

LSD-1500A ML

Safety device for crane operation

● What is Moment Limiter?

A **Moment Limiter**, also known as **Load Moment Indicator / Load Safety Device**, is a device which is installed on the cranes to warn the operator if the operation enters or exceeds the safe operating range of the machine.

A moment limiter with the help of angle sensor and load cell has the capability to indicate and measure the boom angle, radius and weight of lifted load, and compares it with the load chart provided by the manufacturer to determine whether the lift is in safe condition. It also indicates the actual machine configuration.

● Moment Limiter in KOBELCO

In KOBELCO Cranes, ML's used are LSD-1500A, LSD-1500C, LSD-800C, LSD-800D, LSD-800F, LSD-200C. The most popular moment limiter used in Kobelco machines currently are LSD-1500A and LSD-1500C.

LSD-1500A are equipped to CKE, CK, BM, 7000, SL series . In this LMI model, display and the controller are integrated and is mounted inside the crane cabin.



Display and controller are integrated in LSD-1500A

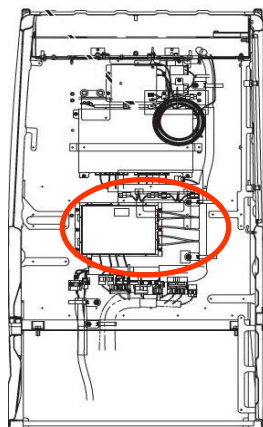
LSD model : LSD-1500A

LSD1500C are equipped to CKS and G model. The display and controller is separated and installed in different location inside the cabin.



ML Monitor

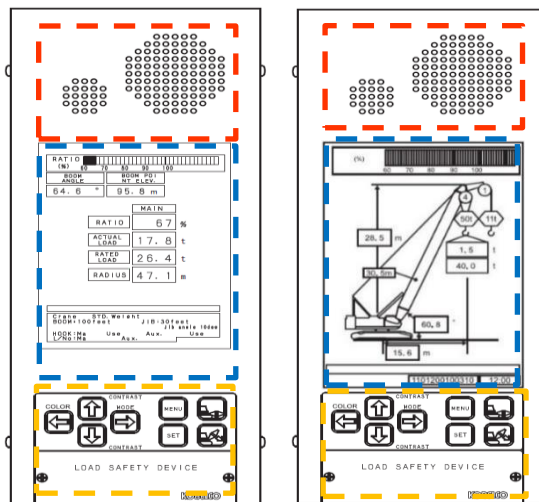
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ML Controller - behind operator seat

LSD model : LSD-15000C

● Appearance of LSD-1500A



Non-pictograph type

Pictograph type

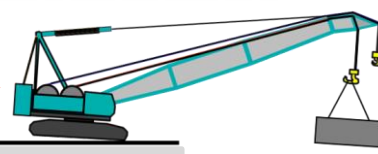
LMI front view	Functions
Buzzer and speaker	It is for alert and warning sounds
Display	Current status of crane and error code as well as warning code is displayed
Switches	used to display or cancel the selected item,delete or execute the selected item, to change the current mode, to adjust contrast, to change color etc.
Memory card slot	Slot for inserting the data memory card
Memory card	contains the data related to crane capacity
Setting and Adjusting switches	Used for upgrading of ML programs and adjustment

● Function of LSD-1500A ML.

LSD-1500A ML continuously monitor and receive signal from angle sensors, limit switches and load cells. Once the LMI receive abnormal signal or exceeds the limitation set by the manufacturer, moment limiter warns the operator by audible warning alarm at 90% and automatically stops the operations at 105% load ratio. At same time error code appears on the LIM display.

● **For your safe operation**, "Do not" operate the machine with below conditions;

- Damaged ML
- Discrepancy of actual indication such as boom angle, radius, lifted load etc.
- LMI which is taken from another Machine Model.

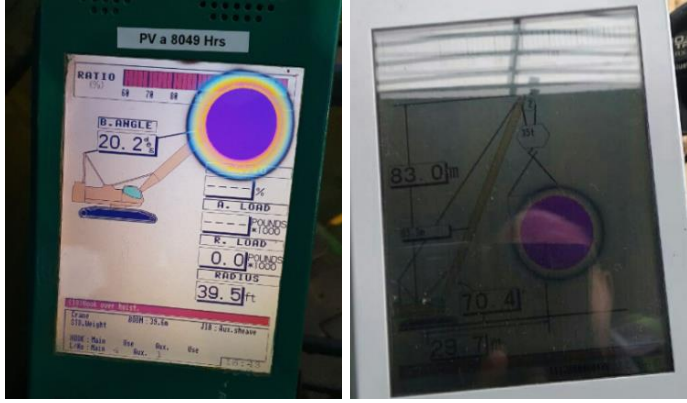


LSD-1500A ML

Safety device for crane operation

● Potential damages on ML and solutions...

➤ Appearance of dark spot on the ML display



Dark spots can restrict operator from reading the machine status, error codes and warnings during the crane operation, which can lead to accident.

If moment limiter display is damaged or invisible,

**KOBELCO offer
 "LMI Display kit"**

**ML Display replacement Kit
 Parts Number : JJ30E00007F1**



* New Display is more visible and clearer. Operators can easily check machine status.

Check It Now!!!

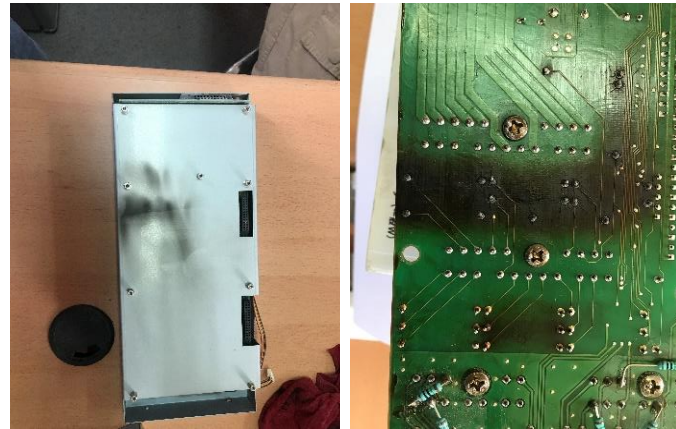
➤ Reading of memory card error.



This error can appear due to the following reasons;

- Damage of memory card - If memory card is damaged, new SM or SD data cards can be supplied
- Damage of data card slot – If memory card slot is damaged, ML Assy should be replaced.

➤ Damage of ML hardware



ML is a very critical part and if it is found damage , it should be replaced with new ML assy.

**Part Number:
 ML Assy : JJ30E00006S001**

Note:

LMI program and Data are varies on Machine Model and Serial number.

KOBELCO priorities customer satisfaction and machine safety !!!

KOBELCO CONSTRUCTION MACHINERY MIDDLE EAST AND AFRICA FZCO.

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