

LP-570E-V2

Instruction Manual

For your safety, please read this Instruction Manual carefully and understand all instructions before starting operating of the machine. If at any time you have any questions, please do not hesitate to contact us.

Welcome

Thank you for choosing our Single Buck Shirt Press LP-570E-V2.

This machine was delivered to you after thorough inspection at our plant. Please read this manual carefully for proper usage of this machine.

Product Specifications

Model	LP-570E-V2
Capacity (*)	Up to 60 shirts / hour
Power	3 phase 400V 50Hz 1.6kW
Air Consumption	43.2 liter / cycle
Steam Consumption	45 kg / hour
Air Pressure	0.6MPa
Steam Pressure	0.6MPa
Air Pipe	3/8B
Steam Pipe	Inlet:3/4B, Outlet:1/2B×3
Weight	610kg
Dimensions Width × Depth × Height	2110×1120×2000 (mm) 83.1×44.1×78.7 (inch)

(*) The number is based on our inspection and testing.

The number may vary depending on many variables including machine location, electricity, maintenance, garment type and size, operator's speed, etc.

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Safety Guidelines

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 most parts, 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. Please keep this manual as it will be needed in the future.

■ Please read the description of each warning label below. Each sign shows the degree of risk of injury or damage if the manual and/or labels are not followed and the machine is misused.

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

■ Rules are shown in the table below.

<u>^</u>	General Sign (for Alertness) This is to alert the user to unspecified caution, warning or danger.	\bigcirc	General Sign (for Prohibition) This is to alert the user to unspecified prohibition.
	Shock Hazard This is to alert the user to a risk of electric shock in certain circumstances.		Prohibition of Dismantling This is to alert the user to a risk of injury or shock if the indicated part is dismantled.
Na	Cut Hazard This is to alert the user to a risk of cutting hands or fingers by a cutter or others. May cause physical handicap.	0	General Sign (for Compulsion) This is to alert the user to unspecified user's action.
	Burn Hazard This is to alert the user to a risk of burn from heat or steam.		Necessity to Ground This is to indicate that the machine must be properly grounded, using the attached green wire.
00000	Pinch Hazard This is to alert the user to a risk of pinching by rollers which may cause permanent damage to extremities.		Rotation Hazard This is to alert the user to a risk of injury if rotating parts of the machine are not properly covered with during maintenance or operation.
	Rotation Hazard This is to alert the user to a risk of injury if rotating parts of the machine are not properly covered by during maintenance or operation.		

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



■ Installation



Installation and rigging of this product should be performed only by an authorized Sankosha distributor or by qualified personnel who has read this manual.

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

■ Ground Connection



The green wire must be properly grounded.

The electrical code must be conformed to 3 Phase 400V power.

Incorrect connection 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.

■ Shock Hazard



Do not touch the electric plug or switch.

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.

■ 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.

■ Shock Hazard



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

It may cause electric shock or explosion.

■ In case of flooding



Please call authorized personnel to inspect and repair the machine if necessary.

It may cause electric shock.

■ Maintenance



Please call authorized service personnel. Do not dismantle by yourself.

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

■ Safety Instructions



- For your safety, please 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.



■ Maintenance of warning labels



The labels need to be cleaned and replaced if necessary. It may cause an accident.

■ 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.

■ Not in use abroad



Do not use the machine outside of designated countries. It may cause fire due to different electrical supply.

■ 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 us or your Sankosha 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.

Hazardous Area

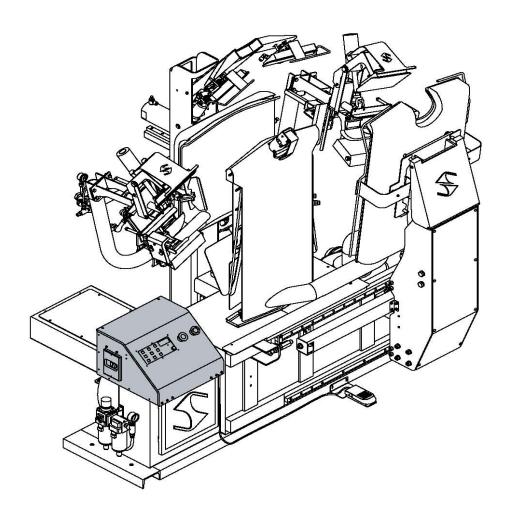
Electrically Live Area

DANGER

Control box has terminals with lethal voltage.

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

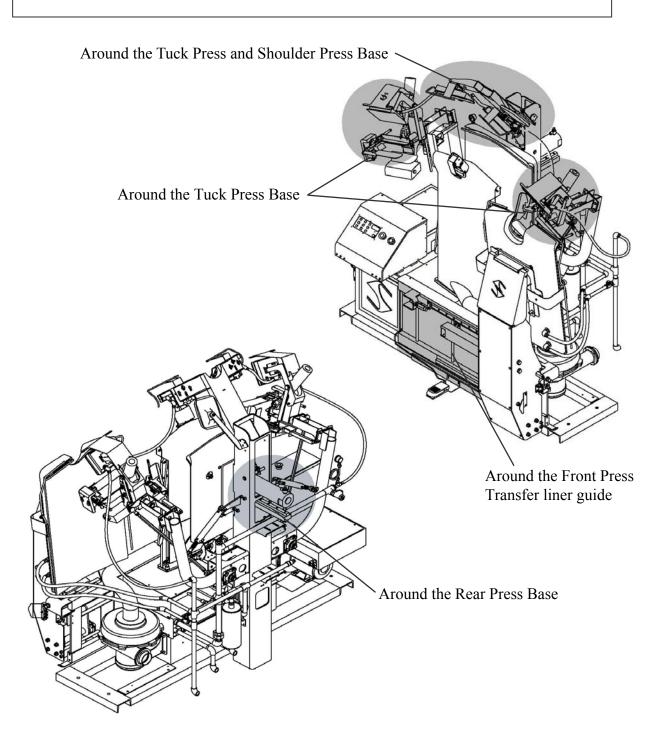
Ignoring this warning will result in serious injury or death due to electrical shock.



Machine Moving Area

WARNING

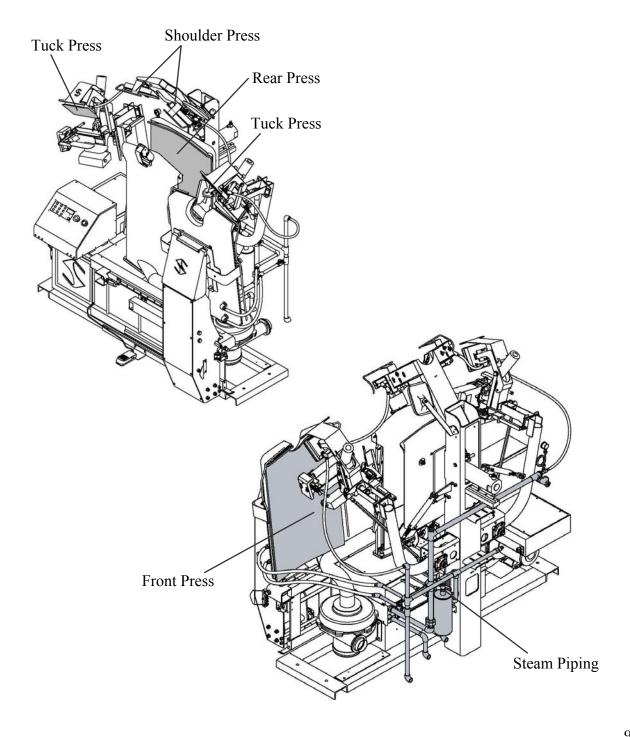
The machine has some moving areas along many portions. Keep your hands away from the moving area during operation. Before starting check up or maintenance, turn off the air and power first. Ignoring this warning could result in serious injuries.



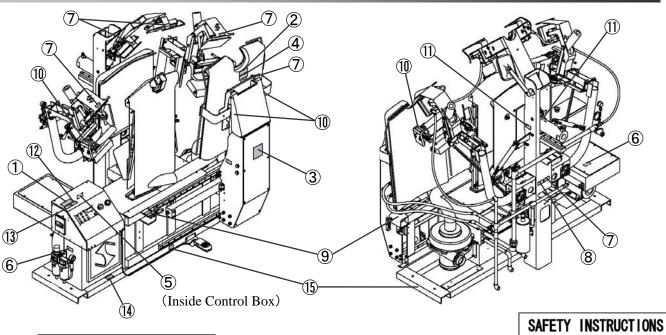
High Temperature Area

CAUTION

The machine has Press Heads which get extremely hot during operation. Never touch Pressing surface during and for 30 minutes after the steam has been turned off. Ignoring this warning may result in burns.



Safety Labels on the Machine



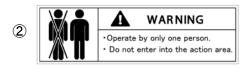


WARNING

Center Mark

Indicating the center of gravity of the machine.

Do not touch the machine while operating



WARNING 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.

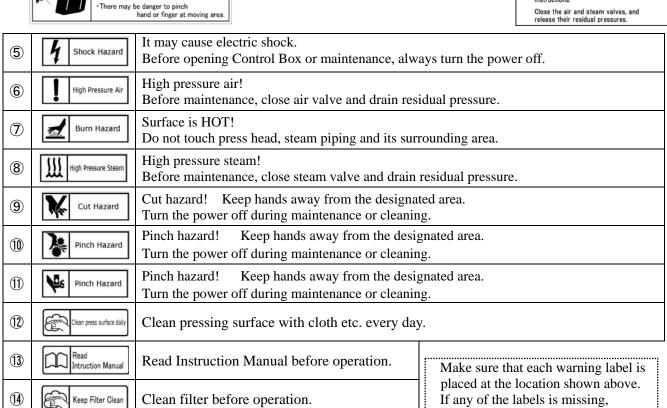
Never operate the machine with anyone else.

Before maintenance, follow the following instructions.

Close the air and steam valves, and

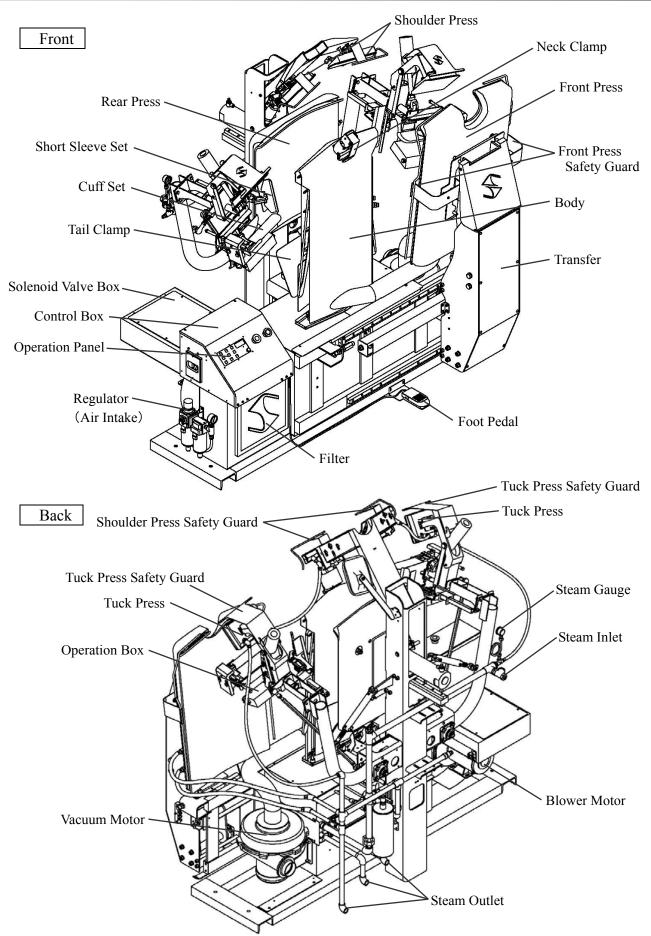
damaged, or illegible, contact your

distributor to obtain a new one.



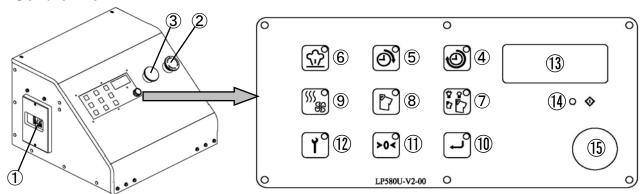
(15)

Main Devices



Control Unit

Control Box



(1) Power Switch

The switch is for the main power.

Black button is for turning the Power ON. Red Button is for turning the Power OFF.

2 Emergency Stop Button

Press this button at any stage in order to release the press and safely return it to the original position.

The beep starts to sound when the Emergency Stop Button is pressed.

Release the lock by turning the pressed button clockwise. (The beep will stop.)

Press the reset button next to return to original position.

3 Reset Button

There are three functions dependent on different timing of button push.

- 1. Push this button to return to the previous position. If it is processed by foot pedal, it is available before left the cuff set up.
- 2. To return to original position after Emergency Stop Button is activating.
- 3. To cease operation while the machine is working.

4 Long Timer Button (green lamp will flash when this timer is activated)

Let this button ON, you can change press timer with dialing No. 15 "Setting and Select Dial".

Also, this green lamp is blinking during operation if it is selected.

(5) Short Timer Button (green lamp will flash when this timer is activated)

Let this button ON, you can change press timer with dialing No. 15 "Setting and Select Dial".

Also, this green lamp is blinking during operation if it is selected.

6 Steam Button (green lamp will flash when it is ON)

There are two functions.

- 1. For automatic operation, you can choose steam injection ON or OFF. When you push it ON, it will steam during operation, and OFF it will not steam at all.
- 2. Press this button (over 1 second), Display (No.13) will show the steam timer setting for automatic operation. You can change the timer with Dial (No.15) before timer goes off from display.

- (7) Size Adjustment Button (green lamp will flash when it is ON)

 This button will make the sleeve arm position closer to the body when it is ON. It is very useful if the short sleeve is too small to reach the original position.
- Short Sleeve Button (green lamp will flash when it is ON)
 Press this button ON to press a short sleeve shirt (not to work tuck press)
- Warming-Up Button (green lamp will flash when it is ON)
 Press this button ON prior to pressing a shirt; it will heat up the body. Please refer on page 16 "Press warming-up Button".
- (1) Enter Button (for Timer Remember) (green lamp will flash when it is ON)

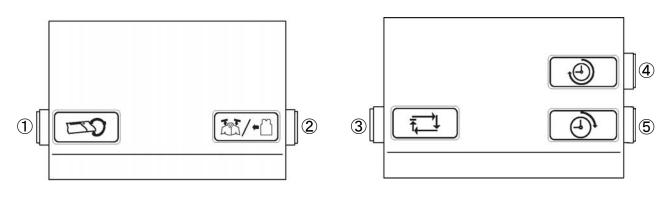
 This button is the registration button to remember all changes such as timer or function.
- ① Counter Clear Button
 Press this button. "0" will blink at ③"Display Window". Press ⑩ the "Enter Button".
 You can reset the counter at "0". Press this button again. The window will show garment counter.
- ① Test Button (green lamp will flash when it is ON)
 Press this button to start the test operation for each function. Please refer on page 33 "Test Operation".
- ③ Display
 It shows the counter, timer with count down, error number menu number and etc...
- Power Lamp
 The red lamp is blinking if it is turned on. Also, it is blinking with Emergency Stop
 Button. It will flash and original position with reset button push.
- (5) Setting and Select Dial

 This dial can change all timers and select menu numbers.

Operation Box

Operation Box Left

Operation Box Right



① Cuff Clamp Button

Press this button to clamp left cuff or short sleeve cuff. It must be complete up to tail clamp operation. If you release the button before taking the next step, the clamp will open.

② Start Button (right)

Press this button while also holding in the ① Cuff Clamp Button to work the shoulder press and to move the front press head to the press position.

3 Start Button (left)

Press this button after selecting the long or short button and keep pressing either button to work the front press and to start the automatic operation.

(4) Long Button

There are two functions on this button.

- 1. This is for the long timer operation. The machine is working according to the timer which is set in advance.
- 2. Press this button to clamp right cuff or short sleeve cuff. If you release the button before taking the next step, the clamp will open.

(5) Short Button

There are two functions on this button.

- 1. This is for the short timer operation. The machine is working according to the timer which is set in advance.
- 2. Press this button to clamp right cuff or short sleeve cuff. If you release the button before taking the next step, the clamp will open.

Operation Procedures

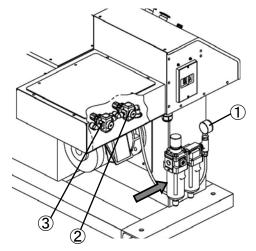
A Caution

Follow the procedure for proper operation.

Improper operation can cause mechanical failure or injury to operators.

Provide Air

- Check whether air pressure is set at the required level for main regulator and other regulators as below.
 - ① Main Regulator ··· 0.6MPa
 - ② Regulator (for Sleeve Down) ...0.25MPa
 - 3 Regulator (for Slide / Sleeve Up) ··· 0.3MPa

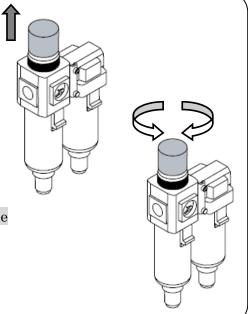


Low air pressure can cause a malfunction. If the pressure does not reach its standard level, set the air pressure properly following the procedure below.

- How to adjust air pressure
 - 1. Pull the adjustment knob up.
 - 2. Turn the knob to adjust air pressure

Clockwise → Pressure will increase Counterclockwise → Pressure will decrease

3. Push the knob down.



Check Point

• Check compressor if the main air pressure does not reach 0.6MPa even after the above adjustment

Attention!

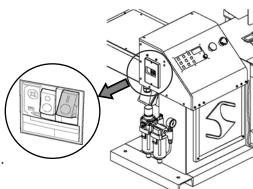
Run the machine where air can be supplied in a stable condition. Use after-cooler or similar equipment to supply clean air at all times.

Provide Steam

- Check whether steam with the pressure at 0.6MPa 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.
- It takes about 15 minutes until press heads heat up after steam is injected. (It may vary depending on the season and the environment.)
 Insufficient heat may adversely affect shirt finishing quality.

Turn the Power On

- The power is ON by pressing black button at the side of the control box.
- →The power lamp at control panel is blinking, and show "- - - - "on display.
- Press "Reset" button.
- →The lamp will keep lit and it is available to operate. Also, the display will change to counter.



Caution

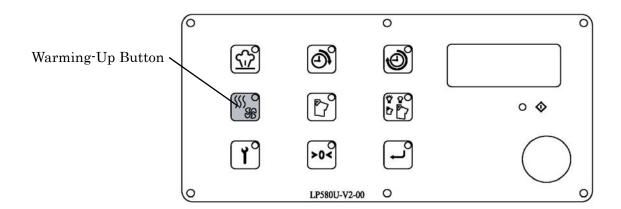
- •Any operation is not available without pushing the Reset button.
- •In case of the front press not being at original position, it will then move to its original position.

("A03" will be displayed during the move.)

Press Warming Up Button

• Press the "Warming-up" button on the control panel. It will work the blower motor 30 seconds ON and OFF for 10 minutes to warm up the machine.

Press "Reset" button (blue) or "Warming -Up" button to finish the warming up process.



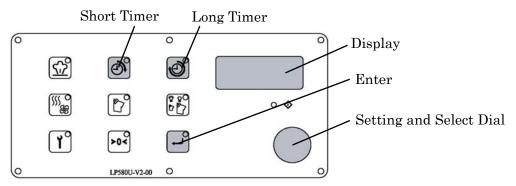
Set each timer according to the material of the shirt

How to set Long Timer / Short Timer

- ① Press Long Timer button or Short Timer button. (either button which is selected lamped)
 •When you choose long cycle timer, you can change timer for long cycle.
 - · · · it shows current long cycle timer on display.
 - •When you choose the short cycle timer, you can change the timer for the short cycle.
 - · · · it shows current short cycle timer on display.
- ② Turn the "Setting and Select Dial" to change timer. You can change per second.
 - * If you turn counterclockwise, the timer will increase. If you do clockwise, the timer will decrease.
- ③ Press the "Enter" button to set the timer → the new time will be memorized. Press the same timer button not to memorize the timer → the timer will be the same as the original.

(However, the changed timer will be effective as long as machine is ON.)

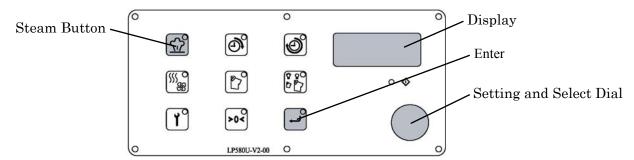
It is set 20 seconds on short timer and 28 seconds on long timer as standard. (Max. 99 seconds)



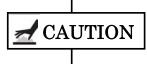
How to set the Steam Injection Timer

- ① Press the "Steam" button until showing the steam timer on the display (about 1 second) (green lamp is ON)
- ② Turn the "Setting and Select Dial", you can change the timer per second.
 - * If you turn counter clockwise, the timer will increase. If you do clockwise, the timer will decrease.
- ④ Press the "Enter" button to set the timer→ the new time will be memorized.
- ⑤ Press the same timer button not to memorize the timer →the timer will be the same as the original.
- ③ (However, the changed timer will be effective as long as machine is ON.)

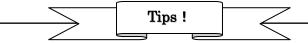
It is set 3.8 seconds on standard. (Max. 9.9 seconds)



Set the Shirt



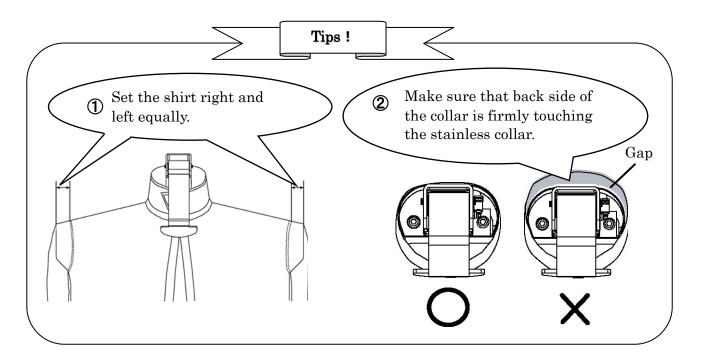
- •Beware of pinching hands or garment by moving part during the operation.
- ·Please take precautions against burning yourself at metal parts of press
- There are tips on how to finish the garment very well at each process.
- Please read and understand these tips, and utilize them for daily operations.
- · Please also read the caution statements for the safety use of the machine.



By finishing setting the shirt within 25 seconds, this will prevent the shirt from airing out too much and the pressing quality will improve.

Please aim to complete the setting the shirt within 25 seconds.

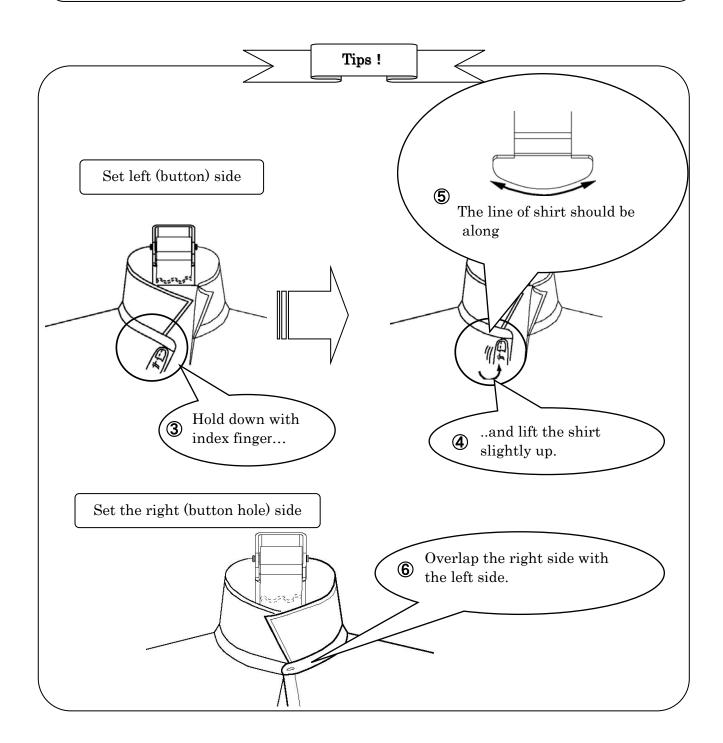
• Set the Shirt on the Body



• Set the Neck

Set the neck and step on the Foot Pedal.

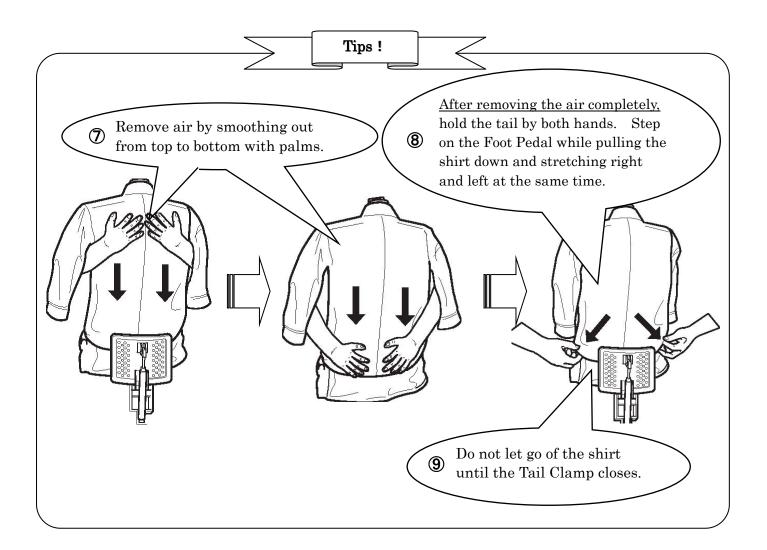
- \rightarrow The Neck Clamp will close.
 - XIf you want to set the neck again, press the Reset Button (blue). The Neck Clamp will open, and you can set the neck once again.
 - *In order to set the neck after the tail of shirt is set, step on the Foot Pedal. The Neck Clamp opens while stepping on the Foot Pedal.



• Set the Tail

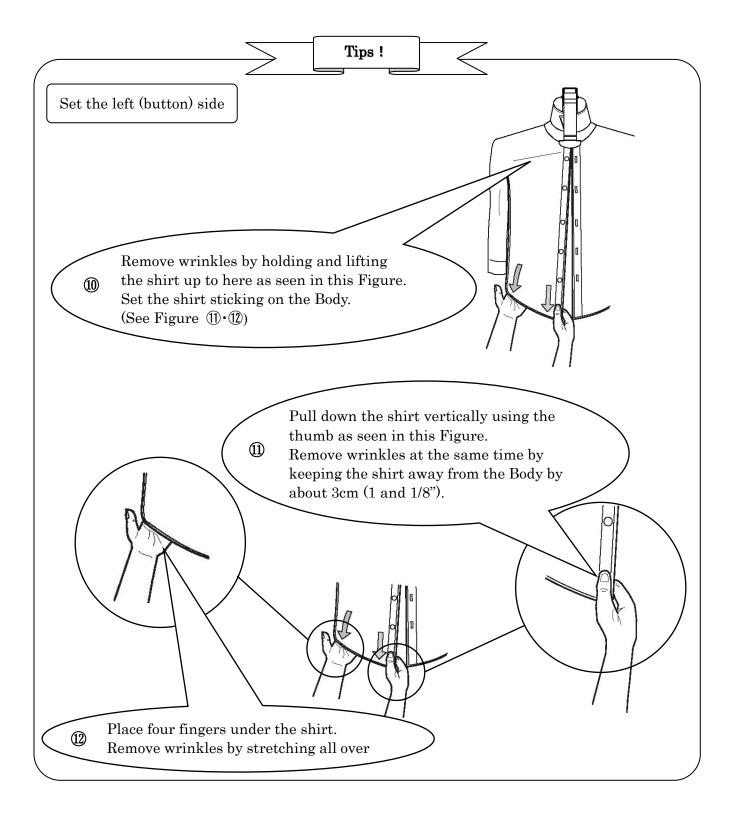
After smoothing out the back of the shirt from top to bottom with both hands, step on the Foot Pedal and pull the tail at the same time.

- \rightarrow The Tail Clamp closes, and the vacuum starts to work.
 - ※ If you want to set the tail again, press the Reset Button (blue).
 The Tail Clamp opens, and you can set the tail once again.



· Set the Front

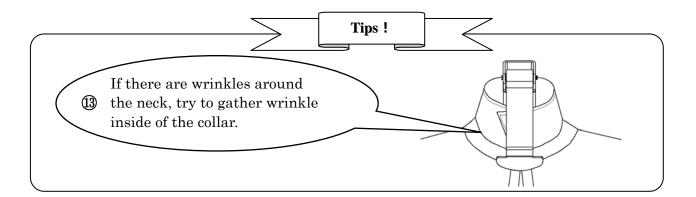
After the Tail Clamp closes, vacuum starts to work and side expanders come out. Remove all the wrinkles by pulling the shirt down.



Set the right (button hole) side

Set the right side as same as the left side.

If there is a pocket, smooth out the air by the back of the hand moving from bottom to top of the pocket.



· Set Cuff (Long Sleeve / Short Sleeve)

Select Long Sleeve or Short Sleeve

You can select long sleeve or short sleeve on the "Short Sleeve" Button ON or OFF at control panel

Long Sleeve

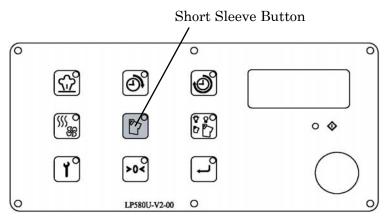
When the "Short Sleeve" button is off, it is in the Long Sleeve mode.

(When the "Short Sleeve" button in ON, press the button to OFF, then it is in the long sleeve mode.)

Short Sleeve

When the "Short Sleeve" button is on, it is in the Short Sleeve mode.

(When the "Short Sleeve" button is OFF, press the button to ON, then it is in the short sleeve mode.)

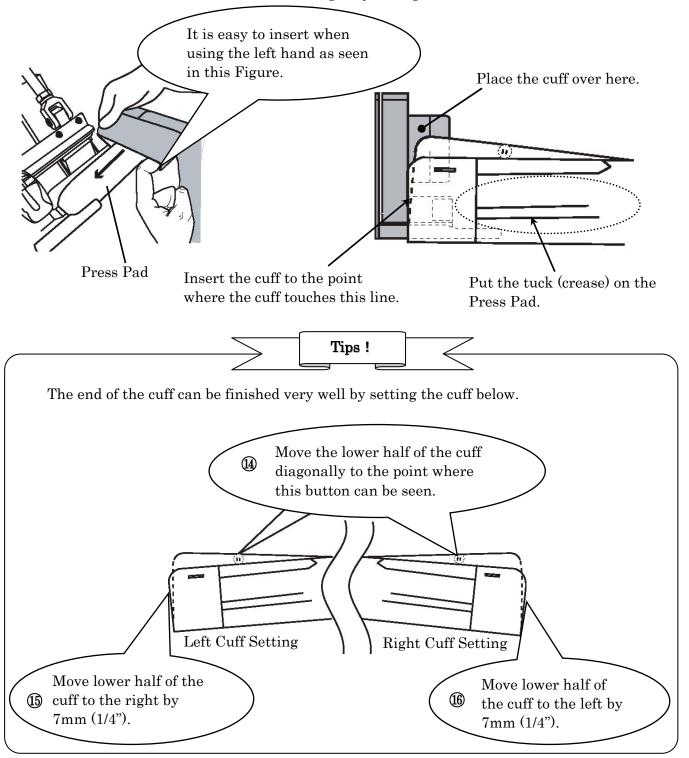


1: Set the Long Sleeve

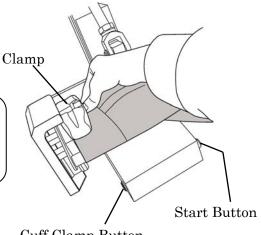
Make sure that the Short Sleeve Button is OFF.

Set the Left Cuff

• Insert the Cuff into the Press Pad holding it by the right hand.



- While holding the cuff in place with the right hand, press the Cuff Clamp Button by the left hand. (Do not let go of the button.)
- \rightarrow The cuff is clamped.
 - * Be careful not to pinch your finger.
 - X If you want to set the cuff again, release the Cuff Clamp Button.
 - The Cuff Clamp opens, and you can set the cuff once again.
- While pressing the Cuff Clamp Button, press the Start Button by the right hand.
- → The Shoulder Press goes down and the Front Press moves in front of the Body.



Cuff Clamp Button

CAUTION

*The Front Press will come closer to the operator.

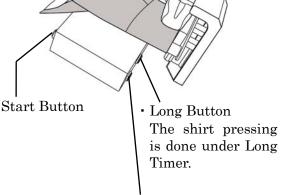
Set the Right Cuff

 Insert the cuff into the Press Pad holding the cuff by the left hand and set the cuff same as the left cuff. Press the Long or the Short Button by the right hand. (You can select either the long timer or short timer.)

- \rightarrow The cuff is clamped.
 - * Be careful not to pinch your finger.
 - X If you want to set the cuff again, release the Cuff Clamp Button.

The Cuff Clamp opens, and you can set the cuff once again.

- While pressing the button by the right hand, press the Start Button by using the left hand.
- → Front Press, Rear Press, and Tuck Press close and automatic operation starts to work.



 Short Button The shirt pressing is done under Short Timer.

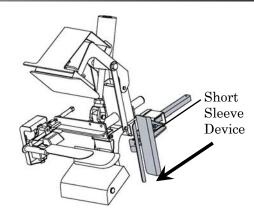
Clamp

Tips!

•When the end of the sleeve cannot reach the clamp, press and turn the Size Adjustment Button ON. The sleeve arm closes and the clamp comes closer. (Press and turn this button OFF once again after the operation so that the sleeve can be easily set.)

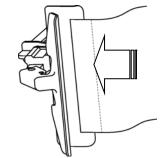
2: Set the Short Sleeve

- Press the Short Sleeve Button on the operation panel. (The lamp turns ON.)
- Move both the left and right short sleeve device to the front position.



Set the Left Short Sleeve

- Set the short sleeve. Hold the short sleeve by the right hand and press the Cuff Clamp Button by using the left hand. (Do not let go of the button.)
- \rightarrow The short sleeve is clamped.
 - ※ If you want to set the short sleeve again, release the Cuff Clamp Button. The Cuff Clamp opens, and you can set the short sleeve once again.
- While pressing the Cuff Clamp Button, press the Start Button by using the right hand.



→ The Shoulder Press goes down and the Front Press moves in front of the Body.

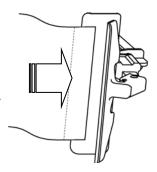
CAUTION

* The Front Press will come closer to the operator.

Set the Right Short Sleeve

- Set the short sleeve as left. Hold the short sleeve by the left hand and press the Cuff Clamp Button by using the left hand. Press the Long or Short Button by using the right hand. (You can select the long timer or the short timer.)
- → The short sleeve is clamped.
 - * If you want to set the short sleeve again, release Cuff Clamp Button. The Cuff Clamp opens, and you can set the short
- While pressing the button, press the Start Button by the right hand.
- → The Front Press and the Rear Press close and automatic operation start to work.

(Tuck Press does not close under the Short Sleeve Mode.)

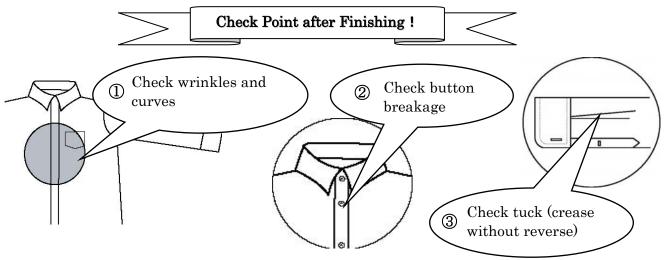


Tips!

- •When the end of the sleeve cannot reach the clamp, press and turn the Size Adjustment Button ON. The sleeve arm closes and the clamp comes closer.
 - (Press and turn this button OFF so that the sleeve can be easily set.)
- •Under short Sleeve Mode, you can cancel the steam injection with Dip switch 7. Please refer to page 38 for "5. diP (Dip Function Setting)

Informatio

- Press the Reset Button during the automatic operation, and then all the processes will stop working.
- Step on the Foot Pedal while Blower works, then the blower time can be extended. The Blower timer can be extended 5 seconds by every step. (Maximum: 99 seconds)
- All the presses open and complete when the setting time is over.
- →The Front Press moves to the right. Remove the shirt after that, and then set next shirt on the machine.



After Operation Is Over

Turn the power OFF by pressing the red button at left side of the Control Box.

→Timer or Counter on the display window turns OFF.

Other Operations

How to Reset Emergency Stop (Safety Error)

In case the Emergency Stop Button or Safety Guard at the Front Press/Shoulder Press/Tuck Press is activated, the buzzer goes off and all of the operations will stop working. All the presses (Shoulder/Body/Tuck) begin to open and the display window will show an error.

How to Release

•In case of Pressing Emergency Stop Button:

Release the lock by turning the button to the right. Press the Reset Button.

The Emergency Stop cannot be released unless the Reset Button is pressed.

•In case of Pressing Each Safety Guard:

Press the Reset Button, then the machine will start to work

<u>XIn case of the front press not being at the original position, it will then move to its original position. ("A03" will be displayed during the move</u>

About the Cover Counter

The Cover Counter was created to make it easy for the customer to know when to change the cover and insure the proper finish quality. If the cover counter exceeds 25,000 times, there will be an error displayed (EC1) when the power is turned on, and the machine will not start.

<u>X THEREFORE, AFTER CHANGING THE COVER, ALWAYS RESET THE COUNTER</u>

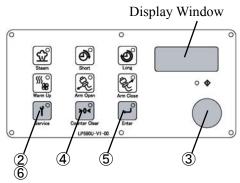
Please use the following instructions when resetting the cover counter.

① After changing the cover, turn the machine on and press the blue reset button for an extended time. Doing this will cancel the buzzer and error.

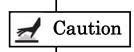
Caution

It is possible to use the machine after completing this step. However, if the counter is not reset, the reset button must be pressed again the next time the machine is turned on.

- ② Press " Test" Button on the control panel. \rightarrow The display will show
- 3 Turn the Set/ Select Dial until [is displayed. Press the "Enter" Button.
 - ightarrow The display will show [.(Number is a pro forma amount.)
- 4 Press "Counter Clear" Button on the control panel.
 - \rightarrow The display will show $\boxed{\blacksquare}$, and the 0 will start flashing.
- ⑤ Press "Enter" Button on the control panel.
 - →The display will show a solid 0 with no flashing. The Reset is finished.
- **(6)** Press the "Test" Button once more to return to standard operation.



How to Replace the Cover & Padding



28

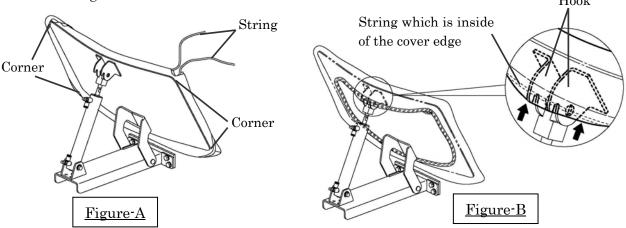
Please turn off the power when replacing covers and padding. Please let the machine cool down completely before replacing covers and padding. Ignoring this warning may result in burns.

Tail Clamp

1. How to Install Tail Clamp Cover

(1) Hook edge of the Tail Clamp Cover on the corners of the Tail Clamp. Pull and tie the string. Keep the rest of the string inside of the cover. (Figure-A)

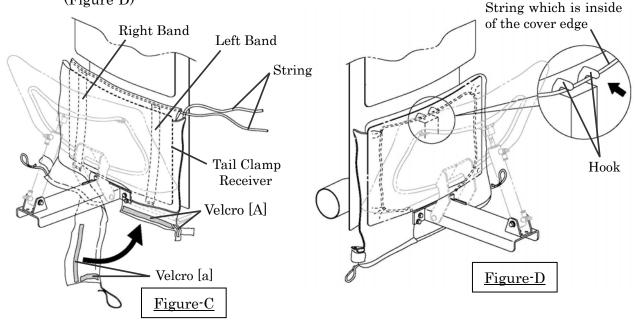
(2) Hitch the string inside of the cover edge around the hook along with the cover edge. (Figure-B)



2. How to Install Tail Clamp Receiver Cover

- (1) Position the Tail Clamp Receiver Cover at back of the Body. Pass the right band of the Tail Clamp Receiver Cover through the Tail Clamp Receiver sliding from right to left. Pass the left band of the Tail Clamp Receiver Cover through the Tail Clamp Receiver sliding from left to right. (Figure-C)
- (2) Hook the cover edge at the four corners of the Tail Clamp Receiver. Pull and tie the string. Keep the rest of the string inside of the cover.
- (3) Attach Velcro [a] to Velcro [A]. (Figure-C)

(4) Hitch the string inside of the cover edge around the hook along with the cover edge. (Figure-D)



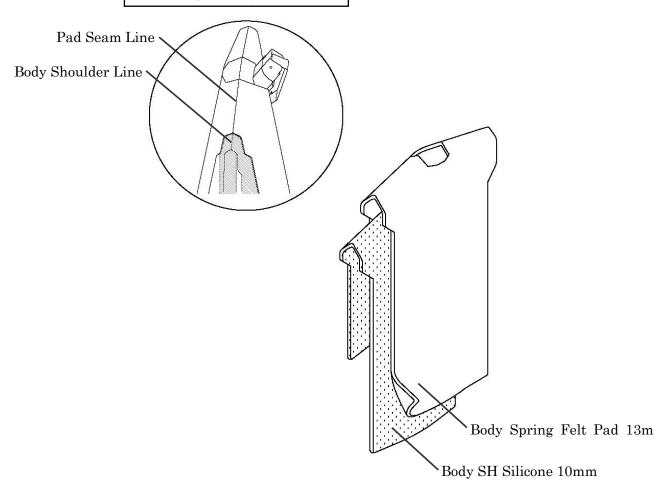
Body

• Cover and Padding can be replaced separately.

1. How to Install Body Pad

- (1) Install Pads to Body in following order: Body SH Silicone 10mm→ Body Spring Felt Pad 13mm.
- (2) Install the Pad so that the seam line of each Pad matches to the ridge of Body Shoulder. Make sure right and left are evenly set.

Seam line of each Pad matches to the ridge of body shoulder.



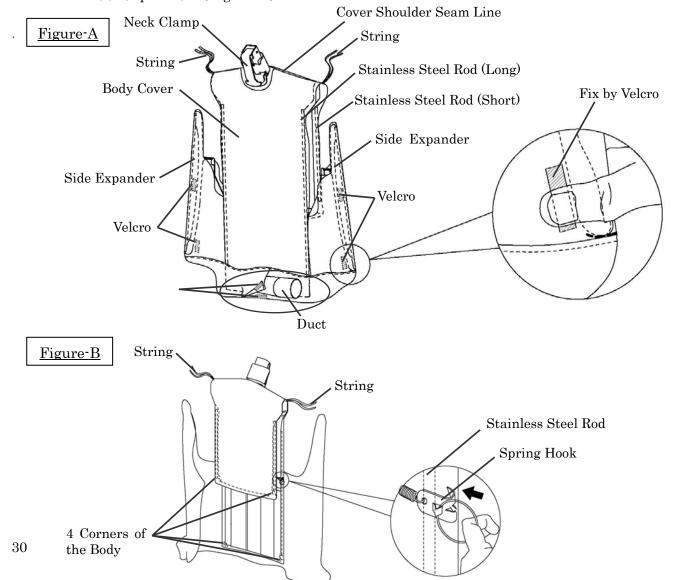
2. How to Install the Body Cover

Caution

• Stainless Steel Rod is installed at front and rear side of the Body Cover. When replacing covers, remove the Steel Rods and install covers in the following order.

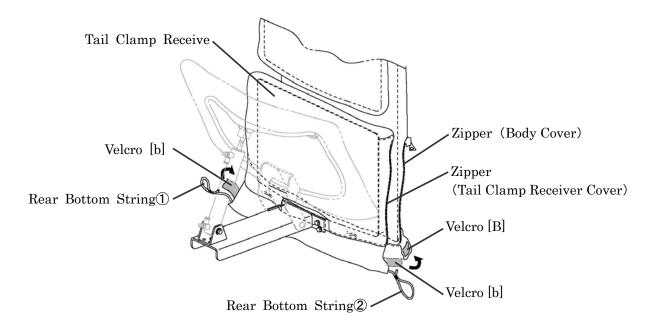
2-1.Install Body Cover

- (1) Install the Body Cover over the Neck Clamp. Put the cover over the Side Expander right and left, and attach Velcro. (2 places on left and right each) (Figure-A)
- (2) Pass the Duct through the hole of the cover, and attach Velcro. (Figure-A)
- (3) Insert longer Stainless Steel Rod into the cover from the string in front left and right. Install shorter Stainless Steel Rod into the cover from the string in rear left and right. (Figure-A)
- (4) Face the cover shoulder seam line up, and make it even left and right.
- (5) Hook the edge of the cover at the corners of the Body (4 corners). Pull and tie the Shoulder String and tie. Keep rest of the string inside the cover. (Figure-B)
- (6) Hitch the Spring Hook inside the Body to the Stainless Steel Rod inserted in Step (3). (4 places) (Figure-B)

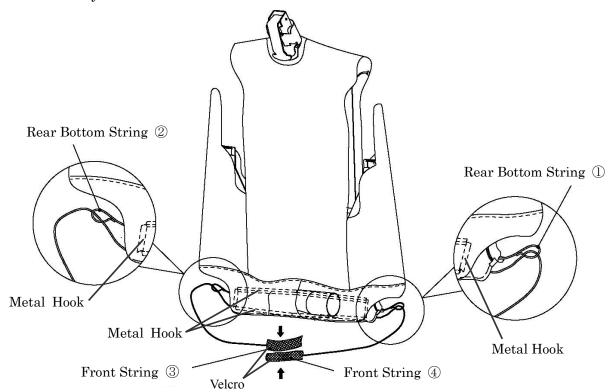


2-2. How to Install the Tail of the Body Cover

(1) Zipper Tail Clamp Receiver Cover and Body Cover and attach Velcro [b] and Velcro [B].

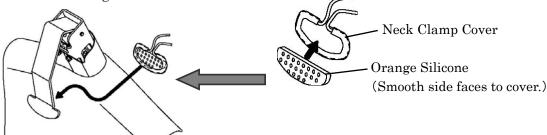


- (2) Pass the Front String 4 through the loop of the Rear Bottom String 1. Pass the Front String 3 through the loop of the Rear Bottom String 2.
- (3) Pull the Velcro of Front String ③ and the Velcro of Front String ④ and attach together at the front of the Body. Make sure the entire string goes under the Metal Hook at every spot: front and rear, and right and left.
- (4) Stretch any wrinkle or slack.



Neck Clamp

- (1) Put the Neck Clamp Orange Silicone in the Neck Clamp Cover facing the smooth side of the Silicone to the cover.
- (2) Install the Neck Clamp Cover (with Silicone) over the Neck Clamp Arm from the back side of the Arm. Make sure the surface of the Clamp Cover is flat. Tie the string firmly. Wrinkles on the cover surface may adversely affect its finishing quality. Keep the rest of the string inside of the cover.

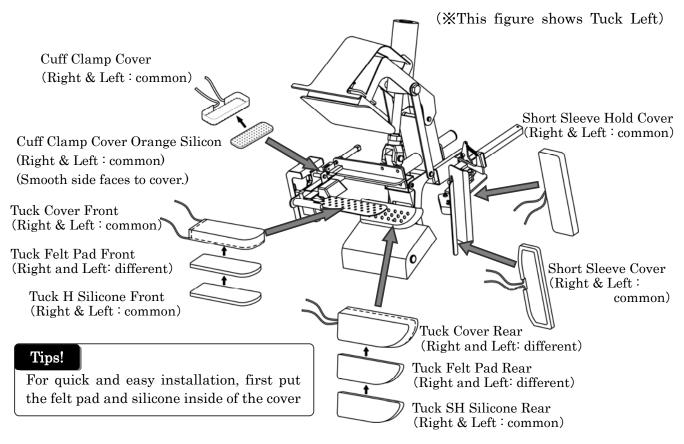


How to Install the Cuff Clamp Cover, Front & Rear Tuck Cover and Short Sleeve Cover

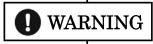
Install the cover carefully not to make any wrinkles on its surface. Tie the string firmly. Keep the rest of the string inside of the cover.

Caution

•Make sure that there is a cover with same the shape on right & left and the one with different shape.



Test Operation



Before using the test operation, make sure there is no one working near the machine.

The Test mode operation enables the machine to run the process by process while the machine runs all the functions continuously on the normal operation.

Step 1: Press the "Test" button on the control panel.

→ The Green lamp will light up, and show "o1" on the display.

Image of display for test "o 1"



Step 2: Select the test number with the "Setting & Select Dial"

→ Test number will go up with counterclockwise, and the number goes down with clockwise

(The number is displayed with order of test number chart at page 34.)

Step 3: Press the "Enter" button.

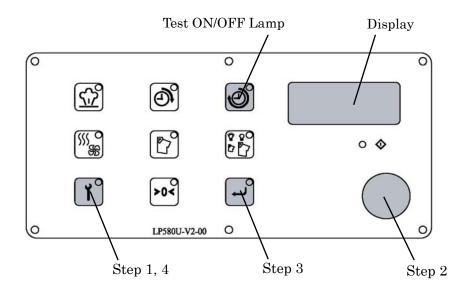
- \rightarrow Test mode is now ON, and the function starts working. The long timer button is blinking while the test is ON.
 - * Press the "Enter" button again to stop the test operation.

Caution

Please finish the test operation; otherwise it will not work for another test.

Step 4: Press the "Test" button when you are finished using this feature.

→ The test button lamp will go off and come back to its original position. It will be displayed in the counter.



Test Number List

Test No	o. Test Item	Remarks
o 1	Magnetic Contactor for Vacuum Motor	
o 2	Magnetic Contactor for Blower Motor	
o 3	Shoulder Press Solenoid (No.3)	
o 4	Tail Clamp Up/Down Solenoid (No.4)	•Buzzer sounds after 0.4 seconds from start to move upper, and does after 0.7 seconds from start to move lower, please adjust speed using buzzer.
o 5	Sleeve Arm Up/Down Solenoid (No.5/No.21)	•Buzzer sounds after 1.8 seconds from start to open, and does after 2.0 seconds from start to close, please adjust speed using buzzer.
o 6	Tail Clamp Solenoid (No.6)	•Buzzer sounds after 0.4 seconds from start to close, and does after 1.35 seconds from start to open, please adjust speed using buzzer.
o 7	Left Cuff Clamp Solenoid (No.7)	•Buzzer sounds after 0.225 seconds from close to open, and does after 0.2 seconds from open to close, please adjust speed using buzzer.
o 8	Right Cuff Clamp Solenoid (No.8)	•Buzzer sounds after 0.225 seconds from close to open, and does after 0.2 seconds from open to close, please adjust speed using buzzer.
o 9	Front Press Transfer Solenoid (No.9/No.10)	
o 11	Tuck Press Solenoid (No.11)	•Buzzer sounds after 1.3 seconds from start to close, please adjust speed using buzzer.
o 12	Body Press Solenoid (No.12)	•Buzzer sounds after 1.8 seconds from start to close with Rear Press Head, and does after 5.0 seconds from start to open, please adjust speed using buzzer.
o 13	Side Expander Solenoid (No.13/No.22)	•Buzzer sounds after 1.55 seconds from start to open, and does after 1.4 seconds from start to close, please adjust speed using buzzer.
o 15	Steam Injection Solenoid (No.15)	•It will work 0.3 seconds when steam button is ON.
o 18	Neck Clamp Solenoid (No.18)	
o 23	Buzzer	

CAUTION

•Beware of Test No.9, the Front Press Head will move to left when the test is ON.

Test No	Test Item	Remarks
BBBB	Dip Switch	You can check and change the DIP switch setting. Please see "DIP Function" on page 40. Press the Counter Clear Button to finish.
	Service timer (Volume)	You can check and change the Volume function. Please see "Volume Function" on page 39. Press the Counter Clear Button to finish.
BBB	Panel Display Test	By turning Set/Select Dial, you can check if the Display Window properly shows various numbers.
	Panel Button Test	By pressing each Button on the Operation Panel, you can check if each button properly works. The green light goes ON.
	Input Test 1	Test for Conduction for each sensor and each button. * Test of Emergency Switch & Safety Guards not available.
8888	Input Test 2	It indicates if the input signal is On or OFF. * Test of Emergency Switch & Safety Guards not available.
8888	Cover Counter	Body pressing time after changing the body cover. **XAfter cover change, be sure to reset the cover counter. (Refer to the 27 pages for the reset instructions.)
8655	Press Counter	Body life time accumulated pressing time. (Cannot reset)

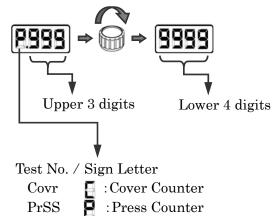
■ About the display of cover counter and press counter

Maximum counter is 9,999,999.

The counter shows twice due to the limited space of Display Window. First it shows upper 3 digits. Turn the Set/Select Dial to the right next. It shows lower 4 digits next. First digit/letter is a sign to identify Cover Counter or Press Counter.

Below contains a diagram of how this works.

• Example of Maximum Counter



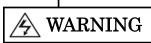
• Example of Cover Counter: 9,999 times



• Example of Press Counter: 12,000 times

• Example of Cover Counter: 25,000 times

Service Menu



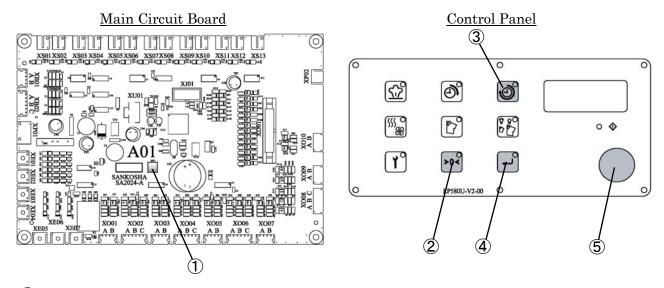
Do not touch anywhere due to the potential danger when you open the control box.

Caution

The initial setting will be changed without prior notice at the time of model changes.

Press the Service Button (BP1) on the main circuit board in the control box; you can check the "Input Test", "Output Test", "Volume Control", "Dip Switch Set" and "Timer Setting". Furthermore, you can reset all the settings to factory standard and check the software version.

■ Here is an explanation for the Service Button Location, all buttons and functions to use for the operation of the service menu.



- ① Service Button
 - Push this button, you will see "In1" on display and ready to use service menu.
- 2 Counter Clear Button

This is the Return Button on service menu.

- 3 Long Timer Button
 - It is used on Input Test 2. Button lamp is ON at input which is ON, and the lamp is OFF at input which is OFF. It is useful to check for possible wire disconnection problem.
- 4 Enter Button

This is the confirmation button for menu which is selected, and to confirm details of a setting change.

(5) Setting & Select Dial

This is a dial for menu select and item select on the service menu.

Counterclockwise: item forward, and number up on setting.

Clockwise: item return, and number down on setting.

■Service Menu List (Please read the following list for the details which is written as Service Menu Explanation.)

Display	Meaning	Function	
150	in1	For "input test 1"	
	in2	For "input test 2"	
	out	For "output test"	
	m VoL	For volume control setting	
	diP	For dip switch select	
	tou	For timer change which is shown the number on display	
def	dEF	For reset all program to standard of factory shipping (default)	
	VEr	For showing current version number of program	

■How to operate

- 1. Press the "Service Button" on main circuit board No, 1→It is shown on display.
- 2. Dial with "Setting & Select" knob No.5 and select the service menu.
- 3. When you see the menu which you want to select, press the "Enter" button No.4.
- 4. Operate referring to one of the "Service Menu Explanation" which you are looking for.
- 5. When you finish all of the set up, press the "Counter Clear" button No.2 to return to the original position. (Even if you don't push the counter clear button, it will return to the original position automatically.)

■Service Menu Explanation

- 1. In1(Input Test 1)
 - According to instruction 1, you can see on the display, please push the "Enter" button No.4. If you push the input button / pedal (reference to chart 1), the number will be shown.

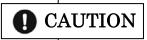
Chart 1 "Input Test 1" List

Button / Pedal / Sensor	Disp. No.	Button / Pedal / Sensor	Disp. No.
Left Cuff Clamp Button	S 1	Front Press Left Position Sensor	S 10
Shoulder Press/Slide Start Button	S 2	Front Press Left Speed Reduction Sensor	S 11
Press Start Button	S 3	Front Press Right Speed Reduction Sensor	S 12
Press Short Button	S 4	Front Press Right Position Sensor	S 13
Press Long Button	S 5	Reset Button	b1A
Shoulder Press Close Sensor	S 6	Neck Close Foot Pedal	b1b
Shoulder Press Open Sensor	S 7	Vacuum Motor Magnet contactor	b2A
Front Press Open Sensor	S 8	Blower Motor Magnet Contactor	b2b
Front Press Close Sensor	S 9		

2. In2(Input Test 2)

- According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- Dial the "Setting & Select" knob No.5, the input number is shown on display (reference Chart 1), and the "Long Timer" button No.3 lights on in case of item of input is ON.

3. out(Output Test)



Please remove all air in case of the output test. It might cause a mechanical problem and/or injury.

- According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- Dial the "Setting & Select" knob No.5 and select the number (reference Chart 2) which you want to test, then press the "Enter" button No.4. The Test selected is now ready.

Chart 2 "Output Test" List

Disp.No.	Output Name	Remark
1A	Vacuum Magnet Contactor	Magnet Contactor KM01
1b	Blower Magnet Contactor	Magnet Contactor KM02
2A	Shoulder Press Solenoid	Solenoid No.3
2b	Tail Clamp Up Solenoid	Solenoid No.4
2C	Tail Clamp Close Solenoid	Solenoid No.6
3A	Sleeve Arm Close Solenoid	Solenoid No.5
3b	Sleeve Arm Open Solenoid	Solenoid No.21
4A	Left Cuff Clamp Close Solenoid	Solenoid No.7
4b	Right Cuff Clamp Close Solenoid	Solenoid No.8

<u>Chart 2</u> "Output Test" List (continue from previous page)

Disp. No.	Output Name	Remark
4C	Neck Clamp Close Solenoid	Solenoid No.18
5A	Front Press Left Transfer Solenoid	Solenoid No.9
5b	Front Press Right Transfer Solenoid	Solenoid No.10
6A	Tuck Press Close Solenoid	Solenoid No.11
6b	Side Expander Open Solenoid	Solenoid No.13
6C	Steam Injection Solenoid	Solenoid No.15
7A	Body Press Close Solenoid	Solenoid No.12

4. VoL(Volume Control)

- •According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- •Dial the "Setting & Select" knob No.5, the volume number is shown on the display (reference Chart 3), so select the volume you want to change. Press the "Enter" button No.4, current volume number will be shown on the display.
- •Dial the "Setting & Select" knob and change the timer. Then press the "Enter" button No.4 to confirm the set up.

Chart 3 "Volume Control" List

Disp. No.	Details	Standard Set Timer
V 1	To control brake air supply timer for front press transfer to left	0.28 sec. (Max. 1.3 sec.)
V 2	To control brake air supply timer for front press transfer to right	0.25 sec. (Max. 1.3 sec.)
V 3	To control Sleeve Arm tension to soften.	0.035 sec. (Max. 0.2 sec.)
V 4	To control blower motor start timing after body press start	3.25 sec. (Max. 5.1sec.)
V 5	To control side expander open timer after second foot pedal.	1.35 sec. (Max. 3.0 sec.)
V 6	To control timing between body press start and sleeve arm start to open	1.6 sec. Max. 3.0 sec.)
V 7	To control timing between body press start and tuck press start to close	2.3 sec. (Max 3.0 sec.)
V 8	To control tuck press time.	32sec. (Max. 32 sec.)
V 9	To control sleeve arm opening time from close position when size adjustment button is OFF.	0.4 sec. (Max. 1.5 sec,)
V 10	To control timing from sleeve arm completely down and starting "V3" function	3.0 sec. (Max. 5.0 sec.)
V 11	To control sleeve arm to close before its completely down after complete press operation.	0.15 sec. (Max. 0.3 sec.)
V 12	(Not in Use)	
V 13	To control Steam Injection start timing after body press start	4.25 sec. (Max. 5.0 sec.)

5. diP (Dip Switch)

- •According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- •Dial the "Setting & Select" knob No.5, the dip switch number will be shown on the display (reference Chart 4), so select the dip switch you want to change. Press the "Enter" button No.4, and the current position will be shown on the display.
- •Dial the "Setting & Select" knob and change the setting, and press the "Enter" button No.4 to confirm the set up.

Chart 4 "Dip Switch" List

Disp. No.	Setting Details		Default Setting
d 1	Timing of Sleeve Arm Close	ON : Second Foot Pedal	OFF
u i	Timing of Dieeve Arm Close	OFF: First Foot Pedal	OFF
d 2	Sleeve arm tension softening function	ON : does work	ON
u 2	for long sleeve operation	OFF : doesn't work	OIV
1.0	N. I. Cl	ON : Same timing of body press open	0.11
d 3	Neck Clamp Opening Timing	OFF: after body press finish opening	ON
1.4	D 1 C 1 C 1	ON : with brake	OPP
d 4	Brake function for sleeve arm to open	OFF: without brake	OFF
d 5	Sleeve arm tension softening function	ON : does work	OFF
և 5	for short sleeve operation	OFF : doesn't work	Orr
d 6	(Not in Use)		-
17	Steam injection for short sleeve	ON : with steam injection	ON
d 7	operation	OFF: without steam injection	ON
d 8	Default set with steam injection when	ON : Yes	ON
u o	it is powered on.	OFF: No	ON
d 9	Default set with short sleeve mode	ON : Yes	OFF
u ə	when it is powered on.	OFF: No.	Orr
d 10	Default set with size adjustment mode when it is powered on.	ON : Yes	OFF
α 10		OFF: No	

- 6. tou (Timer change which is shown on display)
 - According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
 - •Dial the "Setting & Select" knob No.5, the Timer List will be shown on the display (reference Chart 5), so select the timer you want to change. Press the "Enter" button No.4, and the current volume number will be shown on the display.
 - •Dial the "Setting & Select" knob and change the timer. Press the "Enter" button No.4 to confirm the set up.

Chart 5 "Timer" List

<u>Chart &</u>	Chart 6 Times List		
Disp. No.	Setting Details		
t 1	This timer can change the time that is changed to original position automatically without any push from each timer setting.		
t 2	This timer is for counter reset button how long keep pushing.		
t 3	This timer is for pushing time of vacuum timer button for confirmation when you change timer or any set up.		
t 4	This timer is for service menu finishing time without any button push on service menu mode.		
t 5	This timer is for normal display timing from input test mode without any button push.		

7. dEF(to reset to Default)

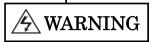
- According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- •It is shown "OFF" on display, so please dial the "Setting & Select" knob and select "ON", then push the "Enter" button No.4. All settings will return to factory original shipping conditions.

8. VEr(Program Version)

- According to instructions 1 and 2, you will see on the display, please push the "Enter" button No.4.
- •The current version number will be shown on the display.

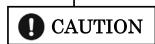
Trouble Shooting

During the operation, if something is wrong an error number shows up at the Display Window on the Operation Panel. Check below List, and take the necessary action.
 Call your dealer or Sankosha if the normal operation does not resume.



It is extremely dangerous in Control Box.

Do not touch anywhere unless otherwise specified.



If any of [EEE], [EE1], [EE2], [EE3], [EE4], or [EE5] shows up, turn the power OFF and turn the power ON again <u>more than 5 seconds</u> <u>later</u>.

Call your dealer or Sankosha if the normal operation does not resume.

Error No.	1. Error Item 2. Error Description 3. Check Point
	Emergency Stop Button The button is kept activating.
E 1	 3. (1) Emergency Stop Button is not released. Insuring safety, release Emergency Stop Button by turning the Button clockwise (→ direction), and press the Reset Button. (2) Wiring may be the cause if E1 displays even after releasing it. Check the Button itself or check if the wire is cut.
	1. Tuck Left Press Safety Guard
	2. Tuck Left Press Safety Guard Switch is kept activating.
E 2	 3. (1) In the case of keep pushing safety bar, it will be shown " 2" if you release the bar. Please check whether the bar is kept pushing by something or not. If you push reset button after confirming the safety, the machine will return to its original position. (2) Even if it is not pressed button, if it is showing "E2" error, it is a switch problem. Please check whether switch is broken, shape change of safety bar, or wire connection is loose or disconnected. (3) The switch is activated due to heavy shock of press head. → Adjust speed controller of tuck press cylinder and sleeve arm cylinder. Check air pressure. (Sleeve Arm Air Pressure: 0.25MPa, reference Page 15)
	1. Tuck Right Press Safety Guard
	2. Tuck Left Press Safety Guard Switch is kept activating
E 3	 3. (1) In the case of keep pushing safety bar, it will be shown " 3" if you release the bar. Please check whether the bar is still being pushed by something or not. If you the push reset button after confirming the safety, the machine will return to its original position. (2) Even if it is not pressed button, if it is showing "E3" error, it is a switch problem. Please check whether switch is broken, shape change of safety bar, or a wire connection is loose or disconnected. (3) The switch is activated due to heavy shock of press head. → Adjust the speed controller of tuck press cylinder and sleeve arm cylinder. Check air pressure. (Sleeve Arm Air Pressure: 0.25MPa, reference Page 15)

Error	1. Error Item
No.	2. Error Description
110.	3. Check Point
	1. Shoulder Press Left Safety Guard
	2. Shoulder Left Press Safety Guard Switch is kept activating
E 4	3. (1) In the case of keep pushing the safety bar, it will be shown " 4" if you release the bar. Please check whether the bar is still being pushed something or not. If you push the reset button after confirming the safety, the machine will return to its original position.(2) Even if the button is not pressed, if it is showing "E4" error, it is a switch problem.
	Please check whether switch is broken, shape change of safety bar, or a wire connection is loose or disconnected.
	(3) The switch is activated due to heavy shock of press head.
	→ Adjust speed controller of shoulder press cylinder.
	1. Shoulder Press Right Safety Guard
	2. Shoulder Right Press Safety Guard Switch is kept activating
	3. (1) In the case of keep pushing the safety bar, it will be shown " 5" if you release the bar. Please check whether the bar is still being pushed by something or not. If you
E 5	push the reset button after confirming the safety, the machine will return to its original position.
	(2) Even if the button is not pressed, if it is showing "E5" error, it is a switch problem.
	Please check whether switch is broken, shape change of safety bar, or a wire
	connection is loose or disconnected.
	(3) The switch is activated due to heavy shock of press head.
	→ Adjust speed controller of shoulder press cylinder.
	1. Front Press Left Safety Guard
	2. Front Press Left Safety Guard Switch is kept activating
E 6	3. (1) In the case of keep pushing the safety bar, it will be shown " 6" if you release the bar. Please check whether the bar is still being pushed by something or not. If you push reset button after confirming the safety, the machine will return to its original position.
	 (2) Even if the button is not pressed, if it is showing "E6" error, it is a switch problem. Please check whether switch is broken, shape change of safety bar, or a wire connection is loose or disconnected. (3) Check air pressure. (Front Press Slide Air Pressure: 0.3MPa, reference Page 15)
	1. Front Press Right Safety Guard
	2. Front Press Right Safety Guard Switch is kept activating.
	3. (1) In the case of keep pushing the safety bar, it will be shown " 7" if you release the
E 7	bar. Please check whether the bar is kept pushing by something or not. If you push reset button after confirming the safety, the machine will return to its original
	position. (2) Even if it is not pressed button, if it is showing "E7" error, it is a switch problem. Please check whether switch is broken, shape change of safety bar, or wire connection is loose or disconnected.
	(3) Check air pressure. (Front Press Slide Air Pressure: 0.3MPa , reference Page 15)

Error	1. Error Item
No.	2. Error Description
	3. Check Point
	 Front Press Press Position Sensor Error It is not detected Front Press Press Position sensor (SQ10) even if press head is at position.
E30	 3. (1)When you touch magnet to sensor at the rod side (left) of cylinder, the red light of sensor ①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.3MPa, reference Page 15)
	1. Front Press Open Sensor Error
	2. It is not detected Front Press Open sensor (SQ08) even if press is activated.3. (1)When you touch magnet to sensor at the head side of cylinder, the red light of sensor
E31	①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.6MPa, reference Page 15)
	1. Reset Button Error
	2. Reset Button keeps activated when the main power is ON, or machine is at the original position.
E32	3. (1) In the case of keep pushing button, please release the button. Also, please remove anything which is pushing button. If you press the button again, the machine will return to its original position.(2) Even if the button is not pressed, if it is showing "E32" error, it is a switch problem. Please check whether the switch is broken or a wire connection is loose or disconnected.
	1. Front Press Left Brake Sensor Error
Foo	2. It is not detected Front Press Left Brake Sensor (SQ11) and is detected Left Position Sensor (SQ10) even if Front Transfer is moving correctly.
E33	3. When you touch magnet to second sensor from rod side of cylinder, it is sensor problem if red light doesn't light. Check sensor is broken, or wire connection (such as looseness or disconnection).
	1. Front Press Right Brake Sensor Error
E34	2. It is not detected Front Press Right Brake Sensor (SQ12) and is detected Original Position Sensor (SQ13) even if Front Transfer is moving correctly.
L04	3. When you touch magnet to second sensor from head side of cylinder, it is sensor problem if red light doesn't light. Check sensor is broken, or wire connection (such as looseness or disconnection).

Error	1. Error Item
No.	2. Error Description
	3. Check Point
E35	 Left Cuff Clamp Button Error (1) Cuff Clamp Button keeps activated if the button is kept pressing by something when the main power is ON, or the machine is at the original position. (2) Cuff Clamp Button is kept pressing for more than 5 seconds even if you release the button. (1) In the case of a button being pushed by something, the error will be released if you release it from the button and push the reset button. (2) Even if it is not pressed button, if it is showing "E35" error, it is a switch problem. Please check whether the switch is broken or a wire connection is loose or disconnected.
	1. Press Start Button Error
	2. Press Start Button keeps activated when the main power is ON, or the machine is at the original position.
E36	3. (1) In the case of a button being pushed by something, the error will be released if you release it from the button and push the reset button.(2) Even if it is a not pressed button, if it is showing "E36" error, it is a switch problem. Please check whether switch is broken or a wire connection is loose or disconnected.
	1. Short Button Error
	2. Short Button keeps activated when the main power is ON.
E37	 3. (1) In the case of a button being pushed by something, error will be released if you release the button and push the reset button. (2) Even if it is not a pressed button, if it is showing "E37" error, it is a switch problem. Please check whether switch is broken or a wire connection is loose or disconnected.
	1. Foot Pedal Error
	2. Foot Pedal keeps activated when the main power is ON, or machine is at the original position.
E38	3. (1) In the case of keep pushing button, please release the pedal. Also, please remove anything which is pushing the pedal. If you press the Reset button again, the machine will return to its original position.(2) Even if the button is not pressed, if it is showing "E38" error, it is a switch problem. Please check whether the switch is broken or a wire connection is loose or disconnected.
	1. Shoulder Press / Slide Start Button Error
E39	 2. (1) Shoulder Press / Slide Start Button keeps activated by something when the main power is ON, or the machine is at the original position. (2) Shoulder Press / Slide Start Button is kept pressing for more than 5 seconds even if you release the button.
	3. (1) In the case of a button being pushed by something, the error will be released if you release it from the button and push the reset button.(2) Even if it is not pressed button, if it is showing "E39" error, it is a switch problem. Please check whether switch is broken or a wire connection is loose or disconnected.

Error	1. Error Item
No.	2. Error Description
110.	3. Check Point
	1.Shoulder Press Close Sensor Error
	2. It is not detected Shoulder Press Close sensor (SQ06) even if press is activated.
E40	3. (1) When you touch magnet to sensor at the rod side of cylinder, the red light of sensor ①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.6MPa, reference Page 15)
	1. Shoulder Press Open Sensor Error
	2. It is not detected Shoulder Press Open sensor (SQ07) even if press is activated.
E41	3. (1)When you touch magnet to sensor at the head side of cylinder, the red light of sensor ①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.6MPa, reference Page 15)
	1. Long Button Error
	2. Long Button keeps activated when the main power is ON.
E42	3. (1) In the case of a button being pushed by something, the error will be released if you release the button and push the reset button.(2) Even if it is not a pressed button, if it is showing "E42" error, it is a switch problem. Please check whether switch is broken or a wire connection is loose or disconnected.
	1. Front Press Close Sensor Error
	2. It is not detected Front Press Close sensor (SQ09) even if press is activated.
E49	 3. (1)When you touch magnet to sensor at the rod side of cylinder, the red light of sensor ①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.6MPa, reference Page 15)
	1. Front Press Original Position Sensor Error
	2. It is not detected Front Press Original Position sensor (SQ13) even if press head is at position.
E50	 3. (1)When you touch magnet to sensor at the head side (right) of cylinder, the red light of sensor ①does light ···it is considered wrong position of sensor. Please loosen the band of it, and find lighting zone. Please place center of lighting zone and fix it. ②doesn't light ···it is sensor problem. Check sensor is broken, or wire connection (such as looseness or disconnection). (2) Check air pressure. (Main Pressure: 0.3MPa, reference Page 15)

Error	1. Error Item
No.	2. Error Description
110.	3. Check Point
	1. Vacuum Motor Thermal Switch
	2. Thermal of Magnetic Contactor KM01 for Vacuum Motor works.
E51	3. Green trip of Magnetic Contactor is retracted and you can't see it when it works. In case of Thermal of Magnetic Contactor works, it is considered overload by wire cutting or continuous motor running under the high temperature. Fix the problem first and press blue Reset Bar of Magnetic Contactor. The error will be released when you press the reset button.
	1. Blower Motor Thermal Switch
	2. Thermal of Magnetic Contactor KM02 for Blower Motor works.
E52	3. Green trip of Magnetic Contactor is retracted and you can't see it when it works. In case of Thermal of Magnetic Contactor works, it is considered overload by wire cutting or continuous motor running under the high temperature. Fix the problem first and press blue Reset Bar of Magnetic Contactor. The error will be released when you press the reset button.
	1. 24V Error
	2. Either safety bar operated in an instant in the vibration and so on.
-E99	3. The error will be released when you press the reset button. When occurring many times, adjust a speed controller at the part where the impact is big.
	1. Warning for cover change timing.(Standard)
	2. Time to change covers. You have done 25,000 presses/finishes since last time.
EC-1	3. Press and hold Reset Button for more than 1 second. Buzzer and error message will be cancelled. After cover change, be sure to reset the cover counter referring to "About the Cover Counter" of page 27.

Daily Maintenance

Q CAUTION

In order to provide the proper maintenance on your Sankosha equipment, please read and comprehend carefully this Daily Check Manual thoroughly before operation. Keep this manual in a safe place for easy access at all times. The Checking cycle will differ: daily, or monthly, annually, according to the item or area that requires maintenance. Use "Item Check List" for checking the correct service procedures. If at any time you have any questions, please do not hesitate to contact your Sankosha dealer or us.

Check Item List

Check Item	Daily	Monthly,	Annual
1. Air Pressure	0		
2. Filter Regulator / Mist Separator	0		
3. Steam Pressure	0		
4. Steam Trap	0		
5. Cover	0		
6. Press surface	0		
7. Emergency stop	0		
8. Blower filter	0		
9. Grease		0	
10. Regulator / Sludge filter			0

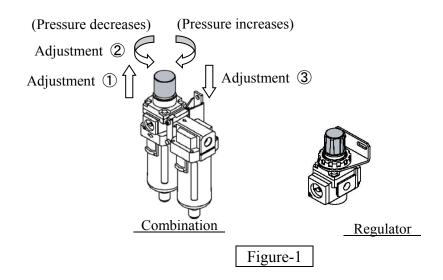
Check Item (Daily)

1. Air Pressure: Figure-1

Please make sure if the air pressure gauge at the regulator is at the standard level. See "Main Devices" and "Operation Procedure* Provide Air" in the Instruction Manual for the installation location and standard pressure level.

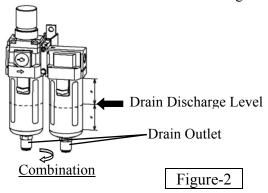
[How to Adjust Pressure]

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



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 dial under the Regulator to the left and let the drain discharge.



3. Steam Pressure: Figure-3

Check the steam pressure gauges (0.6MPa).

XIf the steam pressure does not reach the required level, it may adversely affect the shirt finishing quality.

4. Steam trap check: Figure-3

Check to see if the Steam Trap works properly.

If not, it may malfunction. If the trap is our recommended OVK's trap, open the cock and discharge the drain. Close the faucet after discharge.

- (4.1) Body (front/back) and shoulder/tuck press drain outlet trap
- (4.2) Radiator drain outlet trap
- (4.3) Steam injection (steam header) drain outlet trap

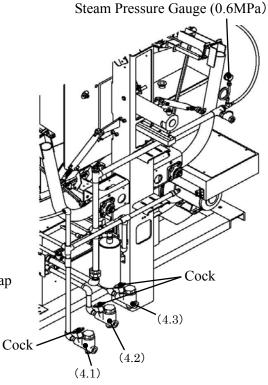


Figure-3

5. Cover check

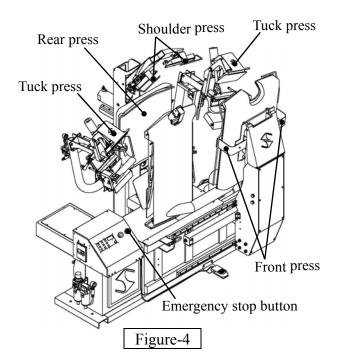
Check to see if it is dirty, tear or not. (Body, Tuck, Cuff clamp, Short sleeve, Tail clamp and Neck) Dirt and any tear can affect pressing quality.

6. Check and clean press surface: Figure-4

Clean the pressing surface (Front, Rear, Tuck and Shoulder) to remove any dirt or detergent deposit. (After stopping steam) Clean it when it is hot. Clean is required to prevent the deposit from burning and to keep ironing quality.

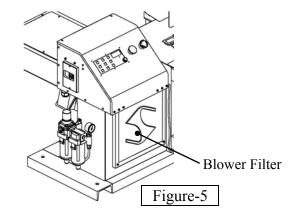
7. Emergency stop check: Figure-4

Press the emergency stop button, safety bar of tuck press (2places), front press (2places) and shoulder press (2places) to ensure that the machine stops.



8. Blower filter check: Figure-5

Check to make sure the Blower Filter is not clogged by any dirt and dust. If so, clean immediately. If you keep using the filter without cleaning, this can cause poor finishing quality as well as a decrease in the blower power.



Start Operation

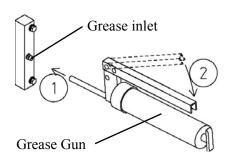
After checking the above items, start operation after warming up the machine sufficiently (for 15 to 20 minutes after the steam is turned on).

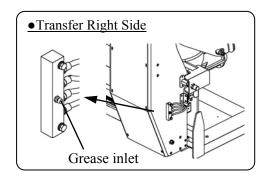
Check Item (Monthly)

9. Grease supply: Figure-6

You need to supply with grease regularly. Please fill with lithium grease. Without grease, connecting parts friction increase, and can cause machine failure. Use Grease gun to replenish grease.

- 1 Press grease gun nozzle to grease inlet straight.
- 2 Supply the grease by pressing the lever twice.





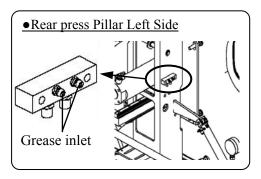
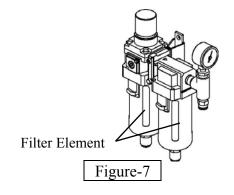


Figure-6

Check Item (Annual)

10.11. Regulator/Mist Separator Cleaning: Figure-7

Clean the filter of Regulator/Mist Separator. Change the Filter Element if any pressure descent frequently takes place.



Item Check List

Check Item (Daily)

	Item (Daily)															
No	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Air Pressure															
2	Regulator /Mist Separator															
3	Steam Pressure															
4	Steam Trap															
5	Cover															
6	Press surface															
7	Emergency stop															
8	Blower filter	·														

No	Item	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	Air Pressure																
2	Regulator /Mist Separator																
3	Steam Pressure																
4	Steam Trap																
5	Cover																
6	Press surface																
7	Emergency stop																
8	Blower filter																

Check Item (Monthly)

No	Item	1	2	3	4	5	6	7	8	9	10	11	12
9	Grease												

Check Item (Annual)

No	Item	1	2	3	4	5	6	7	8	9	10	11	12	13
10	Regulator / Sludge filter													

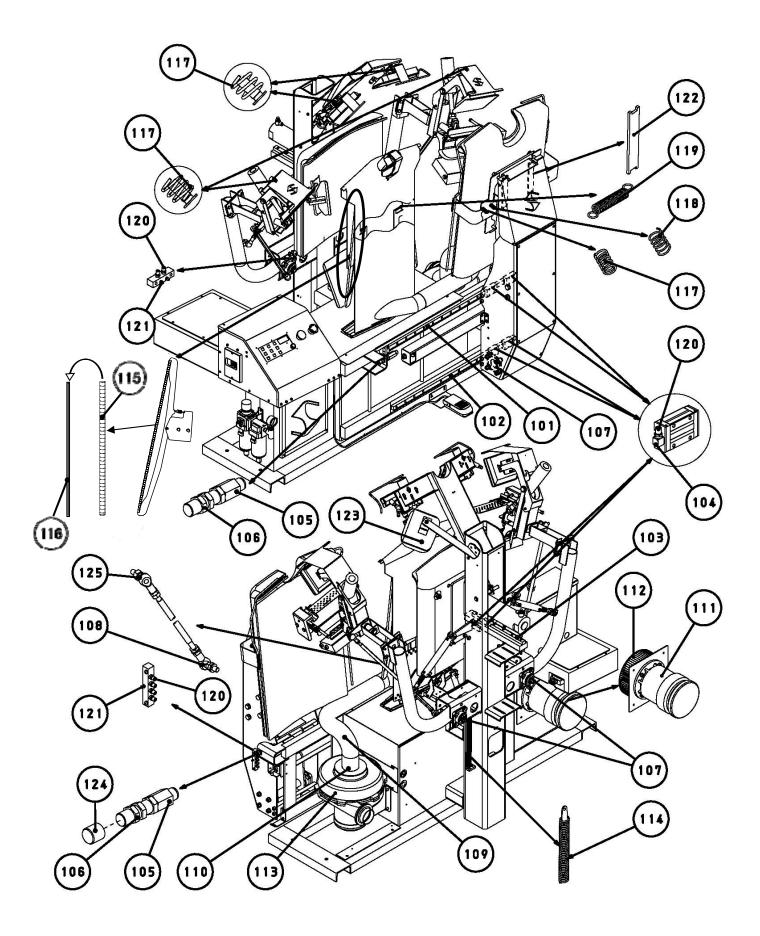
Photocopy this checklist for ongoing maintenance

Spare Parts List

Index

- 1: Motor Operation Diagram
- **2:** Air Piping (1)
- **3:** Air Piping (2)
- **4:** Air Piping (3)
- 5: Steam Piping Diagram
- 6: Control Box/Switch Diagram
- 7: Cover Diagram

1: Motor Operation Diagram REV: 4

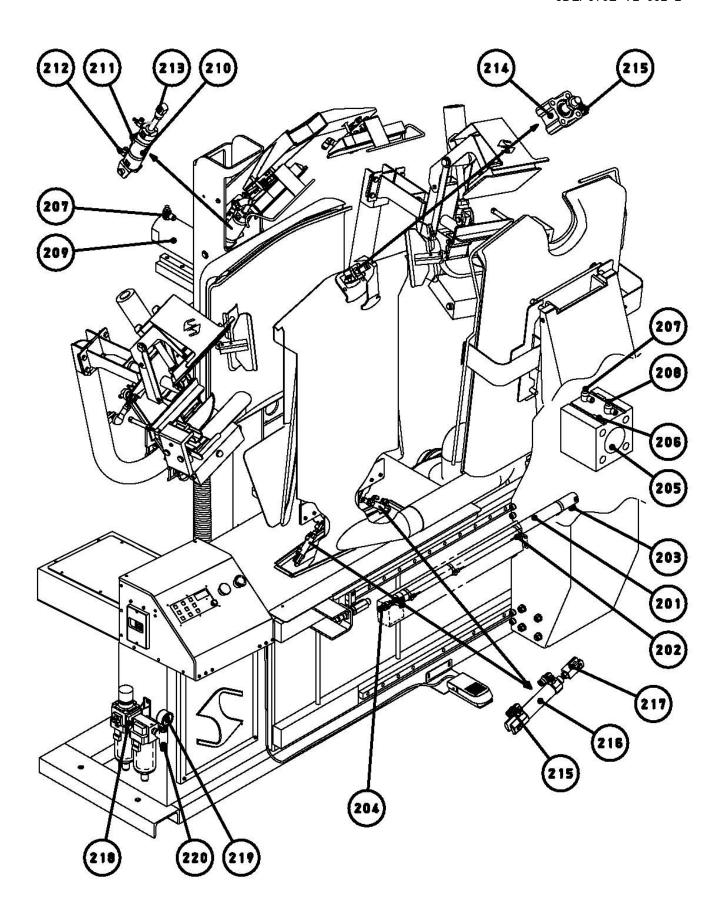


	1. Motor • Operation	Diagram		REV:4
No.	Part Name	Part Number	Q'ty	Remark
101	LM Guide	E0B006	1	Front Press (Upper)
101	LM Guide Block	E0B001	2	
102	LM Guide	E0A013	1	Front Press (Lower)
102	LM Guide Block	E0A001	2	
103	LM Guide	E0A003	2	Rear Press
103	LM Guide Block	E0A001	2	
104	Joint	E0F001	6	
105	Shock Absorber	F0K005	2	
106	Nut	F0L005	2	
107	Bearing Unit	E4A001	6	
108	Link Ball	E5J004	2	
109	Vacuum Flex. Hose	K1D003	1	Length: 770mm
110	Vacuum Flex. Hose Cuff	K1D004	2	
111	Motor	G0E003	1	For Blower
112	Blower Fan	G2B009	1	
113	Motor	G1A053	1	For Vacuum
114	Balance Spring Unit	BSP-UNT-012	2	
115	Spring	H0D015	2	Side Expander
116	Rod	H0D016	2	Side Expander
117	Spring	H0D001	6	
118	Spring	H0D002	4	
119	Spring	H0D004	2	Short Sleeve
120	Joint	C0E002	12	
121	Grease Nipple	E0F003	3	
122	Plate	AB2013	2	(Press Arm Cover Shaft Plate)
123	Mirror	Q0A007	1	
124	Cover (Gum)	M4J001	1	For Right Side
125	Link Ball	E5J003	2	

2: Air Piping (1)

REV: 3

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2. Air Piping (1)

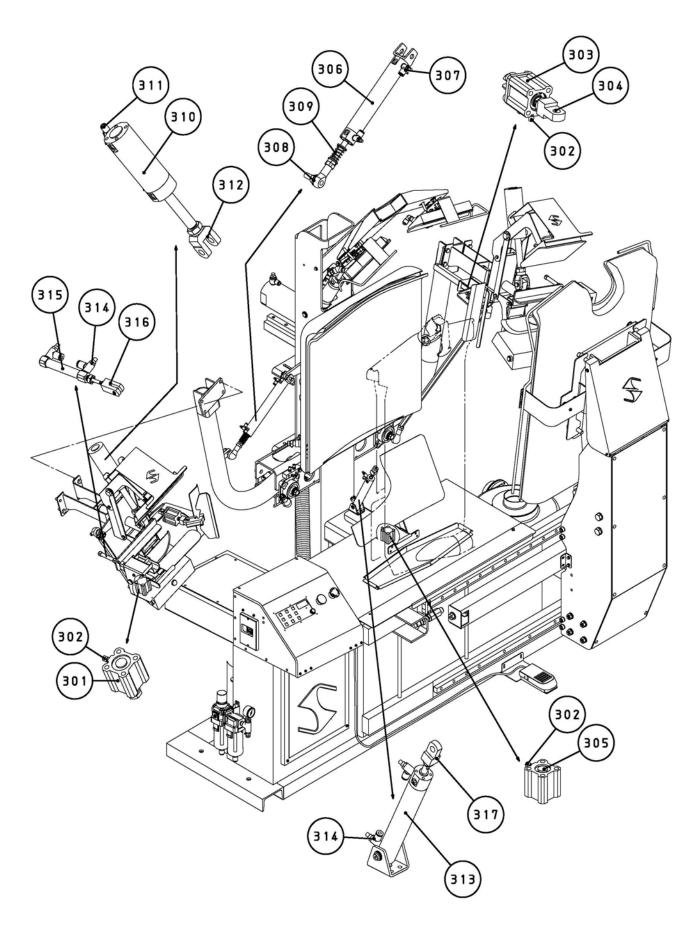
REV:4

No.	Part Name	Part Number	Q'ty	Remark
201	Cylinder	B0K016	1	Front Press Slide
202	Cylinder Sensor	B5A003	4	
203	Joint	C0C054	2	
204	Floating Joint	E5L001	1	
205	Cylinder	B1H001	1	Front Press
206	Cylinder Sensor	B5A004	2	
207	Speed Controller	C1A024	3	
208	Speed Controller	C1A026	1	
209	Cylinder	B2C008	1	Rear Press
210	Cylinder	B0U009	1	Shoulder Press
211	Cylinder Sensor	B5A003	2	
212	Speed Controller	C1A012	2	
213	Knuckle Joint	B6A004	1	
214	Cylinder	B1A007	1	Neck
215	Joint	C0C161	6	
216	Cylinder	B1L003	2	
217	Knuckle Joint	B6B007	2	
218	Air Combination	D0F008	1	
219	Air Gauge	D1C001	1	
220	Joint	C0C012	1	

3: Air Piping (2)

REV: 3

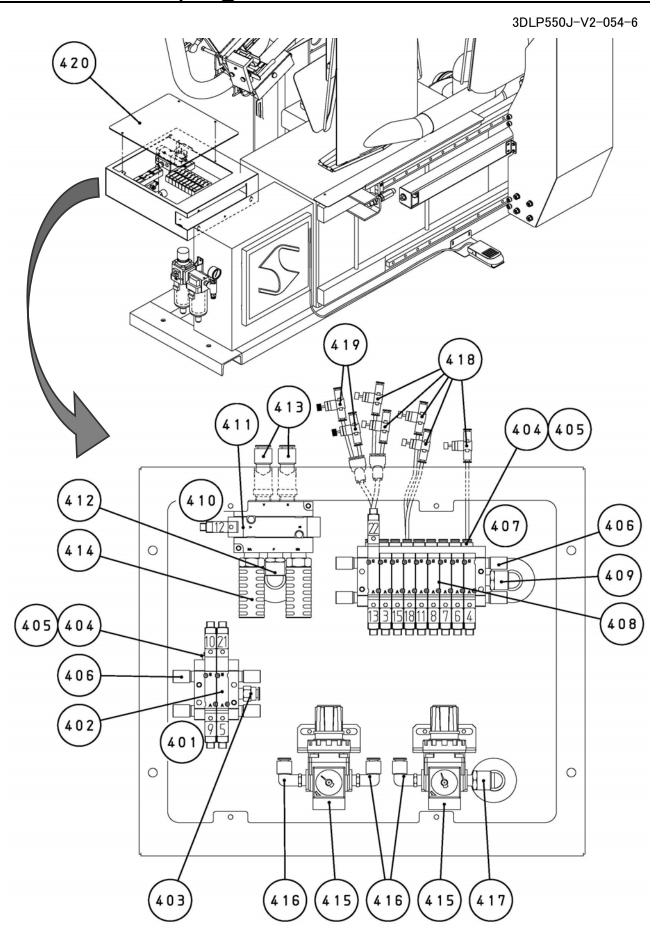
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3. Air Piping (2)

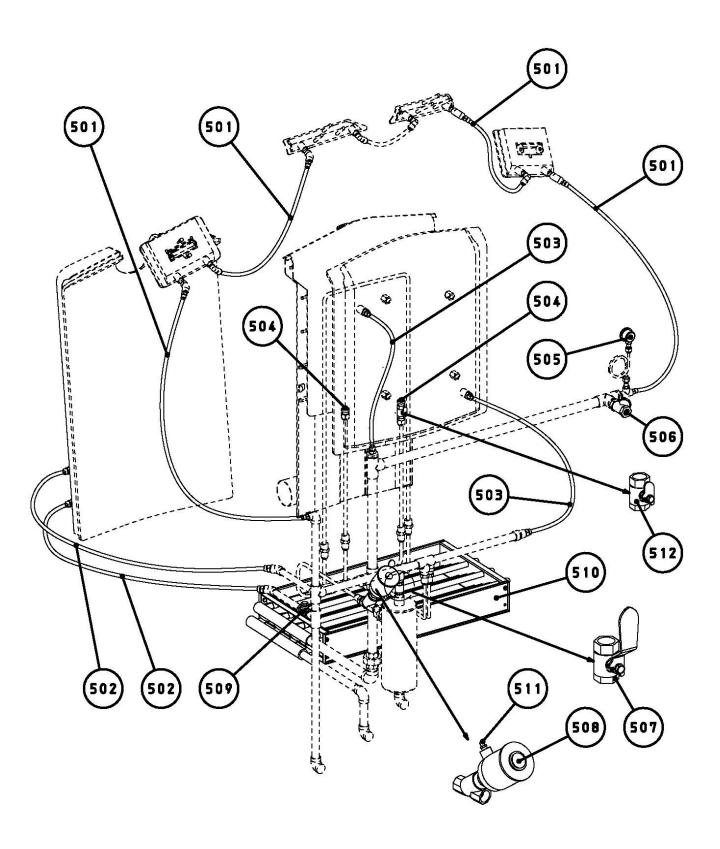
REV:4

No.	Part Name	Part Number	Q'ty	Remark
301	Cylinder	B1A008	2	Cuff Clamp
302	Joint	C0E003	9	
303	Cylinder	B1C007	2	Short Sleeve
304	Knuckle Joint	B6A003	2	
305	Cylinder	B1A005	1	Tail Clamp Up/Down
306	Cylinder	B0C002	2	Sleeve Arm
307	Speed Controller	C1A003	4	
308	Link Ball	E5J004	2	
309	Spring	H0D002	2	
310	Cylinder	B0A019	2	Tuck Press
311	Speed Controller	C1A012	4	
312	Knuckle Joint	B6B003	2	
313	Cylinder	B0E004	1	Tail Clamp
314	Speed Controller	C1A002	6	
315	Cylinder	B1K001	2	Cuff Adjuster
316	Knuckle Joint	B6B008	2	
317	Knuckle Joint	B6A002	1	



	4. Air Piping (3)			REV:4
No.	Part Name	Part Number	Q'ty	Remark
401	Manifold Valve	A0F125	1	
402	Solenoid Valve	A0E013	1	No.5,21 : Sleeve Arm
402	Solenoid Valve	A0E013	1	No.9,10 : Front Press Slide
403	Joint	C0C004	1	
404	Joint	A0J007	10	
405	Joint	C0G002	10	
406	Silencer	C0A003	8	
407	Manifold Valve	A0F129	1	
	Solenoid Valve	A0J012	1	No.4 : Tail Clamp Up/Down
	Solenoid Valve	A0J012	1	No.6 :Tail Clamp
	Solenoid Valve	A0J012	1	No.7 : Cuff/Short Sleeve Clamp, Cuff Adjuster : Left
408	Solenoid Valve	A0J012	1	No.8 : Cuff/Short Sleeve Clamp, Cuff Adjuster : Right
100	Solenoid Valve	A0J012	1	No.11 : Tuck Press
	Solenoid Valve	A0J012	1	No.18 : Neck Clamp
	Solenoid Valve	A0J012	1	No.15 : Steam
	Solenoid Valve	A0J012	1	No.3 : Shoulder Press
	Solenoid Valve	A0E021	1	No.13,22 : Side Expander
409	Joint	C0C024	1	
410	Manifold Valve	A0F020	1	
411	Solenoid Valve	A0E020	1	No.12 : Body Press
412	Joint	C0C098	1	
413	Joint	C0C040	2	
414	Silencer	C0A006	2	
415	Regulator	D0E005	2	
416	Joint	C0C018	3	
417	Joint	C0C024	1	
418	Speed Controller	C1A007	5	
419	Speed Controller	C1A009	2	
420	Solenoid Valve Cover	P0A012	1	

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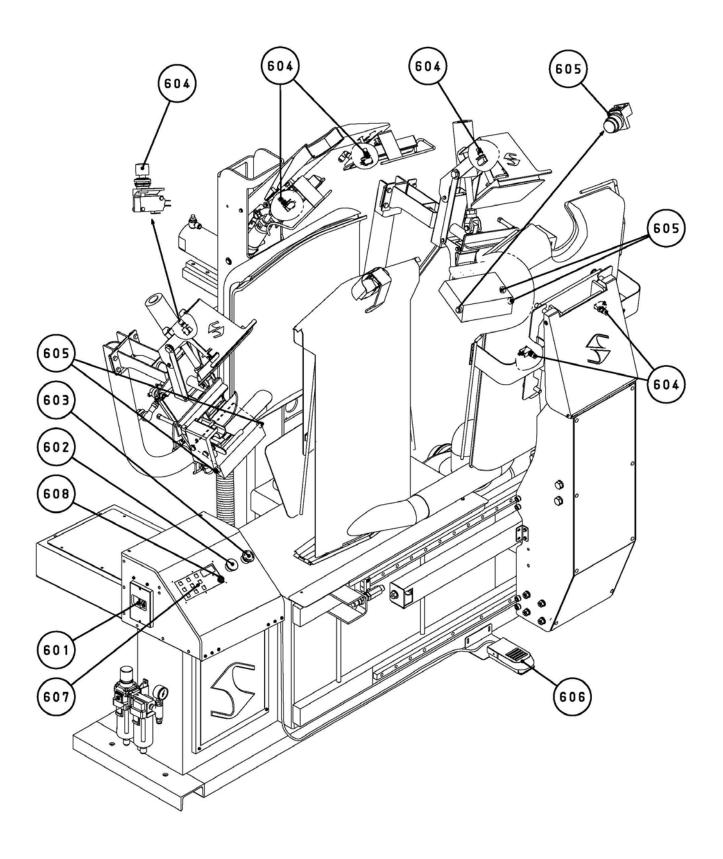
5. Steam Piping

REV:4

No.	Part Name	Part Number	Q'ty	Remark
501	Flex. Hose	A6B020	4	
502	Flex. Hose	A6B018	2	
503	Flex. Hose	A6B017	2	
504	Steam Nozzle	UNA013	2	
505	Steam Gauge	J0A003	1	
506	Y Type Strainer	J2M011	1	
507	Ball Valve	J6A007	1	
508	Piston Valve	A0G003	1	
509	Lift Check	J2J001	1	
510	Radiator	RD200	1	
511	Joint	C0E001	1	
512	Ball Valve Unit	LP-UNT-004-1	1	

6: Control Box Switch Diagram REV: 3

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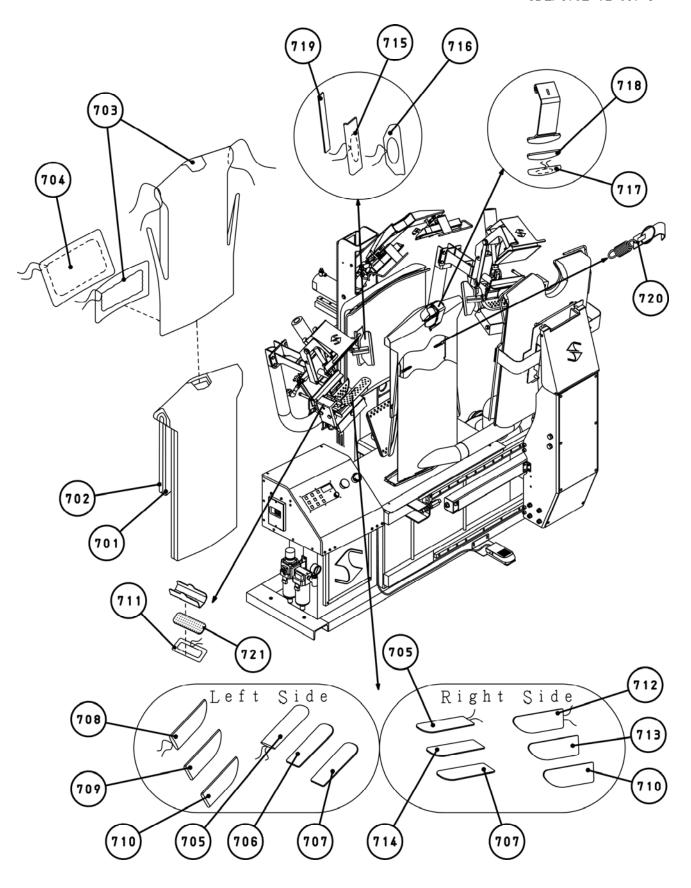
6: Control Box • Switch Diagram REV:4

No.	Part Name	Part Number	Q'ty	Remark
601	Breaker Switch	21C006	1	
602	Push Button Switch	21I111	1	Reset
002	Push Button Switch Cap	21I133	1	
603	Push Button Switch	21I107	1	Emergency
604	Push Button Switch	21I085	6	Safety Guard
605	Push Button Switch	21I148	5	Start
	Foot Pedal Unit	FP-UNT-002	1	
606	Micro Switch	21E035	1	
	Foot Pedal Spring	H0D019	1	
607	Panel Sheet	20U079	1	
608	Knob	21D006	1	

7: Cover Diagram

REV: 3

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Cuff Clamp Cover Orange Silicon S1B079

7. Cover Diagram			REV:3	
No.	Part Name	Part Number	Q'ty	Remark
701	Body SH Silicone 10mm	S1B555	1	
702	Body Spring Felt Pad 13mm	S1B554	1	
703	Body Cover	S1B553	1	
704	Tail Clamp Cover	S1B556	1	
705	Front Tuck Cover	S1B062	2	
706	Front Tuck Felt Pad (Left) 5mm	S1B063	1	
707	Front Tuck H Silicone 6mm	S1B065	2	
708	Rear Tuck Cover (Left)	S1B066	1	
709	Rear Tuck Felt Pad (Left) 5mm	S1B067	1	
710	Rear Tuck SH Silicone 10mm	S1B070	2	
711	Cuff Clamp Cover	S1B071	2	
712	Rear Tuck Cover (Right)	S1B068	1	
713	Rear Tuck Felt Pad (Right) 5mm	S1B069	1	
714	Front Tuck Felt Pad (Right) 5mm	S1B064	1	
715	Short Sleeve Holder Cover	S1B028	2	
716	Short Sleeve Cover	S1B017	2	
717	Neck Clamp (Small) Cover	S1B022	1	
718	Neck Clamp (Small) Orange Silicone	S1B023	1	
719	Adhesive Tape	Q0A008	2	Length: 210mm
720	Cover Spring Unit	CSP-UNT-001	2	

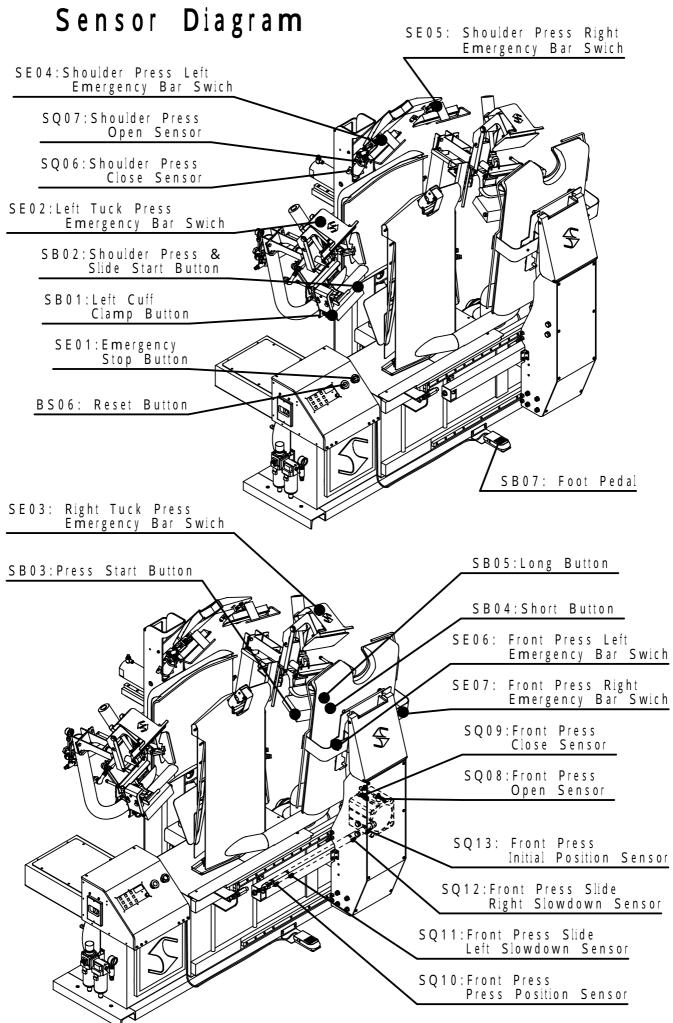
Attached Diagram

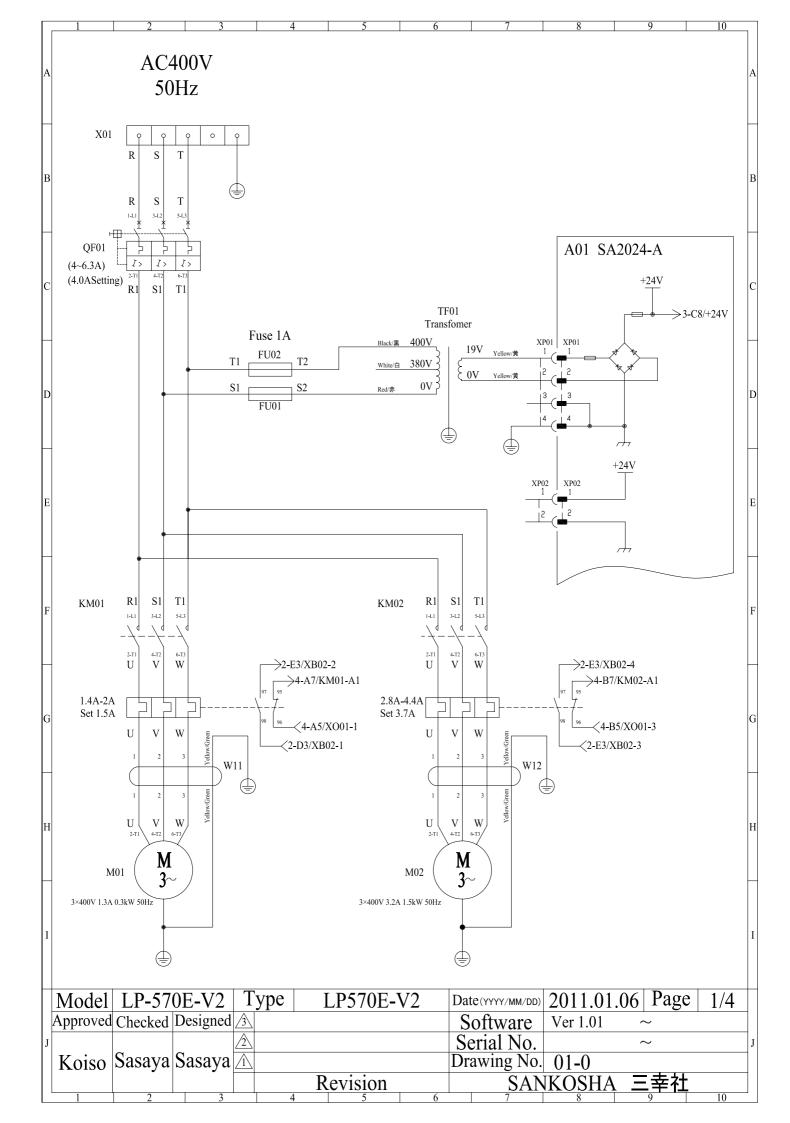
Sensor Diagram

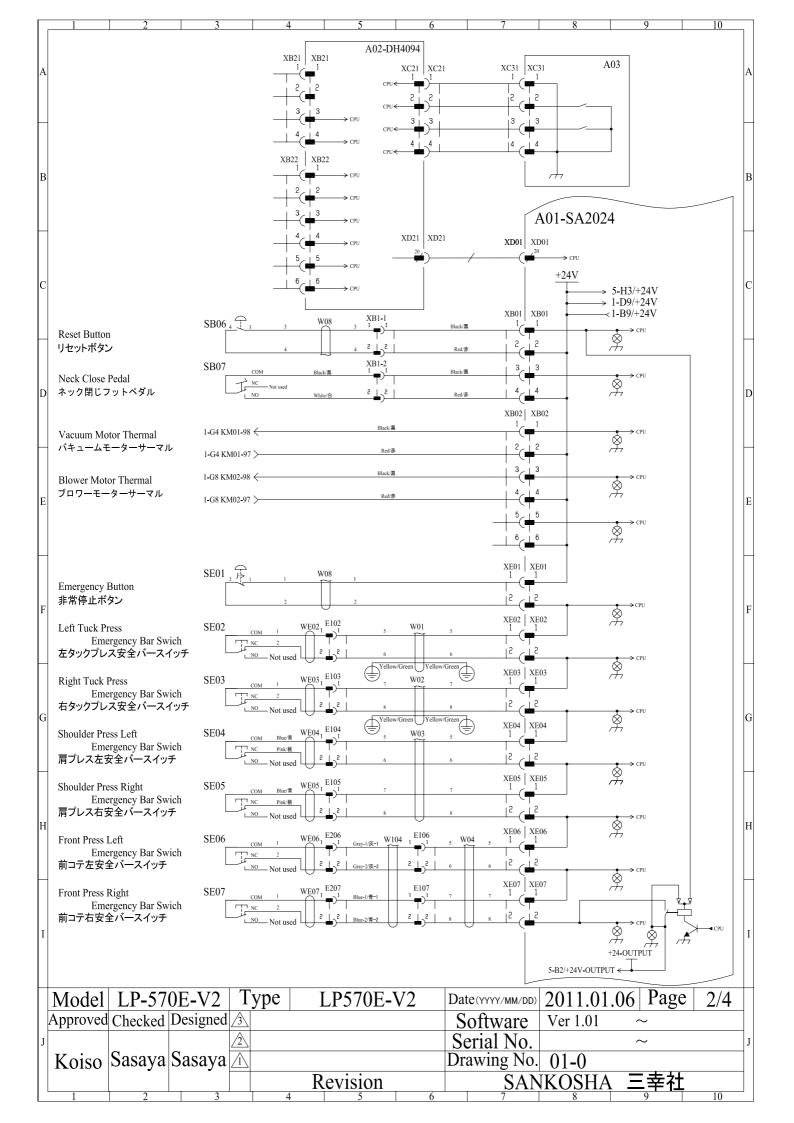
Electric Connection Diagram 1/4~4/4

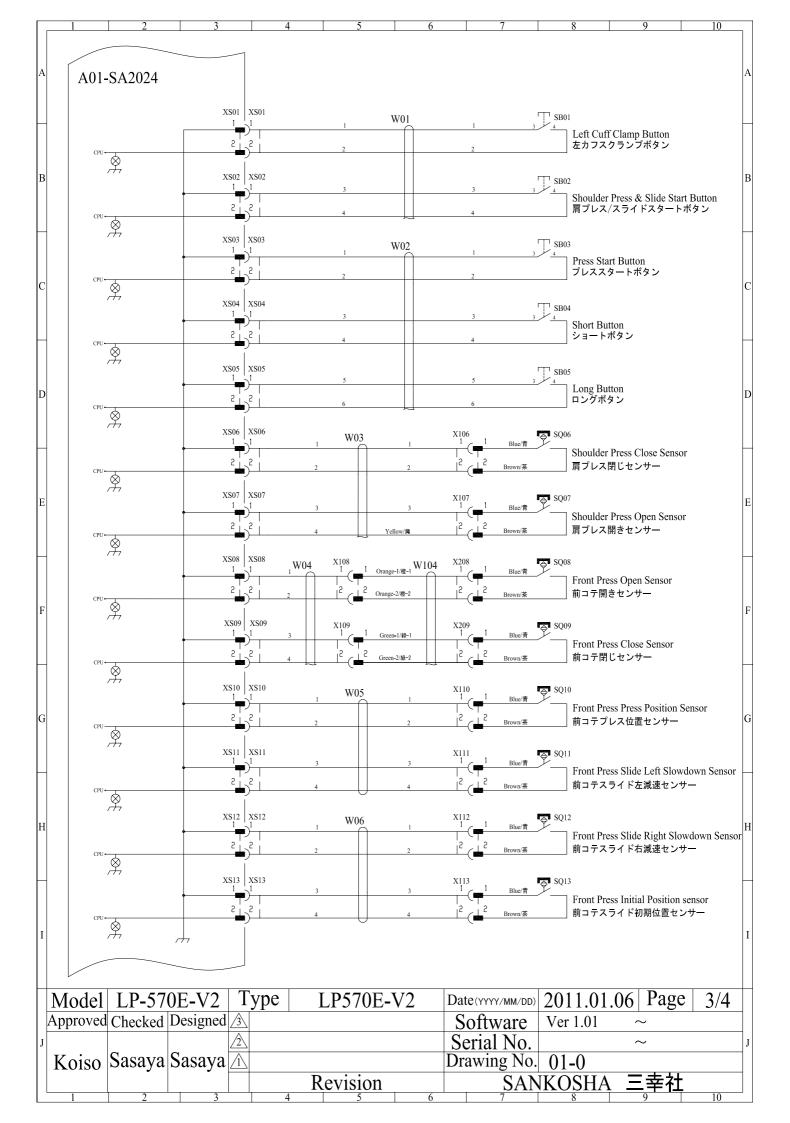
Steam Piping Diagram

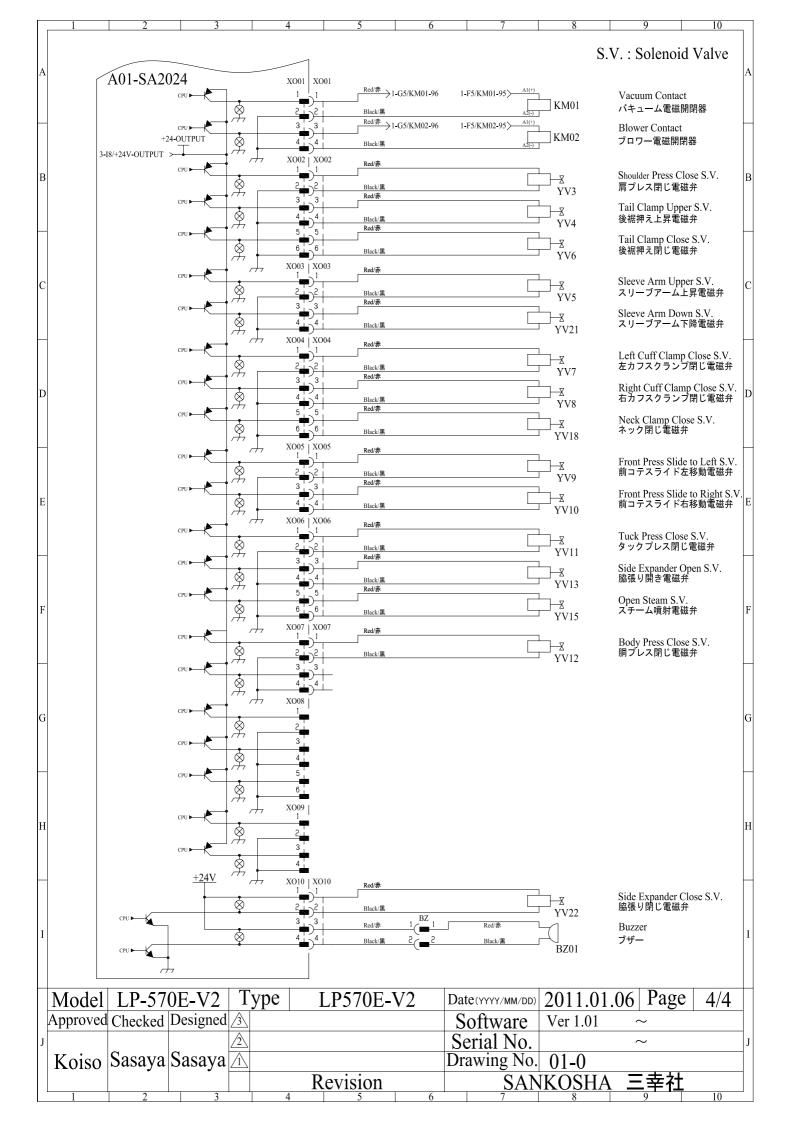
Air Connection Diagram



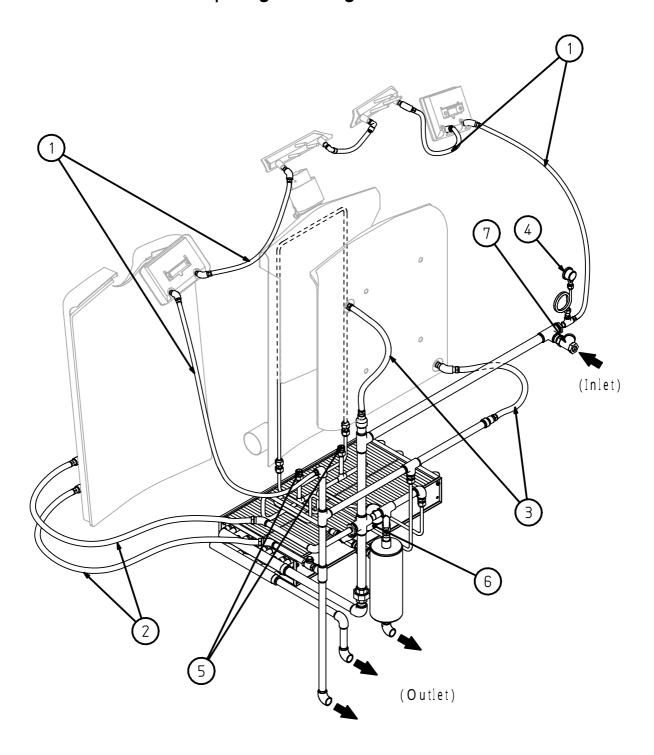








Steam Piping Diagram



Flexible Hose : 3/8×850L(B)
Flexible Hose : 3/8×800L(B)
Flexible Hose : 3/8×600L(B)

Pressure Gage: AMT7/16 60 1.6MPa

Steam Nozzle: SN38-15 Piston Valve: D290A390

Y Strainer : FC KY-4G4 20A 100 Mesh

