

LP-560E-V2 Instruction Manual

For your safety, please read and fully understand this Instruction Manual thoroughly before beginning operation.

Keep this Manual in a designated place for easy access.

If at any time you have any questions, please do not hesitate to contact us.

Welcome

Thank you for choosing our LP-560E-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 specification

Model	LP-560E-V2
Capability *	Up to 60 shirts / hour
Power	3-phase 4-wire 380/400 V 50 Hz 4.0A
Air consumption	43.2 liter/time
Steam consumption	36 kg/hour
Air Pressure	0.6MPa
Steam Pressure	0.6MPa
Air Pipe	3/8B
Steam Pipe	Inlet: 3/4B, Outlet: 1/2B
Weight	530 kg
dimensions(mm)	$2050\times1120\times1970$ (Width × Depth: × height)

^{*}This 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.	\Diamond	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
N/a-	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.
	Pinch Hazard		Rotation Hazard
00000	This is to alert the user to a risk of pinching by rollers which may cause permanent damage to extremities		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.

WARNING

■ 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 220V 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.



■ Damage by Water



When the machine is damaged by water, do not use. Ask a local distributor or Sankosha for maintenance or repair. cause electric shock, injury, fire or

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.

■ 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 process



Please follow the operational instructions to enjoy machine performances safely for a long time.

If ignoring the instructions, you may damage the machine or get hurt.

■ 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

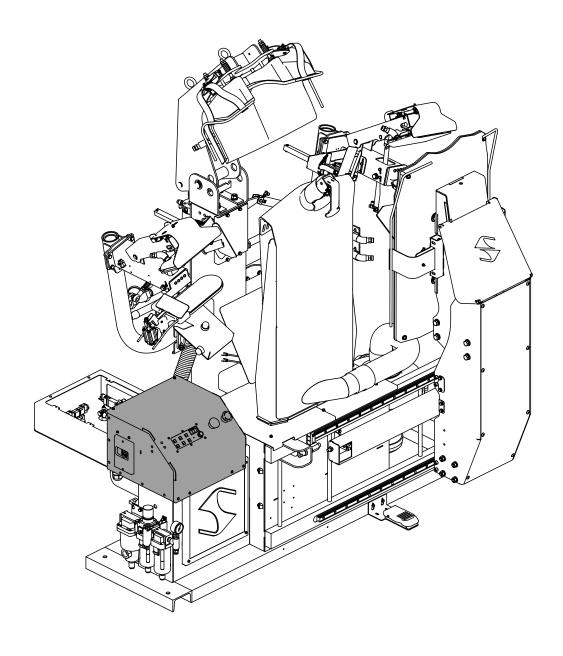
Electrically Live Area

DANGER

The Control box has terminals with lethal voltage.

- -Only trained maintenance personnel should 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.



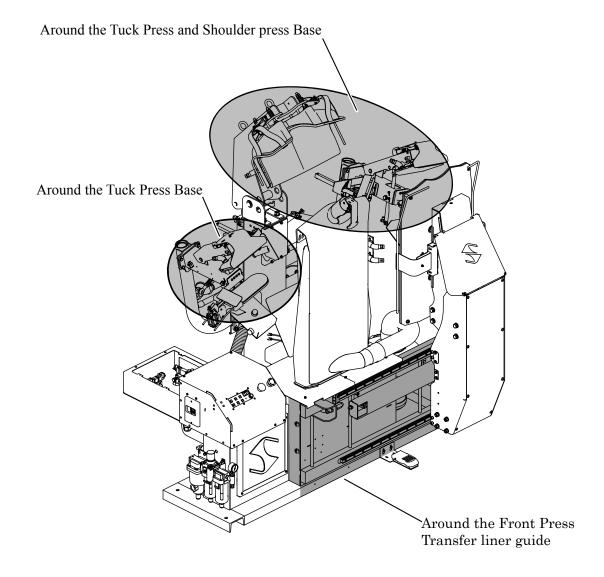
Range of the Machine in Motion

WARNING

The machine has a certain range of motion.

Keep your hands away from moving parts during operation.

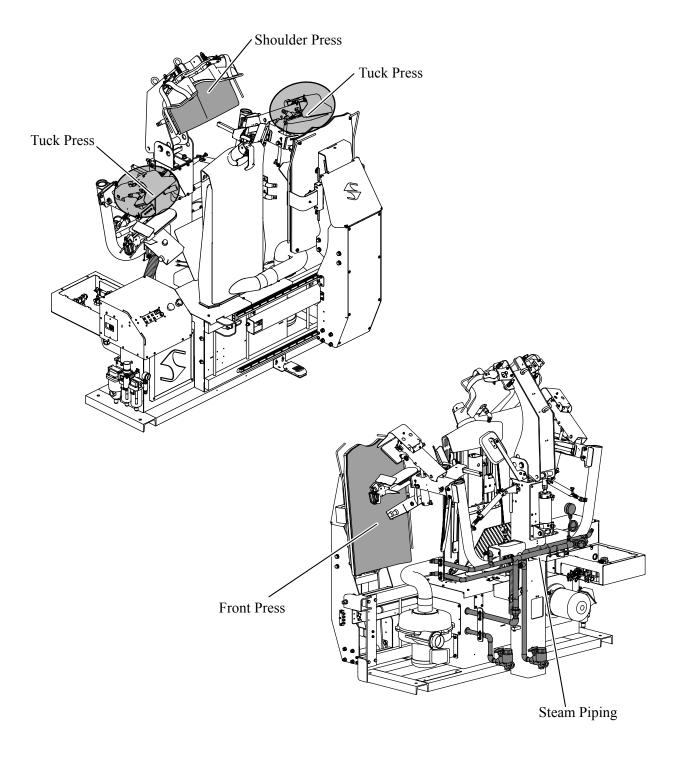
Before starting up or checking for maintenance, turn off the air and electric power. Ignoring this warning could result in serious injury.



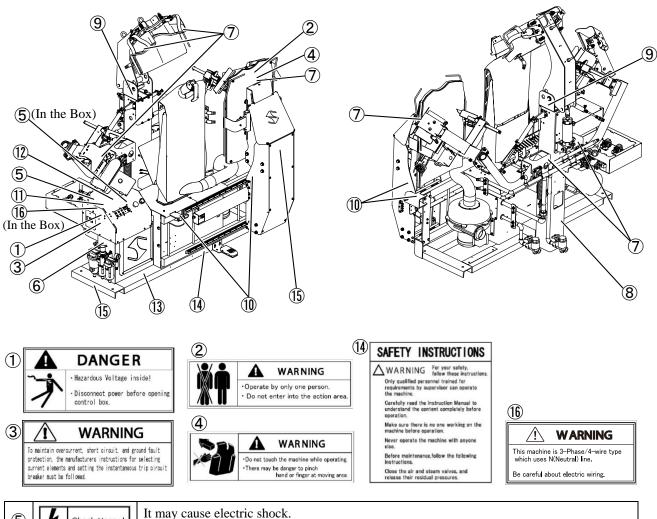
High Temperature Area

CAUTION

The machine has surfaces that get extremely hot during operation. Never touch hot surfaces during and within 30 minutes after the steam has been turned off. Ignoring this warning may result in burns.



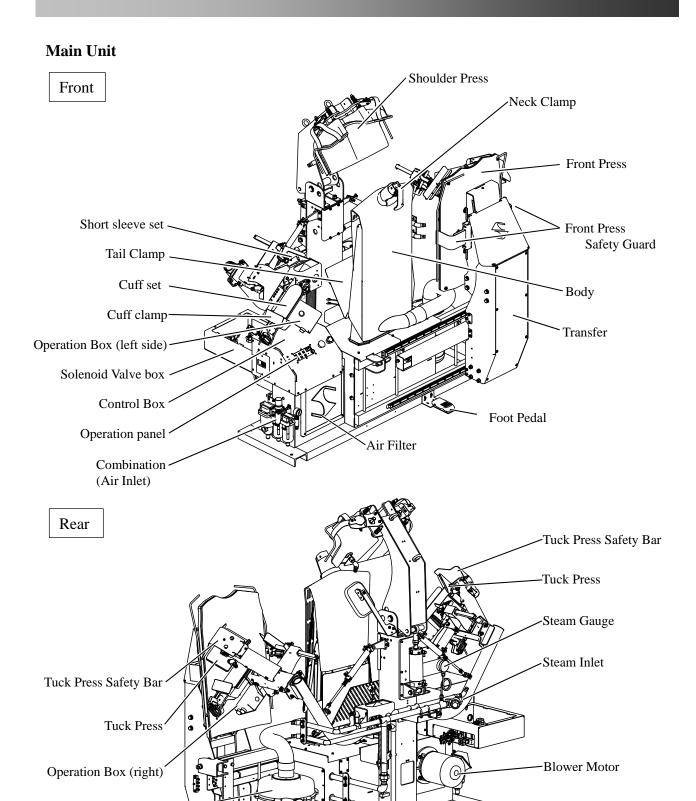
Safety Labels on the Machine



5	Shock Hazard	It may cause electric shock. Before opening Control Box or cover by repair etc, always turn the power off		
6	High Pressure Air	High pressure air! Before maintenance, close air valve and drain residual pressure.		
7	Burn Hazard	The sealing portion is hot enough to burn you. Keep hands away from the machine. Do not touch while operating.		
8	High Pressure Steam	High-pressure steam! Before maintenance, close steam valve and let residual steam discharge		
9	Pinch Hazard	Be careful! There is a high risk of catching your fingers while the machine is in operation. Turn the power off during maintenance or cleaning.		
10	Cut Hazard	Be careful! There is a high risk of catching your fingers while the machine is in operation. When the machine is in operation do not place your hands anywhere in or on the machine.		
11)	Read Instruction Manual	Read Instruction Manual before operation.		
12	Clean press surface daily	Clean pressing surface with cloth etc. every day. (See "Daily Check Manual" on page 51)		
13	Keep Filter Clean	Clean filter before operation. (See "Daily Check Manual" on page 52)		
15)	+	Center Mark Indicating the center of gravity of the machine		

Safety display labelling places mentioned above's being sealed is hoped checking. If safety display labelling, loss or damage, and can not check, report to distributors necessarily, and obtain labeling, and paste, please.

Part Names



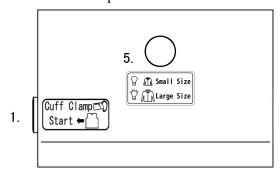
Steam Outlet

Vacuum motor

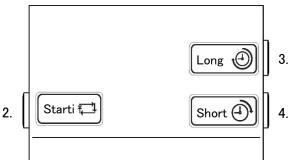
Control Unit

Operation Box

Operation box Left



Operation box Right



① Cuff Clamp Button / Slide Start Button

Press this button to close left cuff clamps and short sleeve clamps after rear clamp closing, then the front press moves to the body.

2 Press Start Button

Press this button after selecting the ③ Long Button or ④ Short Button and keep pressing either button to work the front press and to start the automatic operation.

3 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 left cuff or short sleeve cuff. If you release the button before taking the next step, the clamp will open.

4 Short Button

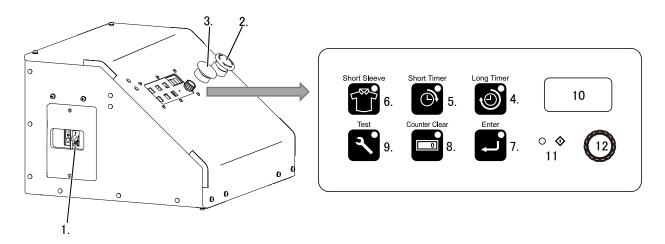
There are two functions on this button.

- 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 left cuff or short sleeve cuff. If you release the button before taking the next step, the clamp will open.

⑤ Size Adjustment Button (The light turns green when the button is ON.)

This button will make the sleeve arm position bigger from the body when it is ON. It is very useful to get the enough clearance for cuff (half sleeve) setting.

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 for the machine to return to its 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 (The light turns green when the button is ON.)

Press this button. Turn 12 "Set/Select Dial" to change the timer for automatic operation by the Long Start Button. The light blinks while the Long Start Button works.

5. Short Timer Button (The light turns green when the button is ON.)

Press this button. Turn 12 "Set/Select Dial" to change the timer for automatic operation by the Short Start Button. The light blinks while the Short Start Button works.

6. Short Sleeve Button (The light turns green when the button is ON.)

Press this button ON to press a short sleeve shirt (not to work tuck press)

7. Enter Button (for Timer Remember) (The light turns green when the button is ON.)

Press this button after changing the timer setting for each mode. The time setting for each mode can be saved.

8. Counter Clear Button

Press this button. "0" will blink at 10"Display Window". Press 7 the "Enter Button". You can reset the counter at "0". Press this button again. The window will show garment counter.

9. Test Button (The light turns green when the button is ON.)

Press this button to start the test operation for each function. Please refer on page 26 "Test Operation"

10. Display Window

It shows the counter, timer with count down, error number menu number and etc...

11. Power Lamp (red)

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.

12. Set/Select Dial

This dial can change all timers and select menu numbers.

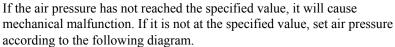
Operation Procedure

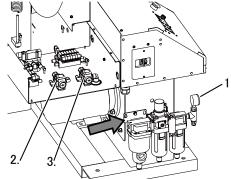


Without following the correct operational procedure for use of the machine, mechanical failure or operator injury can occur.

Getting Air

- Check the air pressure of the main and branch regulators to make sure they are within specifications.
 - 1. Main regulator 0.6 MPa
 - 2. Regulator(sleeve lowering) 0.2MPa
 - 3. Regulator(slide/sleeve rise) 0.3MPa



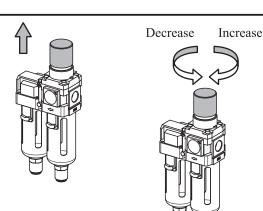


- How to adjust air pressure
 - 1. Pull the adjustment knob up
 - 2. Turn the knob to adjust air pressure

Clockwise → Pressure will increase

Counterclockwise → Pressure will decrease

3. Push the knob down



Check Item

- If the main air does not reach 0.6MPa after adjustment, check the air compressor.
- If air pressure value cannot be changed even though the compressor is working fine, contact the local distributor.

Caution

Make sure to supply the machine with clean air at stable pressure.

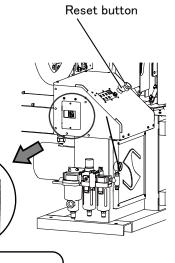
Getting Steam

- 1. Make sure the machine is supplied with at least 87 psi (0.6MPa) of steam.

 If the steam pressure does not reach the specified value, it will influence finishing quality. Check the steam pressure gauge.
- 2. It will take about 15 minutes after opening the steam valve for the machine to warm up. (It depends on the season and environmental conditions.) If the machine is not hot enough, it will affect finishing quality.

Power On

- 1 Press the black button on the power switch on the left of the electric box.
- \rightarrow The power lamp on the operation panel blinks and $\blacksquare \blacksquare \blacksquare$ appears in the display window.
- 2 Press the Reset button
- → The power lamp will be on, the piece counter will be shown in the display window and the machine will become operable.



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.)

Set each timer according to the material of the shirt

- (1) How to set Long Timer / Short Timer
 - ① Press either the Long Timer Button or the Short Timer Button. (The light turns green on the selected button.)

 •When you press the Long Timer Button, you can change the timer for long cycle.
 - ••• The Display Window shows current long timer.
 - •When you press the Short Timer Button, you can change the timer for short cycle.
 - ••• The Display Window shows current short timer.
 - ② Turn the "Set / Select Dial" to change the timer. You can change by 1 second.
 - * Turn clockwise, and the timer will increase. Turn counterclockwise, and the timer will decrease.
 - ③ Press the "Enter Button" to set the timer →The new time will be saved.
 Press the selected timer button again if you do not want to save it. → Timer will not be saved. (However, the selected timer will be effective unless the power is turned OFF.)

The timer is set at 18 seconds for short timer and 25 seconds for long timer as factory initial setting.

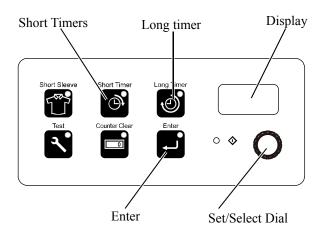


If the change is not saved, the timer goes back to the original one. Be sure to press the "Enter" button to save the change.

In setting at factory Shipped

- Long Timers 25 second
- Short Timers 18 second

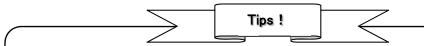
(Maximum configurable time, it is 99 seconds together.)



Set the Shirt



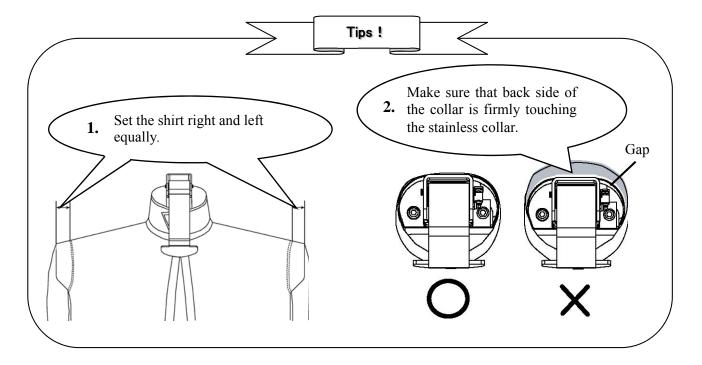
- •Beware of pinching hands or garment by moving part during the operation.
- Please take precautions against burning yourself at metal parts of press heads when setting the garment.
- •There are tips on how to finish the garment very well at each process.
- Please read and understand these tips, and 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.

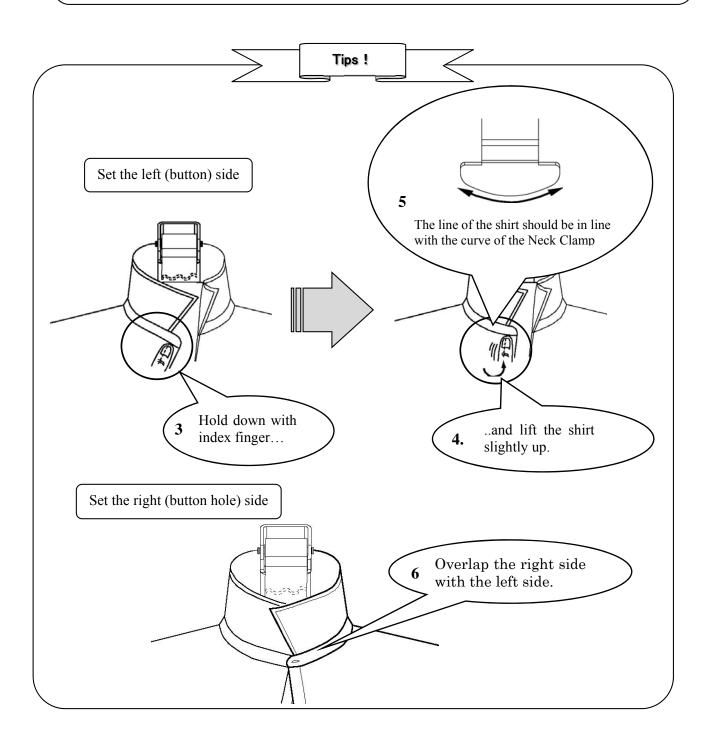
Please aim to complete the setting the shirt within 25 seconds.

Set the Shirt on the Body



Set the Neck

- Set the neck and step on the Foot Pedal.
- → 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.

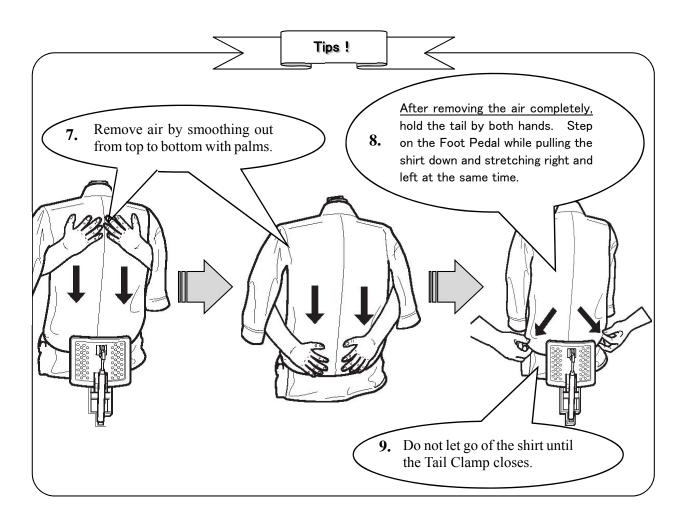


Set the Tail

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.

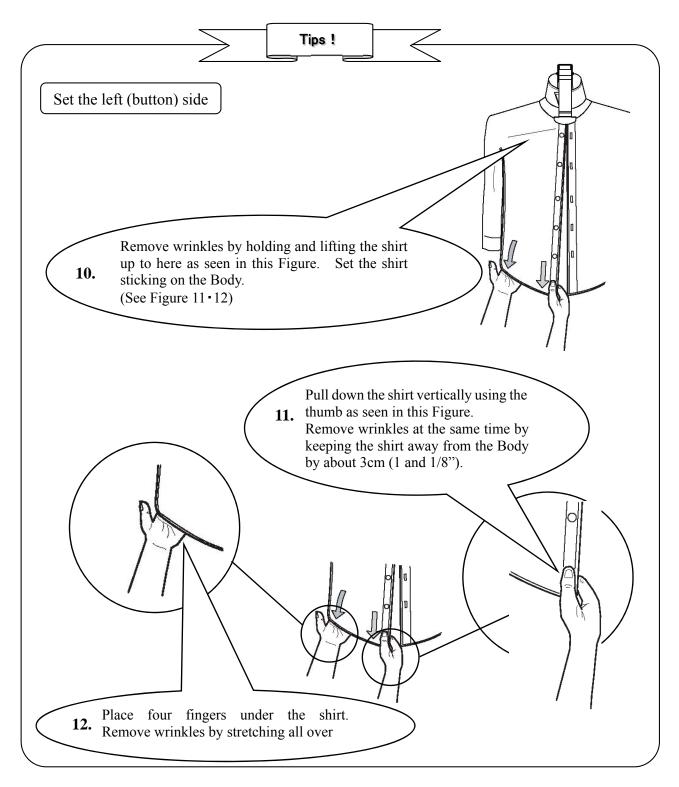
→ The Tail Clamp closes, and the vacuum starts to work.

X 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

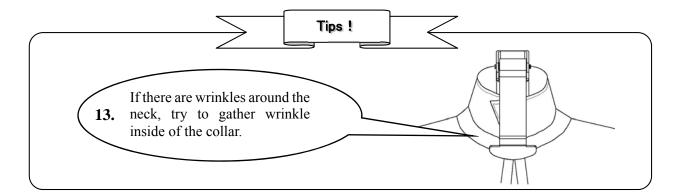
After the Tail Clamp closes, vacuum starts to work and side expanders come out. Remove all the wrinkles by pulling the shirt down.



Set of right(button hole)

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

Long Sleeve or Short Sleeve is selected by pressing Short Sleeve Button on the operation panel at Control Box.

Long Sleeve

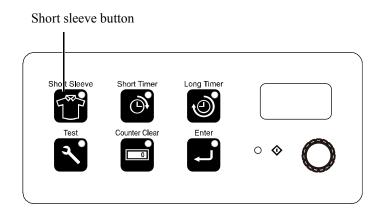
When the "Short Sleeve Button" is OFF, the long sleeve mode works.

(Press this button when the "Short Sleeve Button" is ON. The lamp turns OFF and the long sleeve mode is ready to work.)

Short Sleeve

When the "Short Sleeve Button" is ON, the short sleeve mode works.

(Press this button when the "Short Sleeve Button" is OFF. The lamp turns ON and the short sleeve mode is ready to work.)



1: Set the Long Sleeve

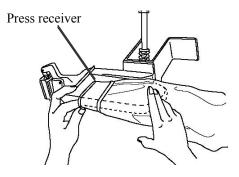
Make sure that the Short Sleeve Button is OFF.

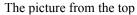
Set the Left Cuff

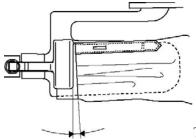
Place the cuffs on the press receiving area on the top and bottom cuff clamps.

Information

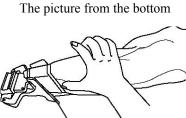
Refer to the setting drawing. Adjust the bottom tuck area.

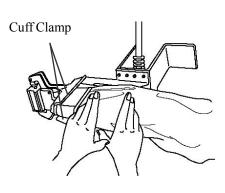






Place at an angle of 5∼15 degrees.





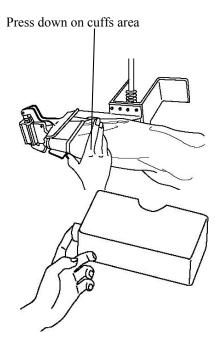
Top/Bottom of cuff is matched

- While holding down the cuffs area with the right hand, press the Cuff Clamp/Slide Button with the left hand.
- →The left cuff will clamp and the front press will begin to move to the left.

CAUTION

Be careful not to touch the press as it moves to the left.

*If you fail to set the short sleeve, press Cuff Clamp/Slide Button after Front Press stop moving. The clamp is released while pressing this button. If you release this button, the cuff is clamped once again.



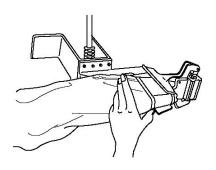
Set the Right Cuff

- Set the right cuff in the same way as the left cuff.
- Press Short Cycle or Long Cycle Button by the right hand while holding tuck area by the left hand.

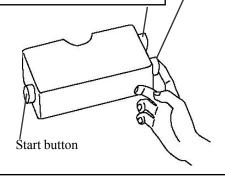
INFORMATION

The pressing time is determined by the button you pressed.

- →The right cuff is clamped.
 - ※ Release the button if you want to set the cuff or change the timer setting again. Release cuff right clamp. Press Short Cycle or Long Cycle Button again. Start to clamp the cuff.
- Press Start Button by the left hand while pressing the button by the right 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.
- Long Button
 The shirt pressing is done under Long Timer.

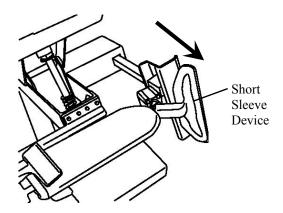


CAUTION

* Hold the button down until the front and rear presses have closed. If the button is released before the presses have closed all the way, the presses will reopen and will not press.

2: Set the Short Sleeve

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



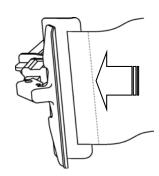
Set the Left Short Sleeve

- Set the short sleeve. Hold the short sleeve by the right hand and press Cuff Clamp /Slide Button by the left hand. (Do not let go of the button.)
- → The left cuff will clamp and the front press will move to the left.

CAUTION

Be careful not to touch the press as it moves to the left.

*If you fail to set the short sleeve, press Cuff Clamp/Slide Button after Front Press stop moving. The clamp is released while pressing this button. If you release this button, the cuff is clamped once again.



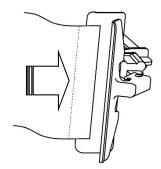
Set the Right Short Sleeve

 Set the short sleeve as left. Hold the short sleeve by the left hand and press Cuff Clamp Button by the left hand. Press Long or Short Button by the right hand.

Information

The pressing time is determined by the button you pressed.

- → The right cuff will be clamped.
 - *Release the button if you want to set the short sleeve or change the timer setting again. Release cuff right clamp. Press Short Cycle or Long Cycle Button again. Start to clamp the cuff.



- While pressing this button by the right hand, press Start Button by the left hand until Front Press and Rear Press close.
- → Front Press and Rear Press close and automatic operation starts to work. (Tuck Press does not close under Short Sleeve Mode.)

Tips!

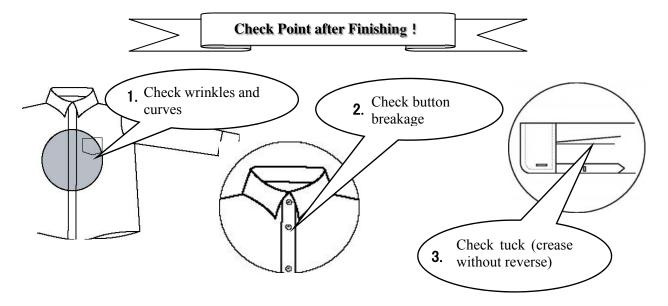
- •When the end of the sleeve cannot reach the clamp, press and turn Small Size Button ON (Green light turns ON.)
- The sleeve arm closes and the clamp comes closer.

(Press and turn this button OFF once again after the operation so that the sleeve can be easily set.)

• Press Reset Button during automatic operation, then all the processes stop working.

Information

- Step Foot Pedal while Blower works, then blower time can be extended. 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, then set next shirt on the machine.



Finishing Operation,

- Push the red button on the power switch on the side of the electric box.
 - → The Power Lamp and Display Window on the control panel will turn 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 activates. 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:

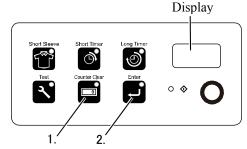
Press the Reset Button, then the machine starts to work

%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)

Resetting of counter (number of finished shirt)

- 1 Press Counter Clear button on operation panel.
 - \rightarrow "0" blinks in the display window.
- 2 Press Enter button on operation panel.
 - \rightarrow "0" stops blinking and resetting is completed.



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.

**** THEREFORE, AFTER CHANGING THE COVER, ALWAYS RESET THE COUNTER**

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. →The display will show **□** □ □ .

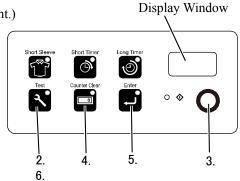
3. Turn the Set/ Select Dial until [is displayed. Press the "Enter" Button.

 \rightarrow The display will show [] .(Number is a pro forma amount.)

4. Press "Counter Clear" Button on the control panel.

 \rightarrow The display will show \square 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



Replacing Covers and Pads



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



Spring hooks come with the cover for tensioning the sides. When pulling the hook, hold ring with a finger and pull to avoid injury.

Be careful when setting covers.



This section is to explain the proper replacement procedure for the covers and pads. For removal proceed in reverse order. In case of changing only a particular item, refer to the related part of the explanation.



After the Cover change, be sure to reset the Cover Counter.

Refer to page 25 for the reset instructions.

Ocean Covers and Pad



Body Cover (w/ Rear Lower Cover)



Stainless Rod 2 pcs. (**Reusable**)



Tail Clamp Cover



Rear Body Protection Cover (Right and Left: common)



Body Felt Pad 8mm



Body SH Silicone 10mm



Neck Clamp Cover



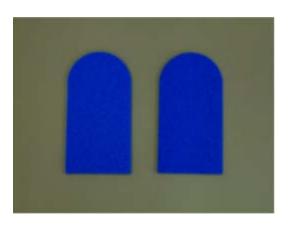
Neck Clamp Orange Silicone



Tuck Cover (Right & Left : different)



Tuck Felt Pad 5mm (Right and Left: common)



Tuck H Silicone 6mm (Right & Left : common)



Cuff Clamp Cover (Right & Left : different)



Short Sleeve Hold Cover (Right & Left : common)



Short Sleeve Cover (Right & Left : common)

1. Removing the Body Cover

- 1-1 •Pull the spring hook at the side of the front body cover by the finger. (Figure 1-1-1)
 - Keeping the ring by the finger, expand the front body cover and hang the spring hook on to the machine's metal body. This will avoid dropping the spring hook. (Figure 1-1-2)
 - ****There are four places to hook the spring hook on the metal body: front upper right & left and front lower right & left.**





Figure 1-1-1

Figure 1-1-2

1-2 • Remove the body cover after removing the duct hose. (Figure 1-2-1)

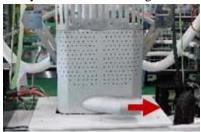


Figure 1-2-1

- 1-3 •Pull out the stainless rod from both side of the pocket of the body cover left and right. (Figure 1-3-1)
 - •Insert the rods to the pockets of the new body cover. (Figure 1-3-2)
 - Insert the rod deep inside the pocket until it reaches to the end. (Figure 1-3-3)





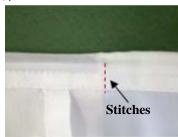


Figure 1-3-1

Figure 1-3-2

Figure 1-3-3

- 1-4 Detach the Velcro at both side of the rear clamp of the new body cover. (Figure 1-4-1)
 - •Open the zipper fastener at both side. (Figure 1-4-2)
 - Take the lower cover off. (Figure 1-4-3)







Figure 1-4-1

Figure 1-4-2

Figure 1-4-3

2. Removing the Rear Clamp Unit

- 2-1 •Close the air cock. (Figure 2-1-1)
 - •Open the regulator valve. (Figure 2-1-2)
 - •Please check if the air pressure turns to be 0Mpa down from 0.6Mpa. (Figure 2-1-3)







Figure 2-1-1

Figure 2-1-2

Figure 2-1-3

- 2-2 Remove black and red air tube from speed controllers at the back side of the rear clamp unit. (Figure 2-2-1)
 - •By pushing the tip of the speed controller, you can pull out the air tube. (Figure 2-2-2)



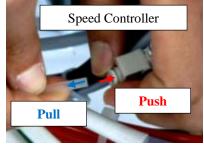


Figure 2-2-1

Figure 2-2-2

- 2-3 Remove two screws by turning their levers at the rear clamp unit. (Figure 2-3-1 and 2)
 - *When the lever touches each other, lift up the lever and change the angle of the lever. (①Lift up the lever ②Change the angle of the lever) (Figure 2-3-3)







Figure 2-3-1

Figure 2-3-2

Figure 2-3-3

- 2-4 Hold the rear clam unit up. (Figure 2-4-1)
 - •Remove the rear clamp unit slowly from the machine. (Figure 2-4-1)



Figure2-4-1

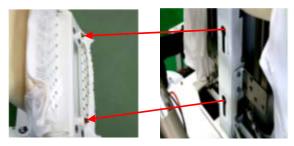


Figure2-4-2

3. Installing the Rear Lower Cover (receiver) and Rear Clamp Cover to the Rear Clamp Unit

- 3-1 Detach the L shape Velcro at the lower right side of the rear lower cover. (Figure 3-1-1)
 - Place the pad at the rear clamp unit properly. ***The cover with Velcro side will face to the clamp.**

(Figure 3-1-2)

- •Pull and tie the string so that the cover will wrap each corner of the unit. Keep the knot inside each corner of the cover. (Figure 3-1-3)
- In order to keep tension on the cover, pull the string at the upper side of the cover down, and hang it on the hook at two places. (Figure 3-1-4)
- •Run the lower part of the cover under the rear clamp unit base and attach the L shape Velcro. (Figure 3-1-5)



Figure3-1-1



Figure 3-1-2



Figure 3-1-3



Figure 3-1-4



Figure 3-1-5

- 3-2 Adjust the rear cover pad to the corner of its material. (Figure 3-2-1)
 - •Place the cover at the rear clamp unit properly. **XThe cover is placed so that the outlet of the string facing Up.**(Figure 3-2-2)
 - •Pull and tie the string so that the cover will wrap each corner of the unit. Keep the knot inside each corner of the cover. (Figure 3-2-3)
 - In order to keep tension on the cover, pull the string at the upper side of the cover down, and hang it on the hook at two places. (Figure 3-2-4)



Figure3-2-1



Figure3-2-2



Figure3-2-3



Figure3-2-4

- 3-3 •Install the rear clamp unit to the machine.
 - Return the rear clamp unit to the machine at the original position.
 - Fasten two screws with lever to fix the rear clamp unit. (****fasten the screw alternately.)**
 - Insert black and red air tube to speed controllers. **Black: Above, Red: Below
 - •Close the regulator valve and open the air cock slowly. Check if the air pressure turns to 0Mpa to 0.6Mpa.

4. Install the Body Silicone, Body Pad and Rear Protection Cover

4-1 •Install the body SH silicone. ***Place the body SH silicone symmetrically against the machine body.**(Figure 4-1-1)



Figure4-1-1

4-2 •Install the 8mm body felt pad. Place **symmetrically** against the machine body too.(Figure4-2-1) **XIt is a bit larger than the machine body.**(Figure4-2-2 and 3)



Figure4-2-1



Figure4-2-2



Figure4-2-3

- 4-3 Cover the cover blade left and right with the rear cover protection cover. (Figure 4-3-1)
 *There is a small open pocket front and back of the stitch inside the straight socks shape protection cover.
 - The cover blade should be in the front open pocket. (Figure 4-3-2)

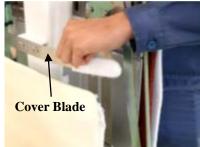


Figure4-3-1

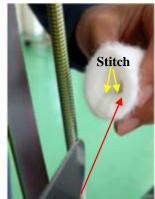


Figure 4-3-2

5. Setting the Body Cover

- •Cover the machine body with the body cover. ***The stainless rod is inserted in the side of the body cover.** (Figure 5-1-1)
 - •Cover the upper left and right of the side expander device with the body cover. **Please do not cover the lower** part of the body. (Figure 5-1-2)
 - •Detach Velcro at the lower part of the body cover. Put the duct hose through the lower part of the body, and attach Velcro at the lower left side of the body cover. (Figure 5-1-3 and 4)
 - ·Check if body cover, 8mm body felt pad, and body SH silicone are installed symmetrically against the metal body. (Figure 5-1-5)





Figure 5-1-1



Figure 5-1-2



Figure5-1-3







Figure 5-1-5

- •Cover the lower front of the metal body with the pocket with a string at the front back of the body cover. (Figure 5-2-1)
 - Pull the string coming out from the front of the shoulder up, and fix the body cover to the metal body. ***Do not** tie the string at this moment.(Figure 5-2-2 and 3)
 - •Cover the tip of the cover blade with the rear back side of the body cover. Pull the string coming out from the rear of the shoulder up. Fix the body cover to the metal body. (Figure 5-2-4)









Figure 5-2-1

Figure 5-2-2

Figure 5-2-3

Figure 5-2-4

•Check if the body cover installed properly in place. Pull the strings coming out from front and rear of the shoulder and tie temporarily in a bow. (Figure 5-2-5 and 6)



Figure 5-2-5



Figure 5-2-6

5-3 •Check if the body cover is installed symmetrically. Eliminate wrinkles on the body cover by pulling down the rear end of the cover. Put the residual cover at the front rear end into the lower back side of the metal body. Adjust rear side of the body cover to the angle of the rear end. (Figure 5-3-1~4)



Figure5-3-1



Figure5-3-2



Figure 5-3-3



Figure 5-3-4

5-4 • When the body cover is installed properly in place, untie the string. Keep the tension of the string and tie firmly the two strings together this time. Tie the remaining strings again and put it inside the body cover to avoid improper finishing quality. (Figure 5-4-1~3)



Figure 5-4-1



Figure 5-4-2



Figure 5-4-3

- 5-5 Move the wrinkles at the shoulder area to the far end of the body cover to avoid improper finishing quality. (Figure 5-5-1 and 2)
 - •Check if the body cover is installed properly in place as a whole, and adjust position if necessary.



Figure5-5-1



Figure5-5-2

5-6 •Release the spring hook from the metal body by pulling the ring by the finger. Hang the spring hook on to the stainless rod over its cover.

****There are four places to hang the spring hook: front left & right and rear left & right.** (Figure 5-6-1)

- •Cover the lower left side of the side expander device with the body cover. (Figure 5-6-2)
- Attach Velcro upper and lower side of the body cover.(Figure 5-6-3 and 4)



Figure5-6-1



Figure 5-6-2



Figure 5-6-3



Figure 5-6-4

- 5-7 Close the zipper of the cover at the rear right side of the side expander device from top to bottom. Close the zipper of the lower rear cover at the rear clamp unit from top to bottom. (Figure 5-7-1)
 - Attach Velcro so that it can hide the handle of the zipper. Put the string with Velcro coming out from the rear end of the body cover through the string loop at the rear end of the rear lower cover. (Figure 5-7-2)
 - Hang the string around the whole body at the very lower end on to the metal hook. Pull right and left end of the string with Velcro. (Figure 5-7-3 and 4)
 - Attach Velcro each other under the duct hose to avoid loosening the string. (Figure 5-7-5)
 - •Install the duct hose to the machine. (Figure 5-7-6)



Figure5-7-1



Figure 5-7-2



Figure 5-7-3



Figure5-7-4



Figure5-7-5



Figure 5-7-6

6. Setting the Neck Clamp Cover

6-1 • Put a neck clamp cover to a tip of the neck clamp arm.

Procedure:

- 1 Put an orange silicon inside the neck clamp cover. (Smoother surface to face the cover) (Figure 6-1-1 and 2)
- 2 Put the neck clamp cover to a tip of the neck clamp arm. (Figure 6-1-3)
- 3 Tie threads of the neck clamp cover firmly. (Figure 6-1-4)
- 4 •Bowl the knot.(Figure 6-1-5)
- 5 Put the threads in the cover. (Figure 6-1-6)







Figure6-1-2

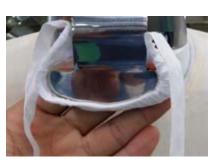


Figure6-1-3







Figure6-1-5



Figure6-1-6

7. Setting the Tuck Cover(left), Tuck Cover(left), Cuff Clamp Cover(left) and Short Sleeve Cover(left)

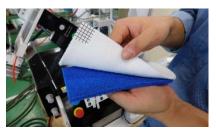
7-1 •Set tuck cover with tuck H silicon and 5mm-thick tuck felt to tuck plate.

Procedure:

- 1 •Lay 5mm-thick tuck felt onto tuck H silicon matching net markings. (Figure 7-1-1)
- 2 •Insert them to the tuck cover. Make felt upside. (Figure 7-1-2)
- 3 •Put the tuck cover to the tuck press plate. The pedestal goes between the silicon and the cover.

(Figure 7-1-3 and 4)

4 • Tie threads firmly and make bowl not to get loose. (Figure 7-1-5)



EBE



Figure7-1-1

Figure7-1-2

Figure 7-1-3





Figure 7-1-4

Figure 7-1-5

6-2 • Setting cuff clamp cover to cuff clamp.

Note: Left cover is different from right in shape. (Figure 7-2-1 and 2)

Procedure:

- 1 Put a cuff clamp cover to the upper cuff clamp and tie firmly and make bowls(Figure7-2-3)
- 2 Put threads in the cover. (Figure 7-2-4)
- 3 •Do the same on the lower cuff clamp. (Figure 7-2-5)



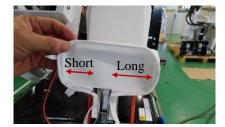




Figure6-2-1

Figure6-2-2

Figure6-2-3





Figure6-2-4

Figure6-2-5

7-3 • Setting the Short Sleeve Clamp Cover

Procedure:

- 1 •Put a thread of **the lower short sleeve cover** through **under** the short sleeve clamp. (Figure 7-3-1)
- 2 •Pull and Tie the threads firmly, and tie again not to get loose. (Figure 7-3-2)
- 3 Put the threads inside the cover. (Figure 7-3-3)
- 4 Put a thread of **the upper short sleeve cover** through **over** the short sleeve clamp. (Figure 7-3-4)
- 5 Tie the threads as #2. (Figure 7-3-5)

Figure 7-3-4

6 •Put the threads inside the cover. (Figure 7-3-6)

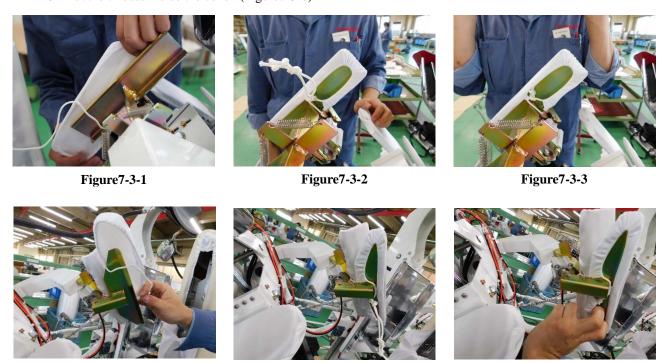


Figure 7-3-5

8. Put the Covers on the right after sliding the Front Press.

8-1 •Slide the front press to the right.

Procedure:

- 1 •Turn the power on. (Figure 8-1-1)
- 2 Press Reset button. (Figure 8-1-2)
- 3 Press Test button on the control panel. (Figure 8-1-3)
- 4 Turn dial to o09. (Figure 8-1-4)
- 5 Press Enter on the control panel. (Figure 8-1-5)
- 6 The front press slides to the left. (Figure 8-1-6 and 7)
- 7 Turn the power off. (Figure 8-1-8)









Figure8-1-1

Figure8-1-2

Figure8-1-3

Figure8-1-4









Figure8-1-5

Figure8-1-6

Figure8-1-7

Figure8-1-8

8-2 • Set the right tuck cover and the cuff clamp cover as in 7-1. (Figure 8-2-1)



Figure8-2-1

8-3 • Setting the short sleeve cover to the short sleeve clamp.

Procedure:

- 1 •Put a thread of **the lower short sleeve cover**(right) through **over** the short sleeve clamp, and set as the left. (Figure 8-3-1 and 2)
- 2 •Put a thread of **the upper short sleeve cover** through **under** the short sleeve clamp, and set as the left. (Figure8-3-3 and 4)

Figure8-3-1

Figure8-3-2





Figure8-3-3

Figure8-3-4

8-4 • Slide the front press to the right.

Procedure:

- 1 •Turn the power on. (Figure 8-4-1)
- 2 Press Reset button. (Figure 8-4-2)
- 3 The front press moves to the right. (Figure 8-4-3 \sim 4)
- 4 Turn the power off. (Figure 8-4-5)









Figure8-4-1

Figure8-4-2

Figure8-4-3

Figure8-4-4



Figure8-4-5

Test Operation



WARNING Be sure there is nobody near the machine during the test operation. It may be dangerous.

Caution

Initial settings are subject to change without prior notice due to unforeseen improvements.

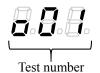
The test operation allows for independent operation of each function on the machine.

Operation Procedure

Step 1: Push the "Test" button on the control panel for one second to get into the test mode.

→The green lamp will light, and test number " o01 " will be shown in the display window.

Test number "o01" is displayed:



Step 2: Turn the "Set/Select" dial on the control panel to choose the test item.

→Turn clockwise to advance the numbers, counter-clockwise to reduce.

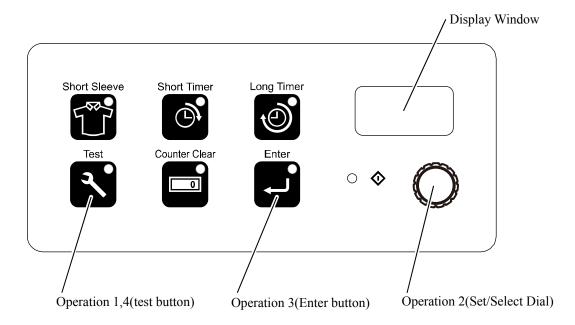
(Test numbers will be shown in order as listed on page 41.)

- Step 3: Press the "Enter" button on the control panel.
 - →The Test operation is enabled and the specified item will work. The light on the Enter button is on during the test operation.
 - *When the "Enter" button is pressed again, test mode will go off.

Caution

Turn the test mode off, or you cannot proceed to normal operation.

- Step 4: Press the "Test button" to finish tests.
 - →The lamp turns off and the machine goes into normal operation mode.



Test Number List

Display Window	Test item	Test data
8.8.8.	Magnetic Contactor for	
	Vacuum Motor	
8.8.8.	Magnetic Contactor for Blower Motor	
8.8.8.	Tail Clamp Upper Solenoid Valve (YV4)	Tail Clamp Upper Solenoid Valve: ON/OFF.
8.8.5.	Sleeve Arm UP / DOWN Solenoid Valve (YV5 / 21)	Sleeve Arm UP / DOWN Solenoid Valve: ON/OFF. ON: UP OFF: DOWN
8.8.8.	Tail Clamp closing Solenoid Valve (YV6)	Tail Clamp closing Solenoid Valve: ON/OFF.
8.8.8.	Left cuff clamp closing Solenoid Valve (YV7)	Left cuff clamp closing Solenoid Valve: ON/OFF.
8.8.8.	Rights cuff clamp closing Solenoid Valve (YV8)	Rights cuff clamp closing Solenoid Valve: ON/OFF.
8.8.8.	Front Press Transfer Solenoid Valve (YV9/10)	Front Press Transfer Solenoid Valve: ON/OFF.
8.8.8.	Tuck Press closing Solenoid Valve (YV11)	Tuck Press closing Solenoid Valve: ON/OFF.
8.8.8.	Body press/shoulders press Solenoid Valve(YV12)	Body press/shoulders press Solenoid Valve: ON/OFF.
8.8.8.	Side Expander opening / Closeing Solenoid Valve (YV13/22)	Side Expander opening / Closeing Solenoid Valve: ON/OFF.
8.8.8.	Neck closing Solenoid Valve (YV18)	Neck closing Solenoid Valve: ON/OFF.
888	Buzzer	Buzzer sounds while it is ON.
888	Size Adjustment Button Lamp	The lamp turns ON.
<i>B.B.B.</i>	Dip Switch	You can check and change the DIP switch setting. Please see "DIP Function" on page 42. Press the Counter Clear Button to finish.
888	Service timer (Volume)	You can check and change the Volume function. Please see "Volume Function" on page 42. Press the Counter Clear Button to finish.
8.8.8.	Panel Display Test	By turning Set/Select Dial, you can check if the Display Window properly shows various numbers.
8.8.8.	Panel Button Test	By pressing each Button on the Operation Panel, you can check if each button properly works. The green light goes ON.
8.8.8.	Input test 1	Test for Conduction for each sensor and each button. * Test of Emergency Switch & Safety Guards not available.
8.8.8.	Input test 2	It indicates if the input signal is On or OFF. * Test of Emergency Switch & Safety Guards not available.
	Cover counter	Body pressing time after changing the body cover. **XAfter cover change, be sure to reset the cover counter. (Refer to page 25 for reset.)
8.8.8.	Press counter	Body life time accumulated pressing time. (Cannot reset)

■ DIP Switches

- Press "Enter" when **B. B. B.** appears in the display window.
- Choose DIP number to check/change as in Table-1 turning Set/Select dial, and press "Enter".
- Choose on or off of DIP turning Set/Select dial, and press "Enter" to save.
- Press "Hard/Soft" button to end DIP switch function.

Table-1 Dip Switch Functions and Settings

No.	Setting									
	Timing of Closes Arm Close	ON: Second Foot Pedal	OFF							
8.8.8.	Timing of Sleeve Arm Close	OFF: First Foot Pedal	Orr							
	Default set with short sleeve mode when it is	ON: Yes	OFF							
	powered on.	OFF: No	OFF							
	Dualta function for alcays arm to anon	ON: with brake	OFF							
	Brake function for sleeve arm to open	OFF: without brake	OFF							

■ Volume Function

- Press "Enter" when **appears** in the display window...
- Choose Volume number to check/change as in Table-2 turning the Set/Select dial, and press "Enter".
- Select and set value turning Set/Select dial, and press "Enter" to save.
- Press "Hard/Soft" button to end Volume function.

Table-2 "Volume Control" List

Disp. No.	Details	Default Setting
B.B.B.	To control brake air supply timer for front press transfer to left	0.2 sec. (Max 1.3 sec.)
<i>∃.∃.</i> ∃.	To control brake air supply timer for front press transfer to right	0.17 sec. (Max 1.3 sec.)
8.8.8.	To control blower motor start timing after body press start	3.1 sec. (Max 5.1 sec.)
5.5.5.	To control side expander open timer after second foot pedal.	1.3 sec. (Max 3.0 sec.)
B.B.B.	To control timing between body press start and sleeve arm start to open	1.4 sec. (Max 3.0 sec.)
<i>∃.</i> ∄. <i>∃.</i>	To control timing between body press start and tuck press start to close	2.5 sec. (Max 5.0 sec.)
8.8.8.	Set the release timing of the tuck press when it is released before finishing work completes.	3 sec. (Max 32 sec.) (Mini 3 sec.)
8.8.8.	To control sleeve arm to close before its completely down after complete press operation.	0.1 sec. (Max 2.0 sec.)
8.8.8.	To set time between cuffs clamp release and movement of sleeve arms upwards a little bit after press operation.	0.2 sec. (Max 5.0 sec.)
<i>8.8.8</i> .	To control timing from sleeve arm completely down and starting "V11" "V12" function	3.0 sec. (Max 5.0 sec.)
8.8.8.	To control Sleeve Arm tension to soften. (short Sleeve)	0.0 sec. (Max 0.2 sec.)
8.8.8.	To control Sleeve Arm tension to soften. (Long Sleeve)	0.04 sec. (Max 0.2 sec.)
8.8.	To control sleeve arm opening time from close position when size adjustment button is ON.	0.2 sec. (Max 1.5 sec.)

■Tou function

- When papears after operating 1 and 2, press Enter button.
- Turn Set/Select dial to choose the number you want to change. Press Enter button to let it show the current set time.
- Turn Set/Select dial to change time. Press Enter button to save setting.

■ Input Test 1

- Press the "Enter" button when [4.4] appears in the display window.
- Press each input button and the number in Table-3 will be shown in the display window.
- Press the "Enter" button to end this function.

■ Input Test 2

- Press the "Enter" button when $\blacksquare \blacksquare \blacksquare$ appears in the display window.
- Turn the Set/Select dial to get each input button and the number in Table-3 be shown in the display window. Vacuum lamp on...test on, vacuum lamp off...test off.
- Press the "Enter" button to end this function.

Table-3 "Input Test 1, 2"

Name	Displayed number	Name	Displayed number
Reset Button	8.8.8.	Front Press Open Sensor	<i>8.8.8.</i>
Foot Pedal	8.8.8	Front Press Close Sensor	<i>8.8.8.</i>
Vacuum Motor Magnet Contactor	888	Front Press Left Position Sensor	8.8.8.
Blower Motor Magnet Contactor	8.8.8.	Front Press Left Speed Reduction Sensor	8 . 8 .
Left Cuff Clamp / Slide Start Button	8 .8.8.	Front Press Right Speed Reduction Sensor	8 .3.8.
Press Start Button	8 . 9 . 8 .	Front Press Right Position Sensor	<i>8.8.8.</i>
Press Short Button	<i>8.8.8.</i>	Size Adjustment Button	<i>8.8.8.</i>
Press Long Button	<i>8.8.8.</i>		

■ Cover <u>counter</u> display

- When **[6 0 0**] is displayed, press Enter button.
- The counter will be displayed in 2 different numbers.
- The first displayed 3 digits signifies 1,000's to 100,000's.

The second 3 digits signifies 1 to 100's.

One-point

Use this function to know cover changing timing.

Make cover counter "0" after changing the cover, which is for the next cover changing timing.

ex. 12,345 presses will be shown:

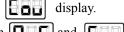


Caution

Refer page 25 for resetting.

• Selecting the Counter

Press the Cover CNT button will bring up a flashing



Turning the dial will allow the user to switch between Ras and

When you press enter while either one is selected, the corresponding count will be shown.

 About the display of cover counter and press counter Maximum counter is 9,999,999.

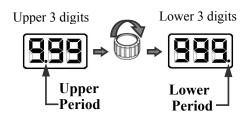
The counter shows twice due to the limited space of Display Window.

First it shows upper 3 digits. Turn the Set/Select Dial to the right next. It shows lower 3 digits next. When displaying the upper 3 digits, there will be a period placed in the window to denote

which set of numbers the user is currently viewing. Below contains a diagram of how this works.

• Example of Maximum Counter (999.999)

• Example of a display in case a counter is 999 times



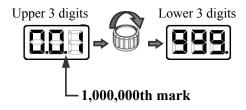


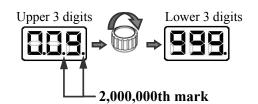
• Example of a display in case a counter is 12,000 times



- In the case of the Press Counter, when the counter reaches 1,000,000 times, a period will be placed in the Upper Number section, beside the number closest to the right. After exceeding 2,000,000, another period will be placed beside the next number in line in the Upper Number section.
- Example: 1,001,999

• Example : 2,009,999





Trouble?

© If your machine doesn't function properly there should be an error number shown on the control panel display. Please see the error number list below along with some helpful hints to get your machine up and running again. If you are unable to get your machine running again after checking the advice below, please contact your local Sankosha distributor or Sankosha USA, Inc's office.



When working around electrical components such as the electrical box and inverter care should be taken. When working in the opened electrical box or inverter box do not touch any unnecessary areas. Touch only the areas as instructed.



If you have any of the following error messages: "EEE", "EE1", "EE2", "EE3", "EE4", "EE5" please turn off the machine and wait for 5 seconds and turn the machine back on. If the error persists, please contact your local Sankosha distributor or Sankosha Inc.

	1. Error Item
Error No.	2. Error Description
	3. Check Point
	1. Emergency Stop Button
	2. Emergency Stop Button is being pressed.
E1	 3. (1) Release the Emergency Stop Button by turning the Button clockwise (to the "→" direction). Display shows " 1". Press 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.
	1. Tuck Left Press Safety Bar
	2. Tuck Left Press Safety Bar Switch is kept activating.
E2	 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: 0.2MPa, reference Page 14)
	1. Tuck Right Press Safety Bar
	2. Tuck Right Press Safety Bar Switch is kept activating
E3	 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: 0.2MPa, reference Page 14)
	1. Front Press Left Safety Bar
	2. Front Press Left Safety Bar Switch is kept activating
E4	 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 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 "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) Check air pressure. (Front Press Slide Air Pressure: 0.3MPa, reference Page 14)

	1. Error Item
Error No.	2. Error Description
	3. Check Point
	1. Front Press Right Safety Bar
E5	 2. Front Press Right Safety Bar 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 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 "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) Check air pressure. (Front Press Slide Air Pressure: 0.3MPa, reference Page 14)
	1. Shoulder Press Left Safety Bar
	2. Shoulder Left Press Safety Bar Switch is kept activating
E6	 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 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 "E7" 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 Bar
	2. Shoulder Right Press Safety Bar Switch is kept activating
E 7	 3. (1) In the case of keep pushing the safety bar, it will be shown " 7" if you release the bar. Please check whether the bar is still being pushed by 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 "E7" 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 Press Position Sensor Error
	2. It is not detected Front Press Press Position sensor (SQ7) even if press head is at position.
E30	3.(1)When you touch the magnet to sensor at the rod side (left) of cylinder, the red light of sensor ①does light ··· it is considered the wrong position of the sensor. Please loosen the band of it, and find the lighting zone. Please place center of lighting zone and fix it. ②doesn't light ··· it is sensor problem. Check if the sensor is broken, or the wire connection is loose or disconnected (2) Check the air pressure. (Main Pressure: 0.6MPa, reference Page 14)
	1. Front Press Open Sensor Error
E31	2. It is not detected Front Press Open sensor (SQ05) even if press is activated. 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 14)
	1. Reset Button Error
E32	 2. Reset Button keeps activated when the main power is ON, or machine is at the original position. 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. Error Item
Error No.	2. Error Description
INU.	3. Check Point
	1. Front Press Left Brake Sensor Error
E33	2. It is not detected Front Press Left Brake Sensor (SQ8) and is detected Left Position Sensor (SQ7) 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 (SQ9) and is detected Original Position Sensor (SQ10) even if Front Transfer is moving correctly.
	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).
	1. Left Cuff Clamp / slides start Button Error(SB1)
E35	2. (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.
	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 "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 (SB2)
	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(SB3)
	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(SB6)
	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. Long Button Error(SB4)
	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
Ľ4 <i>Z</i>	button and push the reset button.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. Error Item
Error No.	2. Error Description
	3. Check Point
	1. Front Press Close Sensor Error
	2. It is not detected Front Press Close sensor (SQ6) 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 14)
	1. Front Press Original Position Sensor Error
	2. It is not detected Front Press Original Position sensor (SQ10) even if press head is at position.
E50	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. (Front Press Slide Pressure: 0.3MPa, reference Page 14)
	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.
	Size Adjustment Button Error
	2. The button is ON when the power is ON.
E56	3. (1) Check if the button is caught or being press for some reason.(2) The button is malfunctioned. Check if the button is damaged or if there is a short circuit in the wire.
	1. 24V Error
EOO	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. (Portion of operation when especially an error occurs).
	1. Warning for cover change timing.(Standard)
E C1	2. Time to change covers. You have done 25,000 presses/finishes since last time.
E C1	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 25.

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

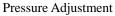
Check item	Daily	Monthly	Yearly
1. Air pressure	0		
2. Regulators/Mist separator	0		
3. Steam pressure	0		
4 Steam trap	0		
5. Covers	0		
6. Trowel surface	0		
7. Emergency Stop Button	0		
8. Blower Filter	0		
9. Grease		0	
10. Regulator / Sludge filter			0

Check Items (daily)

1. Air pressure (daily):Fig.1

Check air pressure gauge if it shows the specified air pressure. Refer to "Part Names" on page 14 and "Getting Air" regarding the component location and specified pressure value.

- ① Main regulator 0.6 MPa
- 2 Regulator (sleeve arm down) 0.2MPa
- 3 Regulator (slide/sleeve arm up) 0.3MPa

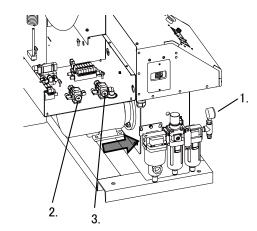


- 1. Lift the adjustment knob to release lock.
- 2. Turn the knob to adjust pressure.

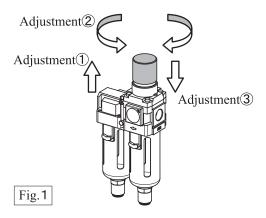
- Clockwise \Rightarrow Raise pressure.

- Counter-clockwise Lower pressure

3. Push adjustment knob back down to lock.

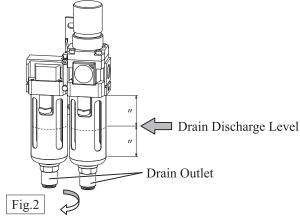


(Pressure decreases) (Pressure increases)



- 2. Regulators/Mist separator (daily):Fig.2
 - Check the auto-draining function of the regulator/mist separators. When the water/oil exceeds half of the tank, it will automatically be discharged.

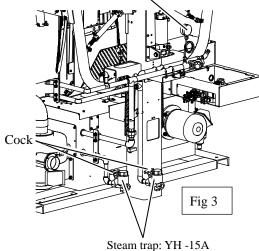
If not, discharge it manually turning the drain outlet counter-clockwise to discharge drain. The Auto-drain may not be functioning right.



3. Steam pressure (daily):Fig.3

Check the steam pressure gauge to make sure it shows the specified steam pressure. Refer to "Part Names" on page 14 and "Getting

Steam" regarding part location and specified pressure value.



Steam Gauge 0.6 MPa

4. Steam trap (daily):Fig.3

Check if the steam trap is working properly. If it is not functioning, it may be out of order.

Open the handle on the steam trap to discharge condensate.

Close the handle after it has completely drained.

5. Covers (daily)

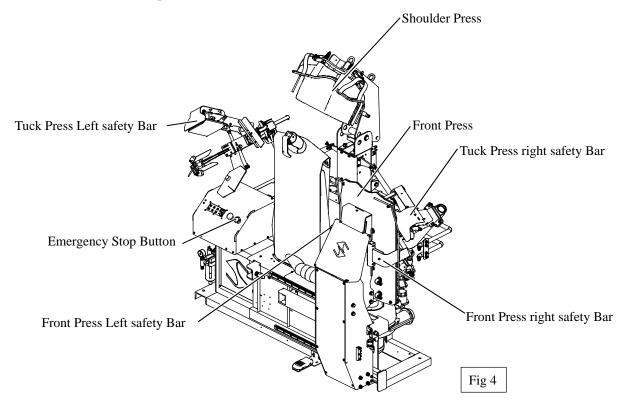
Check the covers of upper/middle/lower press to see if they are soiled or tattered. Stains or holes may effect finishing quality.

6. Check and clean press surface: Fig-4

Clean the press surface (Front, Rear, Tuck and Shoulder) to remove dirty and 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.

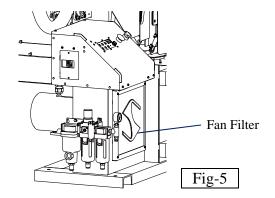
7. Emergency stop check: Fig-4

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



8. Blower filter check: Fig-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).

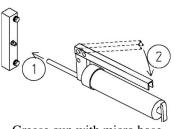
Check Items (monthly)

9. Grease supply: Fig-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.

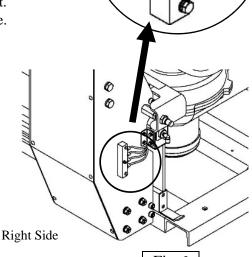
1 Press grease gun nozzle to grease inlet straight.

2 Supply the grease by pressing the lever twice.



Grease gun with micro hose





Check Item (yearly)

10. Regulator/Mist Separator Cleaning: Figure-7

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

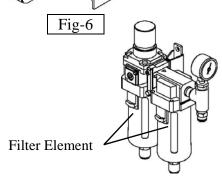


Fig-7

Item Check List

Check Item (Daily)

<u> </u>	cck fichi (Dany)																
No	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Air pressure																
2	Regulator/ Mist separator																
3	Steam pressure																
4	Steam trap																
5	Covers																
6	Trowel surface																
7	Emergency Stop Button																
8	Blower Filter																
No	check item	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	Covers																
6	Trowel surface																
7	Emergency Stop Button																

Check Item (Monthly)

Blower Filter

8

-		\												
	No	check item	1	2	3	4	5	6	7	8	9	10	11	12
	9	Grease												

Check Item (Yearly)

	\ J/													
No	check 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)

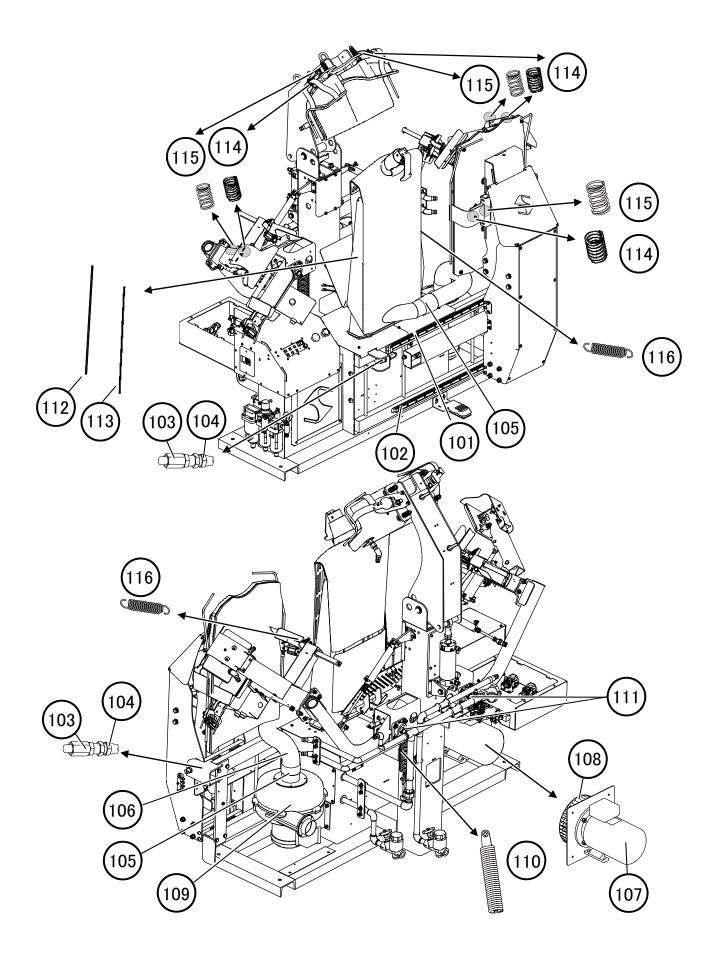
3 : Air Piping (2)

4 : Steam Piping Diagram

5 : Control Box / Switch Diagram

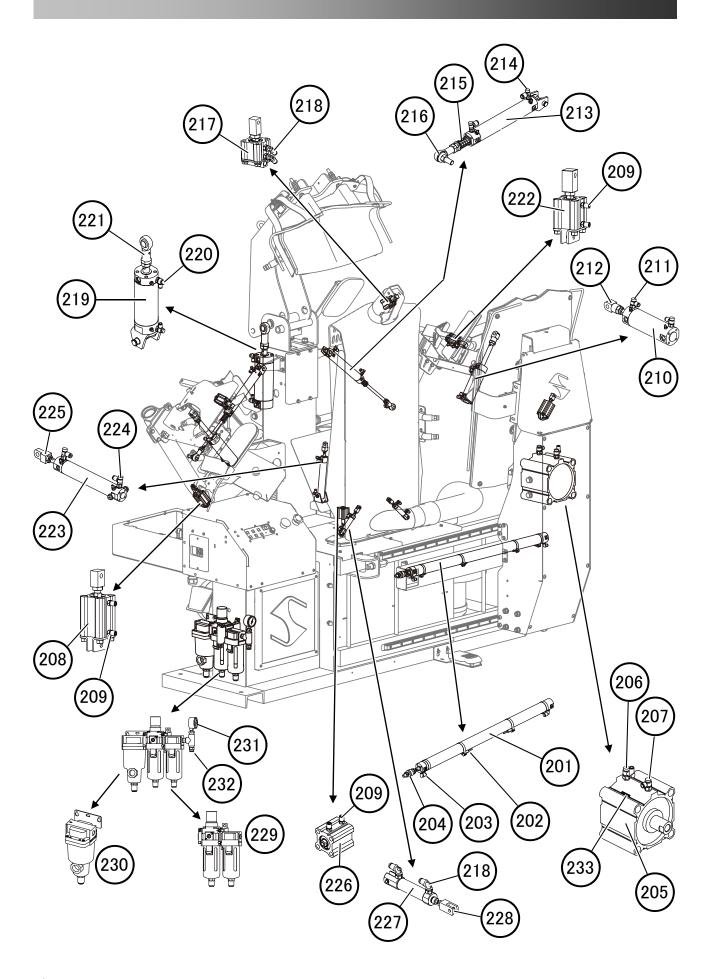
6 : Cover Diagram

1: Motor / Operation Diagram REV: 1



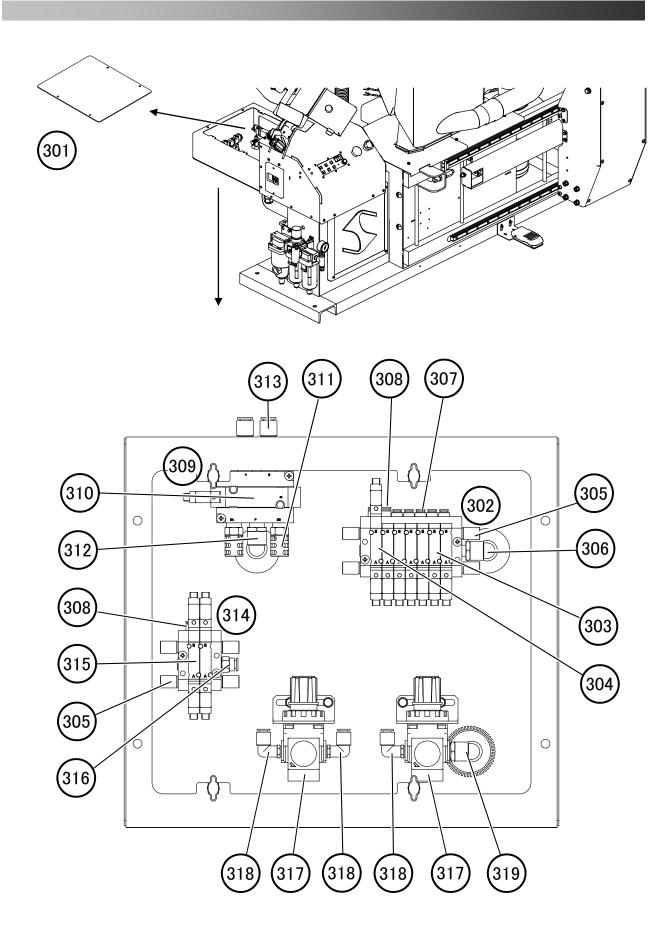
1: Motor / Operation Diagram REV: 1

No.	Part Name	Part Namber	Q'ty	Remark
101	LM Guide	E0B011	1	
101	LM Guide Block	E0B001	2	
102	LM Guide	E0A013	1	
102	LM Guide Block	E0A001	2	
103	Shock Absorber	F0K005	2	
104	Nut	F0L005	2	
105	Vacuum Flex. Hose Cuff	K1D004	2	
106	Vacuum Flex. Hose	K1D003	1	770mm
107	Motor	G0H002	1	1.5kw (LEESON)
108	Blower Fan	G2B009	1	
109	Vacuum Motor	G1A043	1	
110	Balance Spring Unit	AP-05-AA39497	2	
111	Bearing Unit	E4A001	4	
112	Spring	H0D015	2	
113	Rod	H0D016	2	
114	Spring	H0D001	6	
115	Spring	H0D002	6	
116	Spring	H0D-004	6	



2 : Air Piping (1)

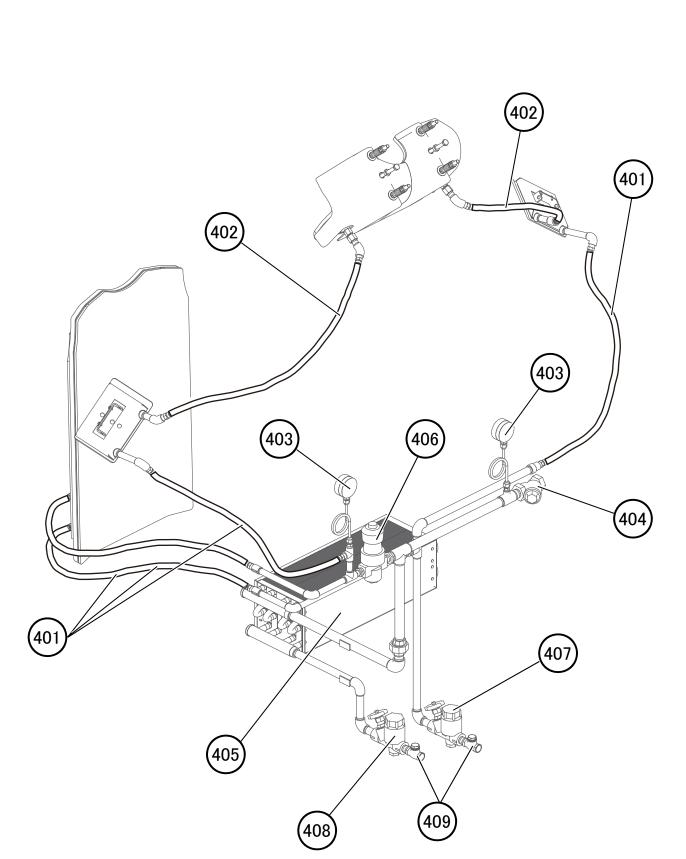
No.	Part Name	Part Number	Q'ty	Remark
201	Cylinder	B0K018	1	Slide Cylinder
202	Sensor	B5A012	4	
203	Joint	C0C018	2	
204	Floating Joint	E5L001	1	
205	Cylinder	B1H010	1	Front Press Cylinder
206	Speed Controller	C1A079	1	
207	Speed Controller	C1A074	1	
208	Cylinder	B1B014	2	Cuff Clamp Cylinder
209	Joint	C0E003	10	
210	Cylinder	B0A028	2	Tuck Press Cylinder
211	Joint	C1A065	4	
212	Knuckle Joint	B6A004	2	
213	Cylinder	B0C008	2	
214	Speed Controller	C1A068	4	
215	Spring	H0D002	2	
216	Link Ball	E5J004	2	
217	Cylinder	B1A007	1	
218	Joint	C0C161	6	
219	Cylinder	B0W032	1	Shoulder Press Cylinder
220	Joint	C1A073	2	
221	Rod End	E5A013	1	
222	Cylinder	B1B015	2	Short Sleeve Cylinder
223	Cylinder	B0E004	1	Tail Clamp Cylinder
224	Speed Controller	C1A076	2	
225	Knuckle Joint	B6A002	1	
226	Cylinder	B1B003	1	Tail Clamp Up / Down Cylinder
227	Cylinder	B1L015	2	Side Expander Cylinder
228	Knuckle Joint	B6B022	2	
229	Air Combination	D0F008	1	
230	Mist Sparator	D0G006	1	
231	Air Gauge	J0A003	1	
232	Joint	C0C012	1	
233	Joint	B5A012	2	



: Air Piping (2)

No.	Part Name	Part Number	Q'ty	Remark
301	Solenoid Valve Cover	P0A012	1	
302	Manifold Valve	A0F172	1	
303	Solenoid Valve	A0E012	6	
304	Solenoid Valve	A0E021	1	
305	Silencer	C0A003	8	
306	Joint	C0C024	1	
307	Joint	A0J007	12	
308	Joint	A0J039	6	
309	Manifold Valve	A0F020	1	
310	Solenoid Valve	A0E002	1	
311	Silencer		2	
312	Joint	C0C098	1	
313	Joint	C0C040	2	
314	Manifold Valve	A0F125	1	
315	Solenoid Valve	A0E013	2	
316	Joint	C0C005	1	
317	Regulator	D0E005	2	
318	Joint	C0C018	3	
319	Joint	C0C024	1	

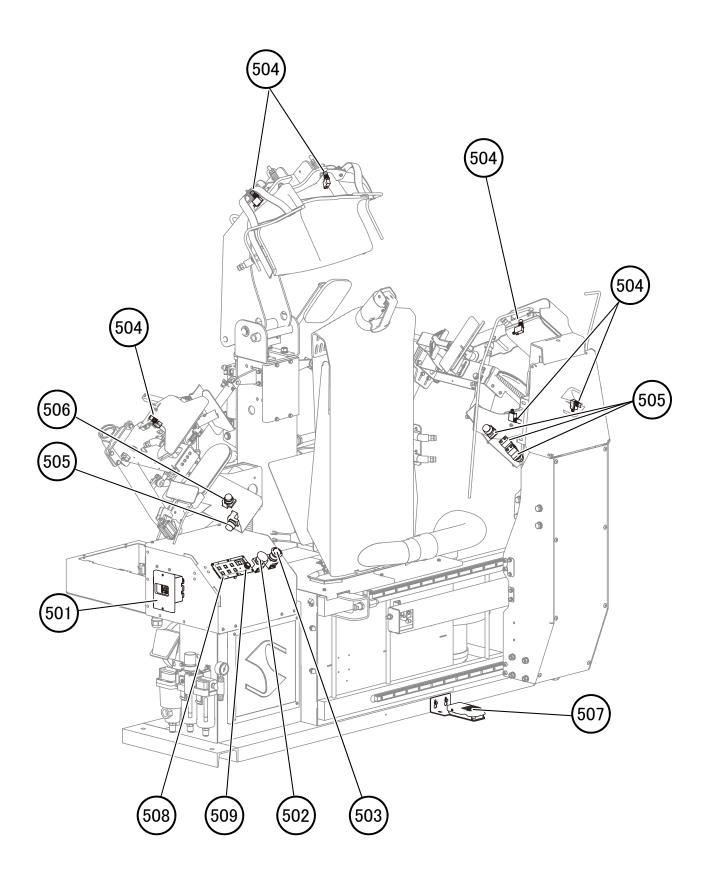
4: Steam Piping Diagram



4: Steam Piping Diagram REV: 1

No.	Part Name	Part Number	Q'ty	Remark
401	Flex.Hose	A6B020	4	
402	Flex.Hose	A6B018	2	
403	Steam Gauge	J0A003	2	
404	Y Type Strainer	J2M013	1	
405	Radiator	RD300	1	
406	Pressure Reducing Valve	J6C003	1	
407	Steam Trap	J2N003	1	
408	Steam Trap	J2N001	1	
409	Swing Check	J2J006	2	

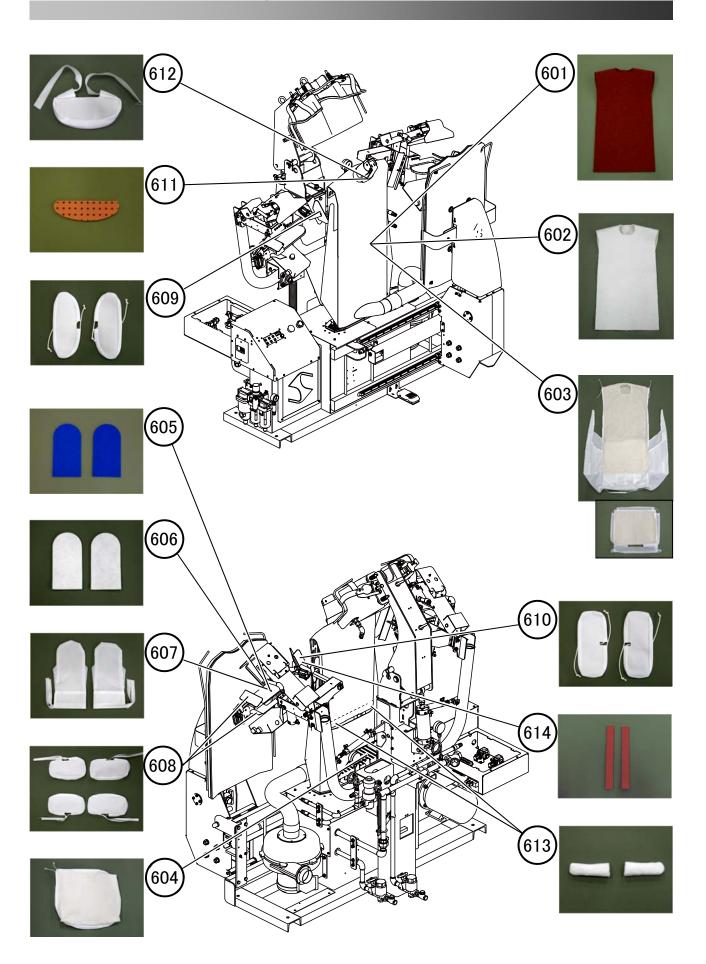
5: Control Box / Switch Diagram REV: 1



5: Control Box / Switch Diagram REV: 1

No.	Part Name	Part Number	Q'ty	Remark
501	Breaker Switch	21C006	1	
502	Push Button Switch	21I170	1	Reset
503	Push Button Switch	21I171	1	Emergency
504	Push Button Switch	211085	6	Sefety Bar
505	Push Button Switch	21I181	4	Left / Right Start
506	Push Button Switch	21I108	1	
	Foot Pedal Unit	FP-UNT-001	1	
507	Micro Switch	21E035	1	
	Foot Pedal Spring	H0D019	1	
508	Panel Sheet	20U139	1	
509	Knob	21D006	1	

6: Cover Diagram

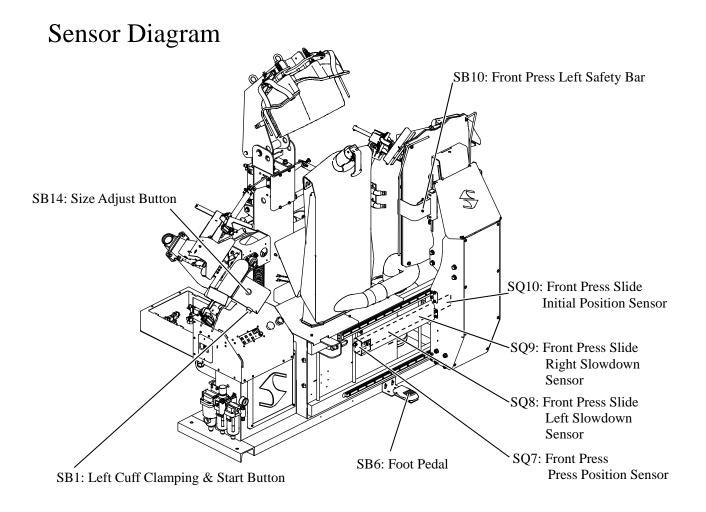


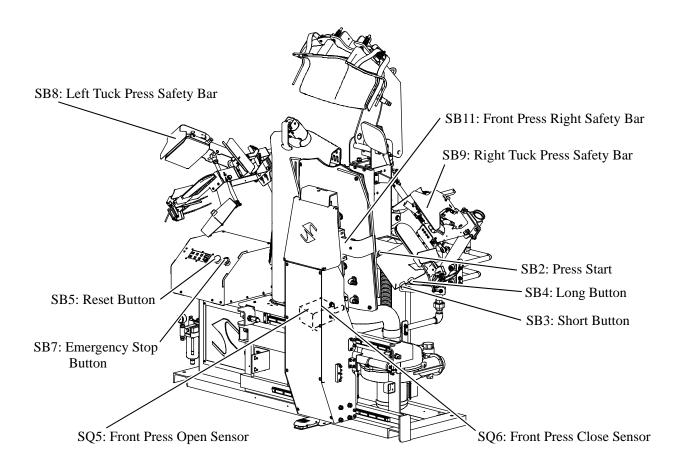
6: Cover Diagram

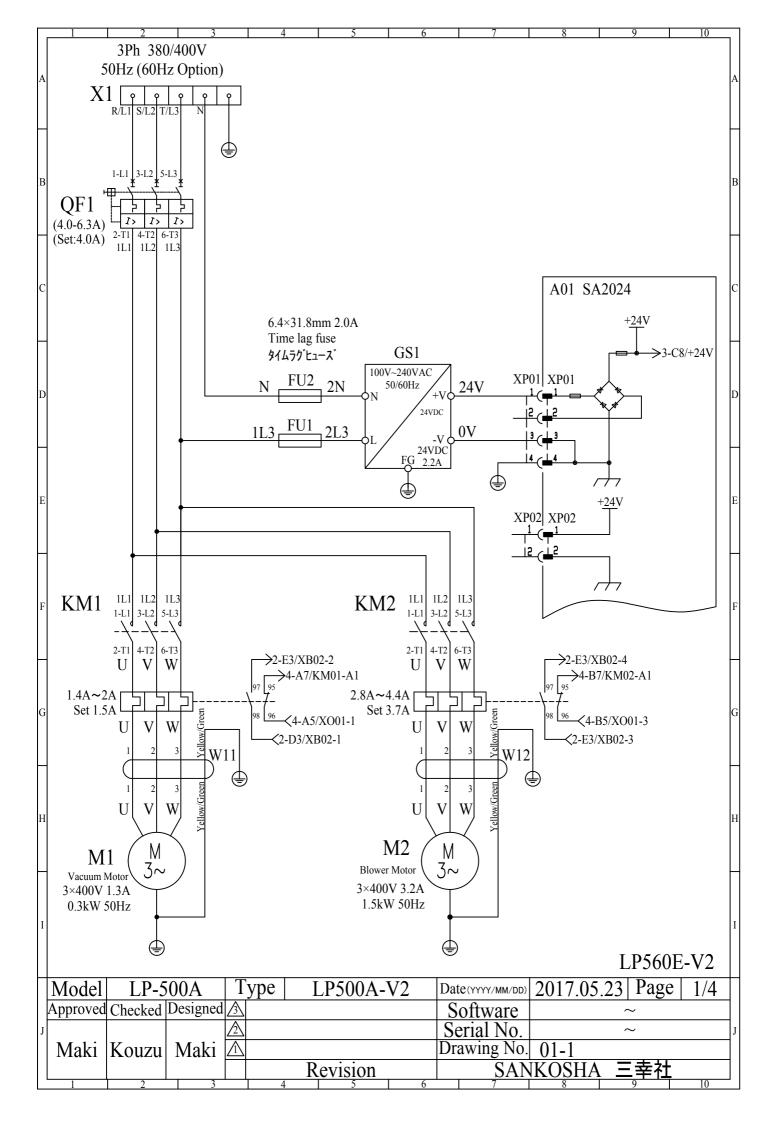
No.	Part Name	Part Number	Q'ty	Remark
601	Body SH Silicone	S1B602	1	
602	Body Felt Pad 8mm	S1B601	1	
603	Body Cover	S1B600	1	
604	Tail Clamp Cover	S1B603	1	
605	No.7 Tuck H Silicone 6mm	S1B014	2	
606	No.7 Tuck Felt Pad 5mm	S1B013	2	
607	No.9 Tuck Cover (Right)	S1B029	1	
007	No.9 Tuck Cover (Left)	S1B030	1	
608	No.2 Cuff Clamp Cover (Left Upper / Right Lower)	S1B040	2	
	No.3 Cuff Clamp Cover (Right Upper / Left Lower)	S1B041	2	
609	Short Sleeve Cover	S1B017	2	
610	Short Sleeve Hoider Cover	S1B028	2	
611	Neck Clamp Orange Silicone	S1B023	1	
612	Neck Clamp Cover	S1B022	1	
613	Rear Body Cover Protection	S1B597	2	
614	Adhesive Tape	S1T002	2	

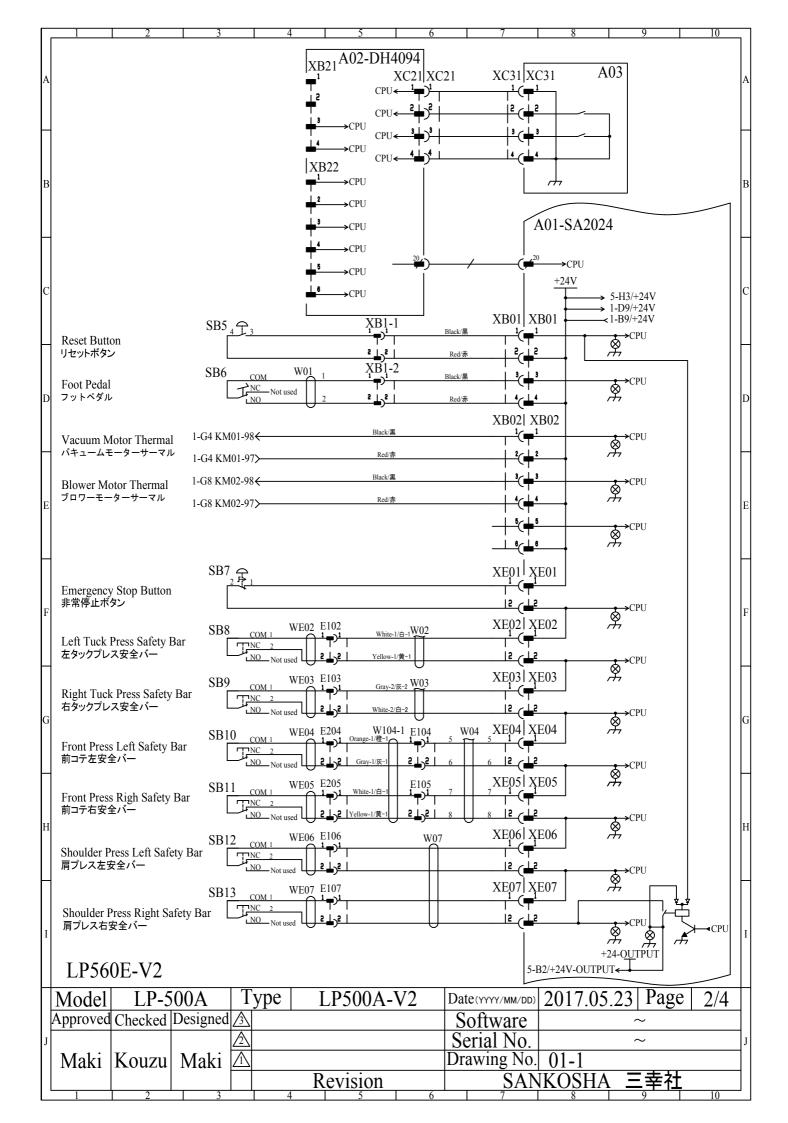
Attached Diagrams

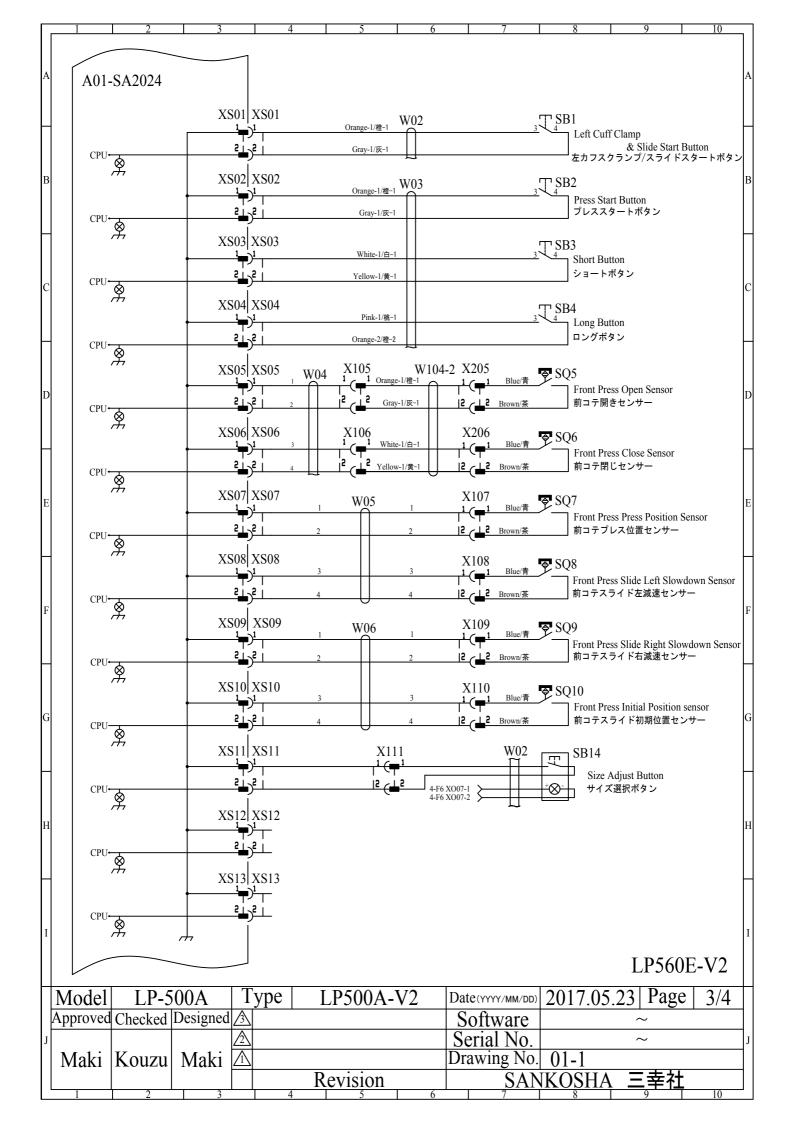
Sensor Layout Drawing
Electrical connection Fig.1/4 to 4/4
Steam piping Diagram
Air piping Diagram

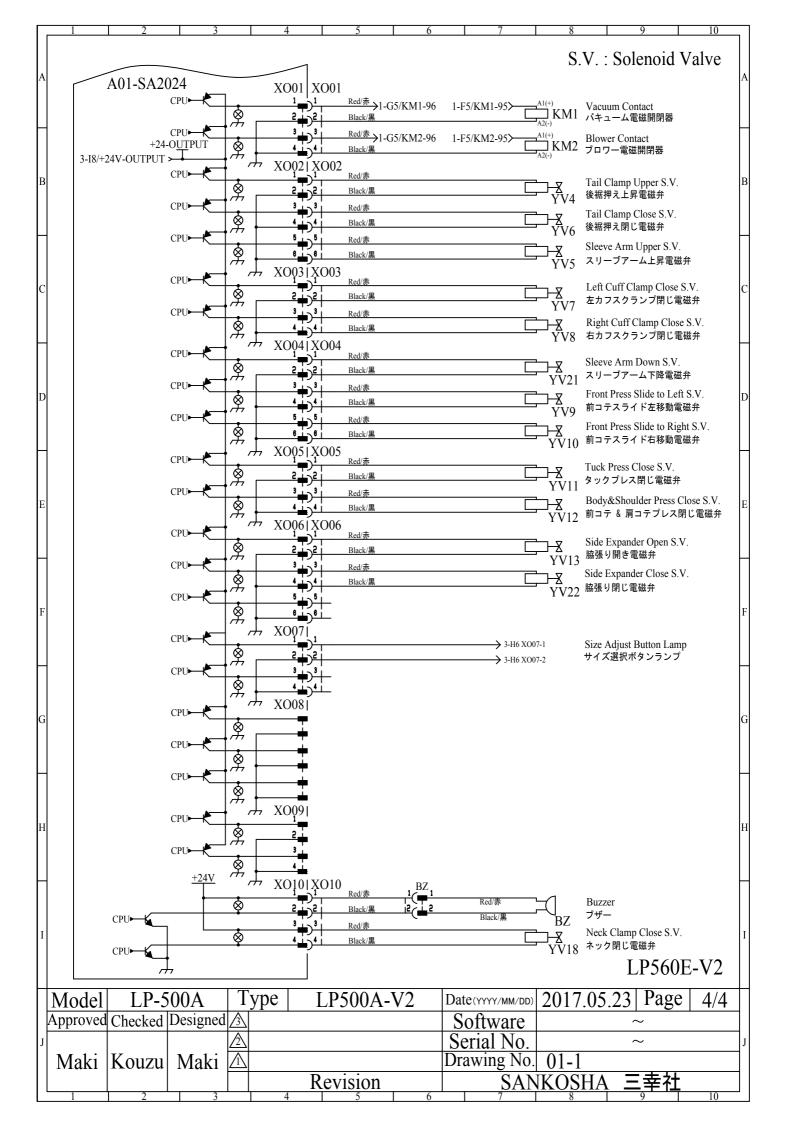




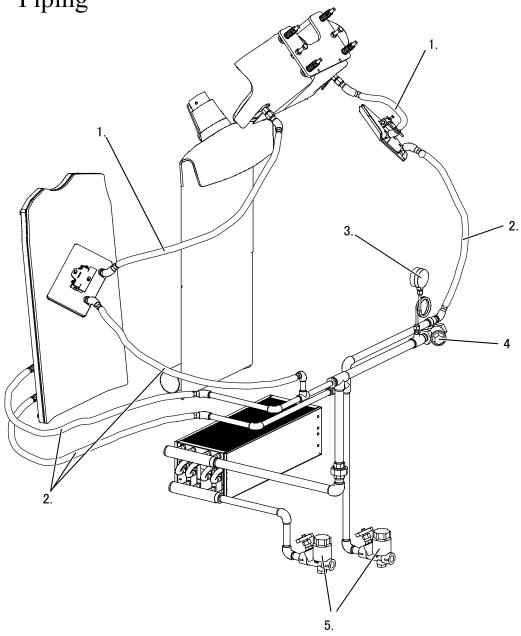








Steam Piping



1. Flexible hose : 3/8×800 L (black)

2. Flexible hose : 3/8×850 L (black)

3. Steam Gauge : AMT7/16 60ϕ 1.6Mpa

4. Type Y strainer : SY-5 80Mesh 20 A

5. Steam trap : YH-15

