

INSTRUCTION MANUAL

LAMP UNITS FOR THE INTERLOCK CONNECTOR BOX

MODEL: TSC-RAP-L

MODEL: TSC-RAP-1L

3rd Edition August 30, 2005

MADOKA SYSTEM CO.,LTD

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1. Outline

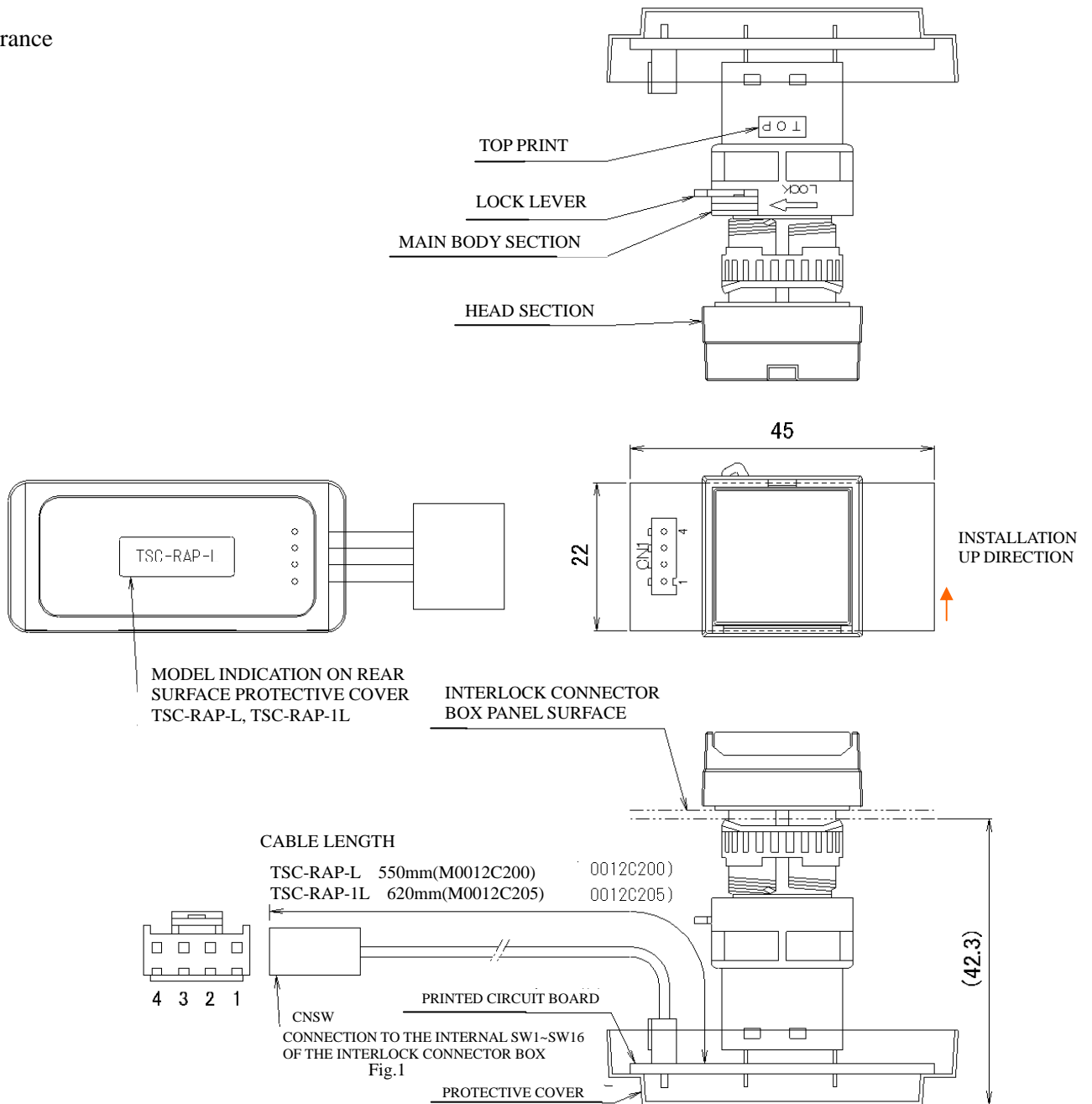
This is the indication lamp for indicating EMERGENCY STOP among equipments.

Please refer to the following table for the different cable lengths of TSC-RAP-L and TSC-RAP-1L.

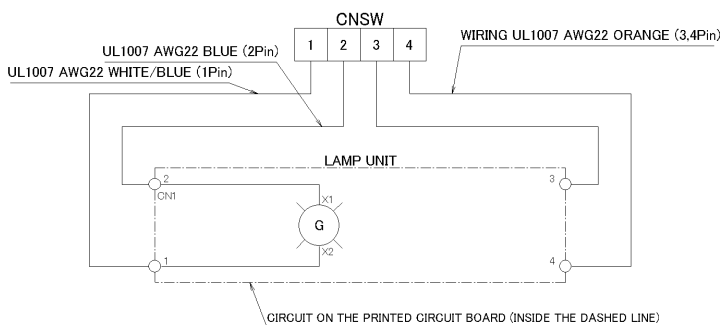
Please use in compliance with the interlock connector box that is installed with the lamp units.

MODEL	CABLE LENGTH	SUITABLE INTERLOCK CONNECTOR BOX MODELS
TSC-RAP-L	550mm	TSC-MF-S TSC-MF-M
TSC-RAP-1L	620mm	TSC-MF-Z

2. Appearance



3. Circuit



• LAMP IS NON POLARITY.

4. Specifications

4-1. General Specifications

ITEM	SPECIFICATIONS
Vibration Resistance	JIS-C0911 Compliant
Impact Resistance	JIS-C0912 Compliant
Atmospheric Temperature for Use	0 ~ 40°C
Atmospheric Humidity for Use	25 ~ 85 % RH No Dew Condensation
Atmospheric Temperature for Preservation	-10 ~ 50°C
Environment for Use	No Corrosion Gas

4-2. Rating

ITEM	SPECIFICATIONS
Lamp Section	Green LED Lamp DC24V ± 10% Current Consumption 8mA Non Polarity

Confirm the rating details with the maker's catalog.

4-3. Main Parts

PART NAME	MODEL	MAKER	
Illuminated Switch		IZUMI DENKI (CO., LTD.)	
Connectors (CNSW)	VHR-4N	J.S.T. MFG. CO., LTD.	

5. Installation

5-1. Switch Units TSC-RAP

Install to the interlock connector box TSC-MF-S, TSC-MF-M.

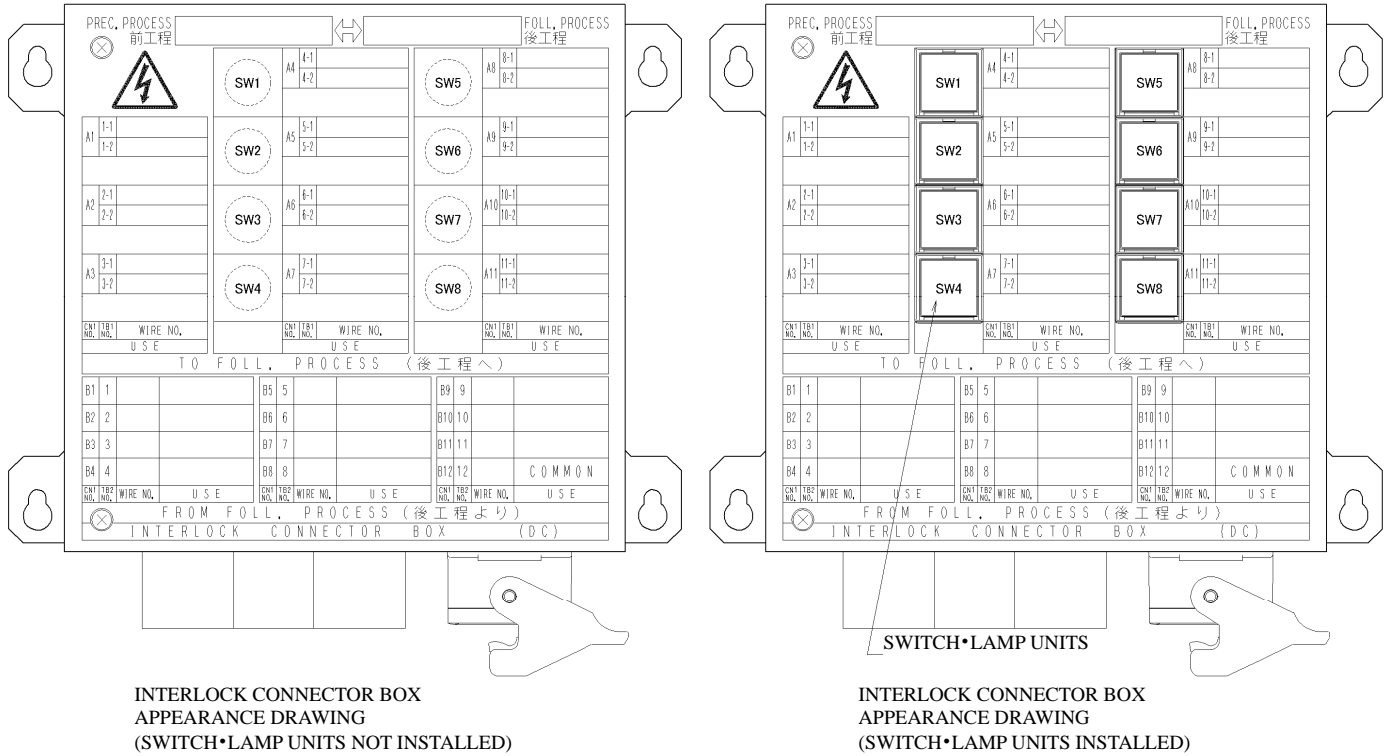


Fig.3

PROCEDURE

The above figure is for TSC-MF-S and TSC-MF-M is the same for installation.

- ① The ○ part on the interlock connector box panel surface is $\phi 16$ BLANK PLUG.
(The indication of SW1~SW8 for the SW1~SW8 in the dashed line circle ○ on the above figure appearance drawing is at the inside of the door.)
Remove the BLANK PLUG.
- ② Release the LOCK LEVER of the lamp units to separate the head section from the main body section and install the head section to the interlock connector box panel.
Put the TOP print surface of the main body section to the UP direction of the interlock connector box.
Use the appropriate tool (MT-001 made by IZUMI DENKI (CO., LTD.)) to tighten the tightening nut of the head section.
(Refer to the appearance drawing of the switch units.)
- ③ Insert the main body section into the head section of the lamp units, and turn the LOCK LEVER to LOCK direction and fix it.

5-2. Lamp Units TSC-RAP-1L

Install to the interlock connector box TSC-MF-Z.

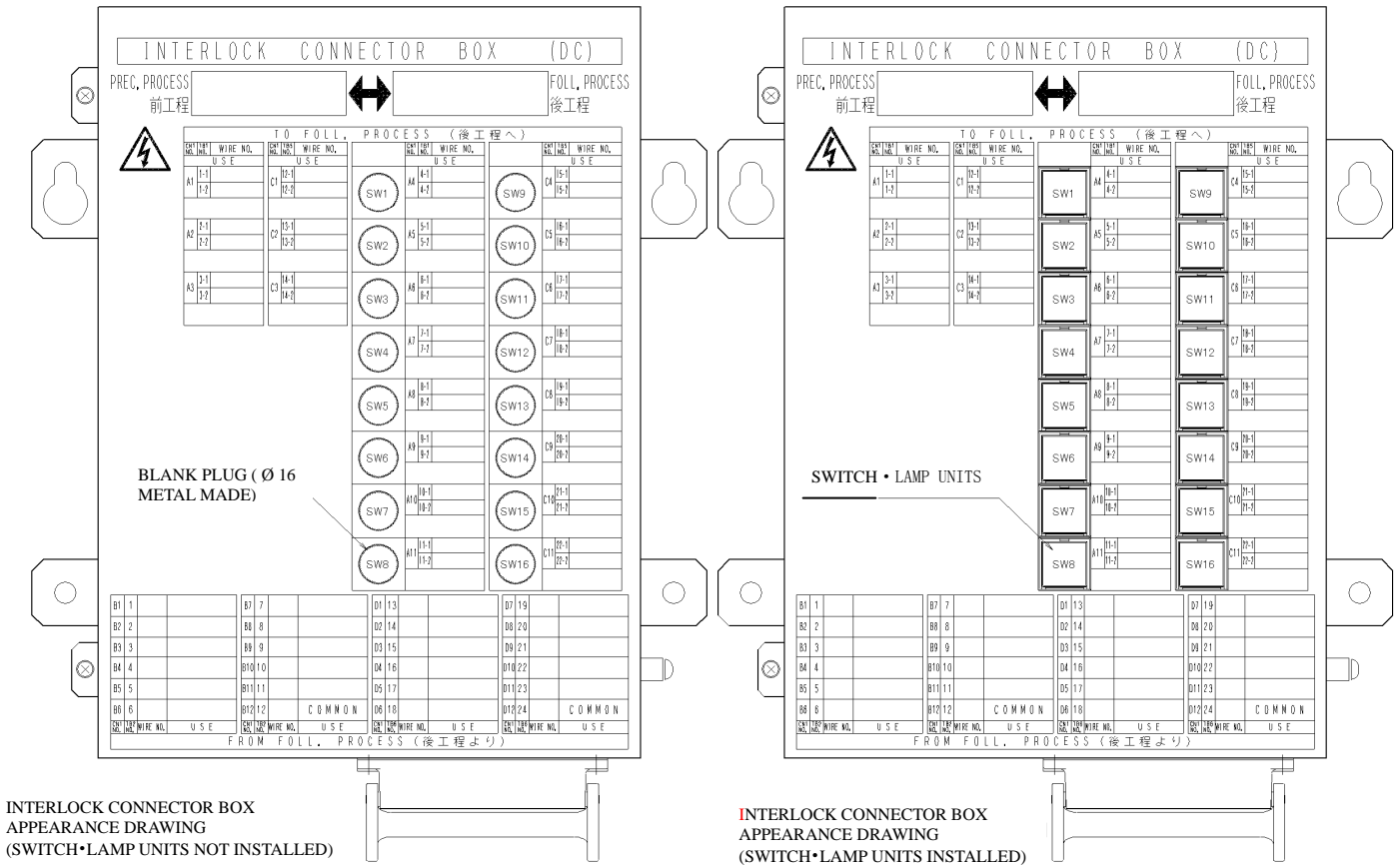


Fig.3a

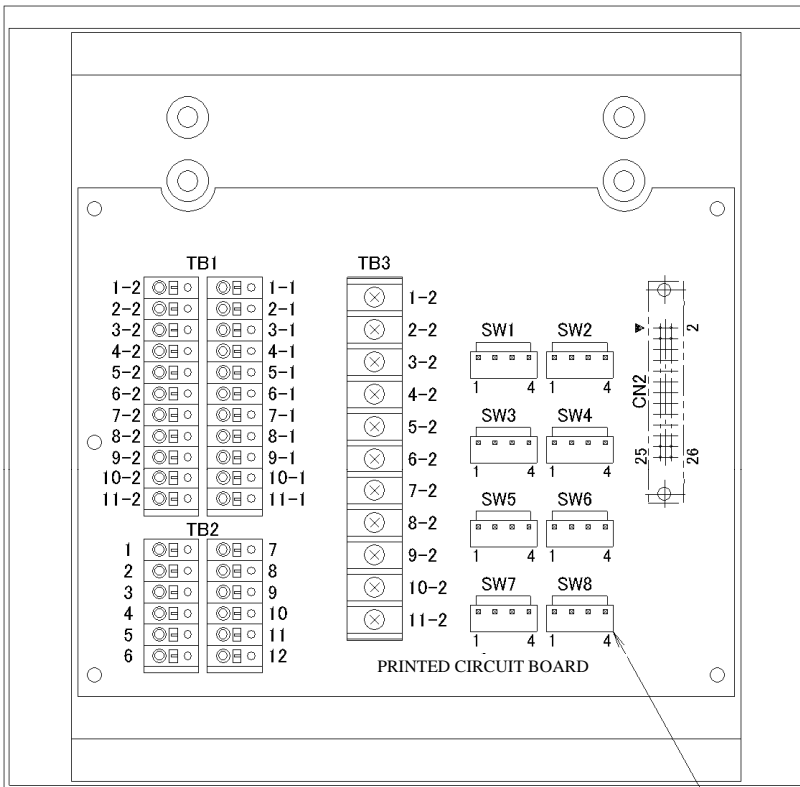
PROCEDURE

- ① The ○ part on the interlock connector box panel surface is $\phi 16$ BLANK PLUG.
 (The indication of SW1~SW16 for the SW1~SW16 in the dashed line circle ○ on the above figure appearance drawing is at the inside of the door.)
 Remove the BLANK PLUG.
- ② Release the LOCK LEVER of the lamp units to separate the head section from the main body section and install the head section to the interlock connector box panel.
 Put the TOP print surface of the main body section to the UP direction of the interlock connector box.
 Use the appropriate tool (MT-001 made by IZUMI DENKI (CO., LTD.)) to tighten the tightening nut of the head section.
 (Refer to the appearance drawing of the lamp units.)
- ③ Insert the main body section into the head section of the lamp units, and turn the LOCK LEVER to LOCK direction and fix it.

6. Connection

6-1. Lamp Units TSC-RAP-L

Connect to interlock connector box TSC-MF-S, TSC-MF-M.



INTERNAL LAYOUT DRAWING OF INTERLOCK CONNECTOR BOX

SW1-SW8 CONNECTORS FOR SWITCH UNITS CONNECTION



BRIDGE CONNECTOR

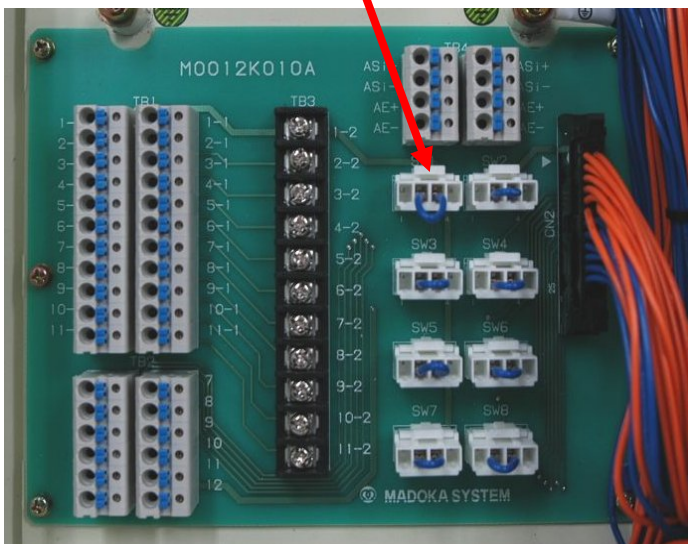


Fig.4

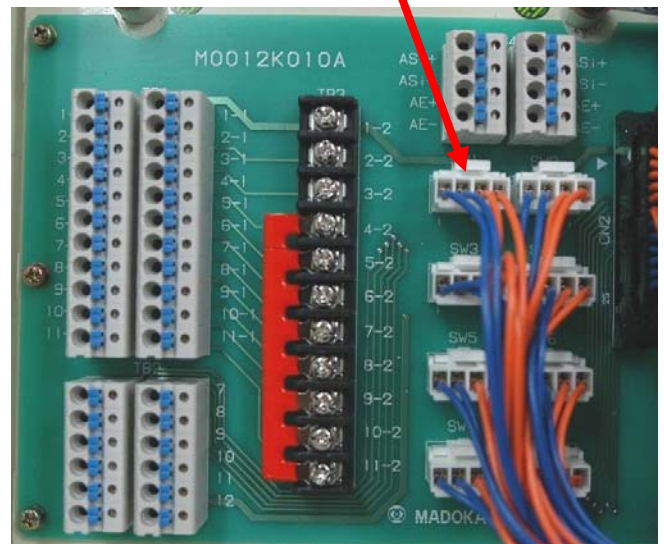
- ① Remove the bridge connectors installed to the internal SW1~SW8 of the interlock connector box.
- ② Install the connectors(CNSW) from the lamp units that were installed by 5-1 to the internal SW1~SW8 connectors of the interlock connector box, and make sure that the connectors are surely locked.

BRIDGE CONNECTORS

CONNECTORS OF SWITCH UNITS



BEFORE INSTALLATION OF THE LAMP UNITS

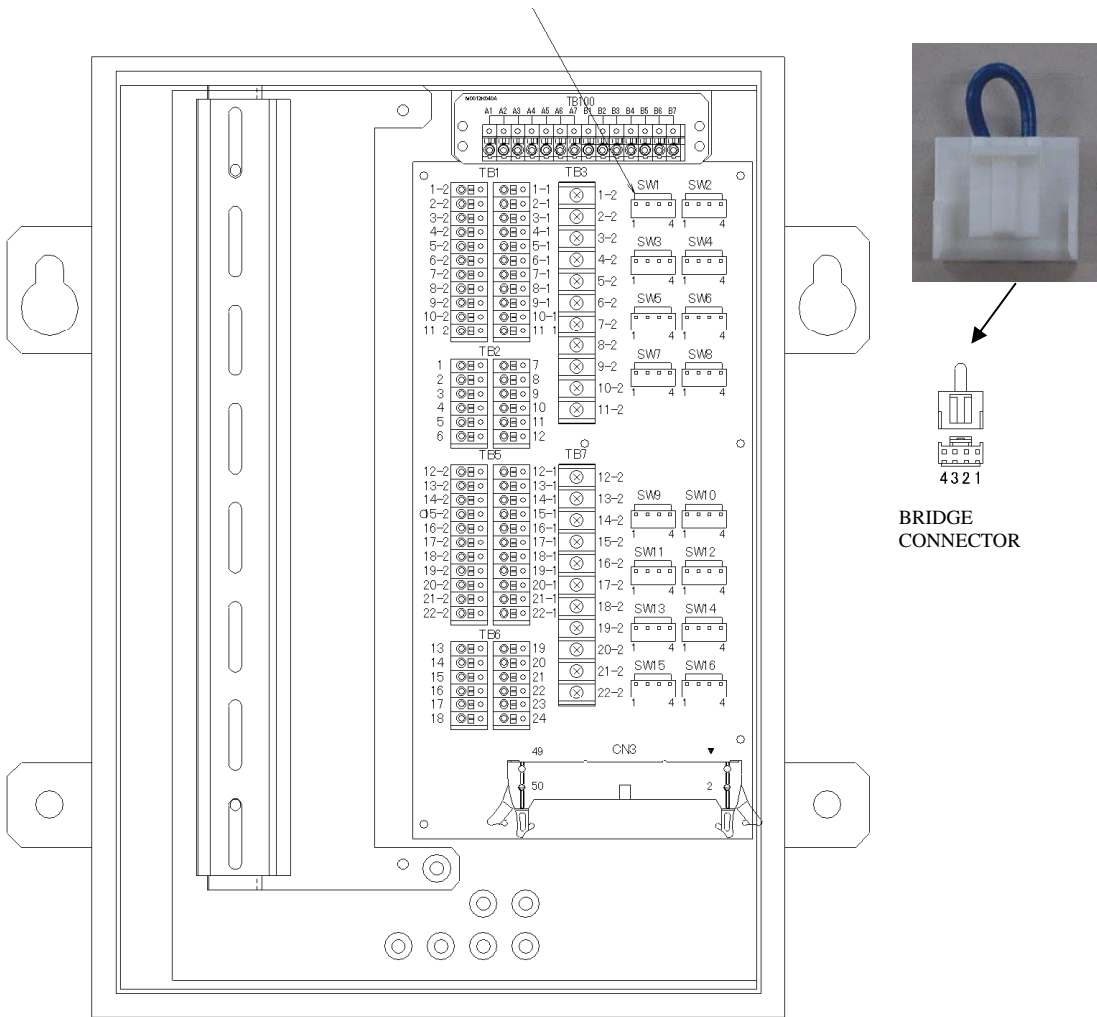


AFTER INSTALLATION OF THE LAMP UNITS

6-2. Lamp Units TSC-RAP-1L

Connect to the interlock connector box TSC-MF-Z.

SW1~SW16 CONNECTORS FOR SWITCH UNITS CONNECTION



INTERNAL LAYOUT DRAWING OF INTERLOCK CONNECTOR BOX

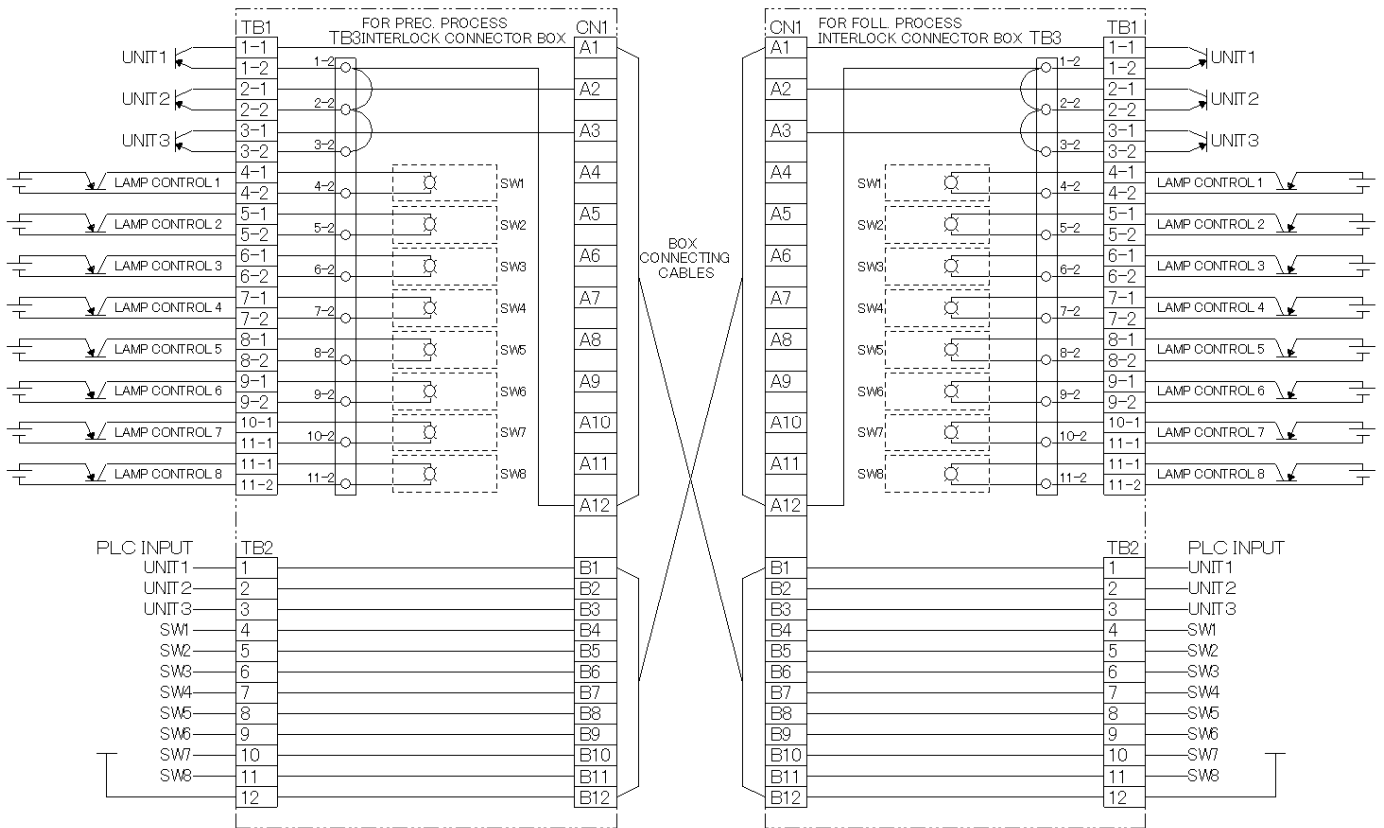
Fig.4a

- ① Remove the bridge connectors installed to the internal SW1~SW16 of the interlock connector box.
- ② Install the connectors(CNSW) from the lamp units that were installed by 5-2 to the internal SW1~SW16 connectors of the interlock connector box, and make sure that the connectors are surely locked.

7. Interlock Connector Box Circuit After Installation Of Lamp Units

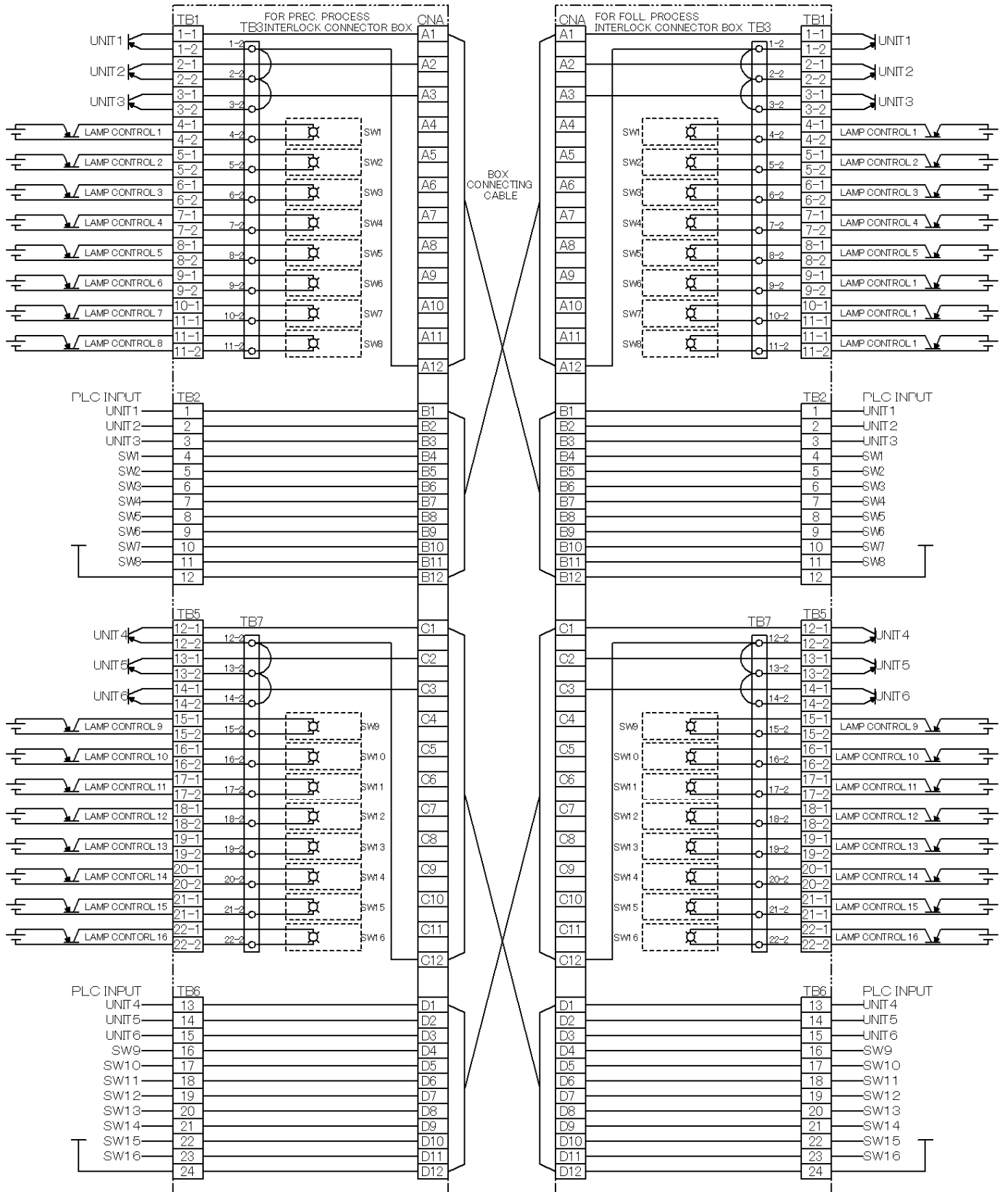
7-1. Lamp Units (Independent Connection) + Input Units (Common Connection) TSC-MF-S, TSC-MF-M

Lamp Units 8 Input Units 3



7-2. Lamp Units (Independent Connection) + Input Units (Common Connection) TSC-MF-Z

Lamp Units 16 Input Units 6



Edition	Detail	Date
1st	First edition	October 10 2003
2nd	With the abandoning of TSC-MF-L, revised to the compliant for RSC-MF-Z Change of the address	September 13 2004 September 13 2004
3rd	The color of the wire (1 Pin) is changed in Circuit Diagram, Blue → White & Blue	August 30, 2005

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