

## Load Control (Supplement)

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Publication No.  
**9803/3665-3**



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# Introduction

## About This Supplement

### Machine Model and Serial Number

This publication provides information for the following Load Control Systems:

- LCS (Six Valve Manifold) Load Control System
- LC1/LC4 Load Control System
- LC2/LC3 Load Control System
- LC5 Load Control System
- MC05 Load Control System
- MC06 Load Control System

See the appropriate system topic for machine serial nos., where relevant.

### Using the Service Manual Supplement

This manual is a supplement to the JCB Loadall Service Manual. The information covers the JCB Loadall machines fitted with the Load Control System.

Each variant of Load Control System (see opposite) is dealt with separately, each having its own topic in this Supplement.

Only those areas of the machine which are different from the standard Loadall are dealt with here. For all other information refer to the appropriate Loadall Service Manual.

Unless specified otherwise, all references to 'Service Manual' in this supplement are to be taken as meaning the Service Manual specific to the standard machine.

Read the standard Service Manual and this supplement completely and carefully to familiarise yourself with the machine before carrying out any servicing procedures.

### Units of Measurement

T1-001\_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).

### 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 ).

## About the Load Control Systems

### General Information

A Load Control System (LCS) is an enhancement to the devices that JCB currently fit as standard, i.e. loadcharts, boom extension markers and Load Moment Indicator (LMI). These are still the primary source of information to allow the operator to operate the machine correctly. The Load Control System offers additional control if the operator makes an inadvertent movement of the load. The system must not be relied upon as the primary source of protection for the machine. The duty of care is still with the operator/site agent to:

- know the mass and load centre of loads being handled.
- know boom angle and extension that will be required to place the load (this can be checked by doing a dry run first without the load)
- whilst moving the load, obey LMI indications, lift charts and boom extension markers.

**Note:** *Note: The LCS provides a degree of protection only against the machine tipping forward. It does not protect against tipping sideways or rearwards, nor tipping due to the machine being used on unsuitable ground nor operator mishandling (sharp direction changes, etc.).*

Neither will the system protect against instability due to the stabiliser legs being lifted nor misuse of the chassis levelling (sway) function (if either of these options are fitted).

## Identification

There are many variants of the Load Control System. Although they all have a common purpose - to help prevent the load moving into a position which would make the machine unstable - there are variations in the way this is achieved on different Loadall models. Also, some variants of the system incorporate additional features such as stabiliser isolation and load retrieval. The following table

will help you identify which variant may be installed on any particular model of Loadall.

**Note:** For 536-60, 536-70, 531-70, 535-95 and 541-70 machines, you will need also to refer to the table of Hydraulic System Variants. → [Table 2. Identification of Hydraulic System Variants \(536-60, 536-70, 535-95, 531-70 & 541-70\) \( 5\)](#)

**Table 1. System Applicability, Identifying Features and Territorial Availability**

Territories	540-170	540-140	537-135	535-140 Hi-Viz	535-140	535-125 Hi-Viz	535-125	535-95	533-105	532-120	541-70	536-70	531-70	536-60	528-70	System	Description and Identifying Features	Visual Identifier
France			●					●	●	●					●	LCS	Original system (now obsolete). Identifying features: large 6-valve manifold mounted on the chassis side plate and twin aperture LMI.	
Rest of the World (ROW) (not Australia/New Zealand)		●	●	●	●	●	●	●	●	●	●	●	●		●	LC2	2 stage cut -out system. Identifying features: Additional switch in cab for Load Control selection. Load Control Valve inserted between pump and valve block and single aperture LMI with 4 way and 6 way connectors.	
ROW (not Australia/New Zealand)		●	●	●	●	●			●	●						LC3	As LC2 + stabiliser isolation. Identifying features: as LC2, plus stabilisers isolate at 10° boom angle.	

Territories	540-170	540-140	537-135	535-140 Hi-Viz	535-140	535-125 Hi-Viz	535-125	535-95	533-105	532-120	541-70	536-70	531-70	536-60	528-70	System	Description and Identifying Features	Visual Identifier
ROW (not Australia/New Zealand)		●		●	●	●	●									LC5	2 stage cut -out system + lift & retract to retrieve load. Identifying features: Additional switch in cab for Load Control selection. Load Control Valve inserted between pump and valve block, single aperture LMI with 4 way and 6 way connectors and switches on the valve block.	
ROW (not Australia/New Zealand)	●															LC1	540-170 system. Identifying features: twin LMI aperture with 4 way & 6 way connectors.	
ROW (not Australia/New Zealand)	●															LC4	As LC1+ stabiliser isolation. Identifying features: as LC1, plus stabilisers isolate at 10° boom angle.	
Australia/New Zealand	●															MCO5	As LC1 + AS1418.19. Identifying features: twin aperture LMI with 4 way & 8 way connectors.	
Australia/New Zealand				●		●		●	●		●	●	●	●		MCO6	2 stage cut-out system + lift & retract to retrieve load + AS1418.19. Identifying features: Additional switch in cab for Load Control selection. Boom back switch, single aperture LMI with 4 way & 6 way connectors.	



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