



TADANO

HYDRAULIC CRANE SERVICE MANUAL LORD MOMENT INDICATOR (AML-M)

サービスマニュアル 荷重モーメント表示器

INFORMATION No. R301-Z8-01

01

TADANO LTD.

LOAD MOMENT INDICATOR

③⑥ Check switch

This switch is pushed in preoperational checks and whenever the system operation is suspected to be faulty, to check the main unit. When the main unit is in good order, it assumes the following state.

- All displays show entire display segments.
- All indicator lamps illuminate.
- Buzzer sounds continuously.
- Stop circuit is operated.

③⑦ On-rubber state register switch

This switch is pushed to register the on-rubber state.

③⑧ Outrigger state register switch

This switch is pushed to register the outrigger state.

③⑨ Boom state register switch

This switch is for registering the state of the boom, single top or jib. It is pushed and released alternately until the desired registration is made.

④① —————

④① Boom length span adjuster "BOOM LENGTH SPAN"

Screw turn range
(number of rotations) : 15

④② Boom length zero adjuster "BOOM LENGTH ZERO"

Screw turn range
(number of rotations) : 15

Adjusters ④① and ④② adjust the boom length display.

④③ Boom angle span adjuster "BOOM ANGLE SPAN"

Screw turn range
(number of rotations) : 15

④④ Boom angle zero adjuster "BOOM ANGLE ZERO"

Screw turn range
(number of rotations) : 15

Adjusters ④③ and ④④ adjust the boom angle display.

③⑥ チェックスイッチ

作業前点検時及び装置の作動が疑しい場合、本スイッチを押して本体の異常の有無をチェックします。正常な場合、下記のチェックモードとなります。

- 全表示器全セグメント表示
- 全表示灯点灯
- ブザー連続音で吹鳴
- 自動停止回路作動

③⑦ オンタイヤ設定スイッチ

オンタイヤ状態を設定する場合に本スイッチを押します。

③⑧ アウトリガ設定スイッチ

アウトリガを設定する場合に本スイッチを押します。

③⑨ ブーム状態設定スイッチ

ブーム、シングルトップ、ジブのいずれかの状態を選択する場合に、本スイッチを順次押します。

④① —————

④① ブーム長さスパン調整器 " BOOM LENGTH SPAN "

調整器回転数：15回転

④② ブーム長さ零調整器 " BOOM LENGTH ZERO "

調整器回転数：15回転

④①、④②の両方の調整器でブーム長さ表示の調整を行なう。

④③ ブーム角度スパン調整器 " BOOM ANGLE SPAN "

調整器回転数：15回転

④④ ブーム角度零調整器 " BOOM ANGLE ZERO "

調整器回転数：15回転

④③、④④の両方の調整器でブーム角度表示の調整を行なう。

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Fault 7. Error code no. "12" and error message "LUE" are displayed.

Cause	Check procedure	Correction	Note
① Combination of boom status setting, work status setting and boom length is wrong.	Data table at end of this section gives input patterns (input signal combinations) which cause display of this error code. If actual input pattern conforms to none of tabulated patterns, and yet this error code is displayed, fault ② below is present.	Make correct setting.	See "Input patterns that cause error code 12 and message LUE to be displayed" in data table at end of this section.
② Boom status or work status setting unit is faulty.	Turn off power and unplug CN1. Check continuity across CN1 connector side terminals (1 or 2) and (15 through 19), and identify input pattern (combination of input signals). Compare this pattern with correct pattern for current status settings given in data table at end of this section. Differing terminal input is faulty input. Correct: Actual input pattern should conform to tabulated pattern.	If incorrect, correct wiring, sw., etc. according to crane electric circuit diagram.	• With some models, status input can be made to some terminals only when power is on. (Such terminals are relay terminals) Refer to crane electric circuit diagram. • See "Combination of operating condition signals" in data table at end of this section.
③ Faulty power supply board.	When above checks indicate no fault.	Replace power supply board.	

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9. Output of load moment indicator is faulty.

Fault 1. Crane motions stay stopped.
(This occurs even when moment display is below 100%.)

Cause	Check procedure	Correction	Note
① Blown fuse (for relay)	Take fuse off bracket, and check it for continuity with a multimeter. Correct reading : 0 (Ω)	Replace fuse. (If it blows repeatedly, check for short circuit between CN1 connector side terminals (23 through 34) and chassis ground.)	5A
② Faulty stop circuit.	With power turned off, unplug CN1. After shorting CN1 connector side terminals (13 or 14) and (28) with a wire, turn on power. Correct : Stop state is cleared.	If incorrect, correct according to crane electric circuit diagram.	
③ Faulty lever manipulation detector switch.	With power turned off, unplug CN2. With control lever in neutral, check continuity across CN2 connector side terminals (19 through 26) and CN1 connector side terminal (1 or 2.) Correct : 0 (Ω) For terminals without switch (or relay), it is infinite ($\infty \Omega$).	If incorrect, correct according to crane electric circuit diagram.	With some models, lever manipulation detector switch input is made to some terminals only when power is on. (Such input terminals are relay terminals.)
④ Faulty over-wind detector switch.	With power turned off, unplug CN1. Under non-overhoist condition, check continuity across CN1 connector side terminals (1 or 2) and (22). Correct : 0 (Ω)	If incorrect, correct according to crane electric circuit diagram.	
⑤ Faulty power supply board.	When above checks ① through ④ indicate no fault.	Replace power supply board.	Check that angle limit, load limit, and rear stability limit are not being exceeded.
⑥ Relay (in load moment indicator main unit.)	When above checks ① through ④ indicate no fault.	Replace case ass'y.	

LOAD MOMENT INDICATOR

(5) Load moment indicator main body

Replace all components of the load moment indicator main body in board units, except for the fuse and P-ROM on the rear panel.

NOTES

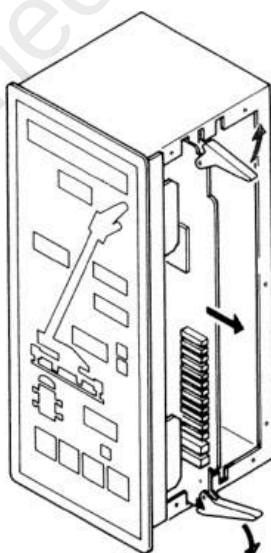
- ☆ Do not touch the two surfaces of the boards by hand during disassembly and reassembly processes.
- ☆ When removing the display board, LCD illumination board, CPU board, and power supply board, pull them out without tilting them. The CPU and power supply boards come out approx. 10 mm when the board retaining levers are pushed open; then pull them out in the direction shown below. Take care not to pinch any parts on the board with the fingers. When any one of the front panel, display board, and LCD illumination board requires removal, remove the three all together as an assembly; then disassemble.

(5) 荷重モーメント表示器本体

荷重モーメント表示器本体の構成部品は、裏面のヒューズ及びP-ROM以外は全て基板単位で交換して下さい。

注意

- ☆ 分解、組み立て時に各基板の表裏面には直接手で触らないようにすること。
- ☆ 表示基板、液晶照明基板、CPU 基板及び電源基板を抜く時は、傾かないように真直ぐ引き抜いて下さい。
なお、CPU 基板及び電源基板は基板脱着用レバーを外へ払げると基板が約 10mm 程出て来ますので、真直ぐ引き抜いて下さい。基板上の部品を摘んで引っぱらないこと。又、各基板は下図の方向に抜いて下さい。
前面パネル、表示基板、液晶照明基板は 3 個セットの状態引き抜いた後、各基板に分解します。



■ Removing and reinstalling the boards

See Fig. 5 on page 82.

5-1. Display board

Removing

- 1) Unscrew screwsⒶ, and remove the side cover.

■ 各基板の脱着

Fig. 5 (82P) の分解図を参照して下さい。

5-1. 表示基板

取り外し

- 1) ビスⒶを外し、側板を外す。

Full Version Available

Tadano AML-M Load Moment Indicator Service Manual

Tadano AML-M load moment indicator service manual with troubleshooting, disassembly and test procedures. 2 PDF files, 187 pages. Instant PDF download.

VIEW THE FULL MANUAL

<https://machinecatalogic.com/tadano-aml-m-load-moment-indicator-service-manual/>

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