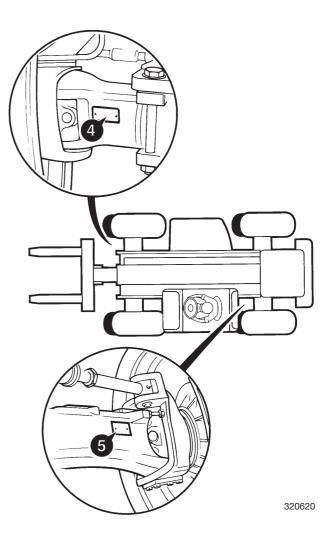
Transmission And Axle Identification

The Syncro Shuttle serial number is stamped on label ${\bf 3}$ as shown.



The front axle serial number is stamped on plate **4** as shown.

The rear axle serial number is stamped on plate 5.



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