JUKI®

INDUSTRIAL SEWING MACHINE
Attachment

MODEL

MP-G50-TE

TECHNICAL MANUAL

I/O Expansion Unit

A181E010P01

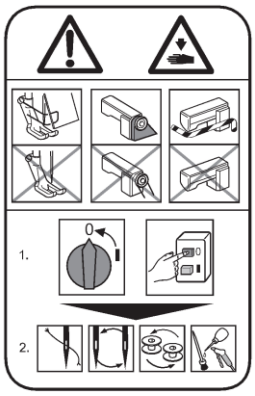
FOR SAFE USE

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

⚠ CAUTION	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage. Note that 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		<u>Precaution for sewing machine operation</u>: Indicates that removing the safety and operating the sewing machine for some other purposes with power-on are prohibited. ● Please do not operate the sewing machine without protective equipment such as a needle guard, an eye guard, a belt cover or the others. ● Please turn off the power switch when threading, changing a needle and a bobbin, cleaning, and lubricating.
2		<u>Caution for fingers injury</u>: Indicates a possibility of fingers (hands) injury in a certain condition.
3		<u>Caution for squeezing fingers</u>: Indicates a possibility of squeezing fingers in a certain condition.

1. Features

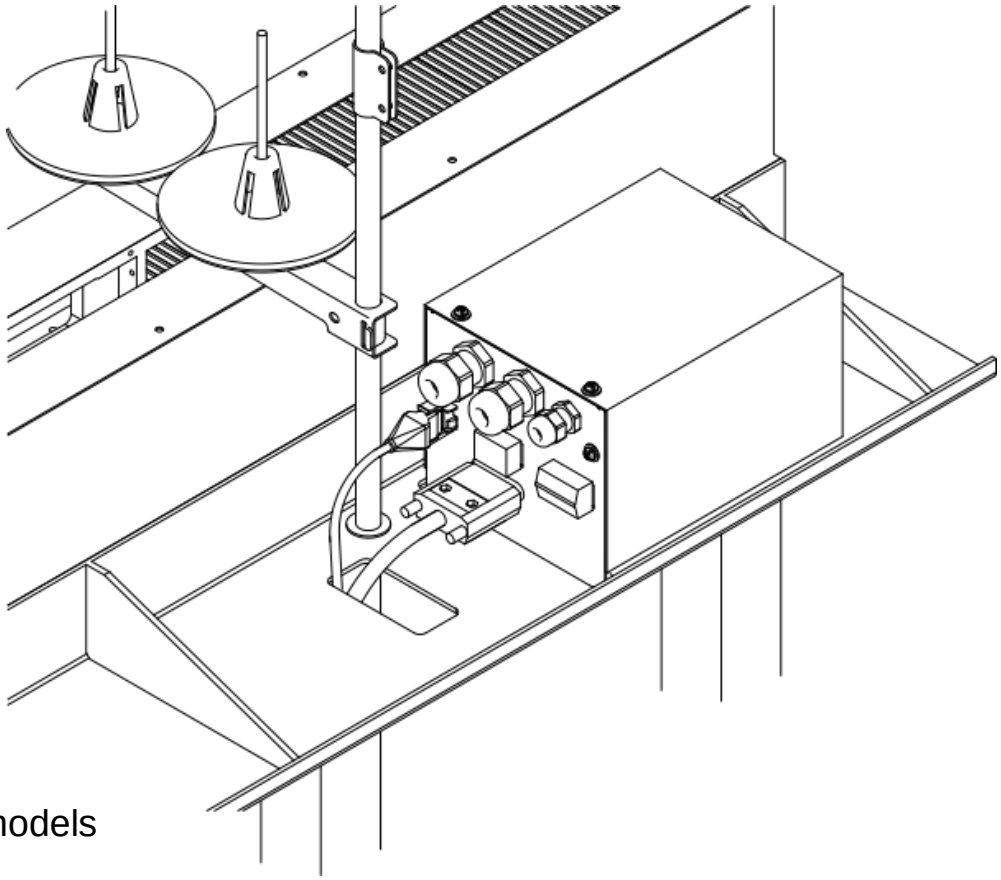
This board expands the sum of the I/O ports of the PLK-G series.

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.



2. Applicable models

PLK-G5050

PLK-G5050R

PLK-G10050

PLK-G10050R

3. Before use

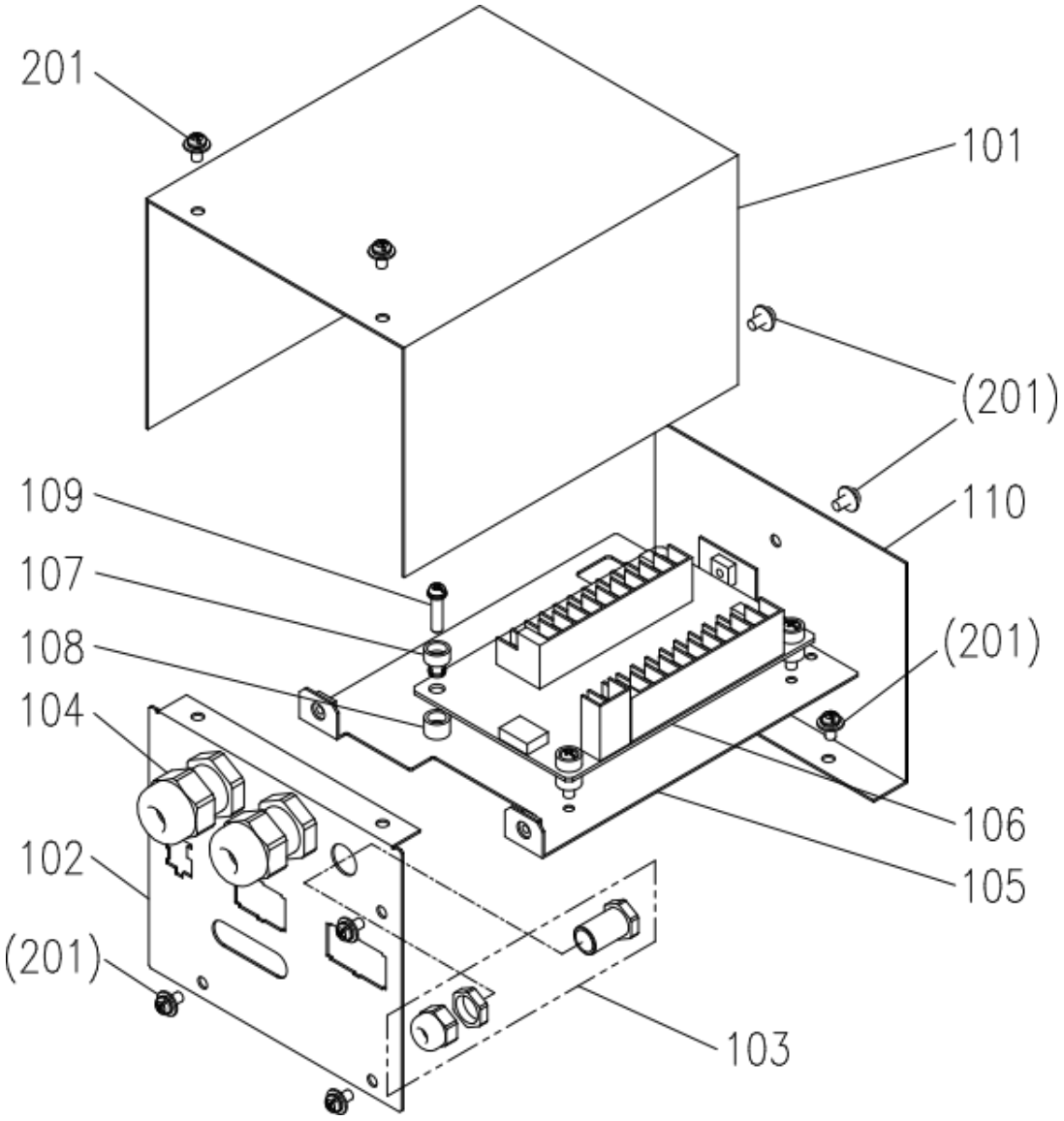
It describes the parts structure and mounting method in this Technical Manual.

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 No.	部品コード Parts No.	品　　名	Description	数量 Amt. Req.
101	MH50T0339	P ﾊﾞﾝｶﾊﾞｰ	Cover	1
102	MH50T0601	ｺﾈｸﾀﾄﾘﾂｹｲﾀ	Adapter	1
103	MB60A6780	ｺｰﾄﾞﾌﾞｯｼｭ(FGA-13-08)	Cord bushing	1
104	MB60A5780	ｺｰﾄﾞﾌﾞｯｼｭ(FGA-21L-12)	Cord bushing	2
105	MH20T1601	ｷﾊﾞﾝﾄﾘﾂｹｲﾀ	Adapter	1
106	M800G2TE0	ｶｸﾁｮｳｷﾊﾞﾝ PLK-G2-TE	Print circuit board	1
107	MB60A0366	ﾜﾝﾀｯﾁﾌﾞｯｼｭ	Nylon bush	4
108	MB60A2352	ﾜﾝﾀｯﾁﾌﾞｯｼｭ	Nylon bush	4
109	M91057004	SW-PW ﾌﾟﾗﾏｲﾅﾍﾞﾈｼﾞ M4X20	Screw M4X20	4
110	MH50T0758	ﾌﾞﾗｹｯﾄ	Bracket	1

4.2 Accessories (Parts list)

Fig No.	部品コード Parts No.	品　　名	Description	数量 Amt. Req.
201	M91071004	SW-MW ﾌﾟﾗﾏｲﾅﾍﾞﾈｼﾞ M4X8	Screw M4X8	11

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 and signals of the circuit board.
(4) Disconnect the connector mounting plate. (This mounting plate is not used after the I/O Expansion Unit attached.)
(5) Remove the connector "SEN 1" , "CON L" and "CON M" from the connector mounting plate as shown in Figure 1.
(6) Remove the two hexagon socket head cap screws shown in Figure 2.
(7) Attach the Fig.No.110 bracket using the screw holes of the previous section by screws "M4" provided.
(8) Attach the connector "CON L" and "CON M" to the Fig.No.102 connector mounting plate.
(9) Attach the connector "CON N" on the I/O Expansion Unit shown in Figure 2 to the Fig.No.102 connector mounting plate.
(10) Attach the Fig.No.102 connector mounting plate to the sewing machine by the screws "M4" provided.
(11) Connect the connector "SEN 2" of the I/O Expansion Unit and the connector "SEN 1".
(12) Connect the connector "CON 2" of the circuit board and the signal line of the I/O Expansion Unit.
(13) Attach the extension board assembly consisting of Fig.No.106 to the Fig.No.102 connector mounting plate by the screws "M4" provided.
(14) Connect the extension cable for the power supply to the connector "CON N". Connect the extension cable for the signals to the circuit board.
(15) Attach the Fig.No.101 cover to the sewing machine by the screw "M4" provided.

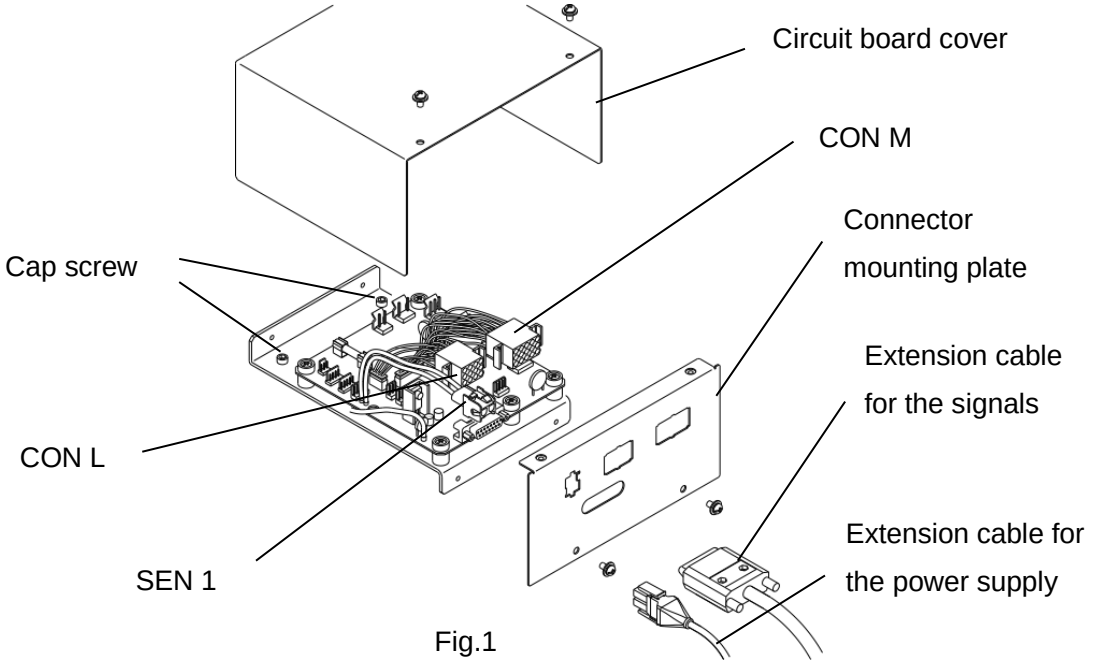


Fig.1

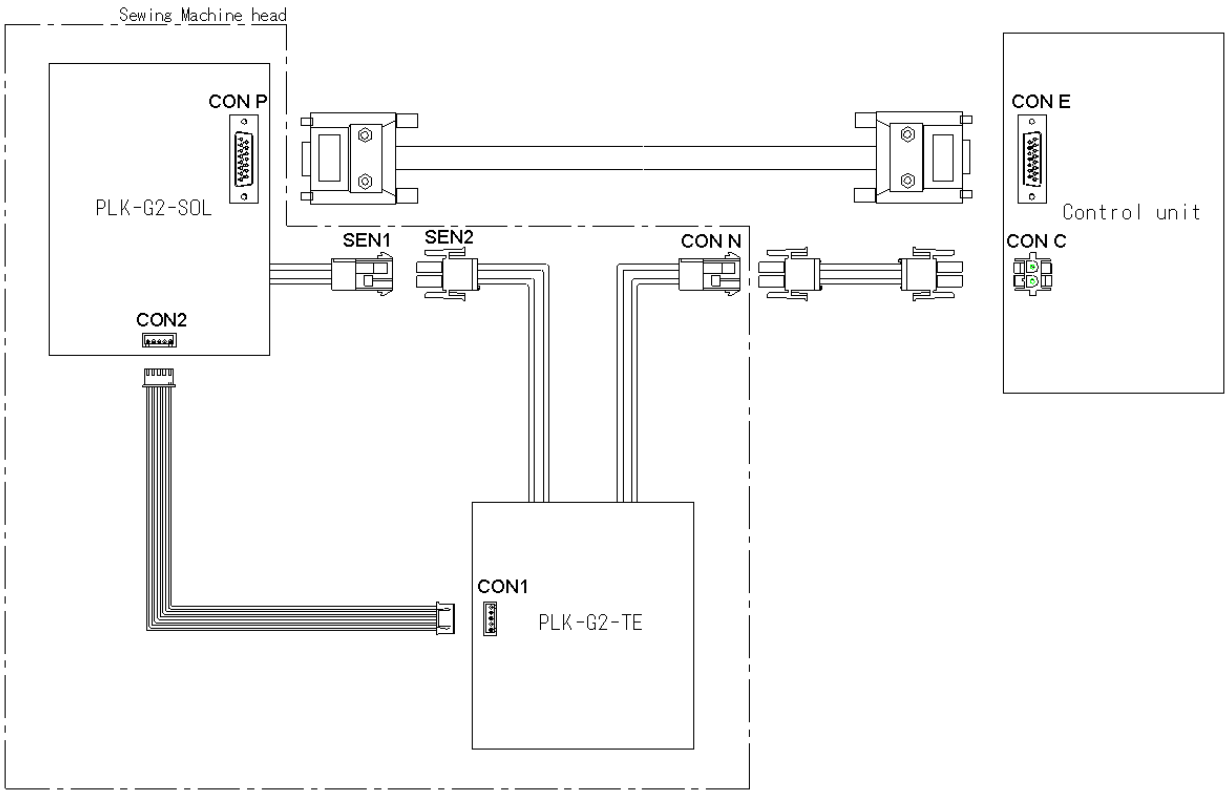


Fig.2

5.2 How to set up and attached confirmation

CAUTION

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.101 cover.

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JUKI CORPORATION

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