

***ENGLISH***

**IT-10  
INSTRUCTION MANUAL**

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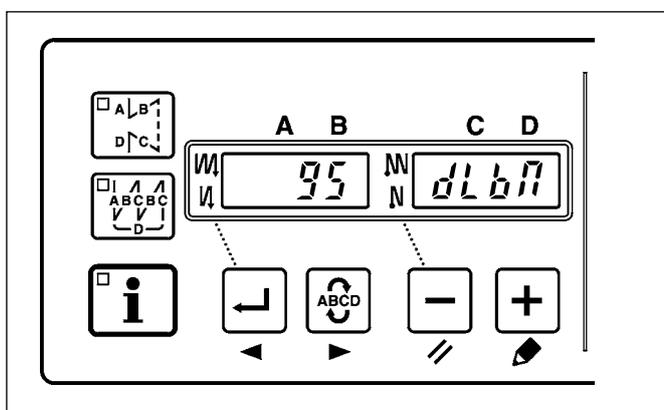
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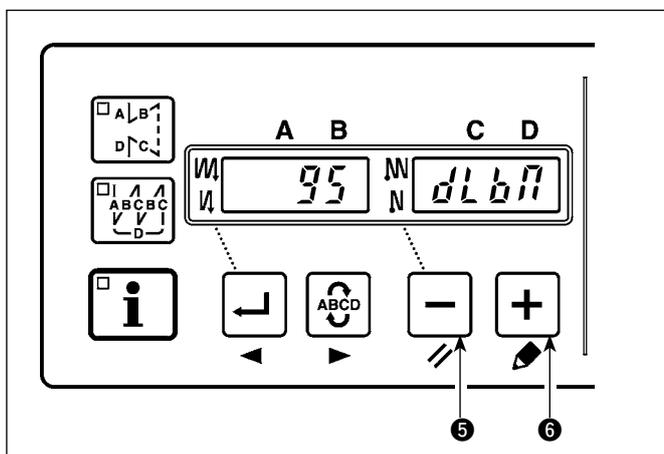
### 3. USB PORT

- ① Precautions to be taken when handling USB devices
  - Do not leave the USB device or USB cable connected to the USB port while the sewing machine is in operation. The machine vibration can damage the port section resulting in loss of data stored on the USB device or breakage of the USB device or sewing machine.
  - Do not insert/remove a USB device during reading/writing a program or sewing data. It may cause data breakage or malfunction.
  - When the storage space of a USB device is partitioned, only one partition is accessible.
  - Some type of the USB device may not be properly recognized by this sewing machine.
  - JUKI does not compensate for loss of data stored on the USB device caused by using it with this sewing machine.
- ② USB specifications
  - Conform to USB 1.1 standard
  - Format supported \_\_\_\_ FAT 32
  - Consumption current \_\_\_\_ The rated consumption current of the applicable USB devices is 500 mA at the maximum.

### 4. SETTING PROCEDURE OF THE MACHINE HEAD

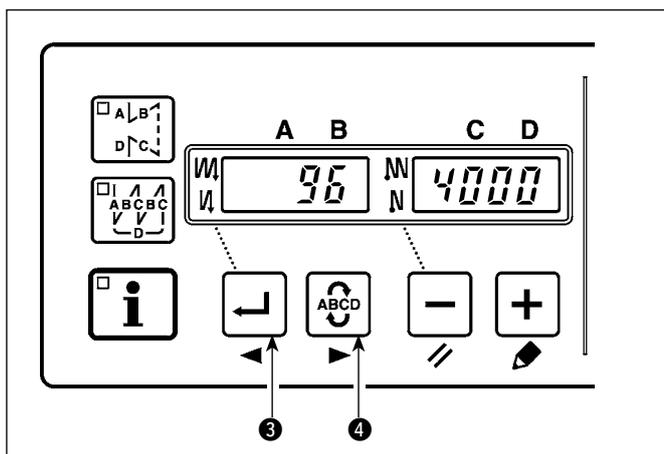


- 1) Refer to "**6-5. Setting for functions**", and call the function setting No. 95.



- 2) The type of machine head can be selected by pressing  switch ⑤ (  switch ⑥).

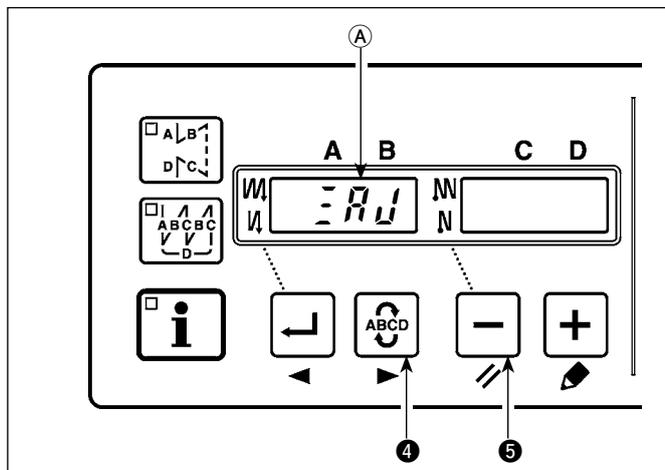
\* Refer to the "**MACHINE HEAD LIST**" on the separate sheet or the Instruction Manual for the machine head of your sewing machine for the type of the machine head.



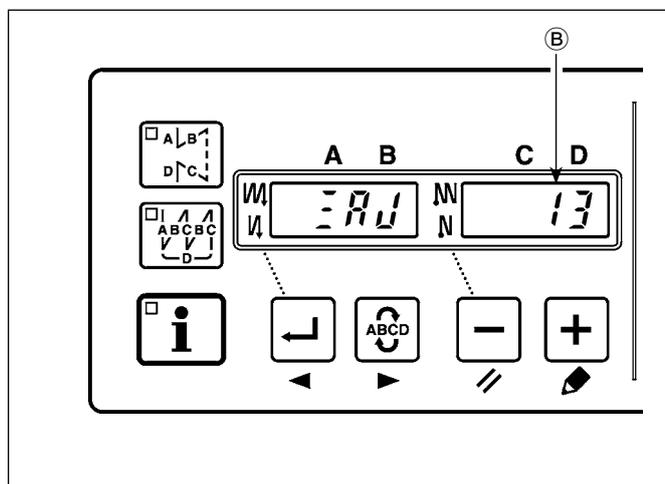
- 3) After selecting the type of machine head, by pressing  switch ③ (  switch ④), the step proceeds to 96 or 94, and the display automatically changes to the contents of the setting corresponding with the type of machine head.

## 5. ADJUSTING THE MACHINE HEAD (DIRECT-DRIVE MOTOR TYPE SEWING MACHINE ONLY)

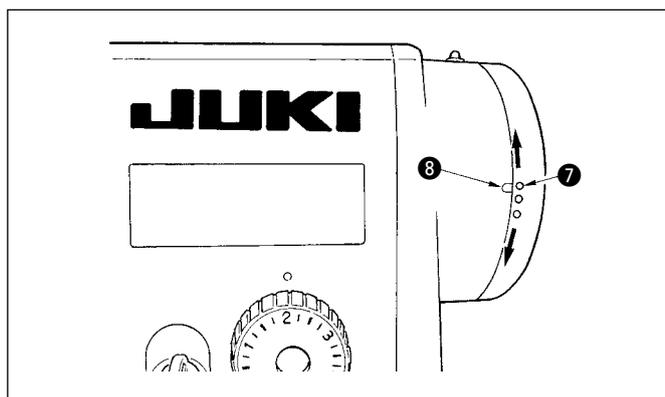
When the slip between the white marker dot on the handwheel and the concave of the cover is excessive after thread trimming, adjust the angle of the machine head by the operation below.



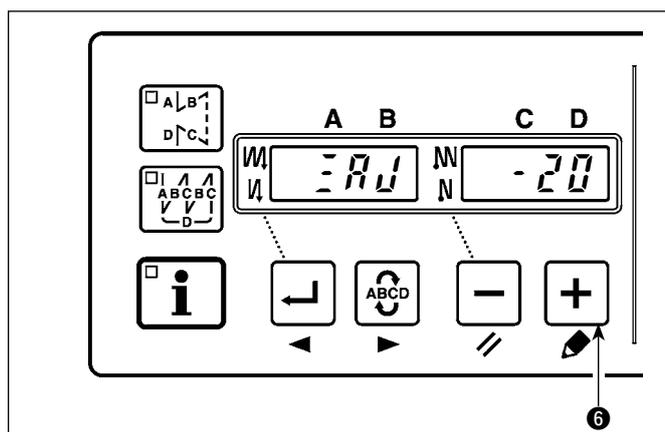
- 1) Simultaneously pressing switch ④ and switch ⑤, turn ON the power switch.
- 2) is displayed (A) in the indicator and the mode is changed over to the adjustment mode.



- 3) Turn the pulley of the machine head by hand until the main-shaft reference signal is detected. At this time, the degree of an angle from the main-shaft reference signal is displayed on the indicator (B). (The value is the reference value.)



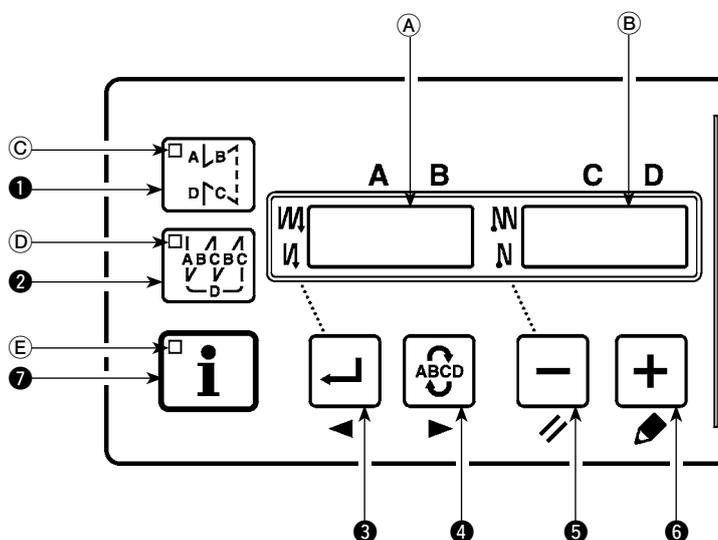
- 4) In this state, align the white dot ⑦ of the handwheel with the concave ⑧ of the pulley cover as shown in the figure.



- 5) Press switch ⑥ to finish the adjustment work. (The value is the reference value.)

## 6. SEWING PATTERN SETUP BLOCK (LEFT PANEL)

### 6-1. Configuration

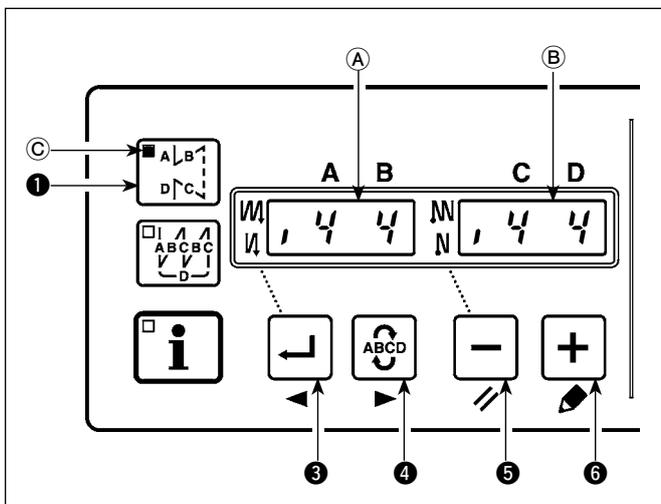


No.	Button and display	Description
①	switch :	Used for changing over effective/ineffective of the reverse feed stitching pattern.
②	switch	Used for changing over effective/ineffective of the overlapped stitching pattern.
③	switch	Used for confirming the contents of setting and for changing over effective/ineffective of the reverse feed stitching at sewing start.
④	switch	Used for selecting the process (A, B, C, D) the number of stitches for which is to be changed. * The selected process flashes on and off.
⑤	switch :	Used for changing the content of the selected display (flashing section) and for changing over effective/ineffective of the reverse stitch at sewing end.
⑥	switch	Used for changing the content of the selected display (flashing section).
⑦	switch :	Used for calling the production support function (by keeping the switch held pressed for two seconds).
Indicators ① and ② :		Various pieces of information are displayed.
LED ③ :		Lights up when the reverse feed stitching pattern is effective.
LED ④ :		Lights up when the overlapped stitching pattern is effective.
LED ⑤ :		Lights up when the production support function is displayed.

## 6-2. Operating procedure of the sewing pattern

### (1) Reverse feed stitching pattern

Reverse feed stitching at sewing start and reverse feed stitching at sewing end can be separately programmed.



#### [Setting procedure of the reverse feed stitching]

1) Effective/ineffective of the reverse feed stitching

pattern can be changed over by pressing  switch ①.

When the reverse feed stitching pattern is rendered effective, LED ③ lights up, the number of stitches of the reverse feed stitching at sewing start is displayed on ①, and the number of stitches of the reverse feed stitching at sewing end is displayed on indicator ②.

Select a process (A, B, C or D) the number of stitches for which is to be changed by using  switch ④.

Change the number of stitches for the selected process by using  switch ⑤ and  switch ⑥.

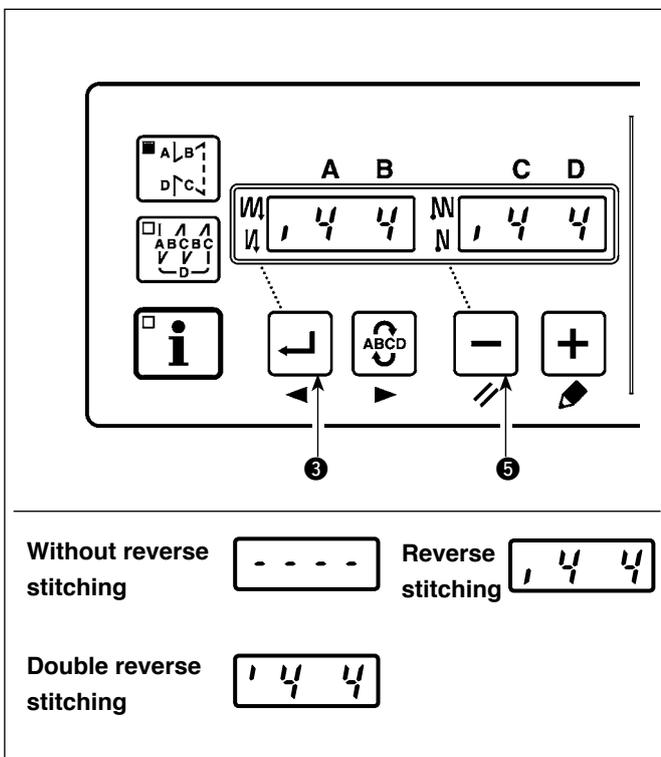
The number which is flashing on and off represents the process which is being set.

Change the number of stitches for the selected process by using  switch ⑤ and  switch ⑥.

Press  switch ③ to confirm the change you have made. (The number of stitches that can be set is 0 to 15.)



The sewing machine cannot perform sewing when the display of the number of stitches for a process is flashing on and off.



2) When the number of reverse feed stitches display is not flashing on and off, every press on

 switch ③ changes over the reverse feed stitching mode from the "reverse feed stitching at sewing start," "double reverse feed stitching at sewing start" and "no reverse feed stitching at sewing start."

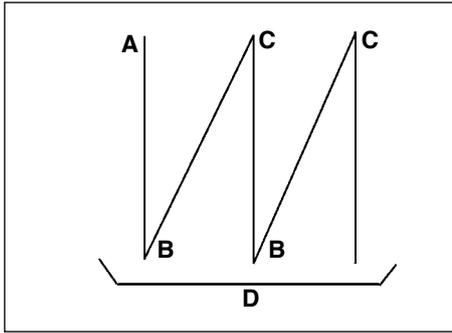
In addition, every time  switch ⑤ is pressed, the reverse feed stitching feature changes over from the reverse feed stitching at sewing end to the double reverse stitch at sewing end, then to no reverse feed stitching at sewing end, in turn.



For some types of the machine head, reverse feed stitching patterns are not available.

## (2) Overlapped stitching pattern

Overlapped stitching pattern can be programmed.



A : Number of stitches of normal stitching setting

0 to 15 stitches

B : Number of stitches of reverse stitching setting

0 to 15 stitches

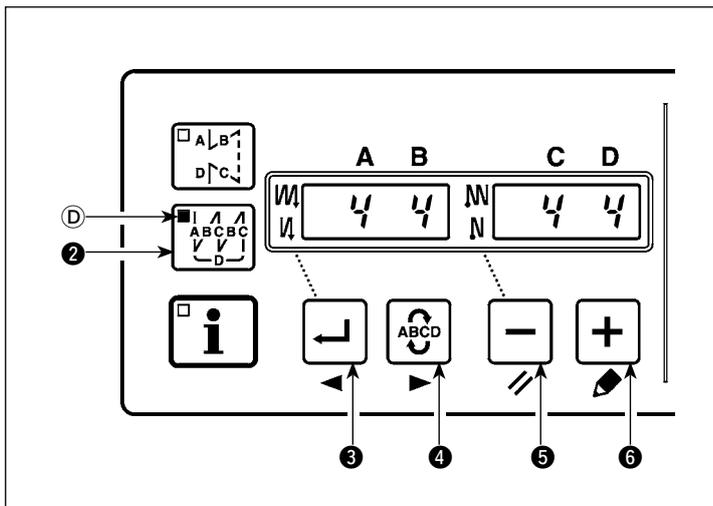
C : Number of stitches of normal stitching setting

0 to 15 stitches

D : Number of times of repetition

0 to 9 times

**(Caution)** When process D is set to 5 times, the sewing is repeated as A → B → C → B → C.



### [Setting procedure of the overlapped stitching]

1) Effective/ineffective of the overlapped stitching pattern can be changed over by pressing  switch ②.

When the overlapped stitching pattern is rendered effective, LED ① lights up.

2) Select a process (A, B, C or D) the number of stitches for which is to be changed by using  switch ④.

The number which is flashing on and off represents the process which is being set.

3) Change the number of stitches for the selected process by using  switch ⑤ and  switch ⑥.

4) Press  switch ③ to confirm the change you have made.

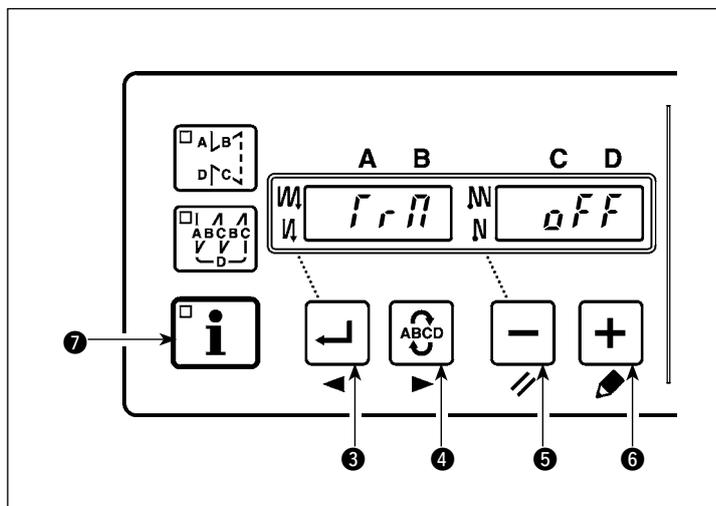
(The sewing machine does not run unless the setting has been confirmed by pressing  switch ③.)



**The overlapped stitching pattern is carried out under automatic operation mode. Once the pedal is depressed, the sewing machine will automatically perform sewing of the number of overlapped stitches.**

### 6-3. One-touch setting

A part of function setting items can be easily changed in the normal sewing state.



#### [One-touch setting procedure]

- 1) Keep switch ⑦ held pressed for one second to place the panel in the function setting mode.
- 2) Change over the item to be set by using switch ③ or switch ④. Then, the set value can be changed by using switch ⑤ and switch ⑥.
- 3) To return to the normal sewing state, press switch ⑦.

The setting is confirmed by pressing switch ⑦.

#### ① Thread trimming function ( *f r n* )

*FFF* : Thread trimming operation is not performed (solenoid output prohibition: Thread trimmer, wiper)

*Fn* : Thread trimming operation is effective.

#### ② Wiper function ( *W P* )

*FFF* : Wiper does not operate after thread trimming

*Fn* : Wiper operates after thread trimming

#### ③ One-shot automatic stitching function ( *S H o f* )

*FFF* : One-shot automatic stitching function is ineffective.

*Fn* : One-shot automatic stitching is effective.

※ **This function is rendered effective when the material end sensor function is set. It is not possible to prohibit the one-shot operation during overlapped sewing operation. The number of revolution is the value which is set for setting No. 38.**

#### ④ Setting of the max. sewing speed ( *S P d* )

The max. sewing speed of the machine head is set. The upper limit of the set value differs with the type of machine head to which the SC is connected.

Setting range : 150 - Max. value [sti/min]

#### ⑤ Material end sensor function ( *E d* )

*FFF* : Material end sensor function is ineffective.

*Fn* : Once the material end is detected, the sewing machine stops running after having sewn the number of stitches set with ⑦ ( *E d S f* ).

※ **This function is rendered effective when the material end sensor function is set.**

#### ⑥ Thread trimming function by material end sensor ( *E d f r* )

*FFF* : Automatic thread trimming function after the detection of material end is ineffective.

*Fn* : Once the material end is detected, the sewing machine performs thread trimming after having sewn the number of stitches set with ⑦ ( *E d S f* ).

※ **This function is rendered effective when the material end sensor function is set.**

#### ⑦ Number of stitches for material end sensor ( *E d S f* )

The number of stitches to be sewn from the detection of material end to the stop of the sewing machine

Number of stitches that can be set: 0 to 19 (stitches)

※ **This function is rendered effective when the material end sensor function is set.**

**If the number of stitches specified is inadequate, the sewing machine can fail to stop within the preset number of stitches depending on the number of revolutions of the sewing machine.**

## 6-4. Production support function

The production support function consists of three different functions (six different modes) such as the production volume management function, operation measuring function and bobbin counter function. Each of them has its own production support effect. Select the appropriate function (mode) as required.

### ■ Production volume management function

Target No. of pcs. display mode [F100]

Target/actual No. of pcs difference display mode [F200]

The target number of pieces, actual number of pieces and the difference between the target and actual number of pieces along with the operation time are displayed to notify the operators of a delay and advance in real time. Sewing machine operators are allowed to engage sewing while constantly checking his/her work pace. This helps raise target awareness, thereby increasing productivity. In addition, a delay in work can be found at an early stage to enable early detection of problems and early implementation of corrective measures.

### ■ Operation measuring function

Sewing machine availability rate display mode [F300]

Pitch time display mode [F400]

Average sewing speed display mode [F500]

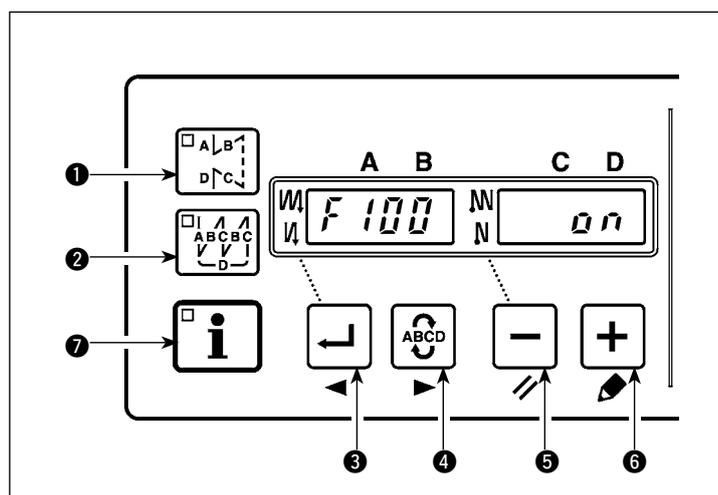
Sewing machine availability status is automatically measured and displayed on the control panel. The data obtained can be used as basic data to perform process analyses, line arrangement and equipment efficiency checkup.

### ■ Bobbin counter function

Bobbin counter display mode

In order to change bobbins before the current bobbin runs out of thread, the time for replacing the bobbin is notified.

#### [To use the production support mode]



Modes F100 to F500 have been factory-set in the OFF state at the time of delivery.



The mode state is changed over to ON/OFF according to the setting of the bobbin thread counter function (function setting No. 6).

Keep switch 7 held pressed (one second) in the normal sewing state to call the one-touch setting screen.

Then, press switch 1 or switch 2 to set each production support mode in ON/OFF state to call the one-touch setting screen.

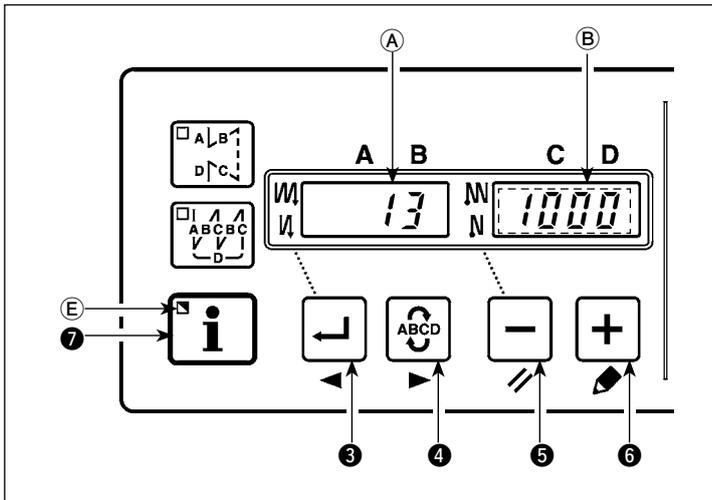
Press switch 3 or switch 4 to select the mode to be set in the ON/OFF state. ON/OFF of the display can be changed over by pressing switch 5 or switch 6.

To return to the normal sewing state, press

switch 7.

Sewing can be performed with the production support data displayed on the control panel.

**[Basic operation of the production support modes]**



- 1) When **i** switch 7 is pressed in the normal sewing state, LED (E) lights up to enter the production support mode.
- 2) Production support function can be changed over by pressing **←** switch 3 or **↻** switch 4.
- 3) Data attached marked with (\*1) in Table 1 "Indicator (A)" can be changed by means of **-** switch 5 and **+** switch 6.

- 4) When you keep **+** switch 6 held pressed for two seconds, indicator (B) and LED (E) flash on and off. While they are flashing on and off, data marked with (\*2) in Table 1 "Display under modes" can be changed by pressing **-** switch 5 and **+** switch 6.  
When you press **i** switch 7, the value marked with (\*2) is confirmed and indicator (B) and LED (E) stop flashing on and off.
- 5) The value with a sharp mark (\*3) in Table 1 "Display of modes" can be changed only immediately after resetting by using **-** switch 5 and **+** switch 6.
- 6) Refer to the table "Mode resetting operation," for the resetting procedure of data.
- 7) To return to the normal sewing state, press **i** switch 7.

Data to be displayed under the respective modes are as described in the table below.

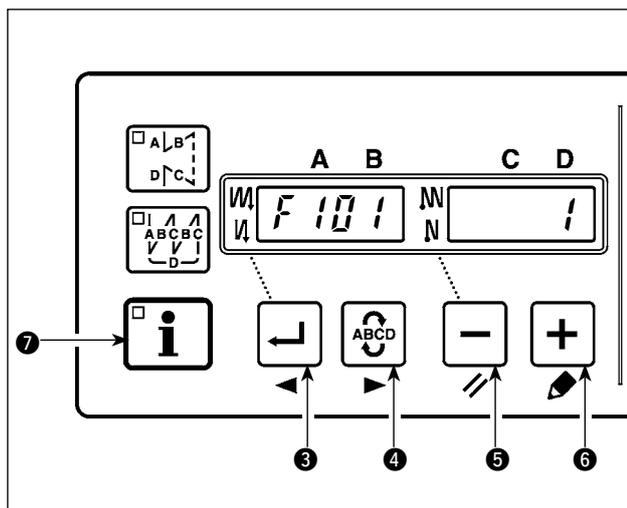
**Table 1: Display of modes**

Mode name	Indicator (A)	Indicator (B)	Indicator (B) (when <b>-</b> switch 5 is pressed)
Target No. of pcs. display mode (F100)	Actual number of pieces [Unit : piece] (*1)	Target number of pieces [Unit : piece] (*2)	-
Target/actual No. of pcs. difference display mode (F200)	Difference between target number of pieces and actual number of pieces [d : piece] (*1)	Target pitch time [Unit : 100 msec] (*2)	-
Sewing machine availability rate display mode (F300)	oP-r	Sewing machine availability rate in the previous sewing [Unit : %]	Display of average availability rate of sewing machine [Unit : %]
Pitch time display mode (F400)	Pi-T	Pitch time in the previous sewing [Unit : 1sec]	Display of average pitch time [Unit : 100 msec]
Average sewing speed display mode (F500)	ASPd	Average sewing speed in the previous sewing [Unit : sti/min]	Display of average sewing speed [Unit : sti/min]
Bobbin counter display mode	bbn	Bobbin counter value (*3)	-

**Table 2: Mode resetting operation**

Mode name	 Switch ⑤ (held pressed for 2 seconds)	 Switch ⑤ (held pressed for 4 seconds)
Target No. of pcs. display mode (F100)	Resets the actual number of pieces Resets the difference between target number of pieces and actual number of pieces	-
Target/actual No. of pcs. difference display mode (F200)	Resets the actual number of pieces Resets the difference between target number of pieces and actual number of pieces	-
Sewing machine availability rate display mode (F300)	Resets average availability rate of sewing machine	Resets average availability rate of sewing machine. Resets average pitch time. Resets average sewing speed of sewing machine.
Pitch time display mode (F400)	Resets average pitch time	Resets average availability rate of sewing machine. Resets average pitch time. Resets average sewing speed of sewing machine.
Average sewing speed display mode (F500)	Resets average sewing speed of sewing machine.	Resets average availability rate of sewing machine. Resets average pitch time. Resets average sewing speed of sewing machine.
Bobbin counter display mode	Resets the bobbin counter value (Note that only the bobbin counter is immediately reset by pressing  switch ⑤.)	-

**[Detailed setting of production volume management function (F101, F102)]**



When  switch ⑦ is held pressed (for three seconds) under the target No. of pcs. display mode (F100) or the target/actual No. of pcs. difference display mode (F200), the detailed setting of the production volume management function can be carried out.

The setting state of the number of times of thread trimming (F101) and that of the target achievement buzzer (F102) can be changed over by pressing  switch ③ or  switch ④.

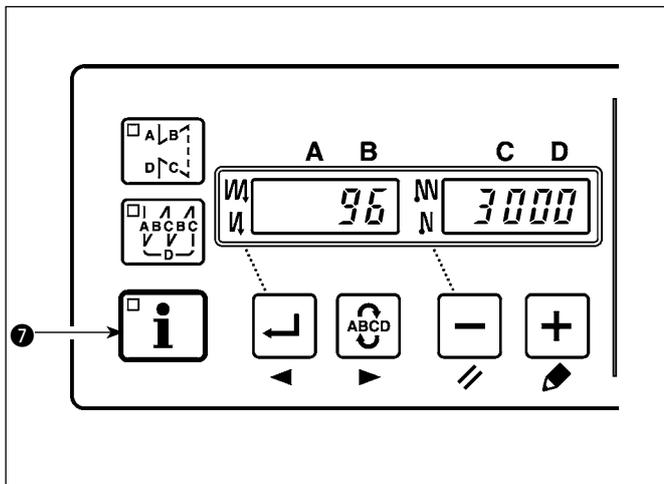
The number of times of thread trimming for sewing one piece of garment can be set by pressing  switch ⑤ or  switch ⑥ in the setting state of the number of times of thread trimming (F101).

It is possible to set whether the buzzer sounds or not when the actual number of pieces has reached the target volume by pressing  switch ⑤ or  switch ⑥ in the setting state of the target achievement buzzer (F102).

## 6-5. Setting of functions

Functions can be selected and specified.

※ Refer to the Instruction Manual for the control box for details of the function setting.

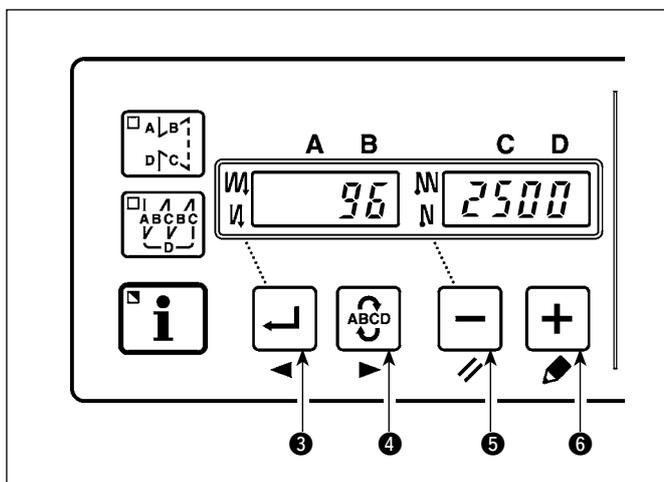


1) Turn ON the power with switch 7 held pressed.

(The item which has been changed during the previous work is displayed.)

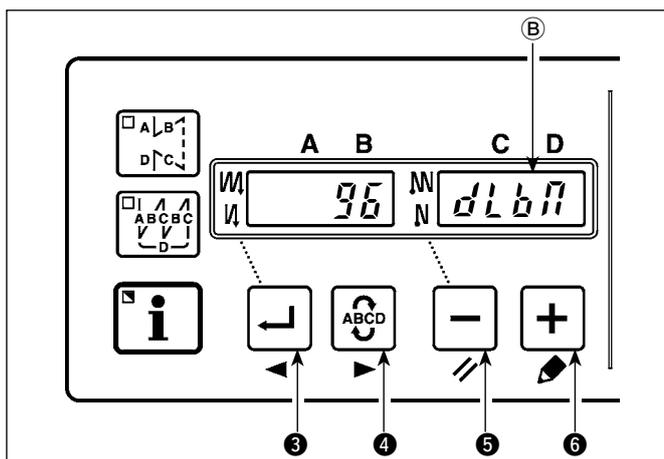
\* If the screen display does not change, re-carry out operation described in step 1).

**Be sure to re-return ON the power switch when one or more seconds have passed after turning it OFF. If the power switch is re-turned ON immediately after turning it OFF, the sewing machine may fail to operate normally. In such a case, be sure to turn ON the power switch again properly.**



2) To move the setting No. forward, press switch 4. To move the setting No. backward, press switch 3.

**If the setting No. is moved forward (or backward), the previous (or subsequent) content of the setting is confirmed. Be careful when the content of a setting is changed (when the / switch is touched).**



Example)

Changing the maximum number of revolutions (setting No. 96)

Press switch 3 or switch 4 to call setting No. "96."

The current set value is displayed on indicator ②.

Press switch 5 to change the setting to "2500."

\* The content of setting of the setting No. returns to the initial value by pressing switch 5 and switch 6 simultaneously.

3) After completion of the changing procedure, press switch 3 or switch 4 to confirm the updated value.

**If the power is turned OFF before carrying out this procedure, the changed content is not updated.**

When switch 3 is pressed, the display on the panel changes to the previous setting No.

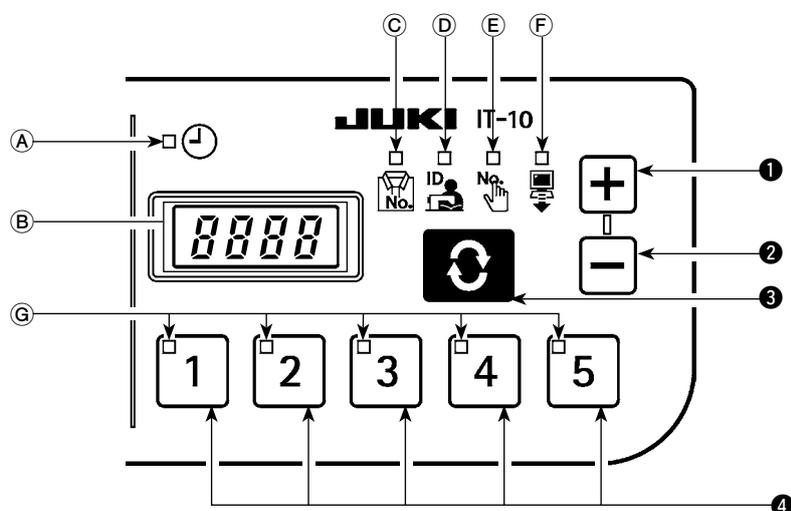


When switch 4 is pressed, the display on the panel changes to the subsequent setting No.

After completion of the operation, the machine is returned to the normal sewing state by turning OFF the power and re-turning it ON.

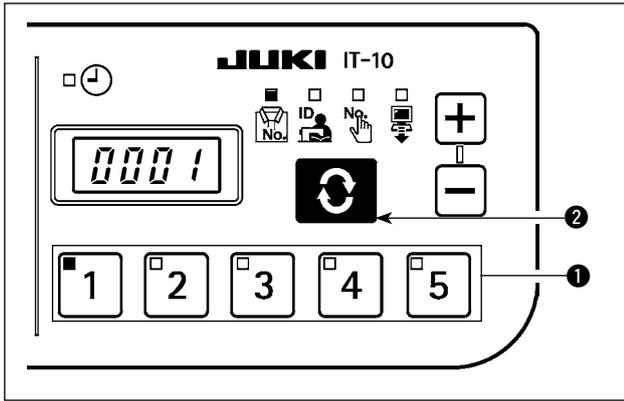
## 7. PRODUCTION MANAGEMENT DATA MEASUREMENT BLOCK (RIGHT PANEL)

### 7-1. Configuration



No.	Switch/indication	Description
(A)	Clock LED	Lights up when the clock is displayed.
(B)	7-segment indication block	Indicates various ID data and clock information.
(C)	Product No. LED	Lights up when Product No. ID is displayed on (B). → See “7-2. (1) Normal startup mode screen”.
(D)	Operator ID LED	Lights up when Operator ID is displayed on (B). → See “7-2. (1) Normal startup mode screen”.
(E)	Optional ID LED	Lights up when Optional ID is displayed on (B). → See “7-2. (1) Normal startup mode screen”.
(F)	Transmitted data LED	Lights up when Transmitted data is displayed on (B). → See “7-2. (1) Normal startup mode screen”.
(G)	No. LED	The selected No. will light up.
①	switch	The value to be indicated in (B) is set up here. The value increases when this switch is pressed.
②	switch	The value to be indicated in (B) is set up here. The value decreases when this switch is pressed.
③	switch	The item to be indicated in (B) is changed here. The indicated item changes when this switch is pressed. → See “7-2. Normal startup mode”.
④	No. switch	Setup information (ID) registered for each item is selected here.

## 7-2. Normal startup mode



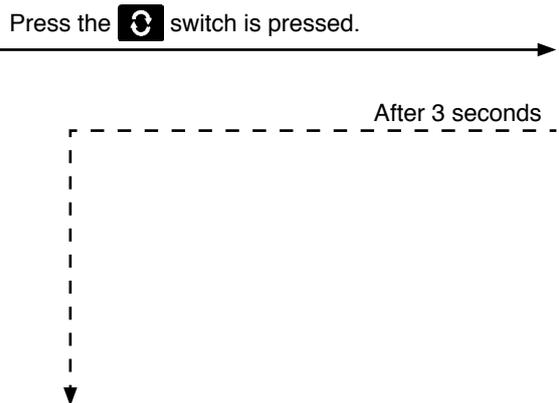
When the power supply is turned on, the item screen and ID data which had been selected before it was turned off in the previous operation.

The selected item and the number for which the ID is registered are indicated in LED.

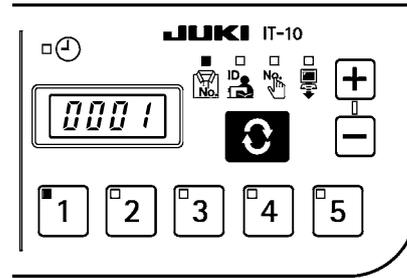
When the No. switch ① is pressed, the ID data for the selected No. is indicated.

When the  switch ② is pressed the following item screen is displayed.

# (1) Normal startup mode screen



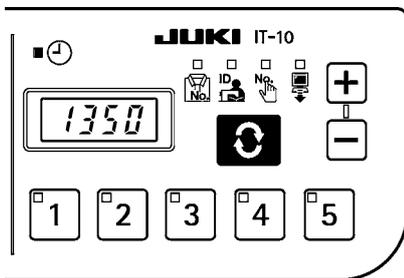
## Product No. display screen



The 16-digit Product No. ID is indicated. A registered ID can be set up from the No. switch.

Press the [Reset] switch is pressed.

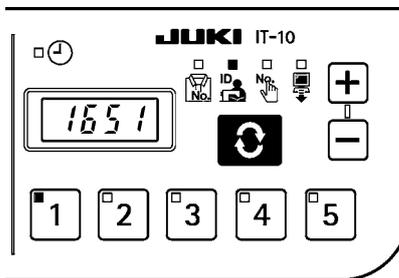
## Clock indication



The current clock is indicated.

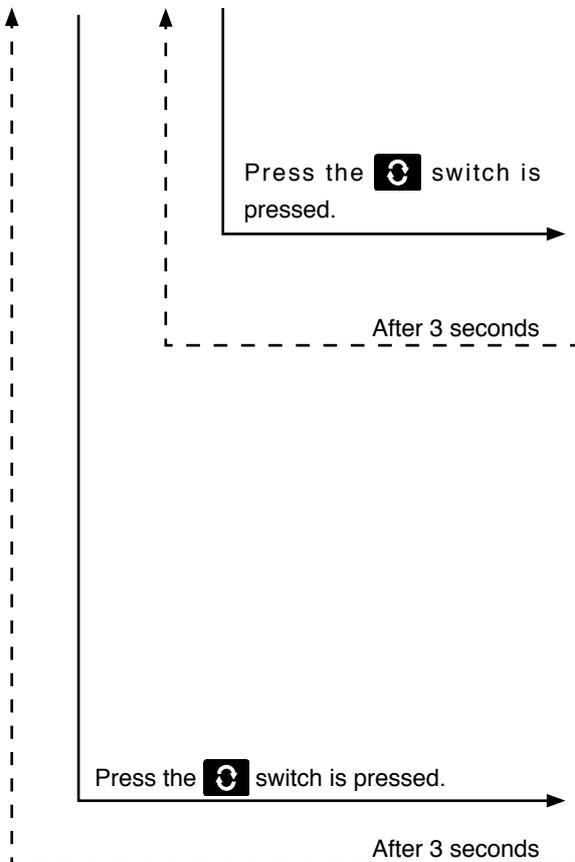
Press the [Reset] switch is pressed.  
After 3 seconds

## Operator ID display screen

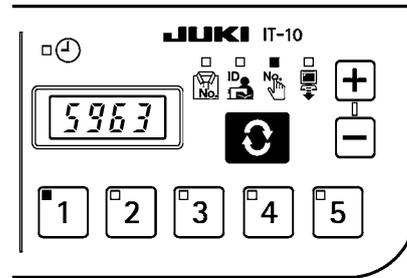


The 8-digit operator ID is indicated. A registered ID can be set up from the No. switch.

Press the [Reset] switch is pressed.



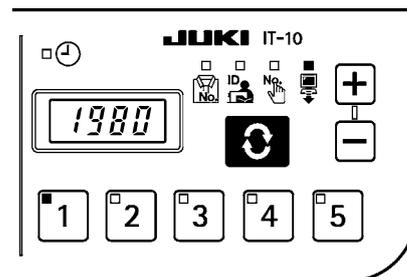
## Optional ID display screen



The 8-digit optional ID is indicated. A registered ID can be set up from the No. switch.

Press the [Reset] switch is pressed.

## Transmission display screen

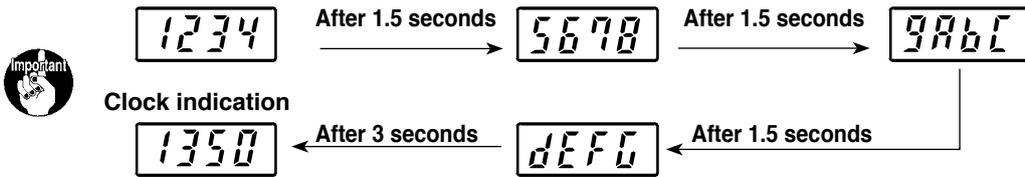


Up to 16 digits of the transmission data is indicated. A registered ID can be set up from the No. switch.

Press the [Reset] switch is pressed.

ID is indicated successively from the first 4 digits.

If the ID is 1234 5678 9ABC DEFG, it is indicated as follows and the indication switches to the clock when the entire ID is indicated.



Whether the clock is automatically displayed after 3 seconds or by pressing the  switch can be selected using the memory switch.

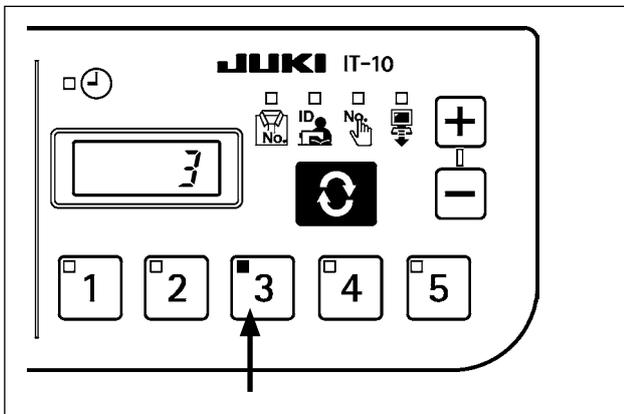
When the setting to display the clock with the  switch is selected, the selected ID is indicated by pressing the memory switch.

## (2) No. switch input procedure under normal startup mode

When the 2 out of the 1 to 5 No. switches are pressed successively, ID can be selected from 30 different IDs. It is considered one-switch operation if one No. switch is pressed and the switch or another switch is not pressed within 1 second and two-switch operation if the next switch is pressed within 1 second.

\* For one-switch operation, the corresponding No. LED lights up. For two-switch operation, the first No. LED lights up and the second No. LED blinks.

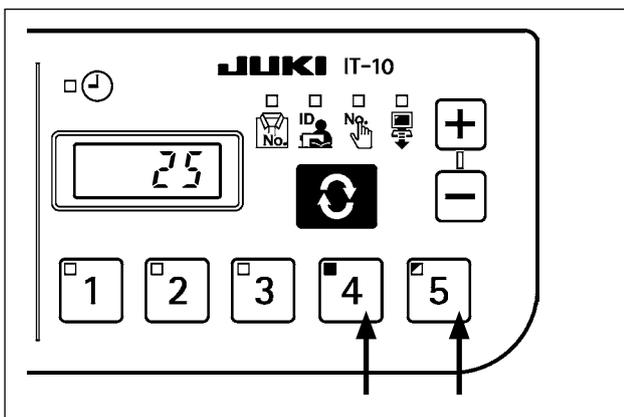
### <e.g.> Inputting “3” (one-switch operation)



 is pressed. ( lights up).

→ No. switch is input successively for 1 second or longer.

### <e.g.> Inputting “25” (two-switch operation)



 is pressed. ( lights up).

→ Then  is pressed successively within 1 second ( blinks).

**(3) List of No. input patterns by switches**

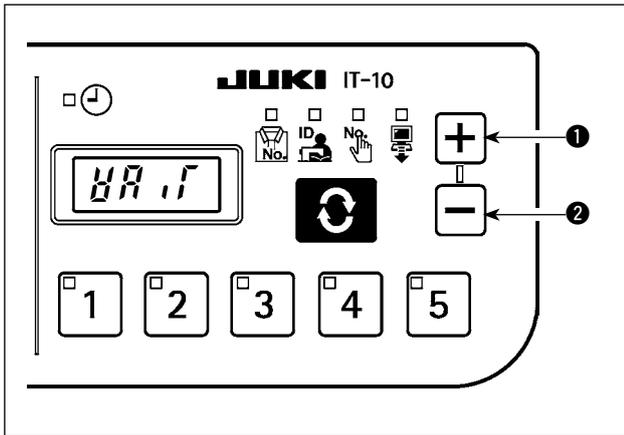
1 indication : Lights up.       1 indication : Blinks.

No.	First switch input	Second switch input	No.	First switch input	Second switch input
1	<input type="checkbox"/> 1	After 1 second	16	<input type="checkbox"/> 3	<input type="checkbox"/> 1
2	<input type="checkbox"/> 2	After 1 second	17	<input type="checkbox"/> 3	<input type="checkbox"/> 2
3	<input type="checkbox"/> 3	After 1 second	18	<input type="checkbox"/> 3	<input type="checkbox"/> 3
4	<input type="checkbox"/> 4	After 1 second	19	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5	<input type="checkbox"/> 5	After 1 second	20	<input type="checkbox"/> 3	<input type="checkbox"/> 5
6	<input type="checkbox"/> 1	<input type="checkbox"/> 1	21	<input type="checkbox"/> 4	<input type="checkbox"/> 1
7	<input type="checkbox"/> 1	<input type="checkbox"/> 2	22	<input type="checkbox"/> 4	<input type="checkbox"/> 2
8	<input type="checkbox"/> 1	<input type="checkbox"/> 3	23	<input type="checkbox"/> 4	<input type="checkbox"/> 3
9	<input type="checkbox"/> 1	<input type="checkbox"/> 4	24	<input type="checkbox"/> 4	<input type="checkbox"/> 4
10	<input type="checkbox"/> 1	<input type="checkbox"/> 5	25	<input type="checkbox"/> 4	<input type="checkbox"/> 5
11	<input type="checkbox"/> 2	<input type="checkbox"/> 1	26	<input type="checkbox"/> 5	<input type="checkbox"/> 1
12	<input type="checkbox"/> 2	<input type="checkbox"/> 2	27	<input type="checkbox"/> 5	<input type="checkbox"/> 2
13	<input type="checkbox"/> 2	<input type="checkbox"/> 3	28	<input type="checkbox"/> 5	<input type="checkbox"/> 3
14	<input type="checkbox"/> 2	<input type="checkbox"/> 4	29	<input type="checkbox"/> 5	<input type="checkbox"/> 4
15	<input type="checkbox"/> 2	<input type="checkbox"/> 5	30	<input type="checkbox"/> 5	<input type="checkbox"/> 5



When No.30 (switches  5 +  5 ) is input, ID will be unselected.

#### (4) Outputting measurement data



When **+** switch **1** is pressed for one second or longer under normal mode, USB data writing function is enabled. When **-** switch **2** is pressed for one second or longer, network data transmission function is enabled.

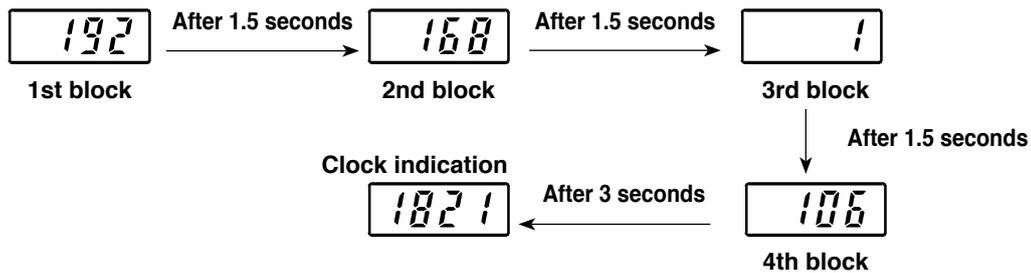
“Wait” blinks on the 7-segment indication block during data output.

In transmission data indication under normal mode, it is possible to indicate 30 different data depending on the No. switch input combination and check the IP address in a similar fashion to other ID data indication.

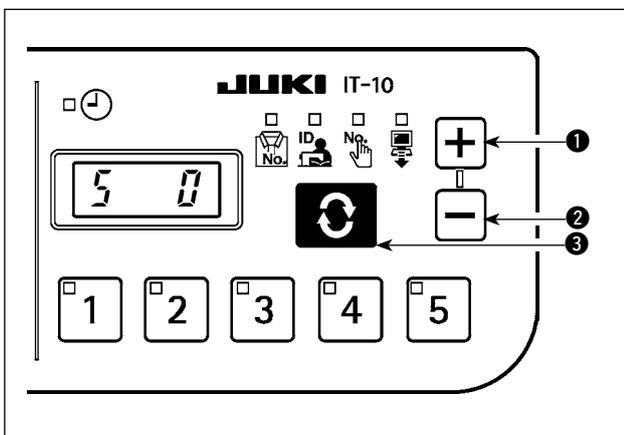
The sewing machine ID can be checked by No. 29 (switches **5** + **4**) for transmission data, and the IP address by No. 30 (switches **5** + **5**).



e.g. For IP address 192.168.1.106,



#### (5) How to change over the shift



Shift number can be changed over by turning the power on with **↻** switch **3** held pressed.

Select the desired shift number by means of **+** switch **1** or **-** switch **2**.

0 : No shift number

1-3 : Select the shift number set in 1A-1.

Refer to HELP for 1A-1 for details of the shift.

## 7-3. Setup mode

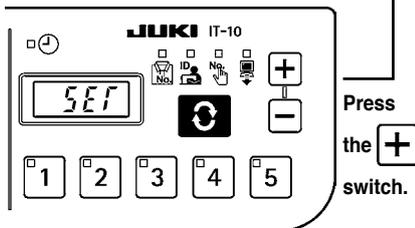
### (1) Setup mode screen

When the power supply is turned on with **1** switch pressed, the system starts up in setup mode.

In setup mode, the setting item is selected by using **+** and **-** switches and confirmed by using the **↻** switch. When confirmed, the corresponding setup screen will be displayed.

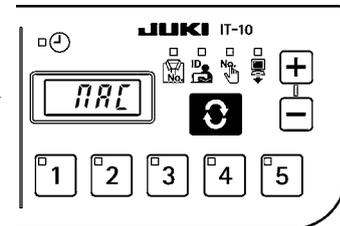
After the completion of the setting procedure, turn the power OFF and re-turn it ON.

#### ■ Setup screen



Press the **-** switch.

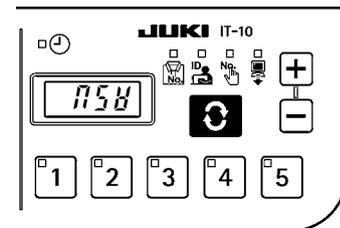
#### ■ MAC address check screen



MAC address assigned for each system can be checked. → See "7-3. (2) MAC address check screen."

Press the **+** switch. ↑ | ↓ Press the **-** switch.

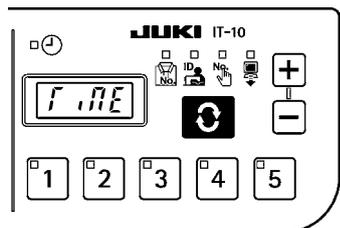
#### ■ Memory switch setup screen



The memory switch No. is set up. → See "7-3. (3) Memory switch setup screen."

Press the **+** switch. ↑ | ↓ Press the **-** switch.

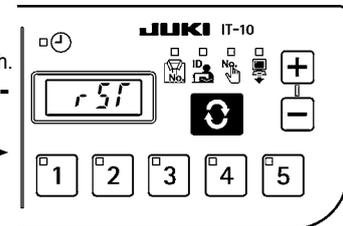
#### ■ Clock setup screen



The clock is set up. → See "7-3. (4) Clock setup screen."

Press the **+** switch.

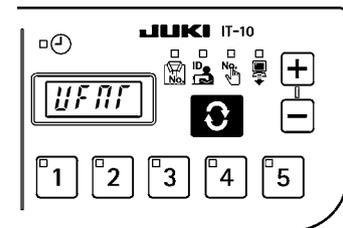
#### ■ Initialization screen



Panel data initialization is executed. → See "7-3. (5) Initialization screen."

Press the **+** switch. ↑ | ↓ Press the **-** switch.

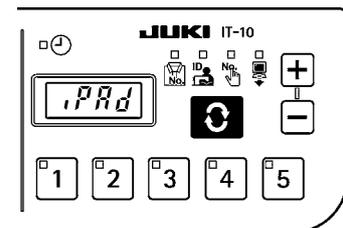
#### ■ USB format screen



The medium connected to USB is formatted. → See "7-3. (6) USB format screen."

Press the **+** switch. ↑ | ↓ Press the **-** switch.

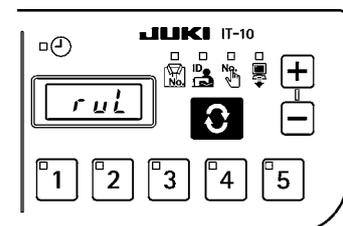
#### ■ IP address check screen



The procedure to obtain the IP address is selected. → See "7-3. (7) IP address setup screen."

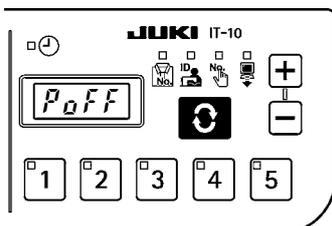
Press the **+** switch. ↑ | ↓ Press the **-** switch.

#### ■ Version check screen



The panel version is checked. → See "7-3. (8) Version check screen."

Press the **+** switch.

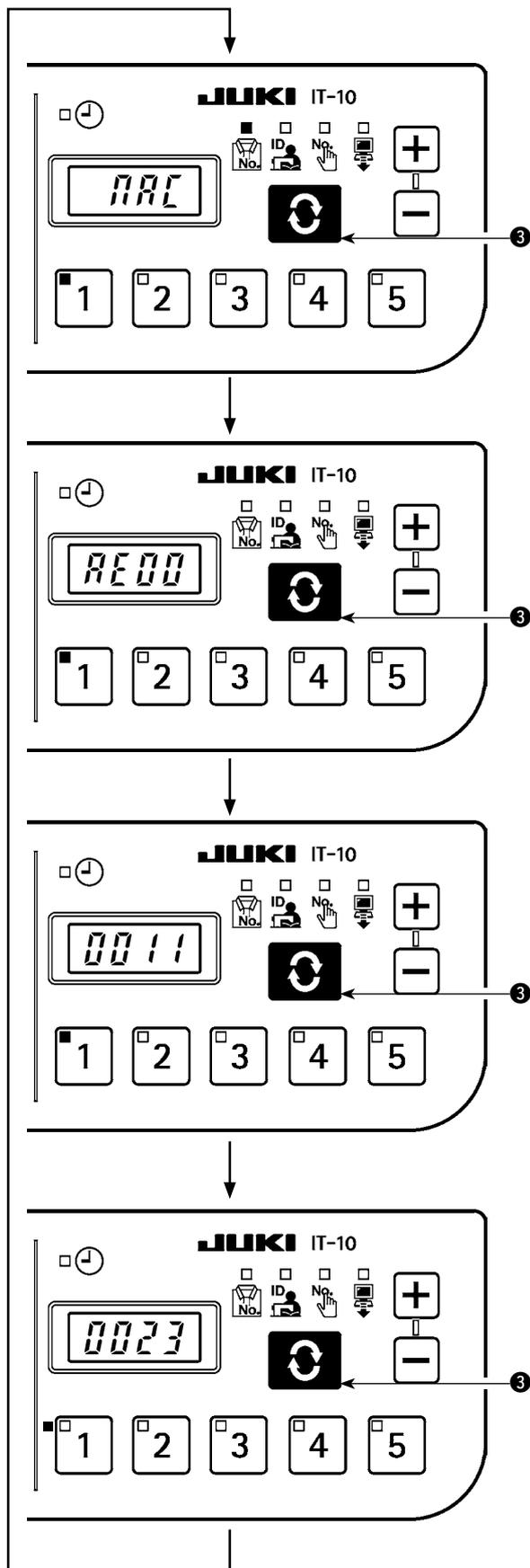


\* If this screen appears, turn the power OFF and re-turn it ON.

## (2) MAC address check screen

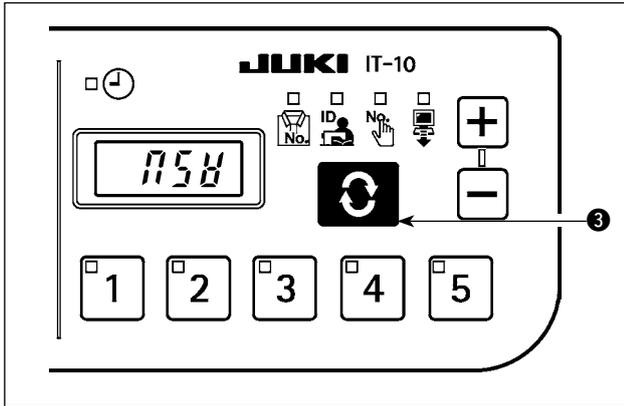
Since MAC address is set up for each device, it can only be checked on the IT panel.

Press the  switch ③ to switch the block indication for MAC address.

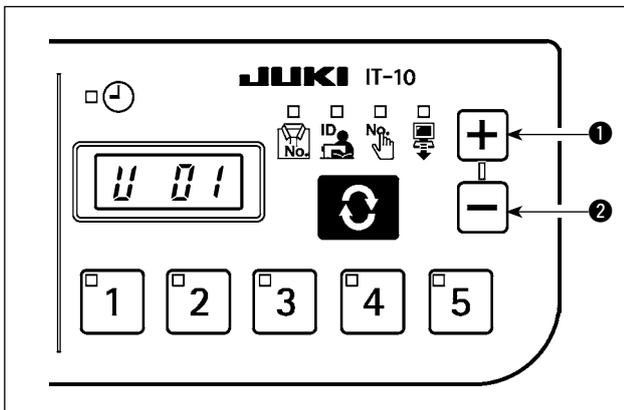


### (3) Memory switch setup screen

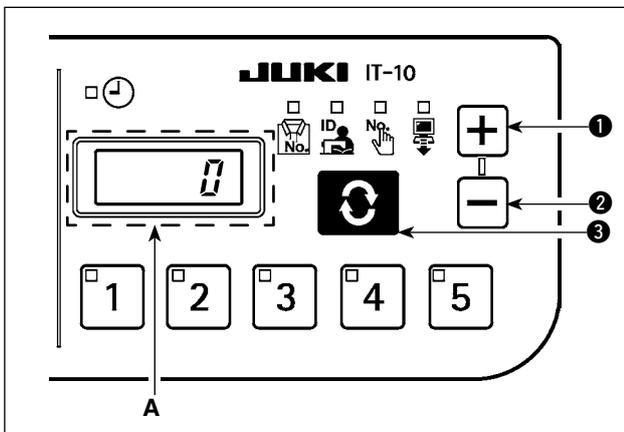
Panel operation can be varied by changing the memory switch setting.



Press the  switch **3** on the memory switch setup screen and display the memory switch No.



The memory switch can be selected by pressing  switch **1** or  switch **2** in this condition.



When the memory switch has been selected, press the  switch **3** to indicate the setting value **A** for the selected memory switch. The setting value can be changed by pressing the  switch **1** or  switch **2** here, and the setting value is saved by pressing the  switch **3** again.

After the completion of the setting procedure, turn the power OFF.

## ■ Memory Switch Data List

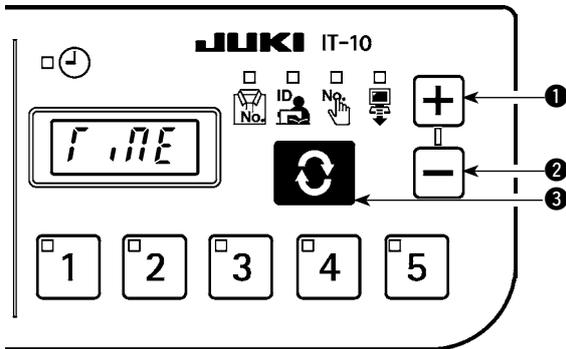
No.	Description	Initial value
U01	<p><b>Network offline setting</b>            Network connection validity/invalidity is selected.            OFF : Network connection is enabled.            ON : Network connection is prohibited.</p>	OFF
U02	<p><b>Clock correction function</b>            Clock correction validity/invalidity when there is network connection is set up.            OFF : Clock correction is not enabled.            ON : The panel clock is corrected in reference to the host PC clock when there is network connection.</p>	ON
U03	<p><b>Indication period for clock indication screen</b>            This item is valid only when the U10 setting is ON.            In how many seconds after displaying the entire ID the clock display screen should be displayed is set up (unit: seconds).</p>	3
U08	<p><b>Network communication ban for ISS measurement data ON/OFF</b>            Transmission of ISS measurement data from the network to the PC is banned.            OFF : Data is transmitted to PC via network.            ON : Data is not transmitted to PC via network.</p>	OFF
U10	<p><b>Selection of clock screen indication method</b>            Whether the clock display screen is displayed or not after ID indication is selected.            OFF : Clock display screen is not automatically displayed. The clock screen is displayed by the  switch.            ON : The clock screen is automatically displayed after the set period in U03 after ID indication.</p>	ON
U11	<p><b>Indication ID on clock screen</b>            This item is valid only when U10 is set to OFF.            The type of ID indicated by lighting up the LED on the clock display screen is selected.            0 : Product number            1 : Operator ID            2 : Optional ID            3 : Transmission data</p>	0
U12	<p><b>Number of stitches neglected by manual switch</b>            The production count-up input is accepted only when the sewing machine is stopped after thread trimming and the number of sewn stitches exceeds the preset number.            This setting is used for preventing incorrect input or fraudulent input.            Setting range: 0 – 99 (stitches)</p>	0
U13	<p><b>Remaining buffer for ISS measurement warning</b>            Warning (E205) is generated when the ISS measurement data capacity stored in the panel becomes small.            0 : No warning is generated.            1 : A warning is generated when the data capacity to output to the network is becoming small (if this warning is generated even when the system is connected to the network, there may be a problem in network connection).            2 : A warning is generated when the data capacity to output to USB is becoming small. Insert a USB memory in the panel and output data if this warning is generated.</p>	1
U14	<p><b>Scroll speed</b>            The scroll speed for displaying IDs larger than 4 digits is set up.            Unit : 0.1 seconds, setting range: 5 (0.5 seconds) to 50 (5.0 seconds)</p>	15

#### (4) Clock setup screen

The year, month, date, hour, minute and second are set up on the clock setup screen.

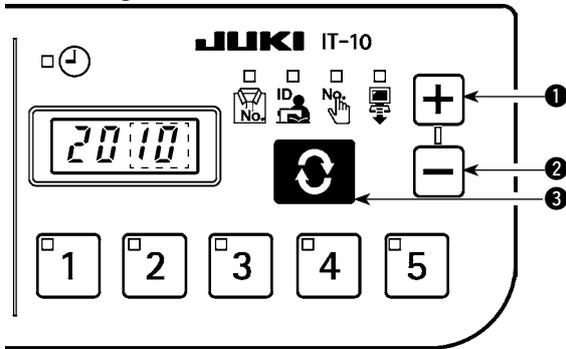
Press **+** switch ① or **-** switch ② to enter the date and time. Then, confirm the entry by pressing **↻** switch ③.

##### ■ Clock setup screen



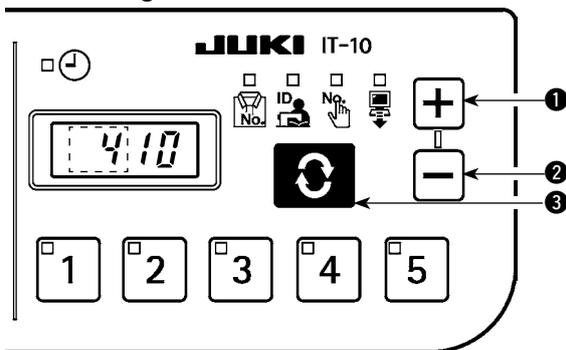
Press the **↻** switch is pressed.

##### ■ Year setting



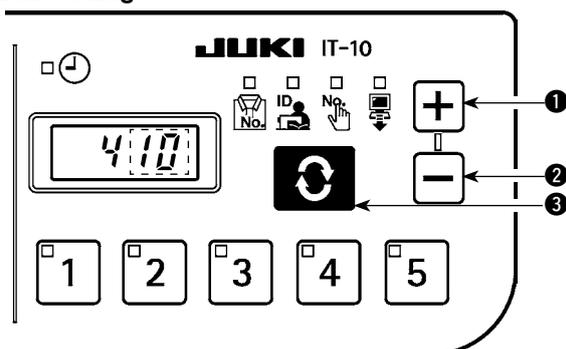
Press the **↻** switch is pressed.

##### ■ Month setting



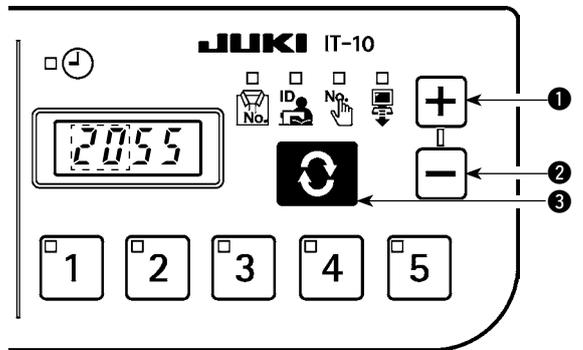
Press the **↻** switch is pressed.

##### ■ Date setting



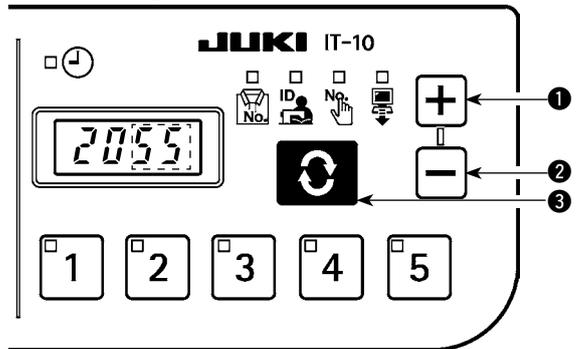
Press the **↻** switch is pressed.

##### ■ Hour setting



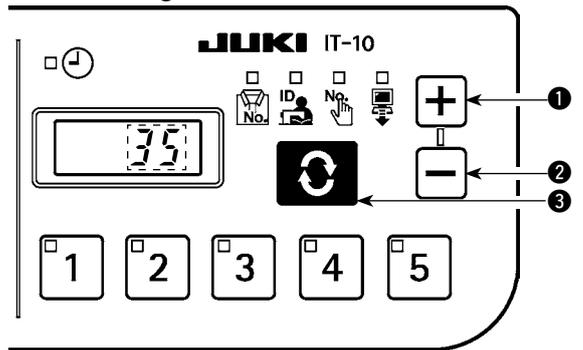
Press the **↻** switch is pressed.

##### ■ Minute setting



Press the **↻** switch is pressed.

##### ■ Second setting

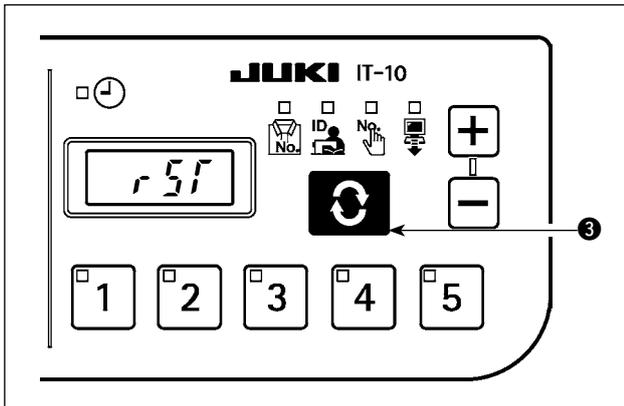


Turn OFF the power supply after setting up everything up to second.

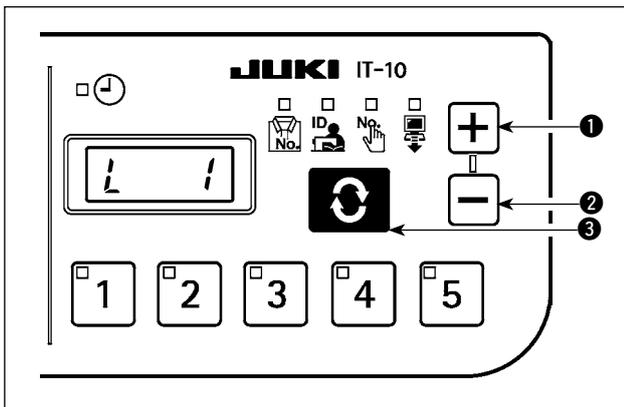
 When it is connected to a network in which IA-1 is connected, time is automatically obtained from IA-1.

## (5) Initialization screen

Panel data is initialized on the initialization screen.



Press the  switch **3** on memory switch initialization screen and indicate the initialization No.



The initialization No. can be selected by pressing the  switch **1** or  switch **2** in this condition.

0 : Initialization is not executed.

1 : Memory switch and so forth are initialized.

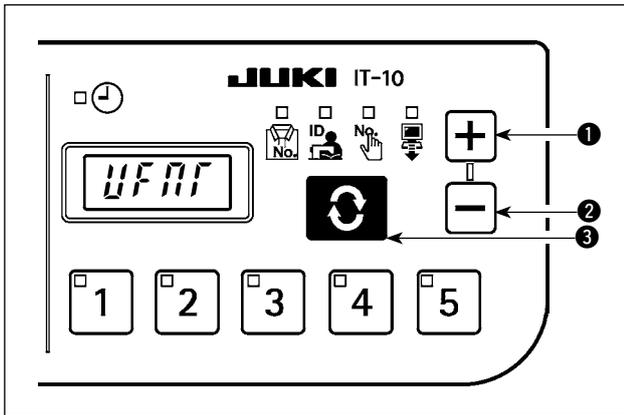
2 : Measurement data is initialized.

3 : Both memory switches and measurement data are initialized.

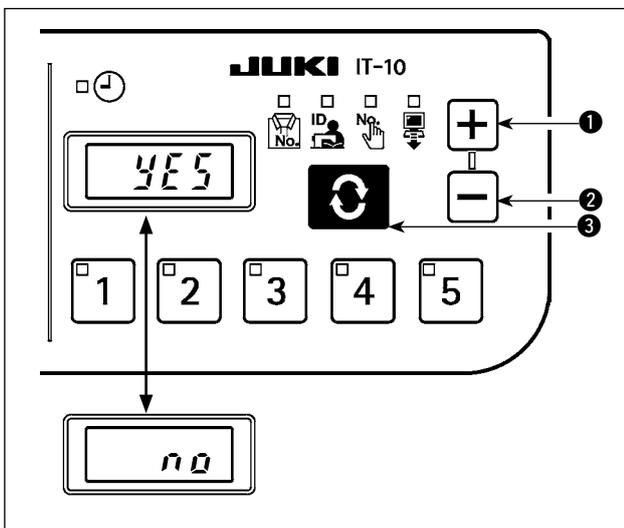
Then, press  switch **3** to confirm the selection and turn the power OFF.

## (6) USB format screen

The external medium connected at the USB is formatted on the USB format screen.

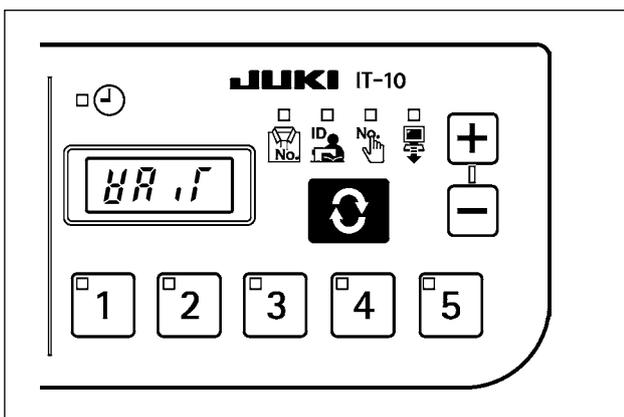


“YES” is displayed when the  switch **3** is pressed on the USB format screen.



“YES” and “NO” are switched by pressing the  switch **1** or  switch **2**.

Press the  switch **3** while “YES” is displayed to start formatting the media connected to USB.

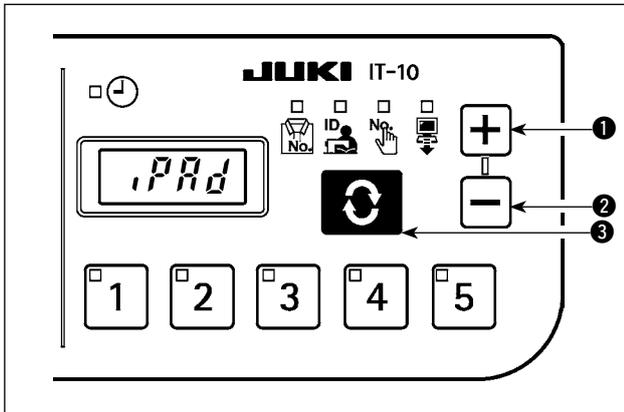


“WAIT” will be displayed during formatting, and it returns to the USB format screen when formatting is completed.

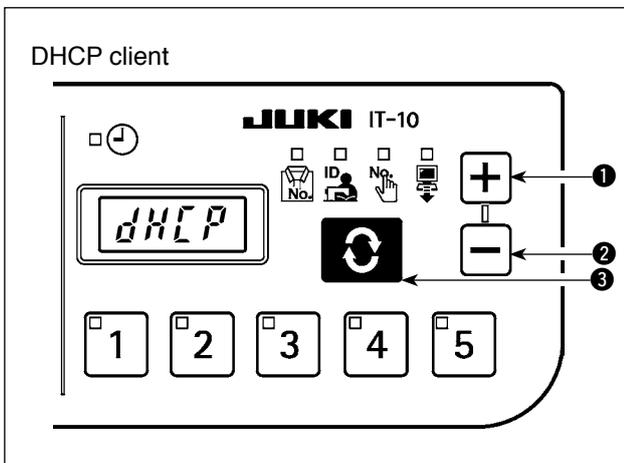
## (7) IP address setup screen

The method to obtain the IP address is selected on the IP address setup screen.

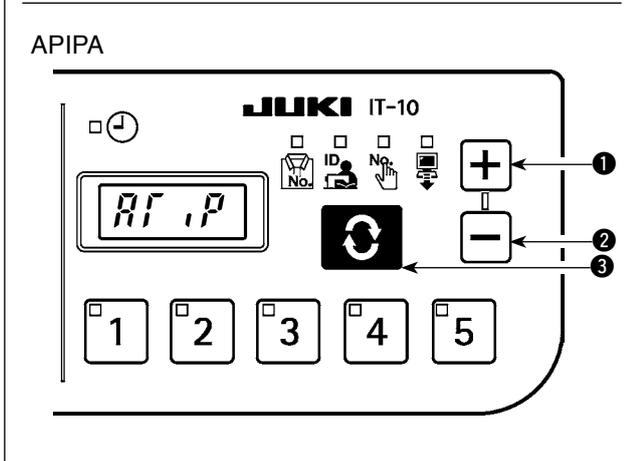
### ■ IP address mode selection



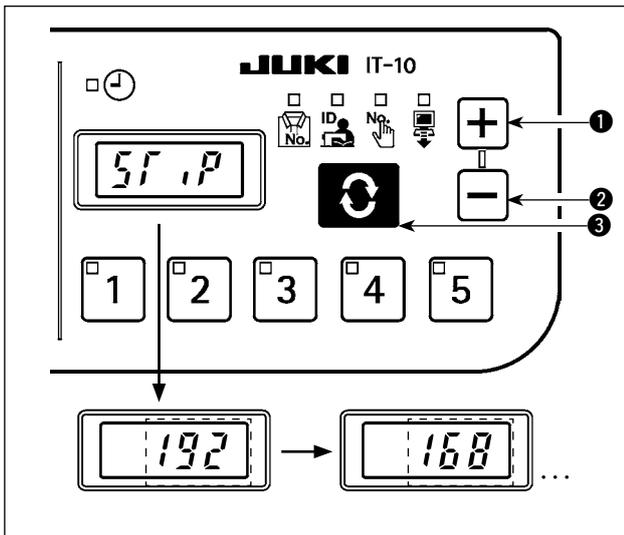
Select the method by pressing the **+** switch **1** or **-** switch **2** with the IP address mode selected, and confirm the selection by pressing the **confirm** switch **3**.



When DHCP or APIPA is selected as the method, the following indication will appear and the screen indication will stay that way.

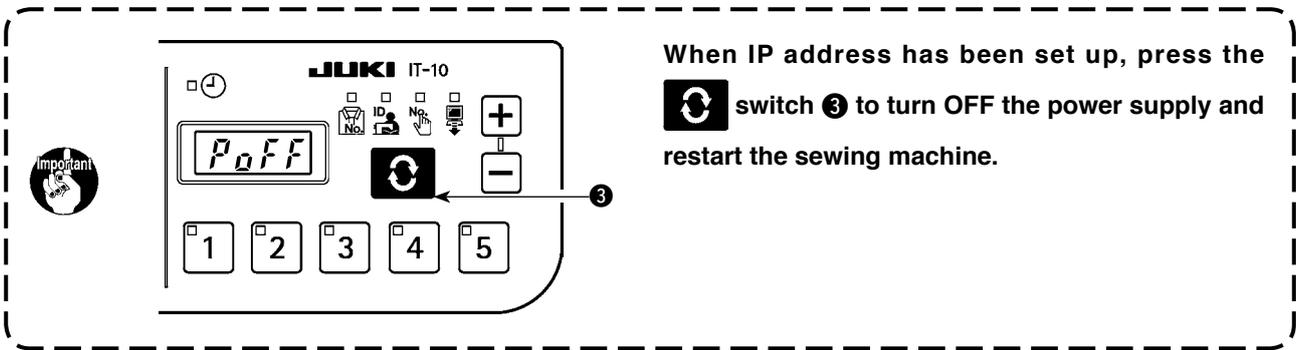


## Manual selection of IP address



When manual input is selected, the IP address input screen will appear. Select the IP address using the **+** switch ① or **-** switch ② for each block and then confirm with the **↻** switch ③.

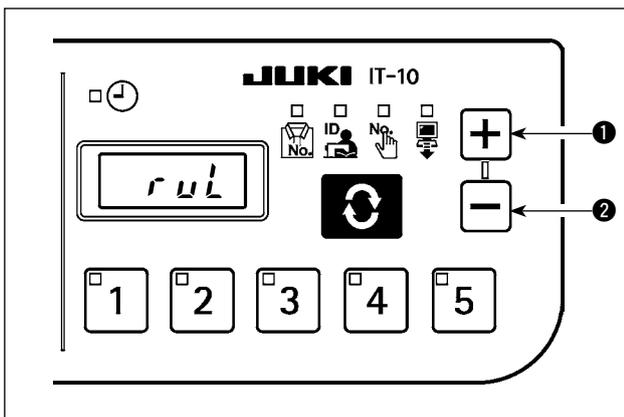
\* The screen will blink during setup.



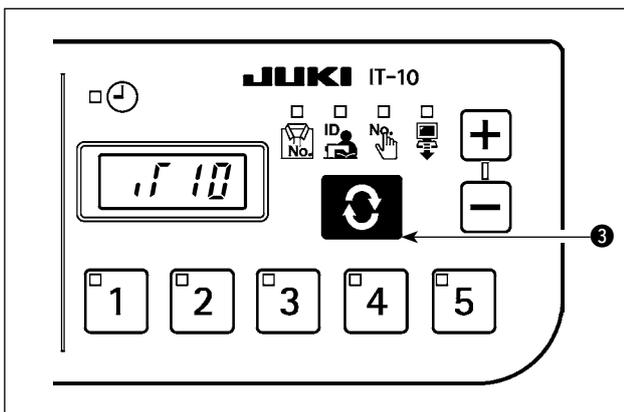
When IP address has been set up, press the **↻** switch ③ to turn OFF the power supply and restart the sewing machine.

## (8) Version check screen

The version data for the panel can be checked on the version check screen.



Select the subject to check the version by pressing the **+** switch ① or **-** switch ② on the version check screen.

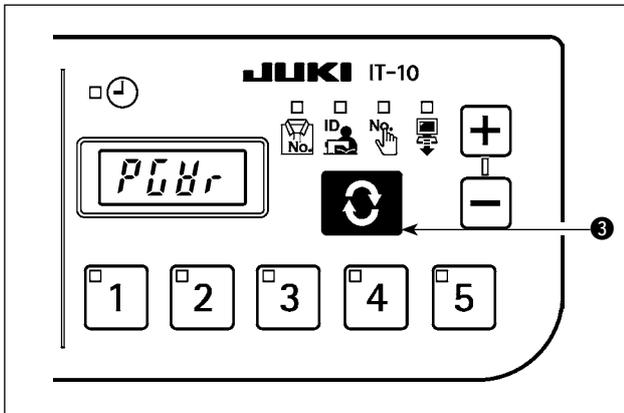


Switch the indication in order of R-V-L branch numbers using the **↻** switch ③.

## 7-4. Software rewrite mode

When the power supply is turned ON with **3** switch pressed, the system will start up in IT-10 application software rewrite mode.

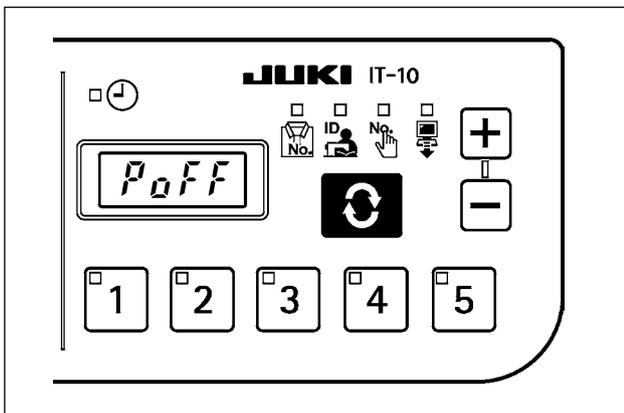
When the power supply is turned ON with **4** switch pressed, the IT-10 is placed in the servomotor software update mode.



Load the software and press the  switch **3** while "PGWr" is displayed to start software rewrite.



**Rewrite cannot be executed if several programs are written in USB.**



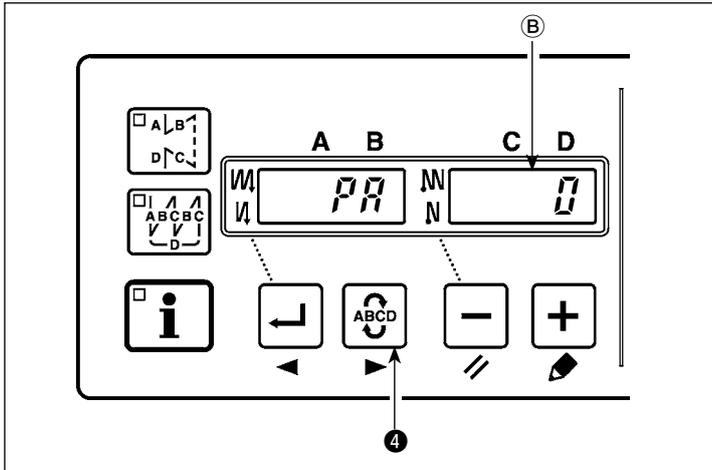
Rewrite progress (%) is indicated while data is loaded, and "PoFF" is displayed when it is completed. Turn OFF the power supply and restart the sewing machine.



**Never cut off the power supply or pull out the USB during this process. Neglect may result in main unit failure.**

## 8. AUTOMATIC COMPENSATION OF NEUTRAL POINT OF THE PEDAL SENSOR

Whenever the pedal sensor, spring, etc. are replaced, be sure to perform following operation :



- 1) Pressing switch  ④, turn ON the power switch.
- 2) Compensated value is displayed on indicator ⑤.

-  **1. At this time, the pedal sensor does not work properly if the pedal is depressed. Do not place the foot or any object on the pedal. Warning sound "blips" and the correct compensation value is not displayed.**

**2. If any display ("-0-" or "-8-") other than a numeric value appears on indicator ⑤, refer to the Engineer's Manual.**

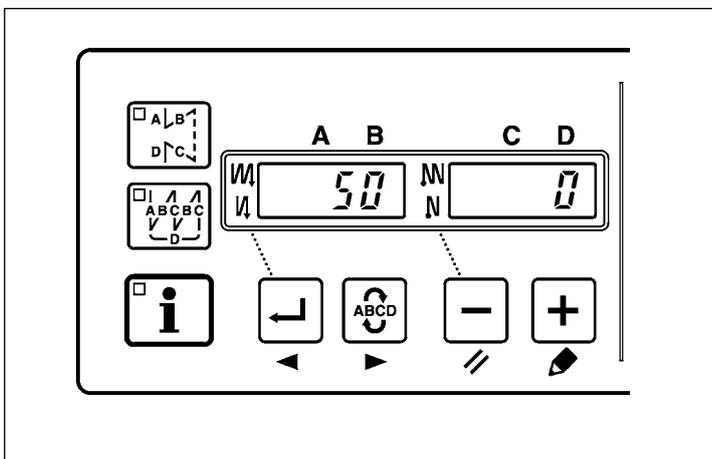
- 3) Turn OFF the power switch, and turn ON the power switch again to return to the normal mode.

 **Be sure to re-turn ON the power switch when one or more seconds have passed after turning it OFF.**  
 (If the ON-OFF operation is carried out faster than the above, the setting may not change normally.)

## 9. SELECTION OF THE PEDAL SPECIFICATIONS

When the pedal sensor has been replaced, change the set value of function setting No. 50 according to the newly connected pedal specifications.

- 0 : KFL
- 1 : PFL



 **Pedal sensor with two springs located at the back part of the pedal type is PFL, and that with one spring type is KFL. Set the pedal sensor to PFL when lifting the presser foot by depressing the back part of the pedal.**

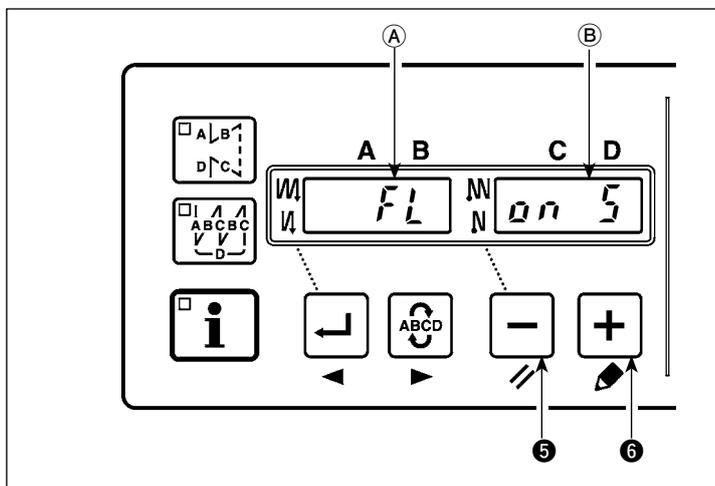
## 10. SETTING OF THE AUTO LIFTER FUNCTION



### WARNING :

When the solenoid is used with the air drive setting, the solenoid may be burned out. So, do not mistake the setting.

When the auto-lifter device (AK) is attached, this function makes the function of auto-lifter work.



- 1) Turn ON the power switch with switch ⑤ held pressed.
- 2) "FL ON" is displayed on indicators ① and ② with a blip to make the auto lifter function effective.
- 3) Turn OFF the power switch, and turn ON the power switch again to return to the normal mode.
- 4) Repeat the operation 1) to 3), and LED display is turned to (FL OFF). Then, the function of auto-lifter does not work.

FL ON : Auto-lifter device becomes effective. Selection of the auto-lifter device of solenoid drive (+33V) or of air drive (+24V) can be performed with switch ⑥.  
(Changeover is performed to drive power +33V or +24V of CN37.)

FL on 5

**Solenoid drive display (+33V)**

FL on A

**Air drive display (+24V)**

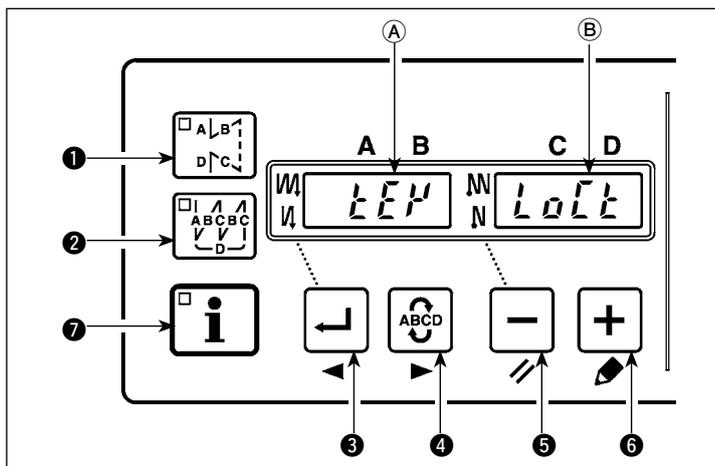
FL OFF : Auto-lifter function does not work. (Similarly, the presser foot is not automatically lifted when programmed stitching is completed.)



1. To perform re-turning ON of the power, be sure to perform after the time of one second or more has passed.  
(If ON / OFF operation of the power is performed quickly, setting may be not changed over well.)
2. Auto-lifter is not actuated unless this function is properly selected.
3. When "FL ON" is selected without installing the auto-lifter device, starting is momentarily delayed at the start of sewing. In addition, be sure to select "FL OFF" when the auto-lifter is not installed since the touch-back switch may not work.

## 11. SELECTING PROCEDURE OF THE KEY-LOCK FUNCTION

Setting of the number of stitches for a pattern can be prohibited by enabling the key lock function.



- 1) Turn ON the power switch with switch and switch held pressed.
- 2) "KEY LOCK" is displayed on indicators and with a blip to make the key-lock function effective.
- 3) The panel returns to the normal operation after displaying "KEY LOCK" on the indicators.
- 4) While the key lock function is effective, "KEY LOCK" is displayed on the indicators when turning the power ON.

- 5) When you carry out steps 1) to 3) in repetition, "KEY LOCK" is not displayed when turning the power ON and the key lock function is rendered ineffective.

• KEY LOCK display when turning the power ON

Display appears: The key lock function is effective.

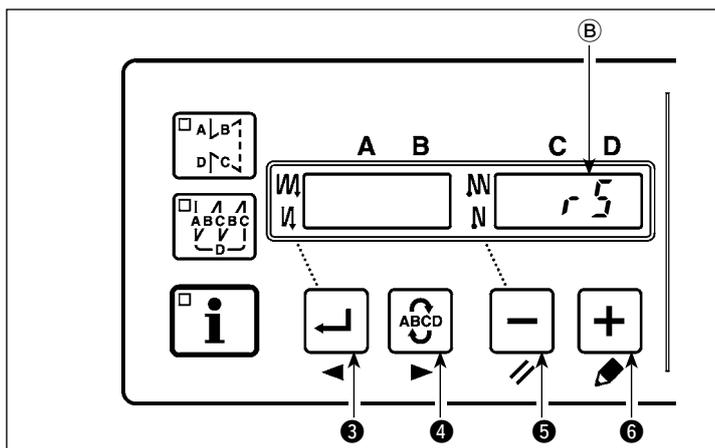
Display does not appear: The key lock function is ineffective.

In the case the key lock function is effective, the operation of the panel will be as shown in the table below.  
(Pattern indication number)

• In the case the operation is disabled	Setting of the number of stitches for a pattern ()
• Functions that are operated in the same procedure as in the case of normal operation state	Change of the sewing pattern ( and ) Changeover of the reverse feed stitching ( and ) Production support function ()

## 12. INITIALIZATION OF THE SETTING DATA

All contents of function setting can be returned to the standard set values.



- 1) Turn ON the POWER switch with all of switch , switch and switch held pressed.
- 2) "rS" is displayed on indicator with a blip to start initialization.
- 3) The buzzer sounds after approximately one second (single sound three times, "peep", "peep", and "peep"), and the setting data returns to the standard setting value.

**Caution** Do not turn OFF the power on the way of initializing operation. Program of the main unit may be broken.

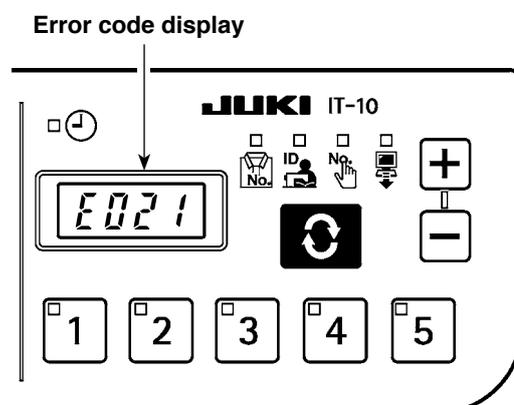
- 4) Turn OFF the power switch and turn ON the power switch after closing the front cover. The machine returns to the normal motion.



1. When you carry out the aforementioned operation, the neutral position correction value for the pedal sensor is also initialized. It is therefore necessary to carry out automatic correction of the pedal sensor neutral position before using the sewing machine. (Refer "8. Automatic compensation of neutral point of the pedal sensor".)
2. When you carry out the aforementioned operation, the machine-head adjustment values are also initialized. It is therefore necessary to carry out adjustment of the machine head before using the sewing machine. (Refer "5. Adjusting the machine head".)
3. Even when this operation is performed, the sewing data set by the operation panel cannot be initialized.

## 13. ERROR INDICATION

This system enables interlock (or restriction of functions) to prevent the problem from spreading in case a problem is detected, and contains the following error codes to notify the problems. When requesting for service, please also check the error code. Refer to the Instruction Manual for the control box errors on the control box.



Error code	Error description	Restoration method
E011	<b>External medium not inserted</b> No medium is inserted.	Reset (Press the  switch.)
E012	<b>Read error</b> Data cannot be read from the medium.	Reset (Press the  switch.)
E013	<b>Write error</b> Data cannot be written into the medium.	Reset (Press the  switch.)
E015	<b>Format error</b> The medium cannot be formatted.	Reset (Press the  switch.)
E016	<b>External medium capacity exceeded</b> The capacity of the medium is insufficient.	Reset (Press the  switch.)
E021	<b>Medium access failure</b>	Reset (Press the  switch.)
E065	<b>Network transmission failure</b> Data cannot be transmitted to the network.	Reset (Press the  switch.)
E067	<b>ID data reading failure</b> ID data stored in the medium is corrupt.	Reset (Press the  switch.)
E204	<b>USB insertion</b> The sewing machine was started up with USB inserted.	Reset (Press the  switch.)
E205	<b>Remaining ISS buffer capacity warning</b> The buffer for ISS data storage is going to be full soon. When it is full and used, data will be erased from the oldest ones.	Reset (Press the  switch.)
E703	<b>Panel connection to an unexpected sewing machine (model error)</b> When the models of panel and sewing machine do not match in initial communication.	Connect the operation panel to the correct sewing machine.
E704	<b>Unmatched system version</b> System version does not match in initial communication.	Re-write the program.
E915	<b>Operation panel ⇔ electrical BOX communication error</b> Error occurred in data communication.	Turn OFF the power
E938	<b>Error in program rewriting file</b>	Turn OFF the power
E949	<b>No file for program rewriting</b>	Turn OFF the power
E950	<b>There are several files for program rewriting</b>	Turn OFF the power