

# INDUSTRIAL SEWING MACHINE Attachment

**MODEL** 

MP-G10-TE

**TECHNICAL MANUAL** 

I/O Expansion Unit

# FOR SAFE USE

Before the installation, operation, and inspection for this product, read the "FOR SAFE USE" and the technical manuals carefully. Also read the other technical manuals, "Sewing Machine Head", "Control Unit" and "Operation Panel" describing some instructions, which are not in this manual, and use the sewing machine properly.

# SAFETY INDICATIONS



Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage. Note that CAUTION **CAUTION** level may lead to a serious consequence according to the circumstances. Always follow the instructions of both levels because they are important to personal safety.

# **CAUTION INDICATIONS**

No.	Caution indication	Description		
1		<ul> <li>Precaution for sewing machine operation:</li> <li>Indicates that removing the safety and operating the sewing machine for some other purposes with power-on are prohibited.</li> <li>Please do not operate the sewing machine without protective equipment such as a needle guard, an eye guard, a belt cover or the others.</li> <li>Please turn off the power switch when threading, changing a needle and a bobbin, cleaning, and lubricating.</li> </ul>		
2		Caution for fingers injury:  Indicates a possibility of fingers (hands) injury in a certain condition.		
3		Caution for squeezing fingers:  Indicates a possibility of squeezing fingers in a certain condition.		

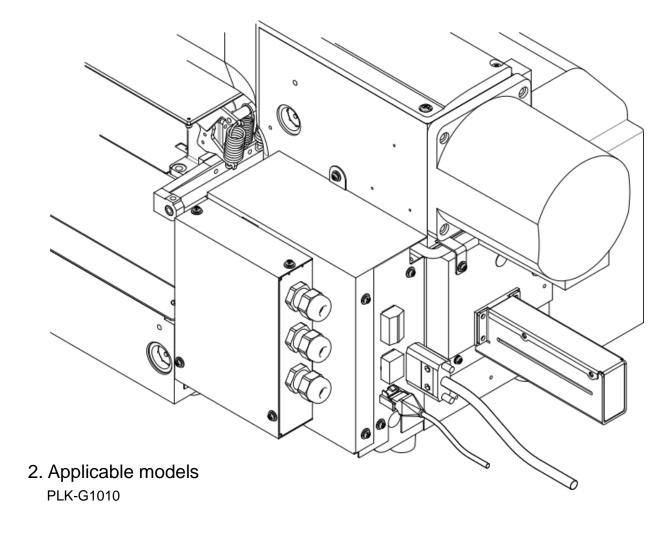
#### 1. Features

This board expands the sum of the I/O ports of the PLK-G series.

12 input and 12 output ports in addition to the number of ports of Standard I/O can be expanded by installing this board.\*1 \*2

The setting of these expanded ports can be changed from the input/Output setting mode.

- \*1 It is not necessary to install the latest system software at PLK-G control unit.
- \*2 These outputs are for air valve only. The solenoid can not be driven.



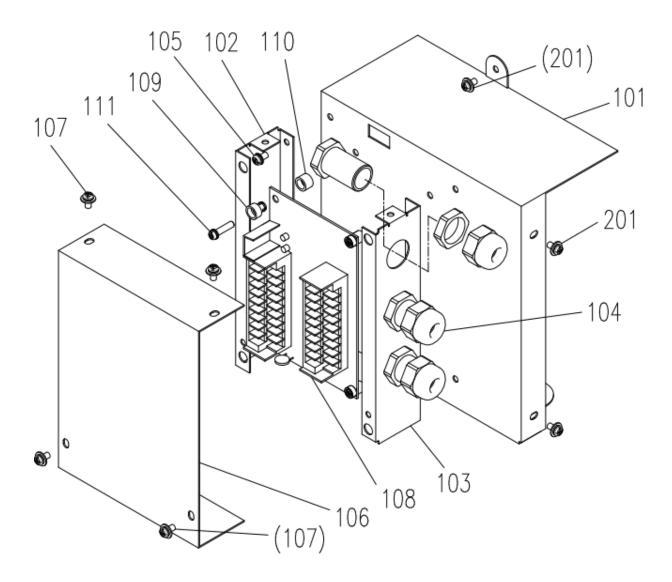
# 3. Before use

It describes the parts structure and mounting method in this Technical Manual. Please see the Technical Manual "PLK-G2-TE" is how to set up and handling.

# 4. Configuration

The Fig. numbers in the drawing correspond to the part numbers given in the following explanations. When ordering service parts, please specify in the Parts No.  $(M^{*********})$ .

# 4.1 I/O Expansion Unit



# 4.1 I/O Expansion Unit (Parts list)

Fig	部品コード	_	D 11	数量
No.	Parts No.	品名	Description	Amt. Req.
101	MH10T0339	P バンカバー	Cover	1
102	MH10T0880	ソクメンイタ	Side cover	1
103	MH10T1880	ソクメンイタ	Side cover	1
104	MB60A5780	コート ブッシュ(FGA-21L-12)	Cord bushing	3
105	M91054004	SW-PW プラマイナヘ゛ネシ゛M4X8	Screw M4X8	4
106	MH10T2339	カクチョウキバンカバー	Cover	1
107	M91071004	SW-MW プラマイナヘ゛ネシ゛ M4X8	Screw M4X8	4
108	M800G2TE0	カクチョウキバン PLK−G2−TE	Print circuit board	1
109	MB60A0366	ワンタッチブッシュ	Nylon bush	4
110	MB60A2352	ワンタッチフ゛ッシュ	Nylon bush	4
111	M91057004	SW-PW プラマイナベネジM4X20	Screw M4X20	4

# 4.2 Accessories (Parts list)

Fig	部品コード	品名	Description	数量
No.	Parts No.	n 1		Amt. Req.
201	M91071004	SW-MW プラマイナヘ゛ネシ゛M4X8	Screw M4X8	7

# 5. Assembly procedures



# CAUTION

★ When installing removal of parts, please go to turn off the power before. In addition, qualified personnel of electrical work, please be performed by wiring work.

#### 5.1 Installing the I/O Expansion Unit

- (1) Turn off the power.
- (2) Remove the circuit board cover as shown in Figure 1. (This cover is not used after the I/O Expansion Unit attached.)
- (3) Disconnect the extension cable for the power supply of the circuit board.
- (4) Remove the connector "SEN 1" from the connector mounting hole as shown in Figure 1.
- (5) Fit the connector into the connector mounting hole on the I/O Expansion Unit "CON N" shown in Figure 2.
- (6) Connect the extension cable and the connector "CON N".
- (7) Connect the connector "SEN 2" of the I/O Expansion Unit and the connector "SEN 1" removed.
- (8) Connect the connector "CON 2" of the circuit board and the signal line of the I/O Expansion Unit.
- (9) Install the I/O Expansion Unit with a screw hole that had been fitted with the circuit board cover.

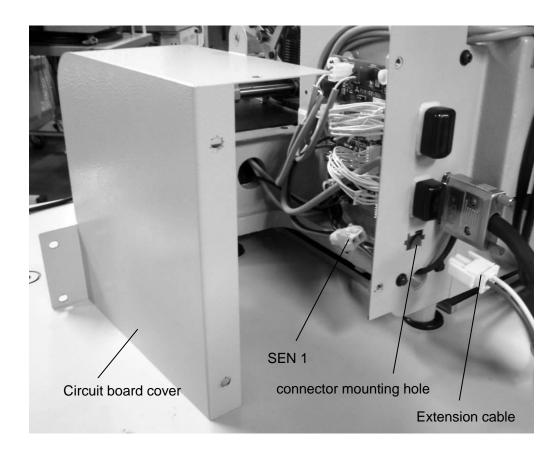


Fig.1

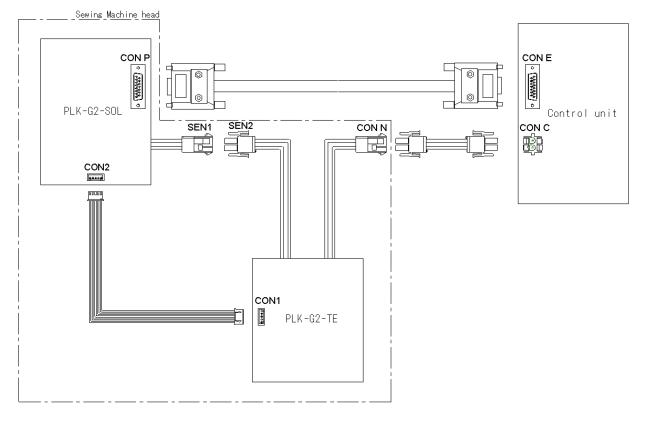


Fig.2

### 5.2 How to set up and attached confirmation



Assembly of this device is completed, please check your work once again.

Because there is a case to unexpected behavior, please away from the sewing machine when the power is turned on and the air pressure.

- (1) Please confirm if have finished the installation of the I/O Expansion Unit.

  Please see the Technical Manual "PLK-G2-TE" is how to check this.
- (2) The connection to the input and output ports, can be done by removing the Fig.No.106 cover.



