



**Ajax**<sup>™</sup>neo

# ADP-610N

## Instruction Manual

For your safety, read and fully understand this Instruction Manual thoroughly before operation. Keep this Manual in a place of easy access. If you have any questions, do not hesitate to contact us or your distributor.

# WELCOME

Thank you for choosing our utility press machine.  
This machine was delivered to you after thorough inspection at our plant.  
Read this manual carefully for proper usage of this machine.

## Product Specifications

Model	ADP-610N
Type	ADP610N-V1A****E ADP610N-V1AH****E
Power	380/400V, 3-phase, 50Hz, 1.6A
Air Consumption	480 liter/hour, calculated at 30 times per hour
Air Pressure	0.5MPa
Air Pipe	3/8B
Steam Consumption	6.7 kg/hour
Steam Pressure	0.5MPa
Steam Pipe	Inlet: 1/2B , Outlet: 1/2B
Weight	290kg
Dimensions Width × Depth × Height	1710 × 1195 × 1590(mm)

# Table of Contents

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Product Specifications .....	2
Safety Guideline .....	4
Hazardous Area .....	7
Electrically Live Area .....	7
Range of the Machine in Motion .....	8
High Temperature Area .....	9
Safety Labels .....	10
Part Name and Function .....	12
Operation part .....	13
Control panel .....	14
Operation Procedures .....	16
Supply Air .....	16
Supply Steam .....	16
Turn ON the Power .....	17
Timer Settings .....	17
Press finishing .....	18
Automatic operation .....	18
Manual operation .....	19
After work of the day .....	20
Other Operations .....	20
How to release the Emergency stop .....	20
How to Replace the Cover & Pad .....	21
Service Menu .....	23
Troubleshooting .....	28
Daily Maintenance .....	30
Check Item List .....	30
Daily Check Items .....	31
Yearly Check Item .....	32
Spare Parts List .....	33
1: Left side diagram .....	34
2: Inside diagram .....	36
3: Right side diagram .....	38
4: Steam piping diagram .....	40
5: Cover diagram .....	42
Diagram .....	44




# Safety Guideline

Warning labels are placed on the machine in order to prevent an operator and others from injury, and to ensure proper and safe operation. For the most part labels are placed on the operational area of the machine.













Use this product safely upon reading this manual and understand the warning labels on the machine.

Keep this manual, as it will be needed in the future.

- Read the description of each warning label below. The following categories explain the degree of hazardous or damage caused by incorrect use of the product without following the safety label or the contents of this manual.

	<b>DANGER</b>	This indicates a potentially hazardous situation which, if not followed, may result in death.
	<b>WARNING</b>	This indicates a potentially hazardous situation which, if not followed, may result in serious injury.
	<b>CAUTION</b>	This indicates a potentially hazardous situation which, if not followed, may result in minor or moderate injury.

- Regulations are shown in a table below.

	<b>General attention</b> Indicate general dangers, warnings, and cautions not specified.		<b>General prohibitions</b> Indicate general prohibited matter.
	<b>Electric shock hazard</b> The possibility of electric shock in specific conditions is indicated.		<b>General forced</b> Indicate general attention what you have to do.
	<b>Cut hazard</b> Indicates the possibility of cutting hands or fingers.		<b>Prohibition of dismantling</b> Notice of prohibition when there is a risk of electric shock or the like due to disassembly of the machine.
	<b>Burn hazard</b> The possibility of burns caused by high-temperature sites is indicated.		<b>Necessity to ground</b> This is used to indicate that the machine must be properly grounded.
	<b>Pinch hazard</b> The possibility of injuries caused by hand and fingers caught by rollers, etc. is indicated		<b>Pinch hazard</b> The possibility of injuries caused by hand and fingers caught by gears, etc. is indicated
	<b>Rotation hazard</b> The possibility of injury caused by removing the guard of the rotation part of the motor, fan, etc.		<b>Pinch hazard</b> The possibility of injuries caused by hand and fingers caught by moving part, etc. is indicated

Sankosha cannot be held legally responsible for any injuries to operators or damage to machines caused by alterations to machines or operations not described in the machine manual.



# WARNING

## ■ Installation



Installation of this product must be performed only by authorized distributor or by qualified personnel who has read this manual.

**Improper installation or rigging of this machine may result in shock, injury or burn.**

## ■ Shock Hazard



Do not put a finger or metal into the machine or Control Box.

**It may cause electric shock or fire.**

## ■ Ground Connection



The green wire must be properly grounded. The electrical code must be conformed to the power.

**Incorrect connection may cause electric shock.**

## ■ In case of flooding



Call authorized personnel to inspect and repair the machine if necessary.

**It may cause electric shock.**

## ■ Fire Hazard



Flammable articles such as gasoline, etc should not be located near the machine.

**It may cause fire or explosion.**

## ■ Maintenance



Call authorized service personnel.  
Do not dismantle by yourself.

**It may cause electric shock, injury, fire or accident.**

## ■ Shock Hazard



Do not touch plugs or switches with wet hands.

**It may cause electric shock.**

## ■ Shock Hazard



Parts must not get wet when cleaning the machine with water.

**It may cause electric shock.**

## ■ Alteration Hazard



Do not improve or dismantle the machine.

**It may cause accident.**

## ■ Safety Instructions



For your safety, follow the instructions below.

- Only qualified trained personnel can operate the machine.
- Carefully read this Instruction Manual in full before using the machine.
- Make sure there is no one working near the machine before beginning operation.
- The machine should be operated individually at all times.
- Before conducting the proper maintenance, always keep following instruction: close the air and steam valves and release their residual pressures.

## ■ Do not Use During Disrepair



Turn the main power and breaker switches off in case of malfunctions.  
Call authorized service personnel.

**It may result in injury or further damage to the equipment.**



# CAUTION

## ■ Damage by Water



When the machine is damaged by water, do not use. Ask a local distributor for maintenance or repair.

**It may cause electric shock, injury, fire or accident.**

## ■ Cleaning



Both the main power switch and the breaker should be off when cleaning.

**It may cause electric shock without power-off.**

## ■ Check and cleaning



Electric plugs and electric sockets need to be checked and cleaned periodically. If you find any damage, call your distributor.

**Breakage can cause electric shock and fire.**

## ■ Adequate space



Adequate space around the machine should be secured for service and maintenance.

**Potential injury to service/maintenance personnel may result.**

## ■ Inside use only



The machine must be located inside the facility.  
Do not place it in a damp or wet area.

**It may cause an accident.**

## ■ Maintenance of warning labels



The labels need to be cleaned and replaced if necessary.

**It may cause an accident.**

## ■ Not in use abroad



Do not use the machine outside of designated countries.

**It may cause fire due to different electrical supply.**

## ■ Operation procedure



Make sure to follow the proper procedure of operations to the safety use of the machine.

**It may result in damage to the equipment or injury to the operator.**

## ■ Regular Clean Up



It may cause dust in the machine if you do not clean the machine for a long time.

**It may result improper operation or damage to the equipment.**

# Hazardous Area

## Electrically Live Area

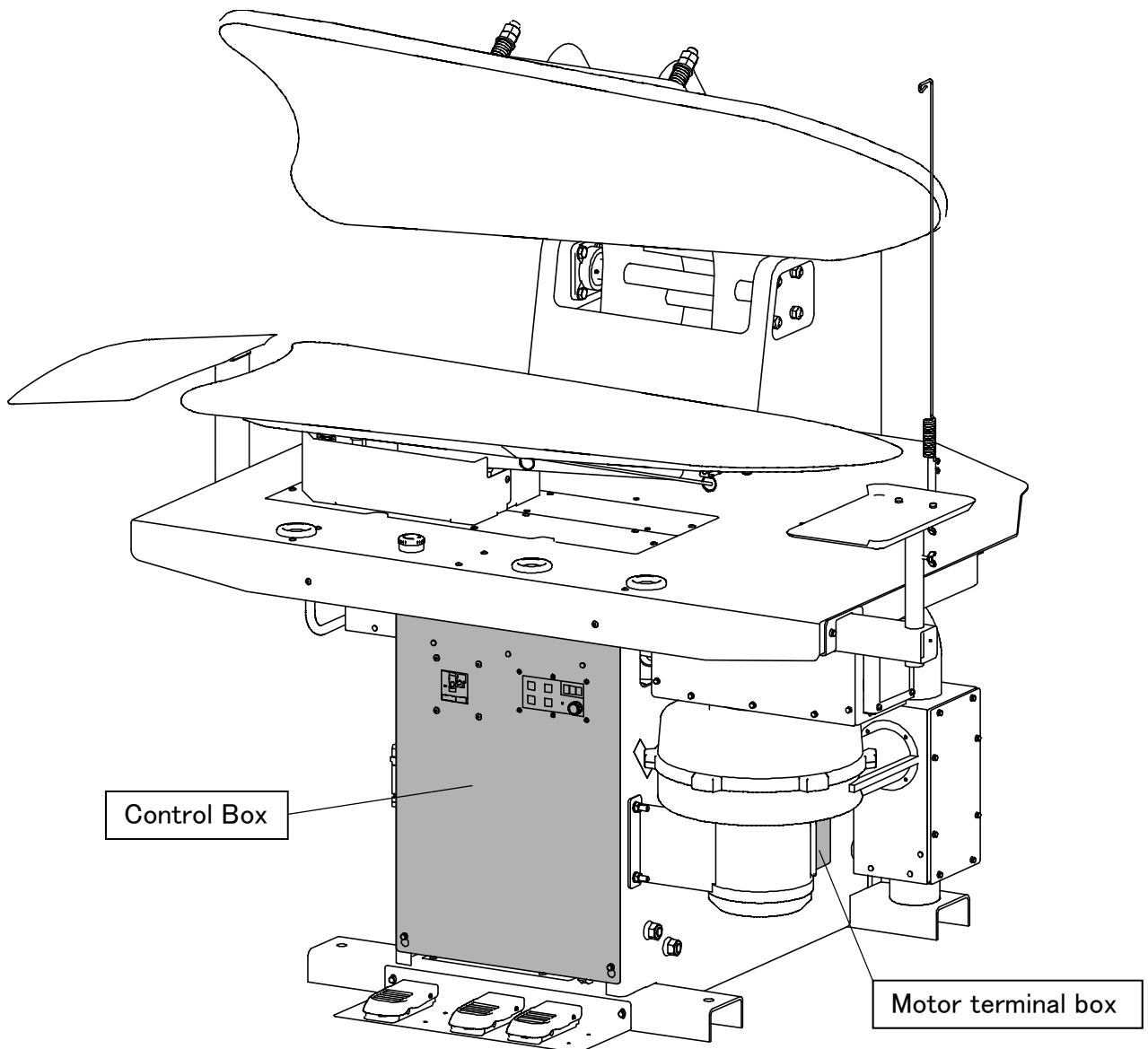


### DANGER

Control box has terminals with lethal voltage.

- Only trained maintenance personnel can open the box.
- Turn off the power before opening the box.

Ignoring this warning will result in serious injury or death due to electric shock.



## Range of the Machine in Motion



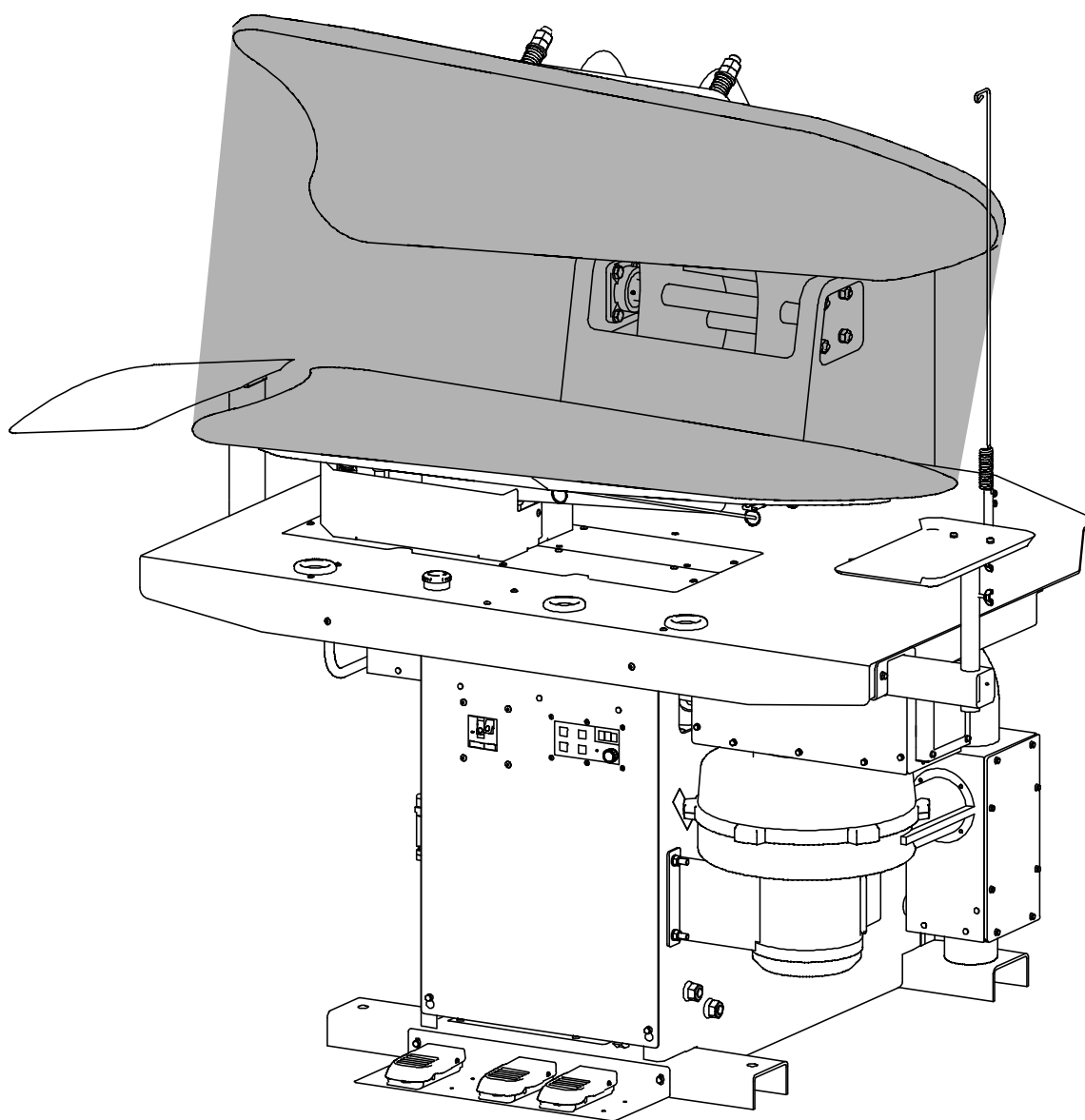
### WARNING

The machine has a certain range of motion.

Keep your hands away from the range of the machine in motion during operation.

Before starting check-up or maintenance, turn off the air and power first.

Ignoring this warning could result in serious injuries.



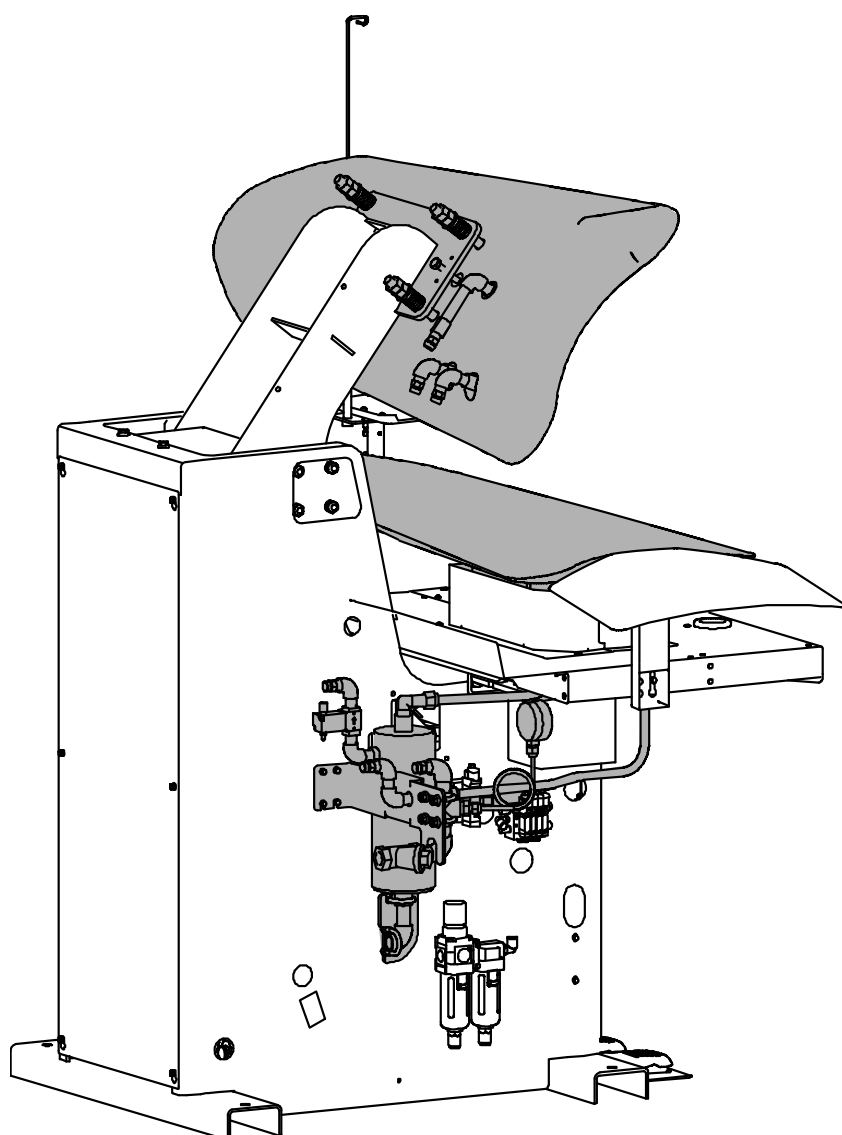


## High Temperature Area

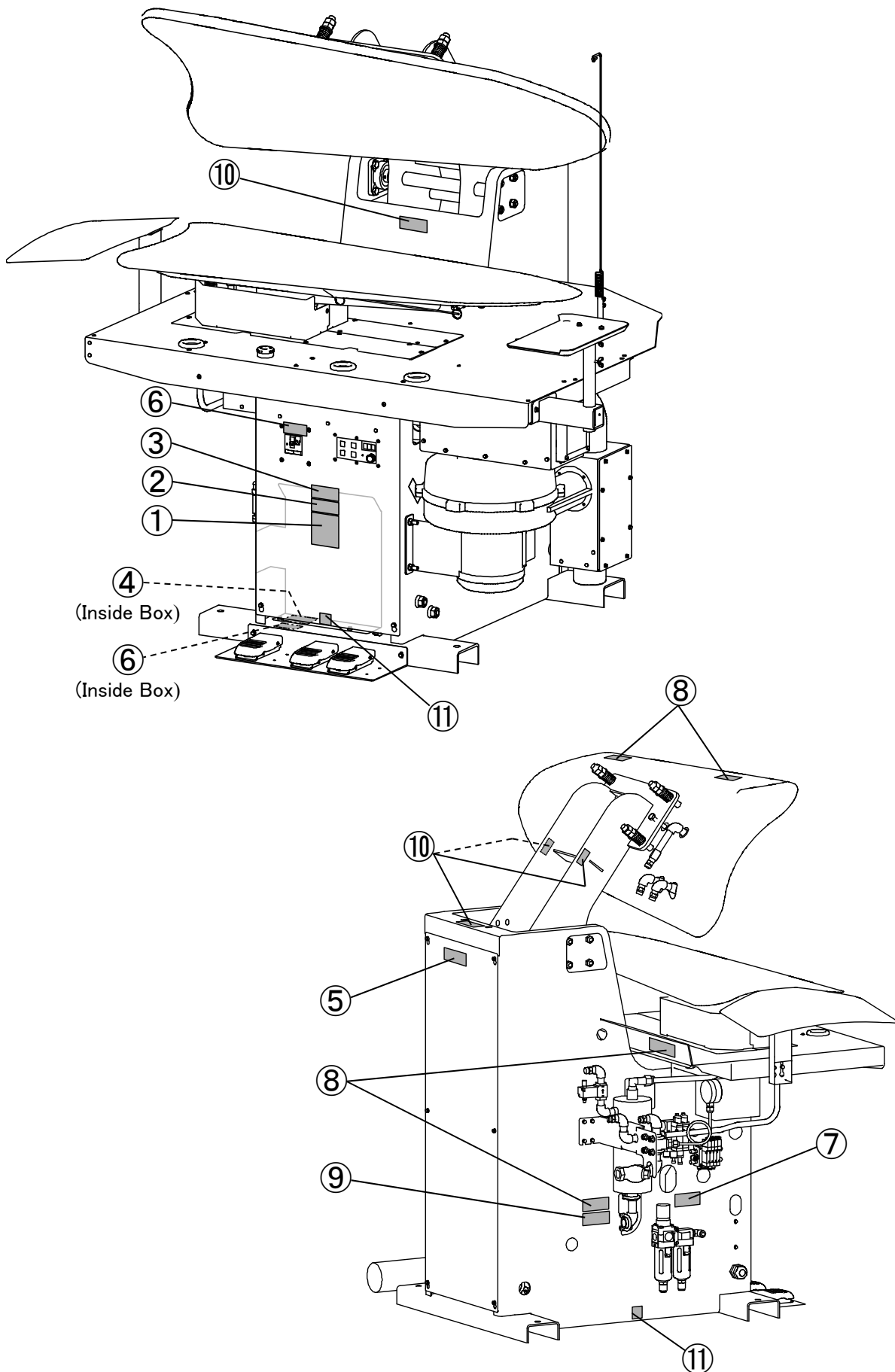


### CAUTION







The machine has Press Heads and steam piping which get extremely hot during operation. Never touch the pressing surface during operation. Do not also touch these areas for 30 minutes after the steam turns off. Ignoring this warning may result in burns.



# Safety Labels



①	<b>SAFETY INSTRUCTIONS</b> <b>⚠ WARNING</b> For your safety, follow these instructions. Only qualified personnel trained for requirements by supervisor can operate the machine. Carefully read the Instruction Manual to understand the content completely before operation. Make sure there is no one working on the machine before operation. Never operate the machine with anyone else. Before maintenance, follow the following instructions. Close the air and steam valves, and release their residual pressures.	②	<b>⚠ WARNING</b>  <ul style="list-style-type: none"> <li>• Operate by only one person.</li> <li>• Do not enter into the action area.</li> </ul>	④	<b>⚠ WARNING</b> This machine is 3-Phase/4-wire type which uses N(Neutral) line. Be careful about electric wiring.
		③	<b>⚠ DANGER</b>  <ul style="list-style-type: none"> <li>• Hazardous Voltage inside!</li> <li>• Disconnect power before opening control box.</li> </ul>	⑤	<b>⚠ WARNING</b> Do not remove this cover. It may cause serious trouble when the cover is removed during the operation. ※If the cover needs to be removed for maintenance work, turn the power off, close air valve and drain residual pressure.

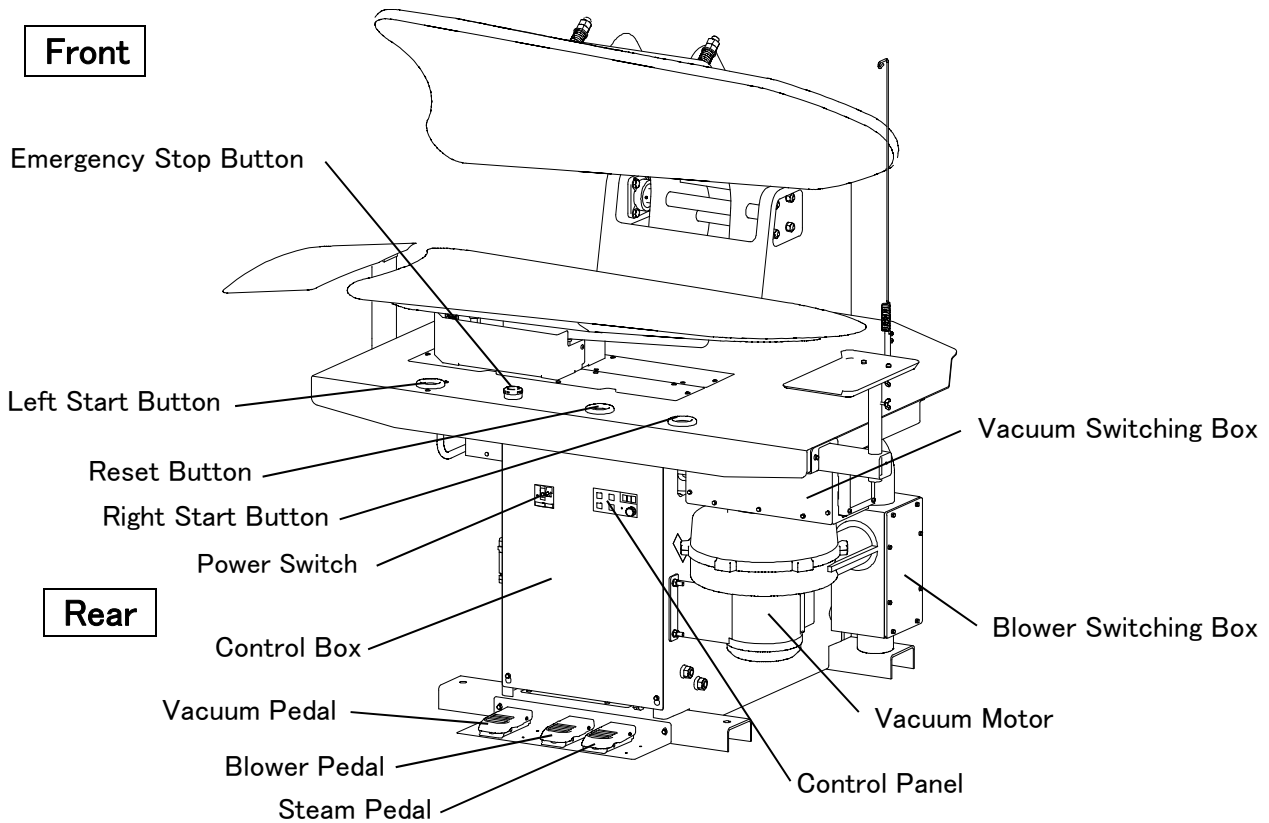
⑥	 Shock Hazard	It may cause electric shock. Before opening Control Box or maintenance, always turn off the power. Do not touch any power switched with wet hands.
⑦	 High pressure air	High pressure air! Before maintenance, close air valve and drain residual pressure.
⑧	 Burn Hazard	Press head surface is HOT! Do not touch press head, steam piping and its surrounding area.
⑨	 High pressure steam	High pressure steam! Before maintenance, close steam valve and let residual steam discharge
⑩	 Pinch Hazard	Pinch hazard! Keep hands away from around this label while operating.
⑪		Center Mark Indicating the center of gravity of the machine

Make sure that each warning label is placed at the location shown above.

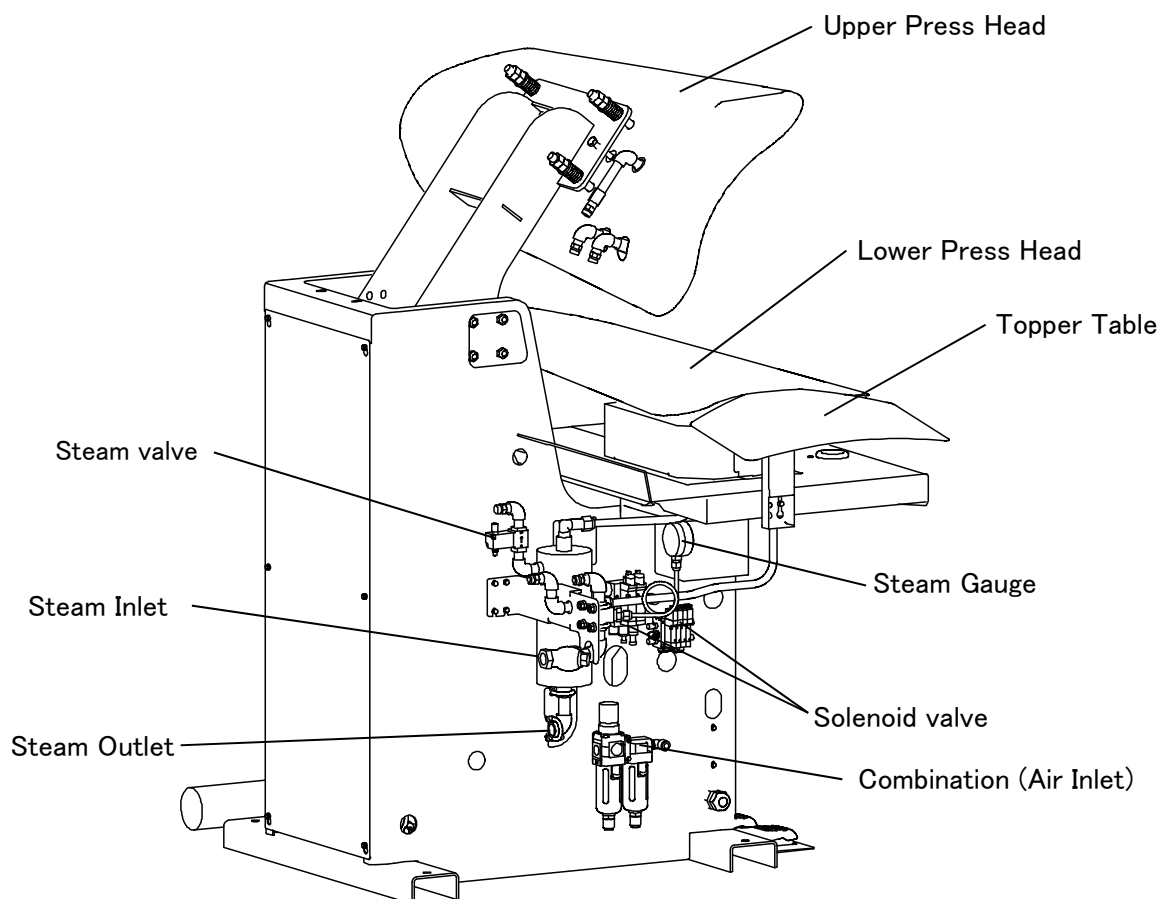
If any of the labels is missing, damaged, or illegible, contact your distributor to obtain a new one.

# Part Name and Function

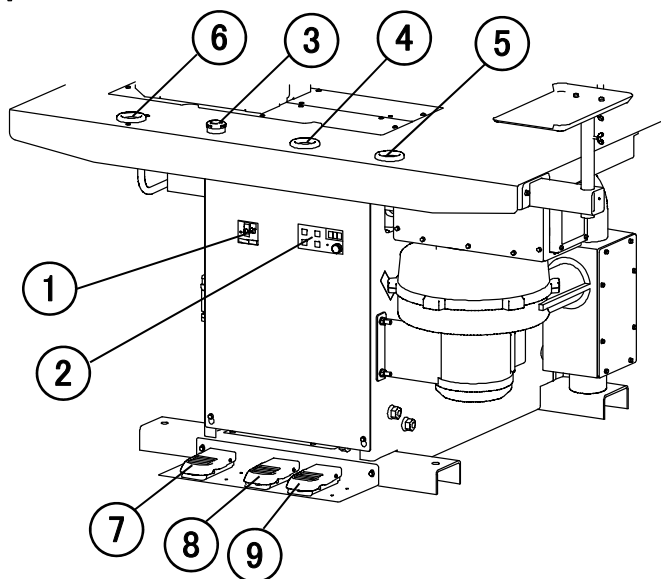
## Front



## Rear



## Operation part



### ① Power switch

The switch is for main power.

Power ON by pushing the black button. Power OFF by pushing the red button.

### ② Control panel

See next page for details.

### ③ Emergency stop button

Push this button at any time in order to release the press and safely return to the initial position.

To release the “Emergency stop”, turn it clockwise and push the reset button.

### ④ Reset button

1. By pushing this button after turning the power ON, the machine is ready to work in normal operation.

2. When the machine stops due to an emergency stop or an error, this button can be used to return to normal operation.

3. Push this button while the machine is in press motion to release the press motion.

### ⑤ Press button

When this button is pushed, the upper press head performs the press operation, but when the button is released, the press operation is canceled.

Automatic operation is started by pushing the “Start” button while pushing this button.

### ⑥ Start button

Automatic operation starts by push this button while pushing the “Press” button.

Pushing this button alone does nothing.

### ⑦ Vacuum foot pedal

Vacuum from the Lower press head works while stepping this pedal.

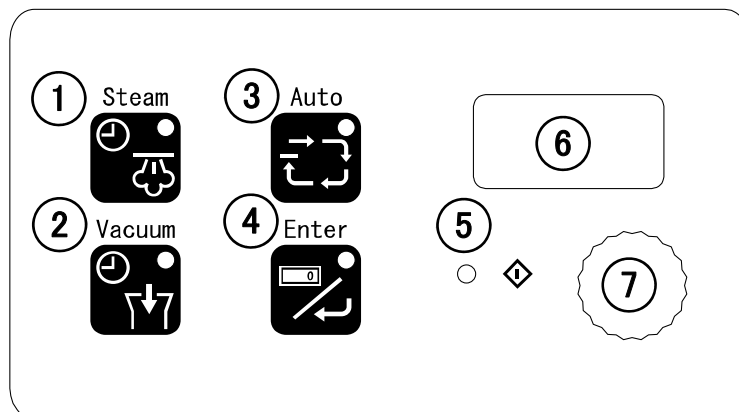
### ⑧ Blower foot pedal

Blower from the Lower press head works while stepping this pedal.

### ⑨ Steam foot pedal

Steam blow up from the Lower press head while stepping this pedal.

## Control panel



### ① Steam Timer Button

You can change the steam injection time of the upper press head during automatic operation.

When this button is turned ON, the lamp of the button lights up. The current timer value will blink on the display. Turn the dial to change the timer value. Push the “Enter” button to save the new setting and return to the finishing counter display.

If you want to return without change the timer value, push this “Steam” button again.

Initial setting: 2.5sec, Max 5.0sec

### ② Vacuum Timer Button

You can change the vacuum time of the lower press head during automatic operation.

When this button is turned ON, the lamp of the button lights up. The current timer value will blink on the display. Turn the dial to change the timer value. Push the “Enter” button to save the new setting and return to the finishing counter display.

If you want to return without change the timer value, push this “Vacuum” button again.

Initial setting: 6.0sec, Max 10.0sec

### ③ Auto Button “Automatic operation”

By initial settings, when the power is turned on, the lamp of this button lights up, and it is in auto mode. In auto mode, the upper press head automatically opens after automatic operation ends.

Push the start button while pushing the “Press” button to start automatic operation.

Automatic operation is “Steam⇒Vacuum⇒Release the press⇒After vacuum”.

When this button is pushed and the lamp on the button turns off, it switches to manual mode.

Manual mode: Push the “Start” button while pushing the “Press” button, “Steam” injection from the upper press head and stop in the pressed state. Push the reset button to release the press and “After vacuum” works.

### ④ Counter Clear/Enter Button

This button has two functions.

#### 1. Counter clear function

When you push this button, the finishing counter value on the display flashes. If you push this button again, the finishing counter value will return to 0.

#### 2. Enter function

Push this button to save the changed setting of the “Steam timer” or “Vacuum timer”.

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⑤ Power Lamp

- When the power is turned on, the lamp blinks.

When the reset button is pressed, the lamp turns on and the machine is ready for operation.

- The lamp changes to blinking when the emergency stop state is entered.

By canceling the emergency stop and pressing the reset button, the lamp turns on and the machine is ready for operation.

⑥ Display

This shows “Finishing counter value” “Timer countdown”, “Error number” and “Menu number”.

⑦ Dial

Used when changing timer values, selecting menus in service mode.

# Operation Procedures

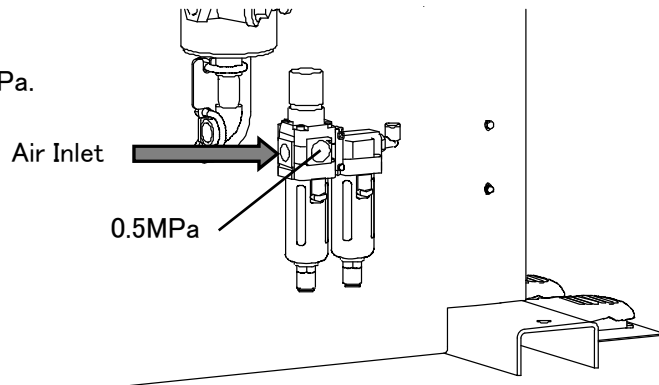


## CAUTION

Follow the procedures below for proper operation.  
Improper operation can cause mechanical failure or injury to operators.

## Supply Air

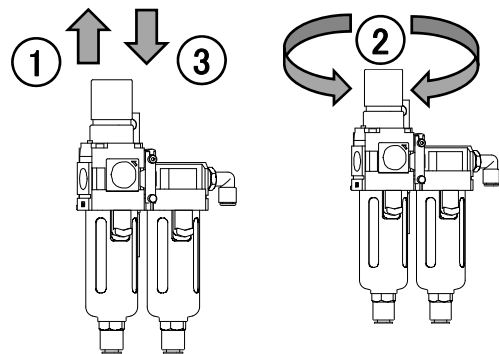
- Check whether air pressure is set at 0.5MPa.



Low air pressure can cause malfunction. If the pressure does not reach its standard level, set the air pressure properly following the procedure below.

### ■ How to adjust air pressure

- ① Pull the adjustment knob up
- ② Turn the knob to adjust air pressure  
Clockwise → Pressure increase  
Counterclockwise → Pressure decrease
- ③ Push the knob down



### Check Point

- Check compressor if the air pressure does not reach 0.5MPa even after the above adjustment.

### Attention!

Run the machine where air can be supplied in a stable condition.  
Use after-cooler or similar equipment to supply clean air all the time.

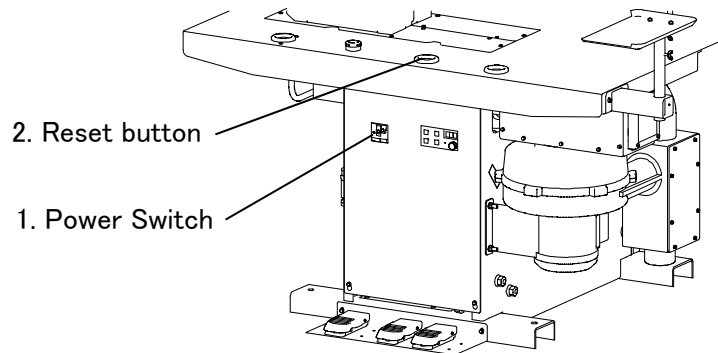
## Supply Steam

1. Check whether steam with the pressure at 0.5MPa or more can be supplied to the machine.  
If the steam pressure does not reach required level, it may adversely affect shirt finishing quality.  
Always check whether the steam pressure meets its requirement with steam gauge.
2. It takes about 15minutes until press heads heat up after steam is injected.  
It may vary depending on the season and the environment.  
Insufficient heat may adversely affect finishing quality.



## Turn ON the Power

1. The power is ON by pushing the Power switch at the front side of the Control box.  
→ The power lamp blinks and “— — —” shows up at the display on the Control panel.
2. Push the Reset button.  
→ The power lamp turns ON and the machine is ready to work.  
The finishing count shows up at the display.

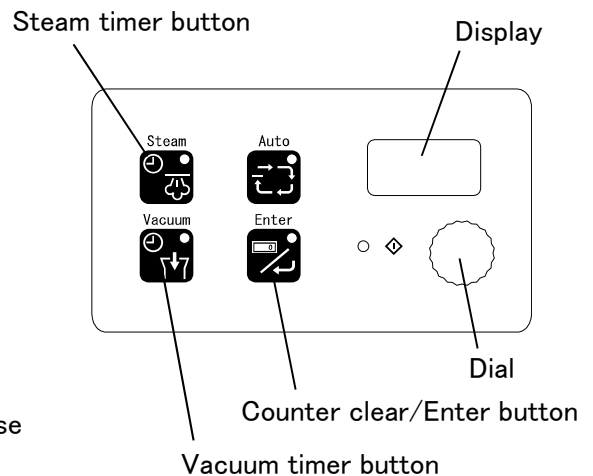


**Caution** The machine does not work until the Reset button is pushed.

## Timer Settings

Change setting of the Steam timer/Blower timer depending on material of the pants.

1. Push the “Steam timer button” or the “Vacuum timer button”.  
→ The green lamp goes on the selected button.  
The current timer blinks at the Display.
2. Turn the “Dial” to change the timer value.
  - Set the time longer by turning clockwise
  - Set the time shorter by turning counterclockwise



3. Push the “Counter clear/Enter button” to save the setting.

**Caution**

If you do not push the “Counter clear/Enter button”, it returns to the previous timer value. Make sure to push the button if you want to save the new setting.

\* Factory Setting (Default Setting) Steam Timer : 2.5 sec  
Vacuum Timer : 6.0 sec

## Press finishing



### CAUTION

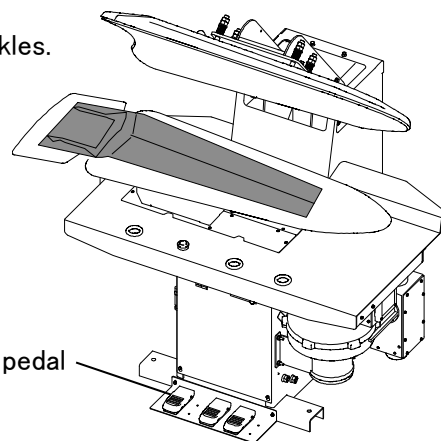
- Beware of pinching hands or clothes by moving part during the operation.
- When setting clothing, be careful not to touch the iron surface or the metal parts around it as it may cause burns.

### Automatic operation

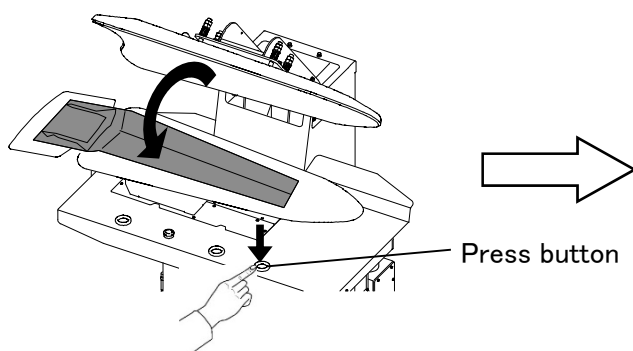
1. Place one leg of the pants on the lower press head without wrinkles.  
When you use the “Vacuum” pedal, it sticks to the Lower press head, making it easier to work.

#### Information

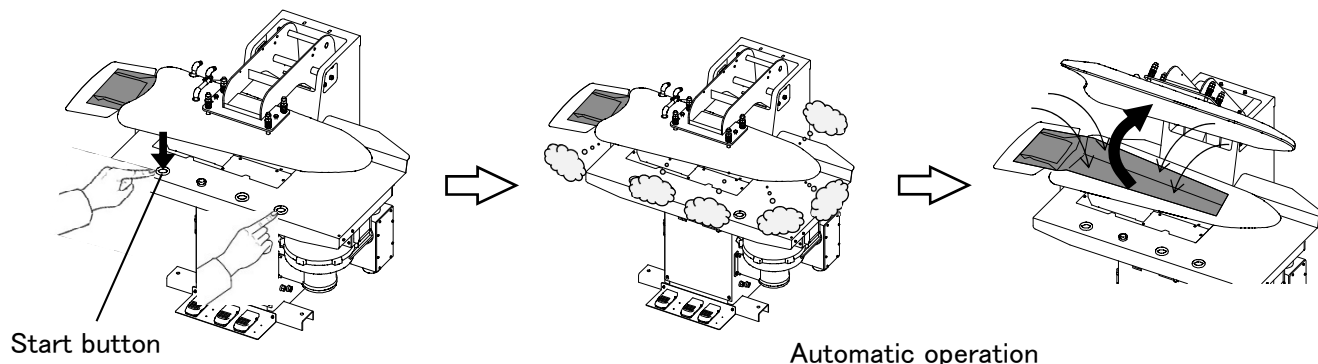
Depending on the pants condition, use vacuum with foot pedal before pressing.  
The finishing quality will improve.



2. Push the “Press” button to close the Upper press head.  
Keep pushing the “Press” button. If you release the button, the Upper press head will open and return to its initial position.



3. Hold down the “Press” button and push the “Start” button to start automatic operation.  
→When the automatic operation is over, the Upper press head opens automatically.

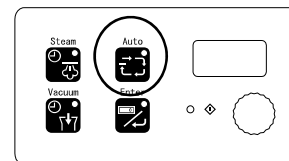


Steam timer ⇒ Vacuum timer ⇒ Release the press ⇒ After vacuum

4. Turn the pants over and process the other leg in the same way.

## Manual operation

1. Push the "Auto" button on the control panel to switch to manual mode.  
The lamp on the button goes off.

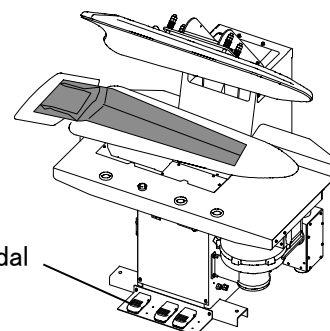


2. Place one leg of the pants on the lower press head without wrinkles.  
When you use the "Vacuum" pedal, it sticks to the Lower press head, making it easier to work.

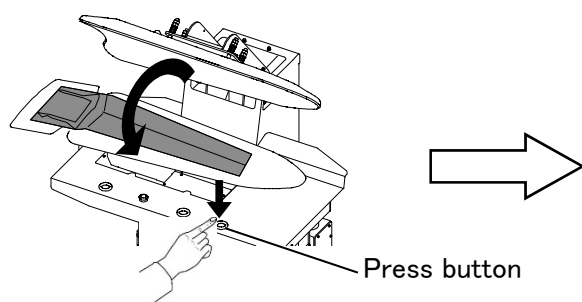
### Information

Depending on the pants condition, use vacuum with foot pedal before pressing.  
The finishing quality will improve.

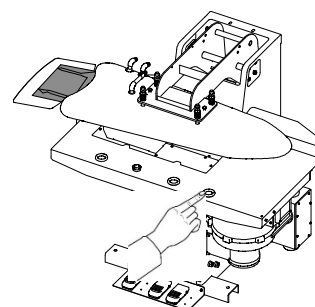
Vacuum pedal



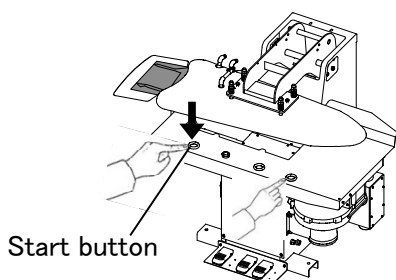
3. Push the "Press" button to close the Upper press head.  
Keep pushing the "Press" button. If you release the button, the Upper press head will open and return to its initial position.



Press button

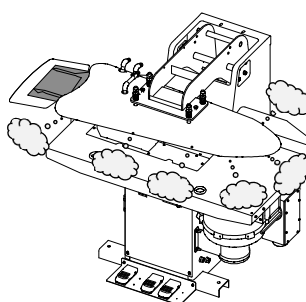


4. Hold down the "Press" button and push the "Start" button to start press and steam timer works.  
→When the steam timer is over, push the "Reset" button to open the upper press head.

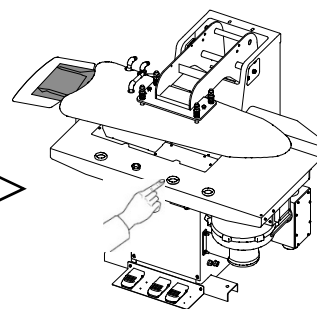


Start button

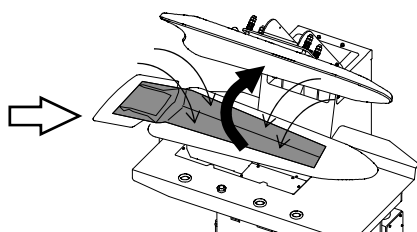
Hold down the "Press" button and push the "Start" button.



Steam timer works



After the steam timer ends, push the "Reset" button.



The upper press head opens and "After vacuum" works.

### Manual operation flow

Steam timer ⇒ Reset button ⇒ Open the upper press head  
⇒ After vacuum

5. Turn the pants over and process the other leg in the same way.

---

## After work of the day.

### ● To use for a long time, do the following procedure.

- ① Close the steam valve of steam inlet part to the machine.
- ② Do some idle operation until remove humidity from the covers and machine.
- ③ Open the steam trap valve of steam outlet part and eject drain from the machine.
- ④ Turn OFF the power by pushing the red button of the power switch.
- ⑤ If some water drops are on the machine surface, wipe it off.

## Other Operations

### How to release the Emergency stop

When the Emergency stop button is pushed, the machine safely returns to the initial position from any process of the operations.

In order to resume normal operation, turn the button clockwise.

The lock will be released.

#### Check Point

If the machine does not work...

- Is the power switch ON ?
- Is the air pressure is 0.5MPa ?
- Is the emergency stop button pushed ?

# How to Replace the Cover & Pad

## WARNING



Before replacing the cover/mat, turn off the power/steam and make sure that the machine has completely stopped and the press iron has cooled down.

If you do not follow these instructions, there is a risk of getting caught in machinery or getting burned.

## Upper Press Cover Replacement

- ① Remove Cover Extension Springs. (Figure-1)

### Caution

The cover extension springs get hot. Let the press head and cover extension springs cool down completely before replacing the mat.

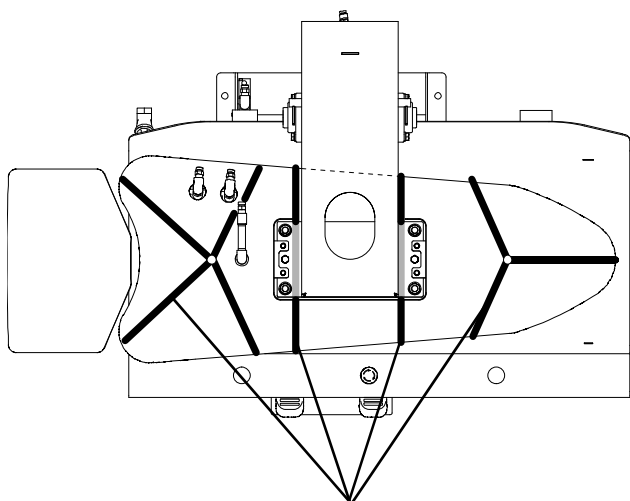
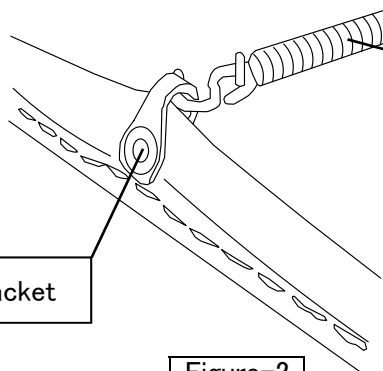


Figure-1

The cover extension spring that accessories of the grid plate.

- ② Cover the upper press head with a new cover, and install the cover extension spring as seen in Figure-1. Also install the hard pad and the cover extension spring as seen in Figure-2.



The cover extension spring that accessories of the grid plate.

Grid plate installation bracket

Figure-2

## Lower Press Mat Replacement

- ① Remove the Cover extension springs loosen the string and remove the Lower press mat. (Figure-1)

**Caution**

Cover extension springs get hot. Let the press and cover extension springs cool down completely before replacing mat.

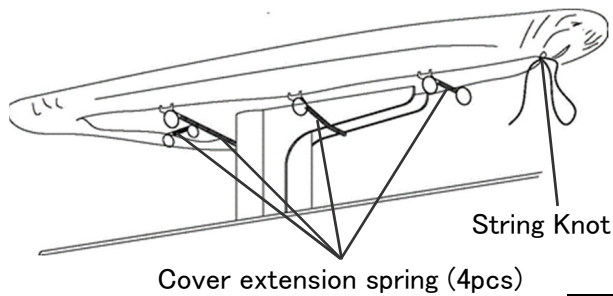


Figure-1

- ② Remove the two Stainless steel rods from the existing mat and insert them into the new mat. (Figure-2)

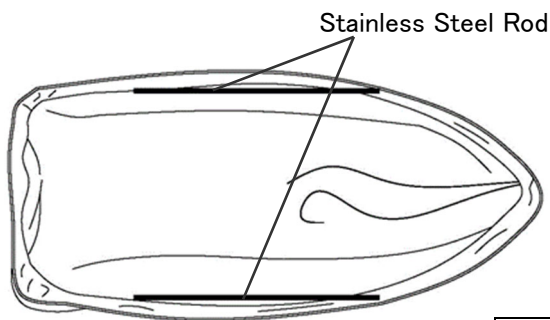


Figure-2

- ③ See from the lower view and make sure that right & left and front & rear side of the mat are evenly set against the press head. Tie the string firmly. (Figure-3)

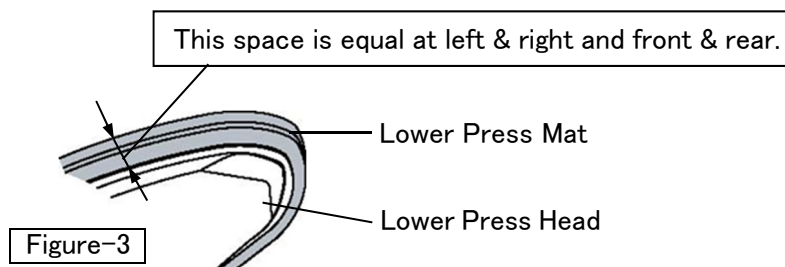


Figure-3

- ④ Hitch the Cover extension spring to the Stainless steel rod.

Make sure that there is no wrinkle or slack on the Lower press mat surface.

See Figure-1 for the position of the Cover extension spring.

# Service Menu

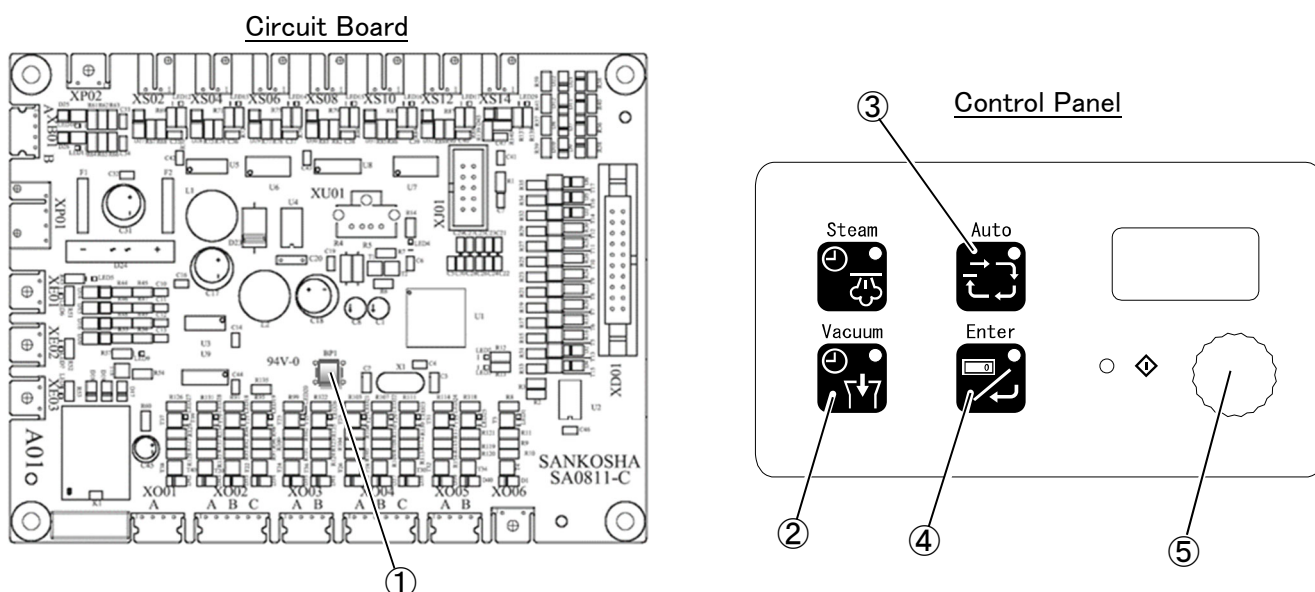


## WARNING

It is very dangerous inside the control box, work must be done by a qualified person. When working with the control box open, do not touch anything other than the specified areas.

When you push the Service button (BP1) on the circuit board in the Control box, you can check "Input test", "Output test", "Volume setting", "DIP setting", "Output timer setting" as well as "Initial setting", "Program version" and accumulated working hours of the circuit board.

■ The location of the Service Button and the function of each Menu Button:



### ① Service button

Push this button, "in1" shows up on the display and you can select the Service menu with the dial.

### ② Vacuum timer button

This button works as the return button while the Service menu is working.

### ③ Auto button

At Input Test 1 or 2, the lamp of this button goes on while the test item is on. The lamp goes off when the test item turns off.

### ④ Counter clear/Enter button








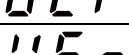
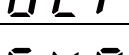
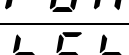
In the service menu, this button for confirming the item selected with the dial.  
Also push this button to turn off a test item that is on.

### ⑤ Dial


In the Service menu, this Dial works to select menu items and change setting value.  
Turn the dial, you can select the Menu items, switch ON/OFF in items such as DIP settings, and change the setting value in the VoL setting.

### ■ Service menu list

See next page "Service menu explanation" for further detail.

Indication	Indication	Function
	in1	"Input Test 1"
	in2	"Input Test 2"
	out	"Output Test"
	VoL	Set each Volume
	diP	Set DIP function
	tou	Set the time when setting or number is displayed in Display Window
	dEF	Return to the Initial Setting for all the modes
	VEr	Display the version of the program
	run	Display the accumulated working hours of the circuit board
	tSt	Test Mode

### ■ Operation procedures

1. Push the "Service button" on the circuit board. →  shows on the display.
2. Turn the "Dial" and select service menu item that you want to work.
3. Push the "Counter clear/Enter button" to start the selected service menu item.
4. Work or setting in accordance with the selected item.  
See next page the "Service menu explanation" for further details.
5. When you finish the service menu work, push the " Vacuum timer button" to return to normal operation.  
Even if you do not push this button, it will return to normal operation after a certain period of time.



## ■ Service menu explanation

### 1. in1 “Input Test 1”

- Follow “Operation procedure” 1 and **in 1** shows up, push ④the “Counter clear/Enter button” to select. Push each Input button/pedal as seen in Table-1, the number for each button/pedal shows up.

Table-1 “Input Test 1” List

Button/Pedal/Sensor	No.	Button/Pedal/Sensor	No.
Reset Button	<b>6 1A</b>	Lower Steam Pedal	<b>5 10</b>
Press Arm Close Sensor*	<b>5 2</b>	Start Button	<b>5 12</b>
Vacuum Pedal	<b>5 6</b>	Press button	<b>5 14</b>
Blower Pedal	<b>5 8</b>		

### 2. in2 “Input Test 2”

- Follow “Operation procedure” 1 and 2, and **in 2** shows up. Push ④the “Counter clear/Enter button” to select.
- Turn ⑤the “Dial”, the number in Table-1 shows up in turn. The lamp of ③the “Auto button” turns ON at the number which indicates a certain function in motion.

### 3. out “Output Test”

See page 27 “10. tSt” when providing air.



## CAUTION

Since the machine actually operates in this test, make sure that there are no people or objects within the operating range.

- Follow “Operation procedure” 1 and 2, and **out** shows up, push ④the “Counter clear/Enter button” to select.
- Turn ⑤the “Dial”, the number in Table-2 shows up in turn.

Table-2 “Output Test” List

No.	Output	Remarks
<b>1A</b>	Motor ON	Contacto KM01
<b>2A</b>	Lower Press Head Steam Solenoid Valve	Solenoid Valve No.3
<b>2b</b>	Upper Press Head Steam Solenoid Valve	Solenoid Valve No.4
<b>2c</b>	Blower Solenoid Valve	Solenoid Valve No.5
<b>3A</b>	Vacuum Solenoid Valve	Solenoid Valve No.6
<b>5A</b>	Press Arm Solenoid Valve	Solenoid Valve No.1
<b>5b</b>	Press Solenoid Valve	Solenoid Valve No.2

#### 4. VoL “Volume Setting”

- Follow “Operation procedure” 1 and 2, and **VoL** shows up, push ④the “Counter clear/Enter button” to select.
- Turn ⑤the “Dial”, and select the number as seen in Table-3, push ④the “Counter clear/Enter button”, the display shows current setting value.
- Turn ⑤the “Dial” to change the setting value, push ④the “Counter clear/Enter button” to save the new setting.

Table-3 “Volume Function” List

No.	Setting	Initial Setting (sec)
<b>U 1</b>	When the press button is pushed, the time from when the “Press arm close sensor” is turned ON until when the steam solenoid valve is turned ON.	0.9s (Max 2.0s)
<b>U 2</b>	The time from when the vacuum timer starts to when the press solenoid valve is turned off during automatic operation.	0.5s (Max 2.0s)
<b>U 3</b>	“After-vacuum” time, starts when vacuum is over in case of automatic operation.	2.0s (Max 10.0s)
<b>U 4</b>	The time until the vacuum solenoid valve is turned off after the after-vacuum is finished.	3.0s (Max 10.0s)
<b>U 5</b>	Time from when the press solenoid valve is turned off when the press button is released to when the press arm solenoid valve is turned off.	1.0s (Max 5.0s)

#### 5. diP “DIP Function”

- Follow “Operation procedure” 1 and 2, and **diP** shows up, push ④the “Counter clear/Enter button” to select.
- Turn ⑤the “Dial” and select the number as seen in Table-4, push ④the “Counter clear/Enter button”, the display shows current setting.
- Turn ⑤the “Dial” to change ON or OFF, push ④the “Counter clear/Enter button” to save the new setting.

Table-4 “DIP Function” List

No.	ON/OFF	Setting	Initial Setting
<b>d 1</b>	<b>on</b>	Automatic operation is selected as the initial setting when the power is turned on.	<b>on</b>
	<b>off</b>	Manual operation is selected as the initial setting when the power is turned on.	
<b>d 2</b>	<b>on</b>	Steam comes out from the “Lower press head” during automatic operation.	<b>off</b>
	<b>off</b>	During automatic operation, steam does not come out from the “Lower press head”.	

#### 6. tou “Timer Setting on Display Window”

- Follow “Operation procedure” 1 and 2, and t o u shows up, push ④the “Counter clear/Enter button” to select.
- Turn ⑤the “Dial” and select the number as seen in Table-5, push ④the “Counter clear/Enter button”, the display shows current timer setting.
- Turn ⑤the “Dial” to change the timer value, push ④the “Counter clear/Enter button” to save the new setting.

Table-5 “Timer” List

No.	Setting
t 1	Not in use.
t 2	Not in use.
t 3	Not in use.
t 4	The time until the display returns to normal if no operation during the service menu.
t 5	The time until the display returns to normal if no operation during the input test.

#### 7. dEF “Default”

- Follow “Operation procedure” 1 and 2, and d E F shows up, push ④the “Counter clear/Enter button” to select.
- “OFF” shows up at the “Display”, turn ⑤the “Dial” to change “ON”, push ④the “Counter clear/Enter button”, all the settings return to the initial settings.

#### 8. VEr “Version of the Program”

- Follow “Operation procedure” 1 and 2, and V E r shows up, push ④the “Counter clear/Enter button” to select.
- The current program version shows up.

#### 9. run “Accumulated Working Hours of Circuit Board”

- Follow “Operation procedure” 1 and 2, and r u n shows up, push ④the “Counter clear/Enter button” to select.
- Displays the cumulative operating time of the circuit board with the power on.

#### 10. tSt “Test Mode”

- Follow “Operation procedure” 1 and 2, and t S t shows up, push ④the “Counter clear/Enter button” to select.
- Push ④the “Counter clear/Enter button”, to enter test mode. See the Table-6 below for details.

Table-6 “Test”

No.	Test
tE1	<ul style="list-style-type: none"> <li>Press Test</li> <li>1. Push the “Press button” and then “Start button” to close “Upper press arm”. The upper press arm opens by the reset button.</li> <li>2. When the “Press button” and “Start button” is pushed while the “Upper press arm” is lowered, the press state is entered. By pushing the reset button, the press state returns to the state where the upper press arm is lowered.</li> <li>3. When the “Press button” and “Start button” is pushed while the “Upper press head” is press state, vacuum turns ON. Push the reset button to return to the previous state.</li> <li>* Use this test mode to adjust the press speed of the upper press arm. The press speed is shown on the “Display”.</li> </ul>

# Troubleshooting

- ◎ During the operation, if something is wrong, an error number will show up at the Display window on the control panel. Check the below List and take the necessary action. Call your dealer or Sankosha if normal operation does not resume.



## WARNING

**It is very dangerous inside the control box, work must be done by a qualified person. When working with the control box open, do not touch anything other than the specified areas.**

### Information

- See the “Sensor diagram” on the last page for the location of each cylinder sensor or button.
- You can make sure of the cylinder sensor or button through “Input test 1” in Service menu. Page 25.



## CAUTION

If any of [EEE], [EE1], [EE2], [EE3], [EE4], or [EE5] shows up, turn OFF the power and turn ON the power again **more than 5 seconds later**. Call your dealer or Sankosha if the normal operation does not resume.

Error No.	1. Error Item
	2. Error Description
	3. Check Point
E1	1. Emergency Stop Button
	2. Emergency Stop Button is being pushed.
	3. (1) Release the Emergency stop button by turning the button clockwise, to the “→” direction. Display shows “- - 1”. Push the Reset button. (2) Wiring may be the cause if E1 displays even after releasing it. Check the button itself or check for a possible short circuit in the wire.
E11	1. Upper Press Arm Close Time Error (Too fast)
	2. Upper press arm closes too fast.
	3. (1) Make sure if the air pressure is set at the required level, 0.5MPa. Check and adjust the regulator referring to “Supply air” of operation procedures on page 16. (2) Check the oil amount of the oil damper. See page 30 “Daily Maintenance 7. Oil quantity Check for oil damper”. (3) Adjust speed by turning the rod side speed controller of upper press arm cylinder clockwise. If speed does not change even after this adjustment, speed controller may be broken.
E12	1. Upper Press Arm Close Time Error (Too slow)
	2. Upper press arm closes too slowly.
	3. (1) Make sure if the air pressure is set at the required level, 0.5MPa. Check and adjust the regulator referring to “Supply air” of operation procedures on page 16. (2) Check if the air does not leak from upper press arm cylinder or solenoid valve “No.4”. (3) Adjust speed by turning the rod side speed controller of upper press arm cylinder counterclockwise. If speed does not change even after this adjustment, speed controller may be broken.

Error No.	1. Error Item
	2. Error Description
	3. Check Point
E21	1. Reset button error
	2. Reset button remains ON more than 15 seconds.
	3. (1) Check if the button is being pushed. (2) Check the button itself, loose connector, disconnection, and short circuit in the wire.
E22	1. Press button error (When DIP 3 is ON)
	2. Press button remains ON more than 15 seconds.
	3. (1) Check if the button is being pushed. (2) Check the button itself, loose connector, disconnection, and short circuit in the wire.
E23	1. Start button error
	2. Start button remains ON more than 15 seconds.
	3. (1) Check if the button is being pushed. (2) Check the button itself, loose connector, disconnection, and short circuit in the wire.
E24	1. Steam pedal error
	2. Steam pedal remains ON more than 15 seconds.
	3. (1) Check if the Pedal is being pressed. (2) Check the switch in the pedal, loose connector, disconnection, and short circuit in the wire.
E25	1. Vacuum pedal error
	2. Vacuum pedal remains ON more than 3minutes.
	3. (1) Check if the pedal is being pressed. (2) Check the switch in the pedal, loose connector, disconnection, and short circuit in the wire.
E26	1. Blower pedal error
	2. Blower pedal remains ON more than 3minutes.
	3. (1) Check if the pedal is being pressed. (2) Check the switch in the pedal, loose connector, disconnection, and short circuit in the wire.
E98	1. Display board external input error
	2. Input of the display board failed to work properly.
	3. (1) Confirm whether or not the entry connector doesn't have a malfunction by the display board. (2) Confirm whether or not there is not garbage on the display board. Clean a board by air blow-dry and so on. (3) It is necessary to exchange a display substrate when even if it does not improve (1),(2).
E99	1. 24V Error
	2. Either safety bar operated in an instant in the vibration and so on.
	3. The error will be released when you push the reset button. When occurring many times, adjust a speed controller at the part where the impact is big.

# Daily Maintenance

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## CAUTION

In order to ensure the safety of operation and to maintain the finished quality, check according to the following “Check Item List” before starting work.

### Check Item List

Check Item	Daily	Yearly
1. Air pressure	<input type="radio"/>	
2. Regulator/Mist separator	<input type="radio"/>	
3. Steam pressure	<input type="radio"/>	
4. Cover & padding	<input type="radio"/>	
5. Emergency stop button	<input type="radio"/>	
6. Regulator filter cleaning		<input type="radio"/>
7. Oil dumper		<input type="radio"/>

## Daily Check Items

### 1. Air pressure: Figure-1

Check if the air pressure of the regulator reaches 0.5MPa.

If the air pressure is too low or too high, correct it with the following procedure.

#### How to adjust pressure

- ① Pull the adjustment knob up.
- ② Turn the knob to adjust air pressure.
  - Clockwise  $\Rightarrow$  Pressure will increase
  - Counterclockwise  $\Rightarrow$  Pressure will decrease
- ③ Push the knob down.

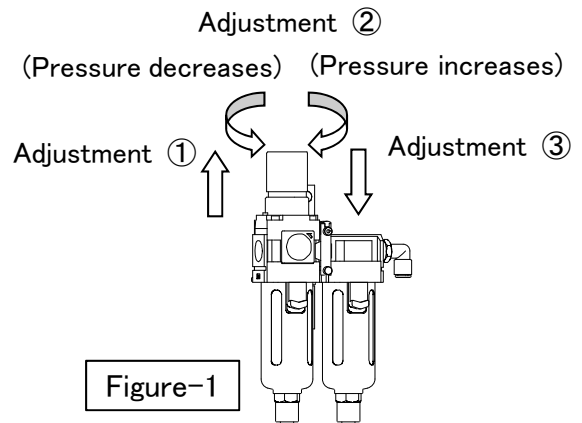


Figure-1

### 2. Regulator/Mist Separator: Figure-2

Check if the automatic drain function works properly at the Regulator/Mist Separator.

The drain is automatically discharged when the quantity of the drain reaches over half of the drain case.

If the drain cannot be discharged even after over half of the drain case is filled, it might malfunction.

Turn the "Drain Outlet" under the regulator to the left and let the drain discharge.

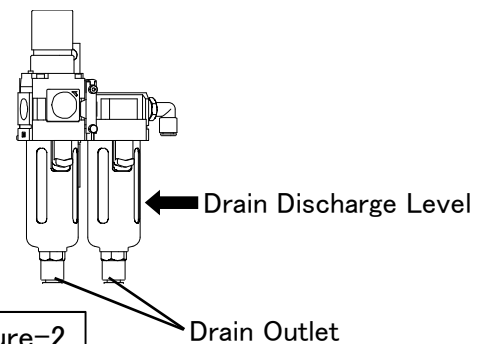


Figure-2

### 3. Steam Pressure: Figure-3

Check if the value of the steam pressure gauge is 0.5MPa of the specified pressure.

Steam Pressure Gauge, 0.5MPa

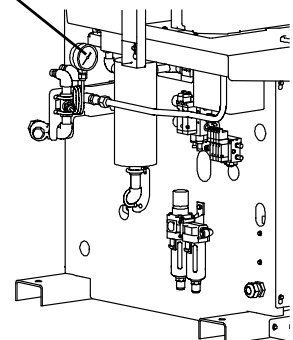


Figure-3

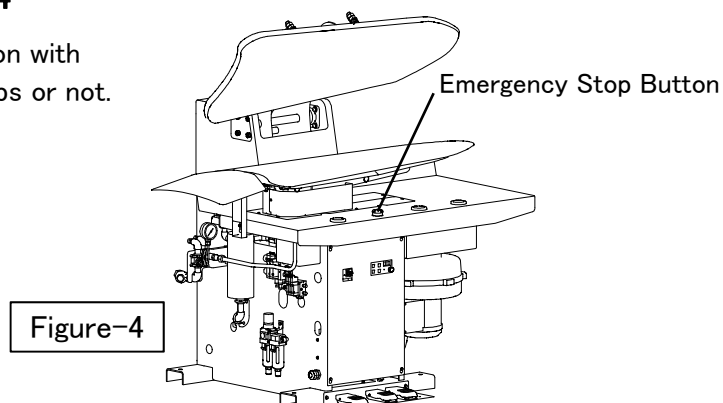
### 4. Cover and Padding

Check the lower press head cover and the upper press head cover.

If stains or tears stand out, it will lead to poor finishing quality, so replace it as soon as possible.

## 5. Emergency Stop Button: Figure-4

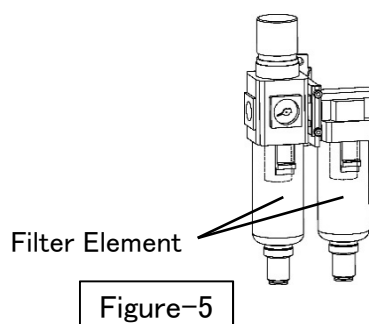
Push the Emergency Stop Button, red button with arrows engraved, to check the machine stops or not.



## Yearly Check Item

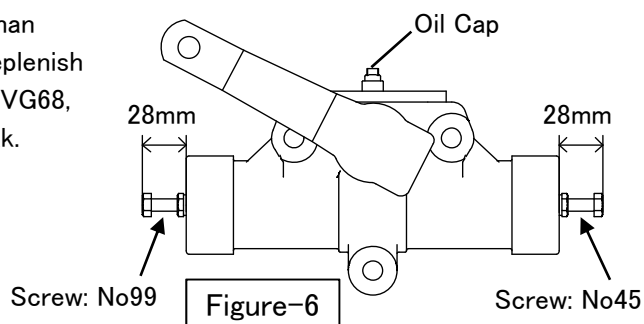
### 6. Regulator Filter Cleaning: Figure-5

Clean the Filter Element inside of the case.  
If decrease the air pressure, replace the Filter Element.



### 7. Oil dumper: Figure-6

Remove oil cap and make sure that oil level is less than 5mm from Oil Inlet. If oil level is more than 5mm, replenish oil, Mobil DTE 768 or the oil which fitted in with ISO VG68, till 5mm from Oil Inlet. Make sure if oil does not leak.



## CAUTION

The oil damper has a dedicated screw set for each model.  
Do not change the type of each screw and the setting length.

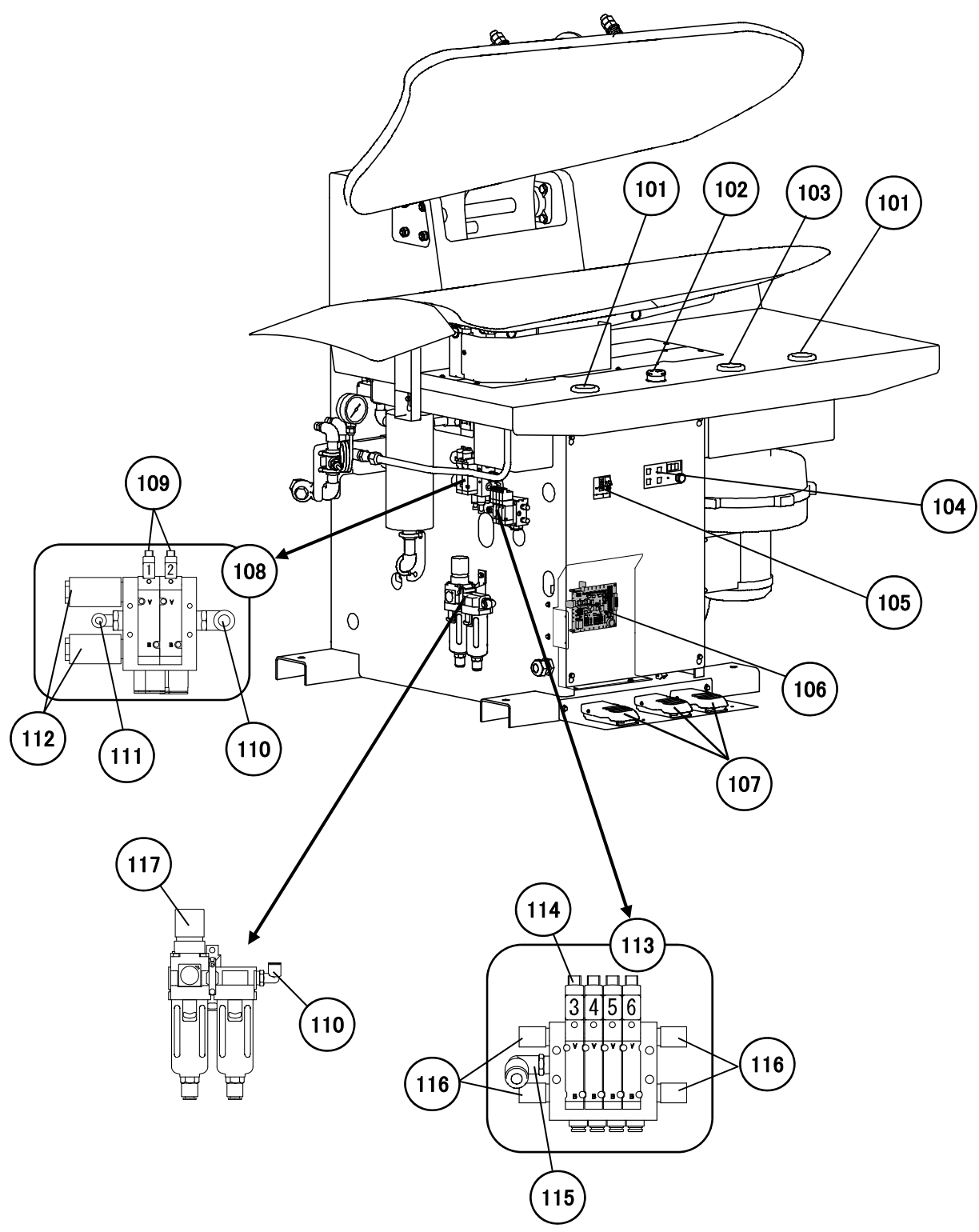


# Spare Parts List

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## Index

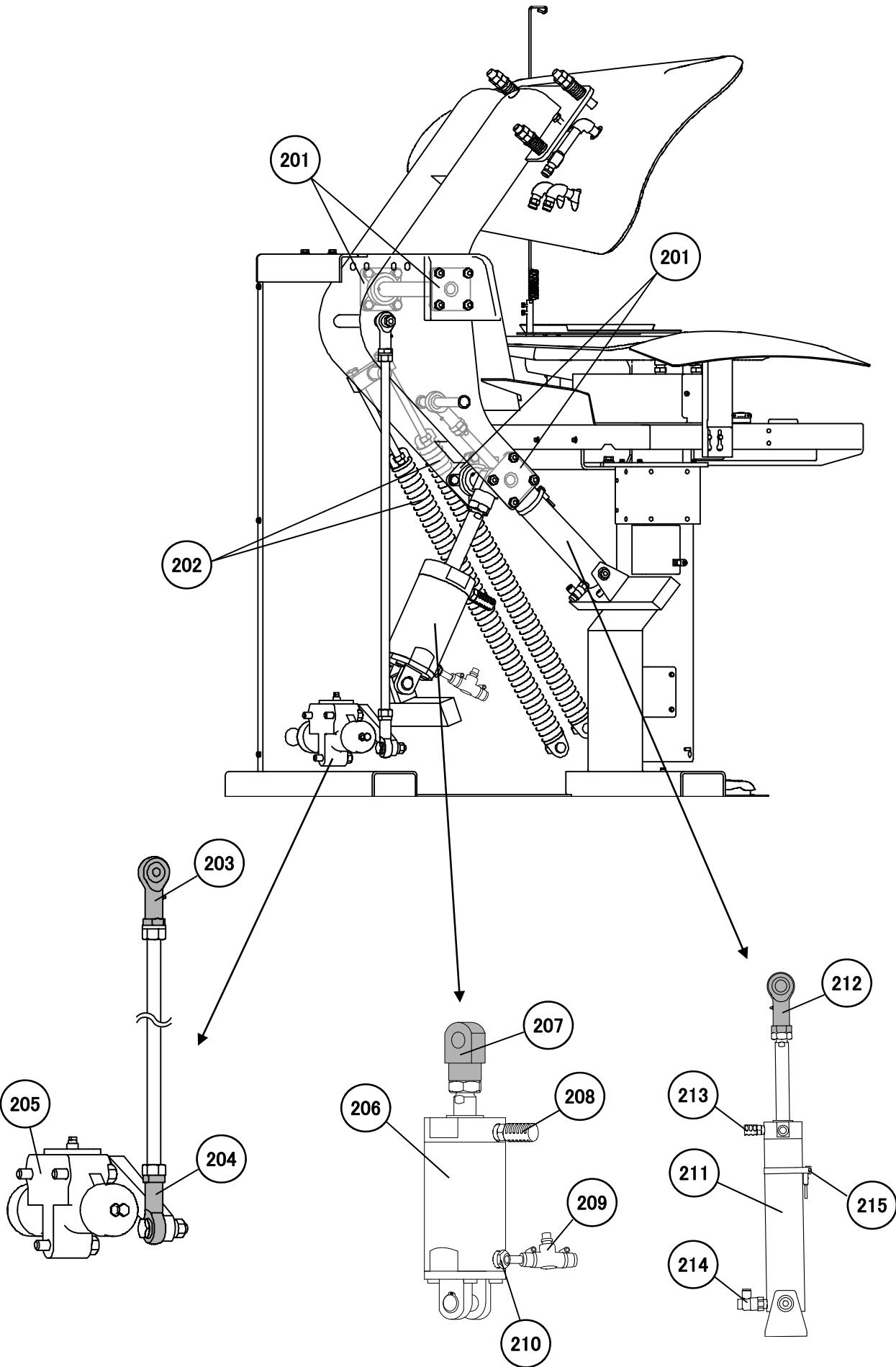
- 1: Left side diagram
- 2: Inside diagram
- 3: Right side diagram
- 4: Steam piping diagram
- 5: Cover diagram



# 1: Left side diagram

REV: 2

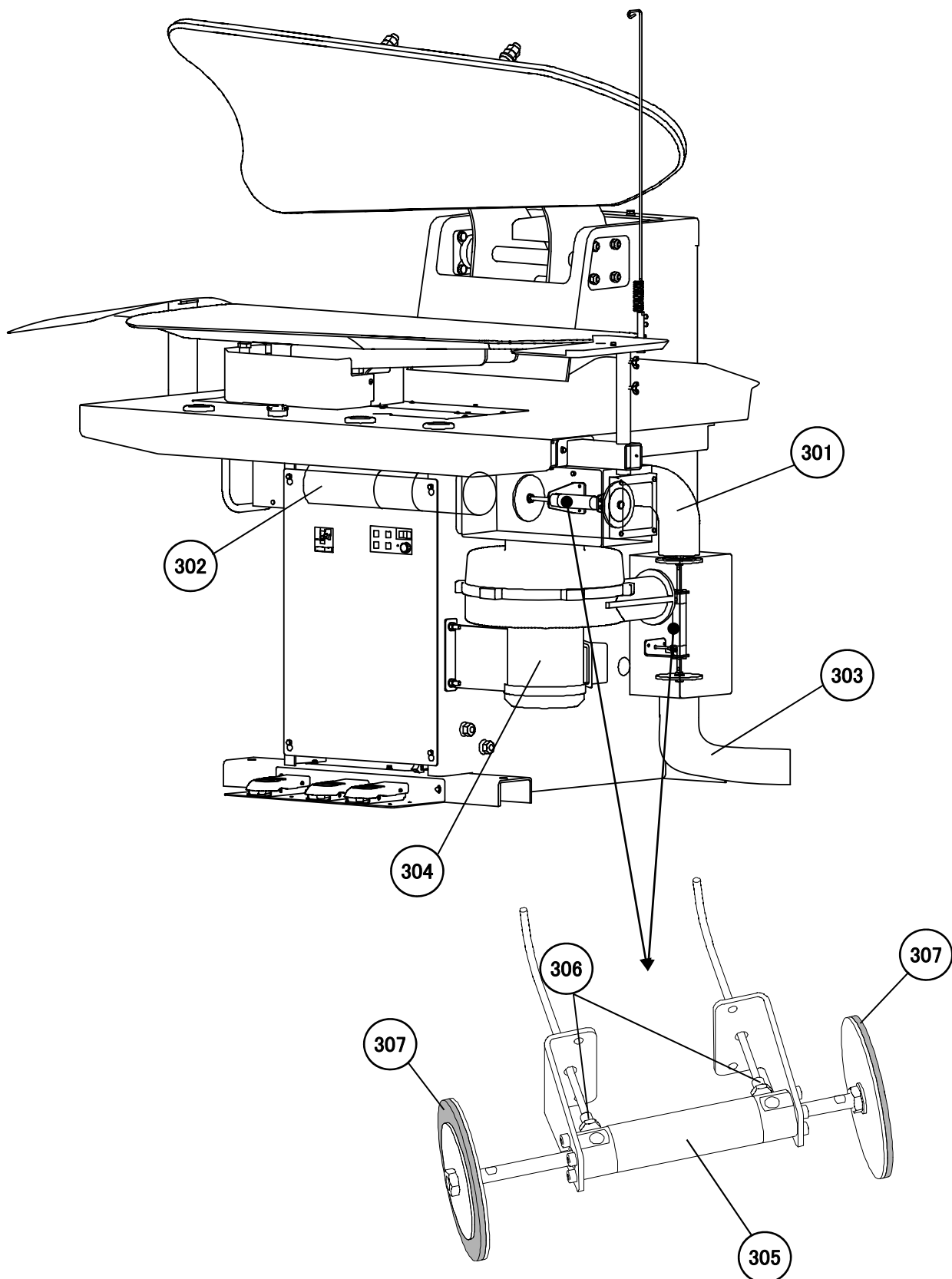
No.	Part code	Part name	Q'ty	Remarks
101	21I169	Push button	2	Green
102	21I171	Emergency stop button	1	Red
103	21I170	Push button	1	Blue: Reset button
104	20U181	Panel sheet	1	
	21D006	Dial	1	
	60A048	Display board	1	
105	21C004	Breaker	1	
106	60A080	Main board	1	
107	FP-UNT-023-1	Foot pedal unit	3	Vacuum, Blower, Steam
	21E035	Switch	3	
	H0D057	Spring	3	
108	A0M006	Manifold valve	1	Include 109-112
109	A0N004	Solenoid valve	2	1: Press arm 2: Press
110	C0H017	Air joint	2	Manifold valve, Regulator
111	C0H025	Air joint	1	
112	C0A019	Silencer	2	
113	A0M007	Manifold valve	1	Include 114-116
114	A0E012	Solenoid valve	4	3: Lower steam ON 4: Upper steam ON 5: Blower 6: Vacuum
115	C0C018	Air joint	1	
116	C0A001	Silencer	4	
117	D0H024	Regulator	1	



## 2: Inside diagram

REV: 1

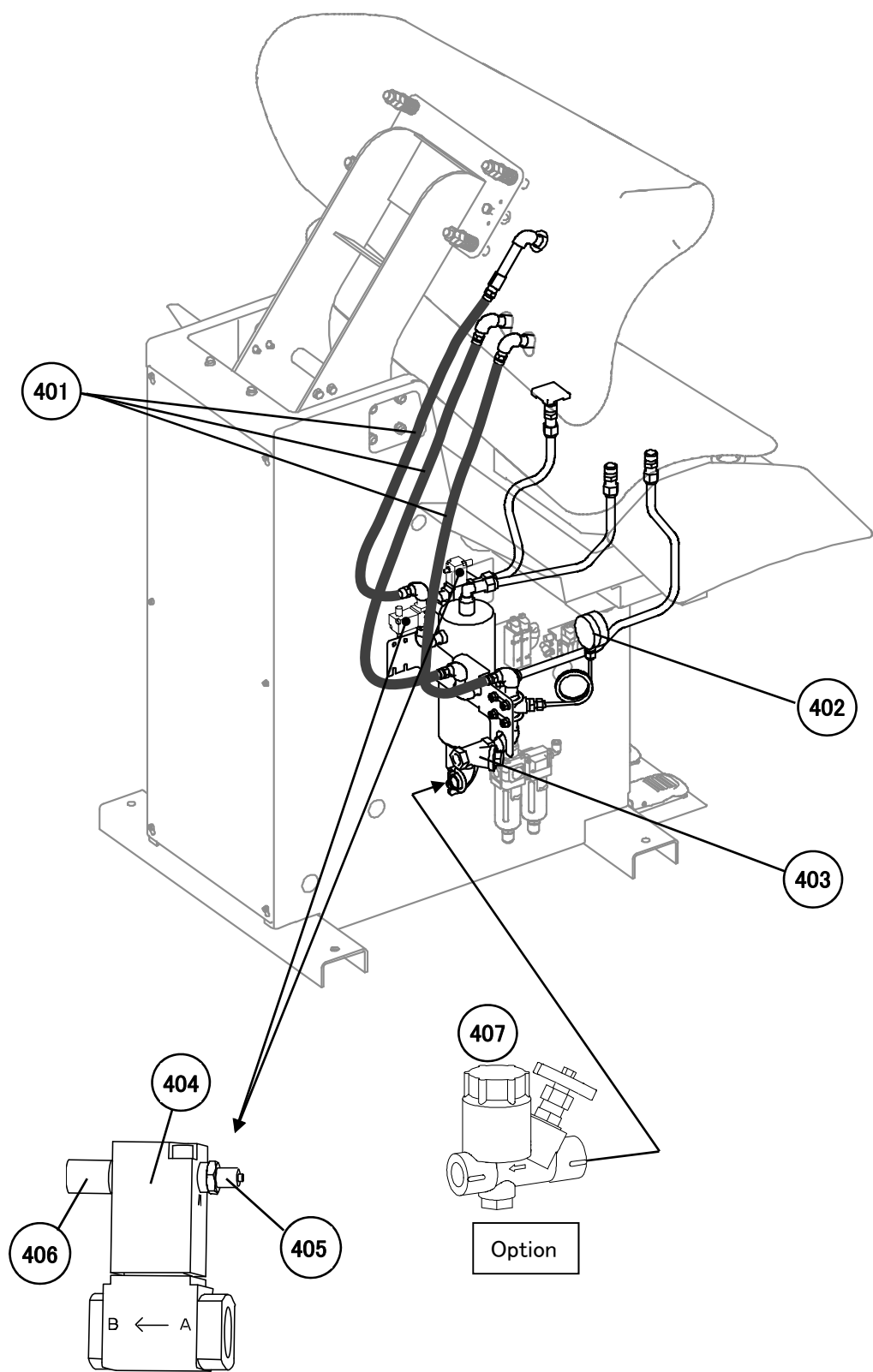
No.	Part code	Part name	Q'ty	Remarks
201	E4A001	Bearing unit	4	
202	AP-05-AA18255	Spring unit	2	
203	E5A011	Rod end	1	
204	E5A012	Rod end	1	
205	F0J001	Oil damper	1	
206	B0D003	Cylinder	1	Press arm
207	B6A006	Joint	1	
208	C0A015	Silencer	1	
209	C1G015	Speed controller	1	
210	C0C089	Air joint	1	
211	B2P003	Cylinder	1	Press
212	E5A020	Rod end	1	
213	KBD076	Silencer	1	
214	C1A033	Speed controller	1	
215	B5A003	Cylinder sensor	1	



### 3: Right side diagram

REV: 0

No.	Part code	Part name	Q'ty	Remarks
301	K1C001	Duct hose	1	460mm
302	K1C001	Duct hose	1	430mm
303	K1C001	Duct hose	1	500mm
304	G1A043	Motor	1	
305	B2I021	Cylinder	2	Switch box
306	C0E001	Air joint	4	
307	MP410-238	Packing	4	

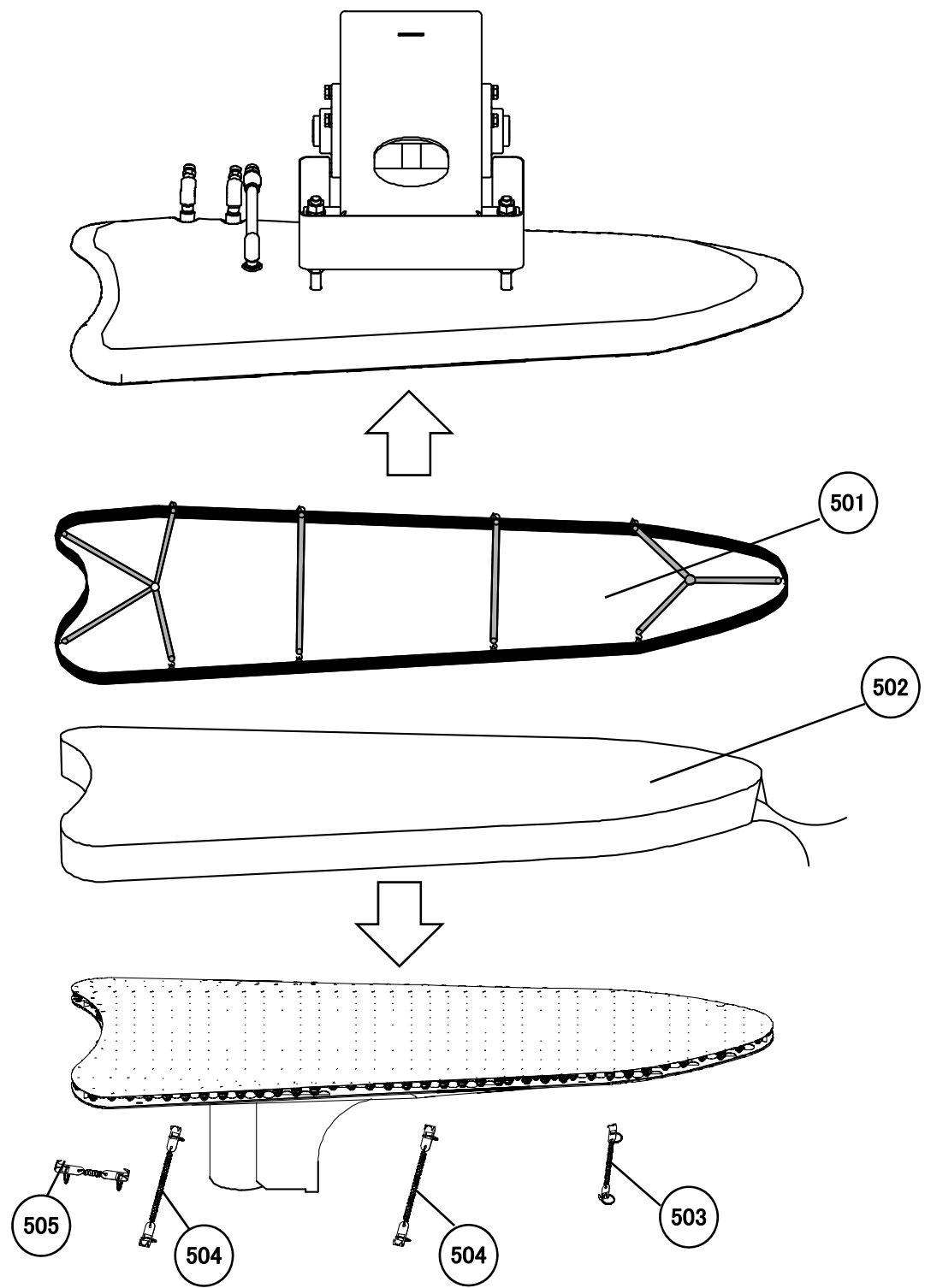




## 4: Steam piping diagram

REV: 0

No.	Part code	Part name	Q'ty	Remarks
401	TBA2055	Flexible hose	3	Blue
402	J0A003	Steam pressure gauge	1	
403	J2M014	Y-strainer	1	Steam inlet
404	A0G013	Steam valve	2	
405	C0E001	Air joint	2	
406	C0A001	Silencer	2	
407	J2N001	Steam trap	1	option



## 5: Cover diagram

REV: 0

No.	Part Code	Part Name	Q'ty	Remark
501	S1D556	Grid Plate	1	
502	S1D572	Lower Press Mat	1	
503	CSP-UNT-007	Cover Spring Unit	1	Spring : 70mm
504	CSP-UNT-008	Cover Spring Unit	2	Spring : 125mm
505	CSP-UNT-009	Cover Spring Unit	1	Spring : 35mm

# **Diagram**

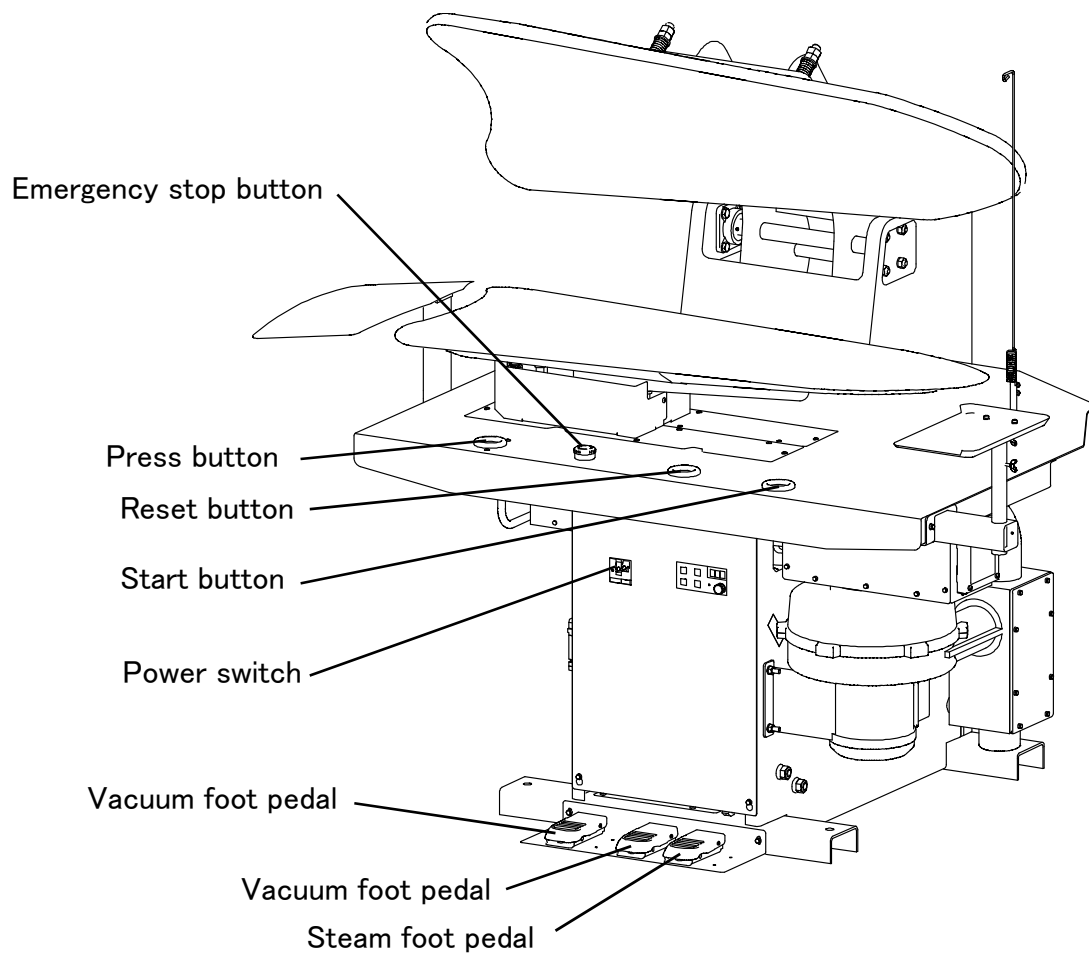
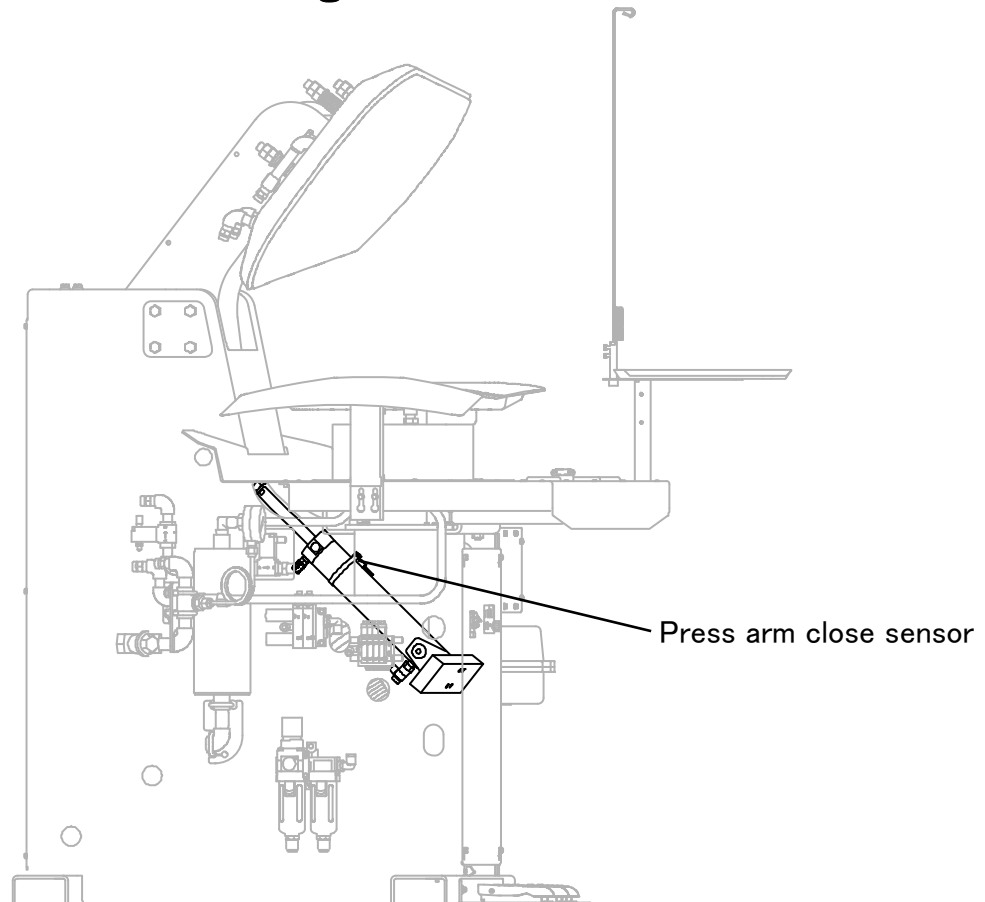
**Sensor and Buttons Diagram**

**Electric Connection Diagram**




**Steam Piping Diagram**

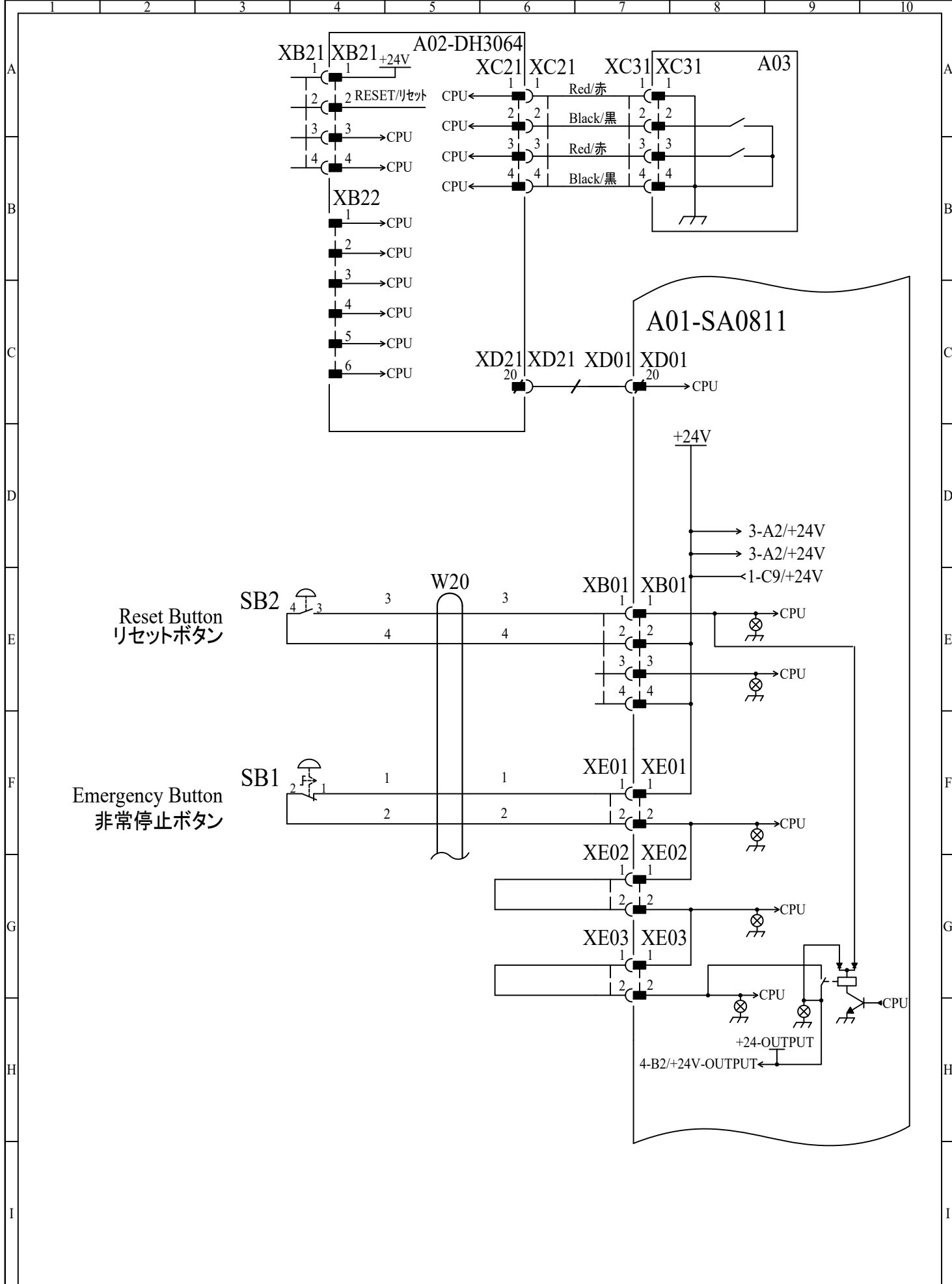
**All Air System**

# Sensor and Buttons Diagram

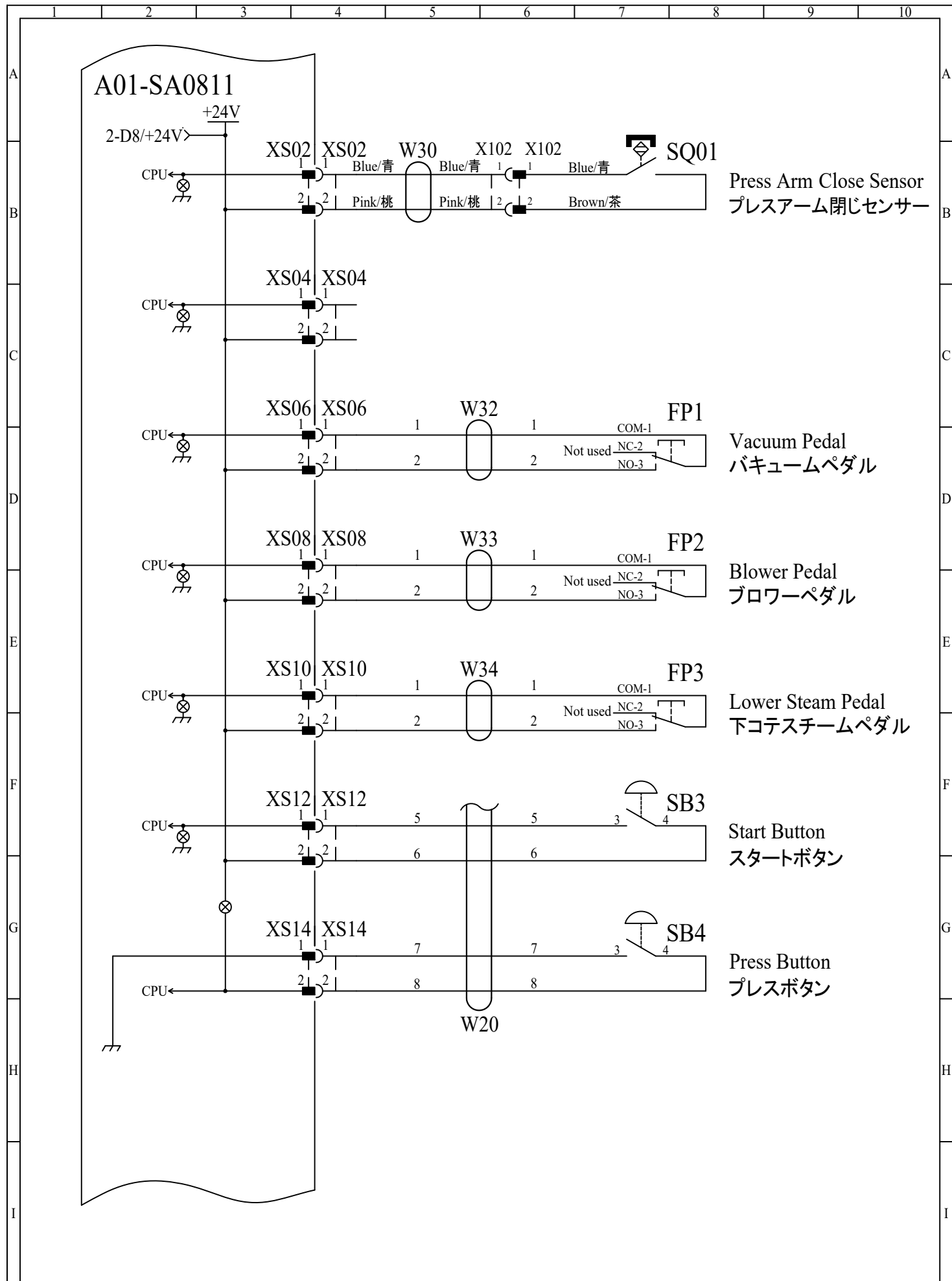


[illegible]

Model	ADP-610N		Type	ADP610N-V1		Date(YYYY/MM/DD)	2023/06/07	Page	1/4
Approved	Checked	Designed				Software	~		
J Maki	Kobayashi	Maki				Serial No.	~		
						Drawing No.	01-0		
				Revision		SANKOSHA 三幸社			
1	2	3	4	5	6	7	8	9	10



Model	ADP-610N		Type	ADP610N-V1		Date (YYYY/MM/DD)	2023/06/07	Page	2/4
Approved	Checked	Designed	△3			Software	~		
J	Maki	Kobayashi	Maki			Serial No.	~		
						Drawing No.	01-0		
				Revision		SANKOSHA 三幸社			
1	2	3	4	5	6	7	8	9	10

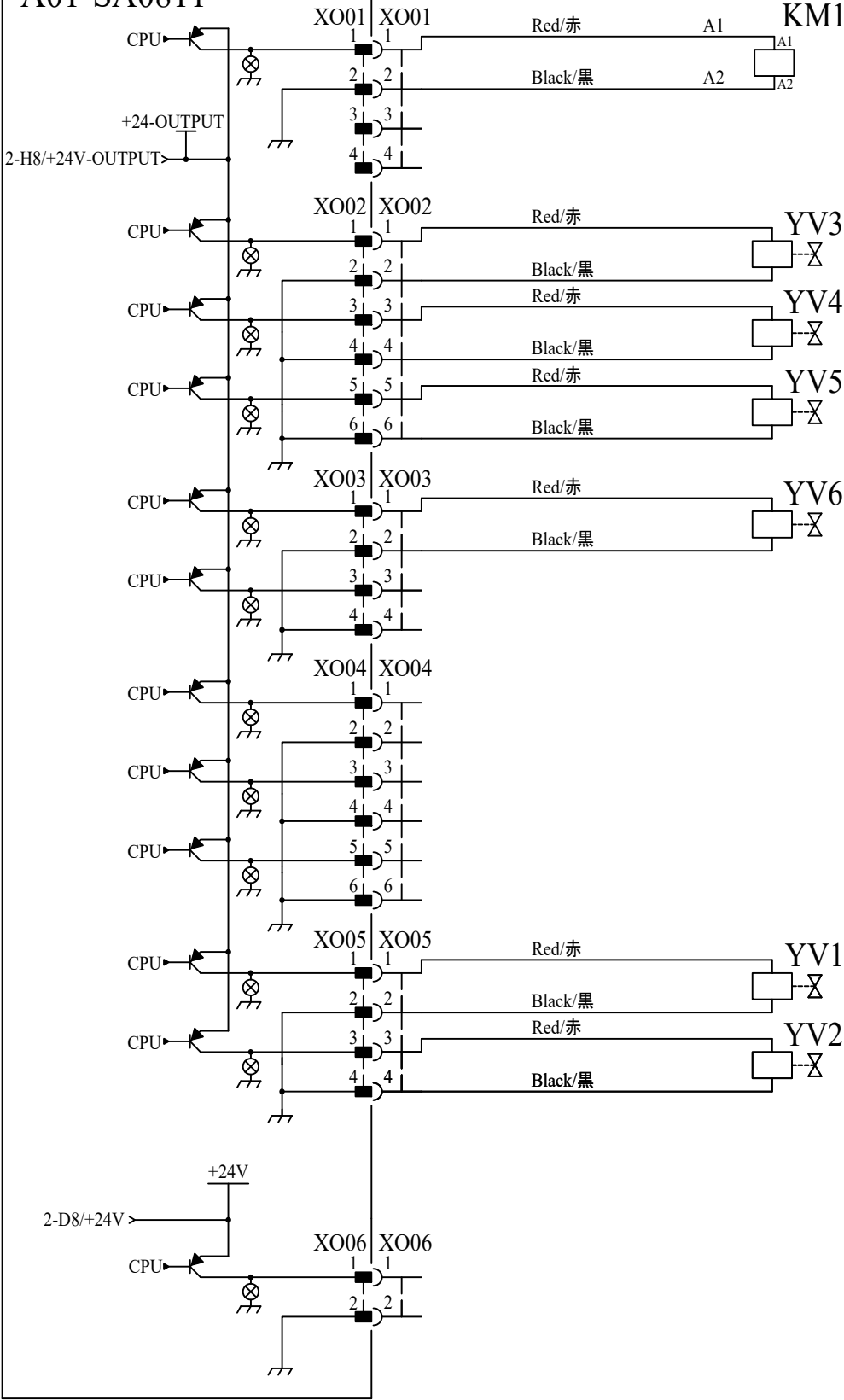


Model	ADP-610N	Type	ADP610N-V1	Date(YYYY/MM/DD)	2023/06/07	Page	3/4
Approved	Checked	Designed	△	Software	~		
Maki	Kobayashi	Maki	△	Serial No.	~		
			△	Drawing No.	01-0		
				Revision	SANKOSHA 三幸社		



S.V. : Solenoid Valve

A01-SA0811



Motor ON  
モーターON

Open Lower Steam S.V.  
下コテスチームON電磁弁

Open Upper Steam S.V.  
上コテスチームON電磁弁

Open Blower S.V.  
ブロワー電磁弁

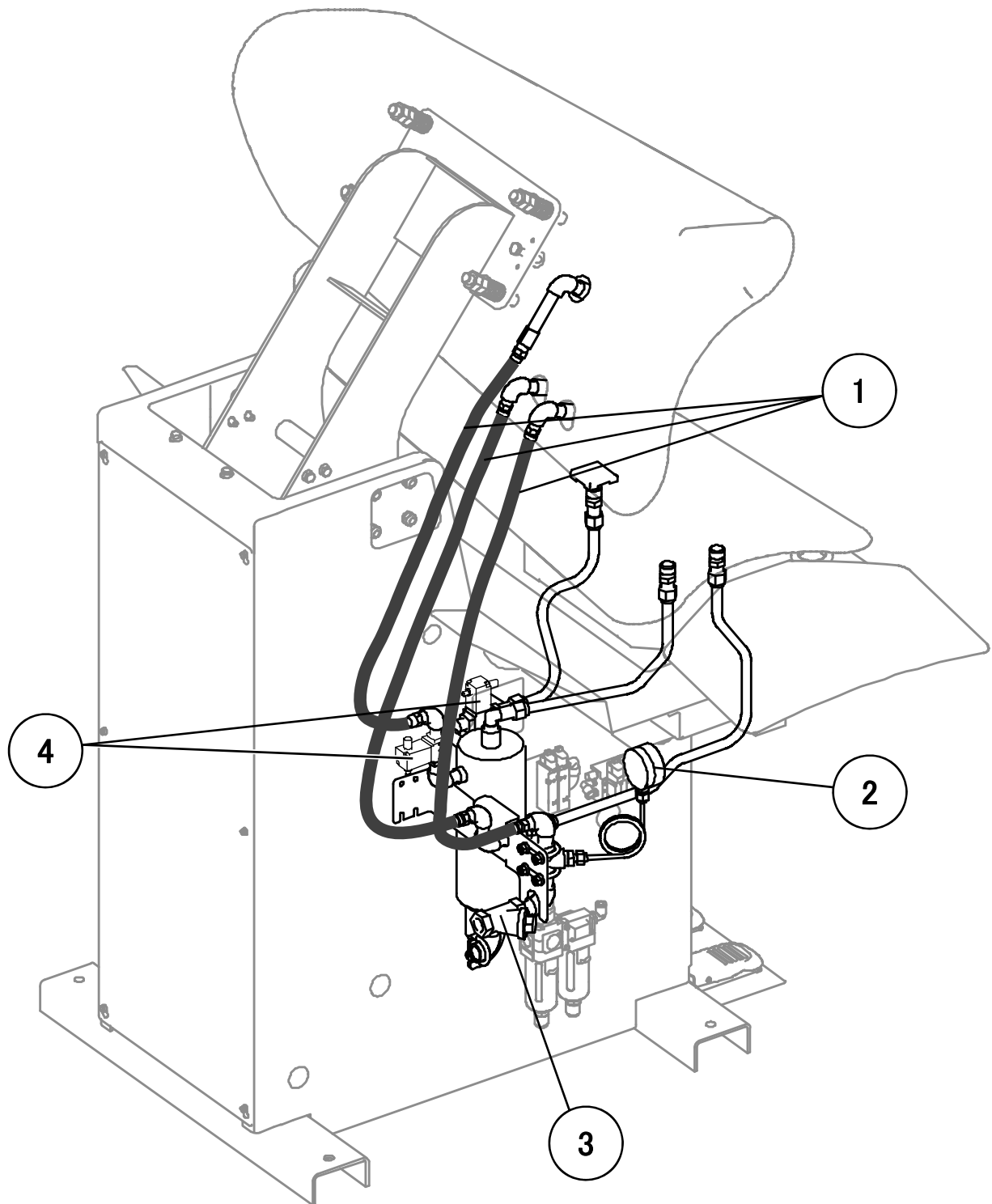
Open Vacuum S.V.  
バキューム電磁弁

Close Press Arm S.V.  
プレスアーム電磁弁

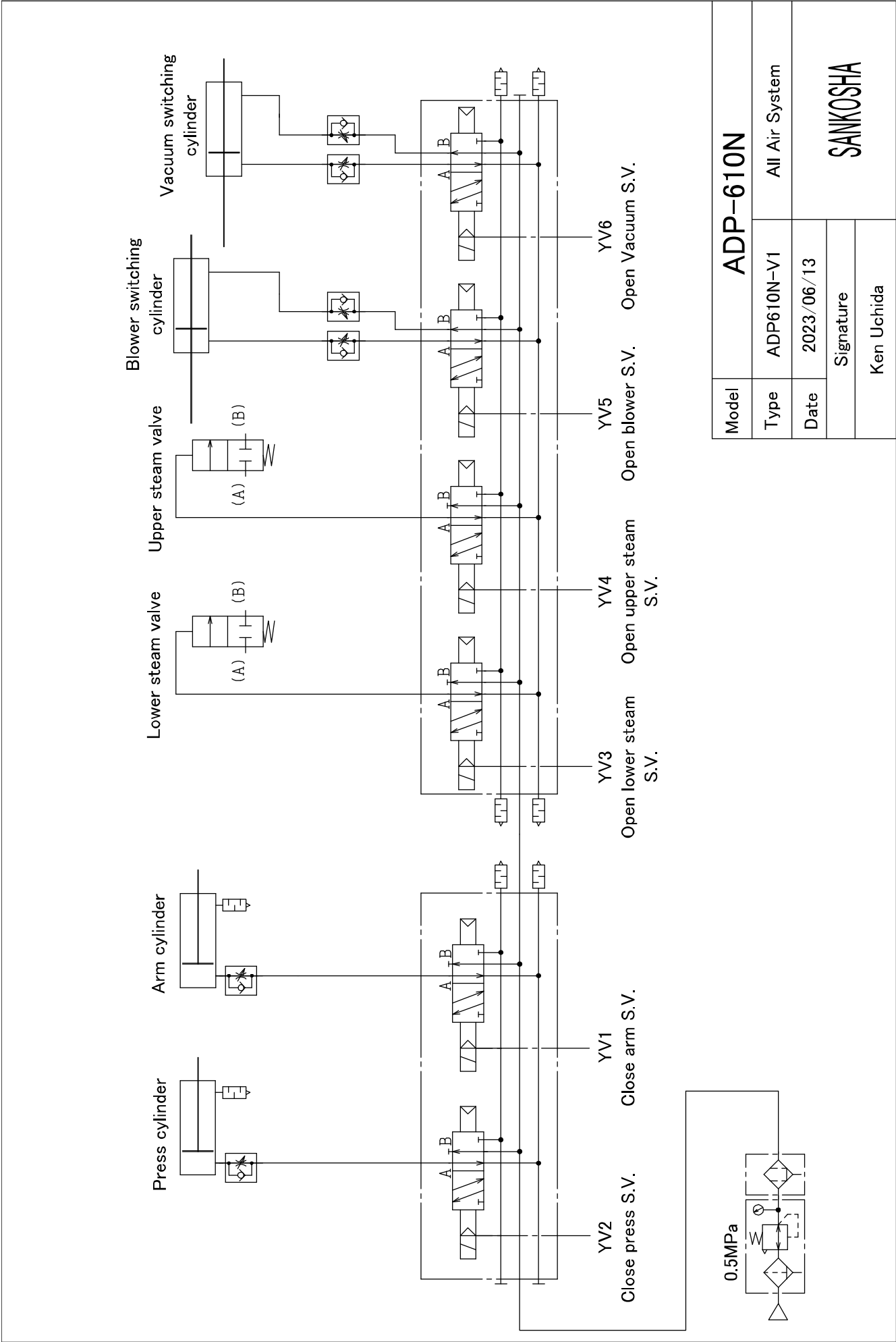
Close Press S.V.  
プレス電磁弁

Model	ADP-610N	Type	ADP610N-V1	Date(YYYY/MM/DD)	2023/06/07	Page	4/4
Approved	Checked	Designed	△	Software	~		
Maki	Kobayashi	Maki	△	Serial No.	~		
			△	Drawing No.	01-0		
			Revision		SANKOSHA 三幸社		

# Steam Piping Diagram



- |                  |                       |
|------------------|-----------------------|
| ① Flexible Hose  | : 3/8 × 800 (Blue)    |
| ② Pressure Gauge | : AMT7/16 60 φ 1.6MPa |
| ③ Y Strainer     | : SY-5 15A 80Mesh     |
| ④ Steam Valve    | : VND104D-10A         |



**Sankosha Manufacturing Co.,Ltd.**

988 Kanoya Cho, Hachioji, Tokyo 193-0815 JAPAN

T e l: 81-42-621-1181

F a x: 81-42-620-0751

URL: <http://overseas.sankosha-mfg.com/>



Distributor

ADP610N-V1A\*\*\*\*E

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