

Service Manual LOADALL

PUBLISHED BY THE
TECHNICAL PUBLICATIONS DEPARTMENT
OF JCB SERVICE; ©
WATERLOO PARK, UTTOXETER,
ST14 5PA, ENGLAND
Tel. 01889 - 590312
PRINTED IN ENGLAND

Publication No. 9803/3610 Issue 10

General Information	1
Care & Safety	2
Routine Maintenance	3
Attachments	A
Body & Framework	В
Electrics	C
Controls	D
Hydraulics	Ε
Transmission	F
Brakes	G
Steering	Н
Engine	K

Introduction

This publication is designed for the benefit of JCB Distributor Service Engineers who are receiving, or have received, training by JCB International Training Centre.

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!**

How to use this manual

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.
- **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 title page; 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, from Serial Number 277001

520-55 RS (Rear Steering) Farm Special & Construction 520-55 AWS (All Wheel Steering) Farm Special & Construction 526-55 Farm Special & Construction 526-55 AWS (All Wheel Steering) Farm Special & Construction 526S AWS (All Wheel Steering) Farm Special & Construction

9803/3695 Issue 5^{*}

Machine History

Date	Machine	Description	
1993 Serial No.	520-55 RS (277001 - 279114)	The machine incorporated twin brake pedals to operate an independent brake circuit controlling each of the front wheels. This allowed single wheel braking to reduce the turning circle. The pedals could be locked together for road use. The machine was also equipped with manually selectable 2/4-wheel drive.	
277001	Machine introduction		
1994 Serial No.	520-55 AWS (504B N.Am) (277386 - 278966)	The machine was fitted with permanent four wheel steering and four-wheel braking.	
277386	Machine introduction	Statung.	
278610	JCB axles, drop box and 4 wheel power brakes fitted.		
1994	526-55 (277467 - 278966)	Introduced as a development of the 520-55 with a stronger inner boom and larger	
Serial No. 277468	Machine introduction	lift, tilt and displacement rams. The machine was fitted with JCB manufactured axles and drop box, and incorporated four-wheel power brakes. The machine was equipped with three manually selectable steering modes and an optional turbo-charged engine was available.	
1996	520 & 526 520 (278967 onwards) 526 (278967 - 279567)	520-55 and 526-55 machines re-named 520 and 526. These machines incorporated a revised hydraulic tank,	
Serial No. 278967	Machine introduction	plastic fuel tank, fenders and engine cover.	
1996	526, 526S (526 Am.N) (279289 onwards)	The 526 and 526S machine incorporated	
Serial No. 279289	Machine introduction	a longer wheelbase to allow for 24in. wheels and tyres on the 526S machine only.	
280300	ECU controlled powershift available as an option. Single lever control and trailer braking. Power brakes replaced by inboard, front axle brakes.	Drop box fitted with helical gears from axle serial number 453/275/00005.	
280577	ECU control was replaced by relay controlled transmission.		
1996	520S (279598 onwards)	Introduced as a 90 hp turbo-charged	
Serial No. 279598	Machine introduction	engine version of the 520 machine. The stronger inner boom on the 526 was introduced to cope with the increased engine power.	

9803/3630 Issue 1

i i

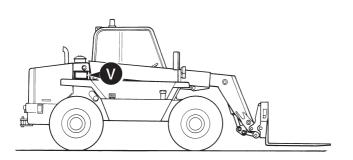
	Contents	Page No.
	Identification	1 - 1
	Torque Settings	2 - 1
*	Service Tools - Numerical List - Section B - Section C - Section E - Section F - Section H - Section K	3 - 1 3 - 3 4 - 1 5 - 1 6 - 1 7 - 1
	Sealing and Retaining Compounds	8 - 1

9803/3610 Issue 2*

-1 1-1

Identification Plate

Your machine has an identification plate ${\bf V}$ mounted as shown. The serial numbers of the machine and its major units are stamped on the plate.



S195340

Explanation of Vehicle Identification Number (VIN)

SLP52655RE0277001

B C D E

Α	World Manufacture	r Identification	SLP = JCB
В	Machine Model		526-55
С	Year of Manufactur	S	
	P = 1993	V = 1997	1 = 2001
	R = 1994	W = 1998	2 = 2002
	S = 1995	X = 1999	3 = 2003
	T = 1996	Y = 2000	4 = 2004
D	Manufacturing Location Machine Serial Number		E = England
Ε			0277001

Machine Model Explanation

526 - 55 F G H

F 500 Series machine range

G 2.6 tonnes lift capacity

H 5.5 meters lift height

With the introduction of the longer wheel base machine the lift height has been deleted from the serial number.

526 F G

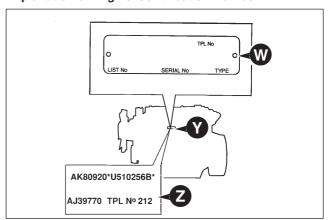
F 500 Series machine range

G 2.6 tonnes lift capacity

* Unit Identification

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

Explanation of Engine Identification Number



Typical Engine Identification Number

AA 50261 U 500405 P **A B C D E**

* A Engine Type:

A series

AA = 4 cylinder naturally aspirated

AB = 4 cylinder turbo

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.

9803/3610 Issue 4*

Please Click Here To Download The Complete Manual Download Other Manuals If Having Any Questions Feel Free To Contact us

admin@servicemanualbit.com