Genie®
A TEREX COMPANY

Load Management System Service Manual

	Serial Number Range
GTH-2506 AU.3	From GTH250614-101
GTH-4014 AU	From GTH401414-101
GTH-4018 AU	From GTH401814-101

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FUNCTIONAL DESCRIPTION

		Description	Level
F	Sw update	Manually Update ECU software (→)	2
F	Sw upload	Manually upload ECU software (→)	2
F	Restart	Restart ECU (→)	2
M	**Params**	**Parameters menu** ○	**2**
F	Send	Send parameters database to ECU (→)	2
F	Receive	Receive parameters database from ECU (→)	2
F	Check	Compare ECU against Display parameters (→)	2
L	Display param	View and modify Display parameters	2
F	USB exp	Export all parameters to USB (→)	2
F	USB imp	Import all parameters from USB to Display (→)	2
L	ECU param	View and modify ECU parameters	2
F	Set default	Reset ECU parameters to default settings (→)	4
F	Load chart download	Download load charts to ECU	4
M	**Sensors**	**Sensor calibration menu** ○	**2**
L	Weight	Weight calibration	2
L	Angle	Boom angle calibration	2
L	Boom len	Boom length calibration	2
L	Tilt sensor	Chassis sensor calibration	2
M	**Joysticks**	**Joystick calibration menu** ○	**2**
L	X-axis	X axis calibration (fork tilt)	2
L	Y-axis	Y axis calibration (boom lower/raise)	2
L	Z-axis	Z axis calibration (boom extend/retract)	2
L	By-pass	LMS override	2
L	System update	Update system (software, load charts, users)	4
L	Gain tables	Used to enable load's 3D interpolation	4
M	**Configuration**	**Machine configuration menu** ○	**4**
L	Available options	Set machine available options	4
M	ECU	Shortcut to maintenance/ECU	4
M	Sensors	Shortcut to maintenance/Sensors	4
M	Joystick	Shortcut to maintenance/Joystick	4
L	Bypass	Shortcut to maintenance/Bypass	4
	System update	Update system (software, load charts, users)	
F	Login / Logout	User login / logout screen	0
	Debug	Page used for debugging	

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PROCEDURES

GTH-2506 AU.3 USB CABLE HARNESS



5. Route iButton cable to fuse/relay board and connect to iButton converter

6. Make iButton access available (refer procedure: 'Configuring Available Options').

7. Enable iButton access (refer procedure: 'Enabling iButton Access').

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Troubleshooting

Troubleshooting Guide

Always note alarms and warnings displayed on the display unit before using this troubleshooting guide. Refer to 'Alarms and Warnings' section for further information.

PROBLEM	POSSIBLE CAUSE	REMEDY
GENERAL		
LMS display won't turn on	■ Blown fuse (F102); ■ Loose display unit power connector; ■ Faulty display screen;	■ Replace fuse: ■ Check connector: ■ Replace display screen.
Unable to select a different attachment.	■ Boom angle too high ■ New attachment not permitted for logged in operator (attachment name is greyed out).	■ Lower the boom below 15°. ■ Request person controlling machine access to upgrade attachment permissions.
Machine won't drive	■ Transmission control lever set to neutral; ■ Parking brake is ON ■ Faulty seat switch.	■ Set transmission control lever to forward or reverse. ■ Disengage the parking brake ■ Check seat switch input signal via the LMS display screen in ECU input signals page. ■ Check machine seat switch wiring; ■ Test the seat switch.

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IBUTTON USER MANAGER

6. Enter Log in details. Refer 'Creating a Project' section for username and password details.



Username and password required to use the iButton User Manager can be found in the '.WBPKG' file being opened. Refer to GOAM section.

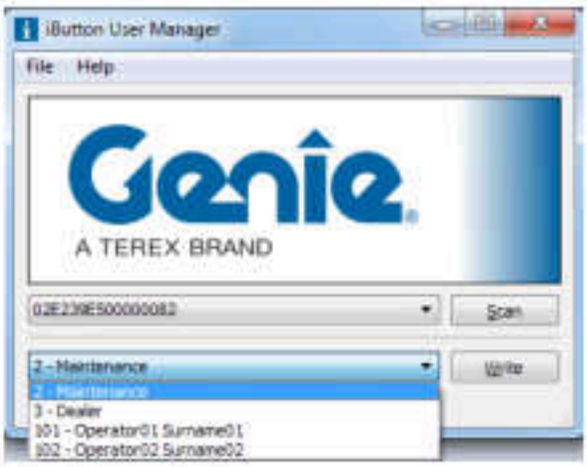
7. Connect USB iButton reader to computer USB port.

8. Insert iButton into iButton reader.

9. Click on scan button. iButton identification number appears on iButton list.



10. Select a user from the user drop down list.



11. Click on write button.

12. Remove iButton.

13. Repeat steps 8 to 12 to configure another iButtons.

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Functional Description

Introduction

The LMS measures lift and levelling cylinder hydraulic pressure, and machine geometry to provide an estimate of the actual load being lifted. This estimated load is then compared against machine rated capacity determined from stored load charts. De-stabilising boom functions are disabled if the actual load exceeds the rated capacity of the machine for the given machine configuration.

Operation of the LMS is setup and configured by:

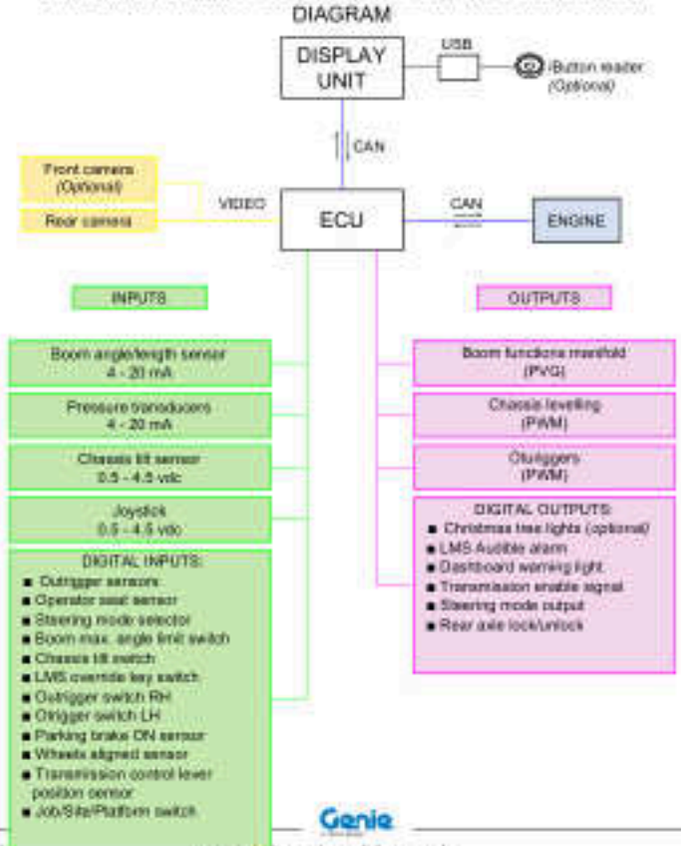
- ECU software
- Load charts
- User access permissions
- Parameter set

LMS - Machine interaction

The LMS is an integral part of the machine. Most machine functions are either monitored or managed by the ECU, or both. Sensors, buttons, switches and feedback signals from hydraulic valves are connected to the ECU to provide information about the machine status. The ECU utilises this information to assess the condition of various components and determine if the machine is functioning as it should be. The ECU also manages various components such as boom movements, outriggers, and engine based on the inputs received.

The following figure shows a basic representation

LOAD MANAGEMENT SYSTEM COMPONENT CONNECTION DIAGRAM



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