



ADF-710

Instruction Manual

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

Welcome

Thank you for choosing our Pants Topper ADF-710.
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	ADF-710
Power	3-phase 4-wire, 380/400V, 50/60Hz, 1.6A
Air Consumption	0.1 liter/cycle
Steam Consumption	13 kg/hour
Air Pressure	0.3MPa
Steam Pressure	0.5MPa
Air Pipe	1/4B
Steam Pipe	Inlet: 1/2B Outlet: 1/2B
Weight	95kg
Dimensions	650mm × 1165mm × 1650mm
Width × Depth × Height	(25.6in × 45.9in × 65.0in)

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

- 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.

	DANGER	This indicates a potentially hazardous situation which, if not followed, may result in death.
	WARNING	This indicates a potentially hazardous situation which, if not followed, may result in serious injury.
	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.

	General Sign (for Alertness) This is to alert the user to unspecified caution, warning or danger.		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.
	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.		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 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.



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.

■ Shock Hazard



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

It may cause electric shock or fire.

■ Ground Connection



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

Incorrect connection may cause electric shock.

■ In case of flooding



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

It may cause electric shock.

■ Fire Hazard



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

It may cause fire or explosion.

■ Maintenance



Call authorized service personnel. Do not dismantle by yourself.

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

■ Shock Hazard



Do not touch plugs or switches with wet hands.

It may cause electric shock.

■ Shock Hazard



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

It may cause electric shock.

■ Alteration Hazard



Do not improve or dismantle the machine.

It may cause accident.

■ 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.

■ Safety Instructions



For your safety, follow the instructions below.

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



CAUTION

■ Damage by Water



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

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

■ Cleaning



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

It may cause electric shock without power-off.

■ Check and cleaning



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

Breakage can cause electric shock and fire.

■ Adequate space



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

service/maintenance personnel may result.

■ Inside use only



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

It may cause an accident.

■ Maintenance of warning labels



The labels need to be cleaned and replaced if necessary.

It may cause an accident.

■ Not in use abroad



Do not use the machine outside of designated countries.

It may cause fire due to different electrical supply.

■ Operation Procedure



Please make sure to follow the proper procedure of operations to insure the safety use of the machine.

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

■ Regular Clean Up



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

It may result improper operation or damage to the equipment.

Hazardous Area

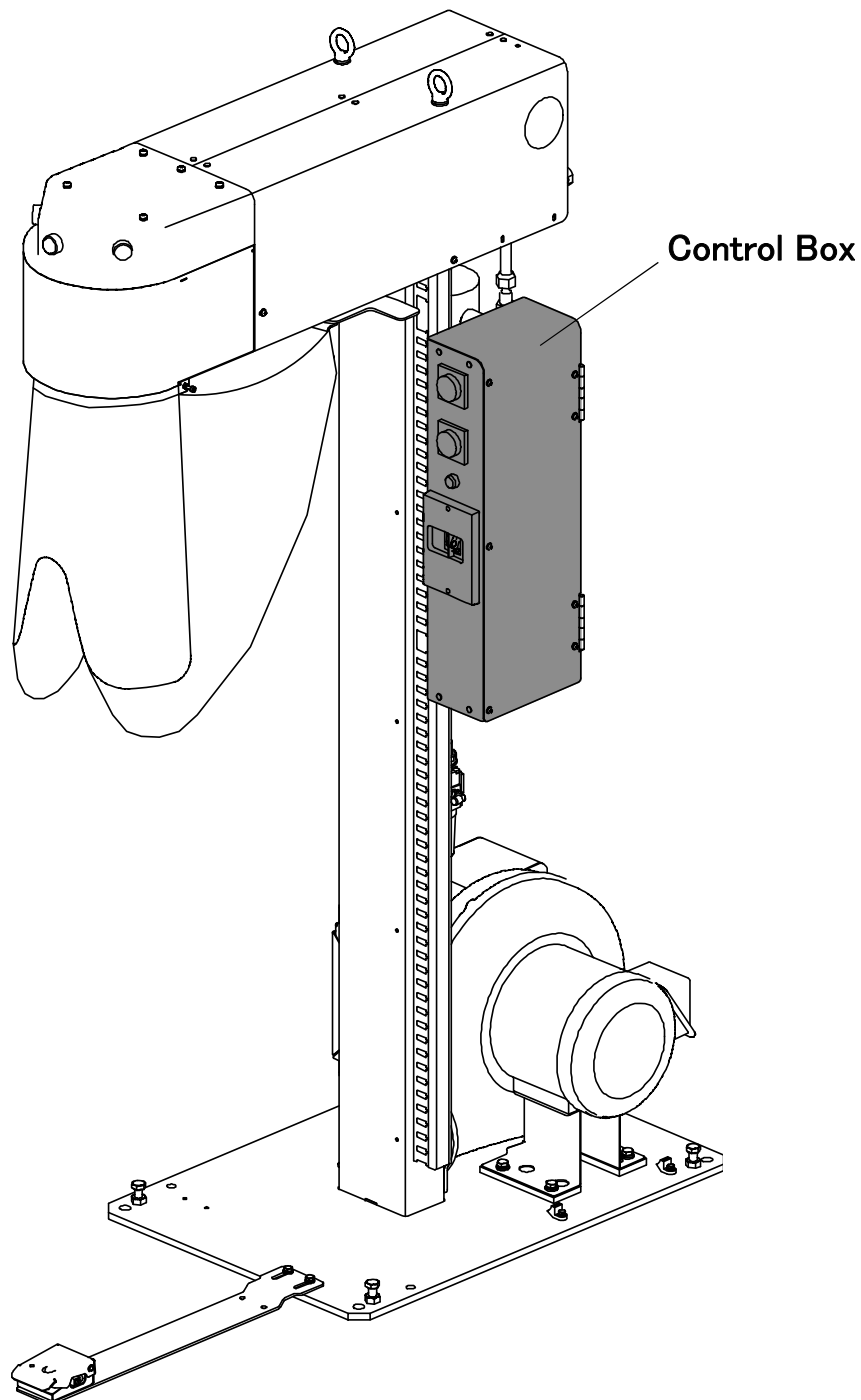
Electrically Live Area

DANGER

Control box has terminals with lethal voltage.

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

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



High Temperature Area

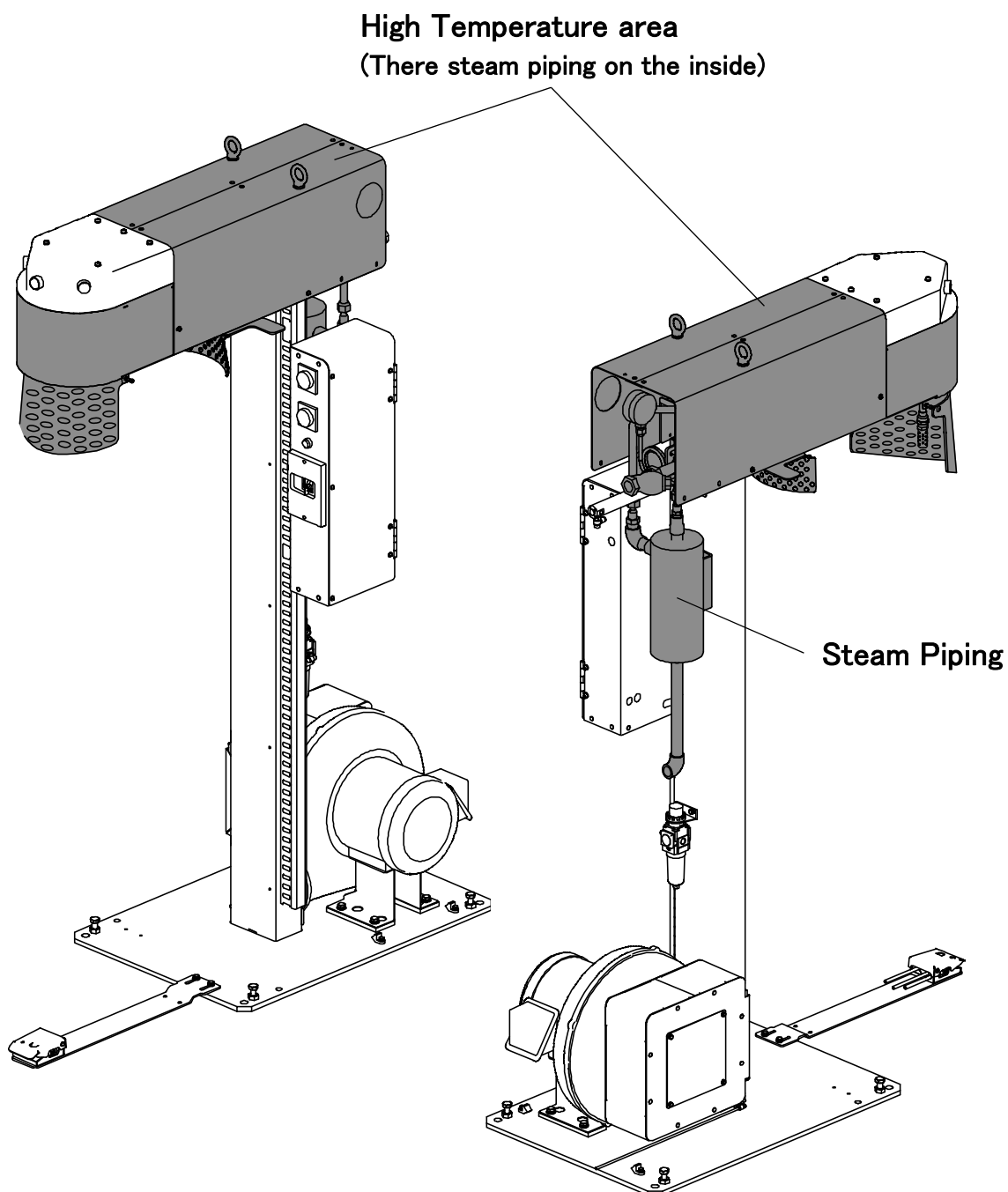
CAUTION

This machine has steam piping and high temperature area which get extremely hot during operation.

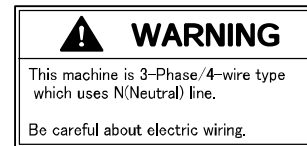
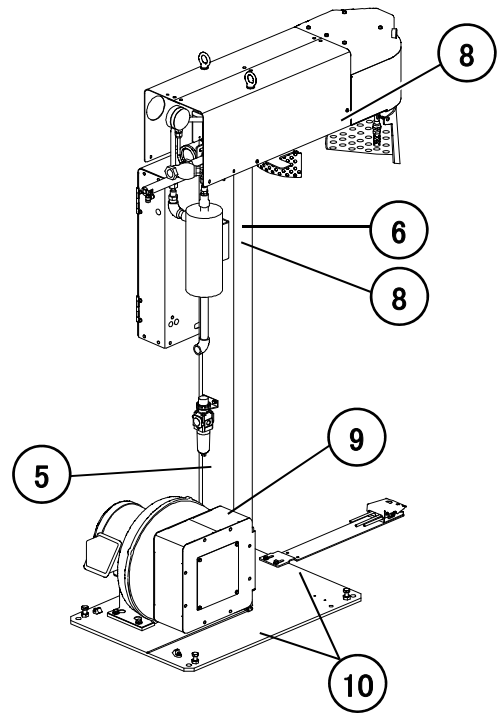
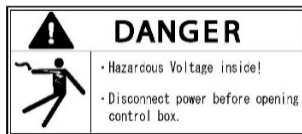
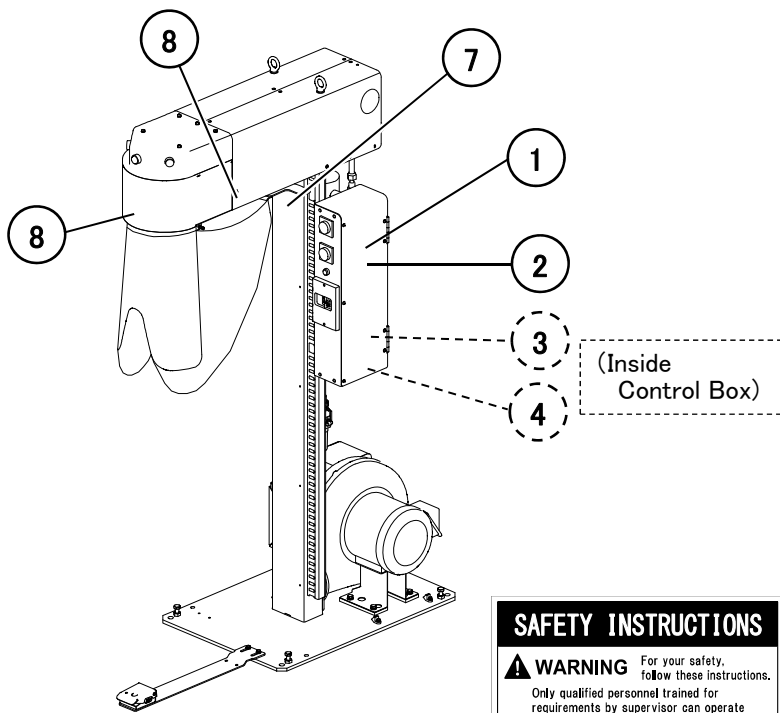
Never touch the steam piping and high temperature area during operation.








Keep hands away from the above area about 30 minutes after the steam turns off.

Ignoring this warning may cause of burns.



Safety Labels on the Machine

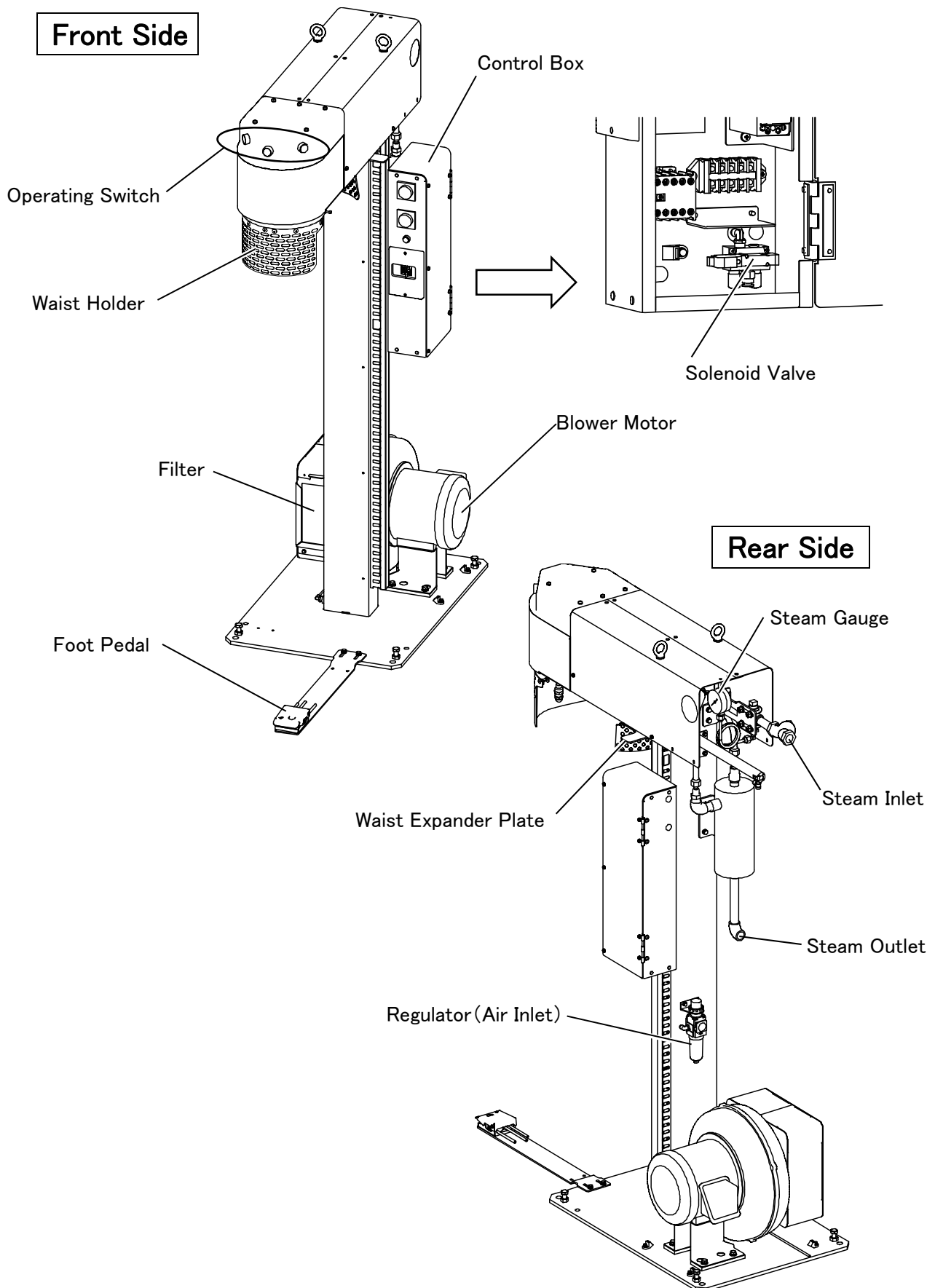


④	 Shock Hazard	It may cause electric shock. Before opening Control Box or maintenance, always turn the power off.
⑤	 High Pressure Air	High pressure air! Before maintenance, close air valve and drain residual pressure.
⑥	 High Pressure Steam	High pressure steam! Before maintenance, close steam valve and drain residual pressure.
⑦	 Pinch Hazard	Pinch hazard! Could cause harm to hands or fingers if caught. Keep hands away from around this label while operating.
⑧	 Burn Hazard	Surface is HOT! Keep hands away from, steam piping and around this label.
⑨	 Keep Filter Clean	Clean filter before operation.
⑩		Center Mark Indicating the center of gravity of the machine

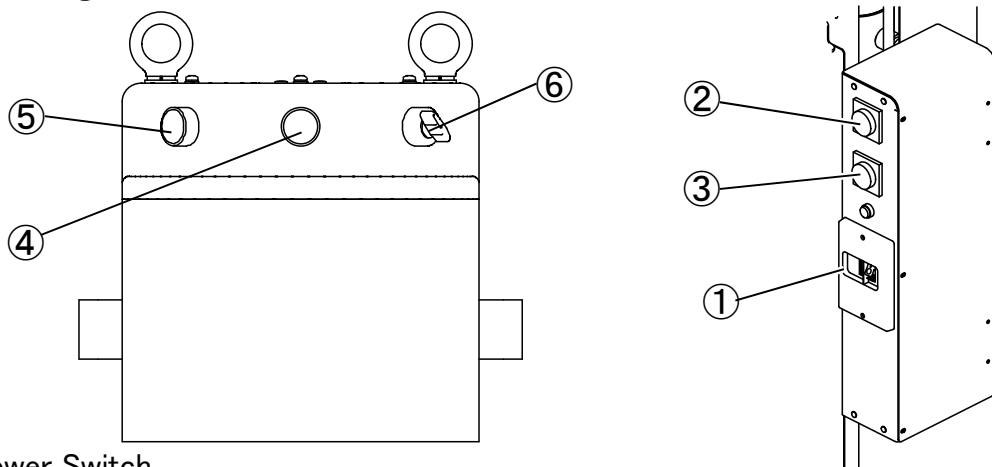
Make sure that each warning label is placed at the location shown above.

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

Main Parts



Operating Switch ▪ Control Box



① Power Switch

The switch for main power.

Turn the power ON by pushing the black button.

Turn the power OFF by pushing the red button.

② Steam Timer

Turn this dial to change the steam injection time of automatic operation.

Initial Setting : 4 sec (Min: 0 sec , Max: 6 sec)

③ Blower Timer

Turn this dial to change the blower time of automatic operation

Initial Setting : 10 sec (Min: 0 sec , Max: 30 sec)

④ Start Button

Push this button to start automatic operation.

Steam injection and hot-air blow in set time.

※If you want to stop the machine in automatic operation, you can cancel by pushing the Steam button or Blower button.

⑤ Steam Button

Steam injection works while this button is pushing.

⑥ Blower Switch

Keep blow hot-air while this switch is ON.

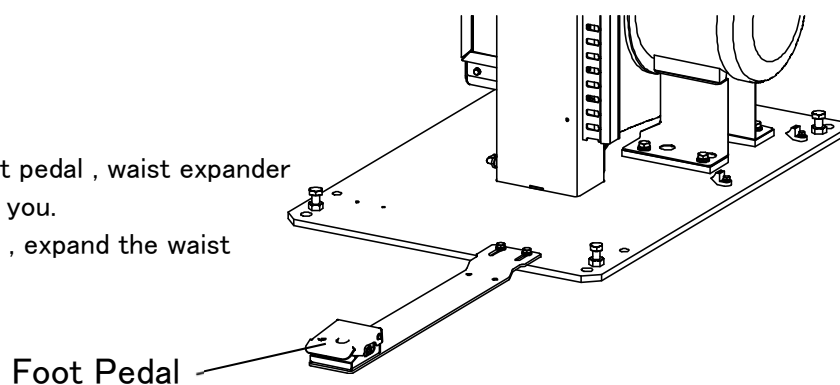
Even if this switch is OFF when you push the start button, blow hot-air after steam.

Foot Pedal

For Waist Expander

While stepping this foot pedal , waist expander plate moves toward to you.

Release the foot pedal , expand the waist expander plate.



Operating Procedure



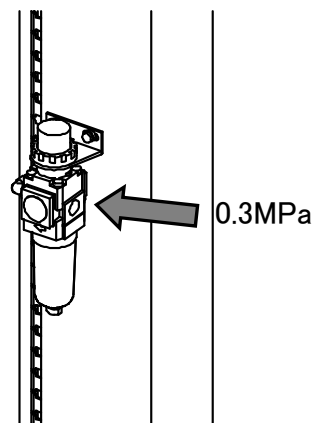
CAUTION

Follow the procedure for proper operation.

Improper operation can cause mechanical failure or injury to operators.

Supply Compressed Air

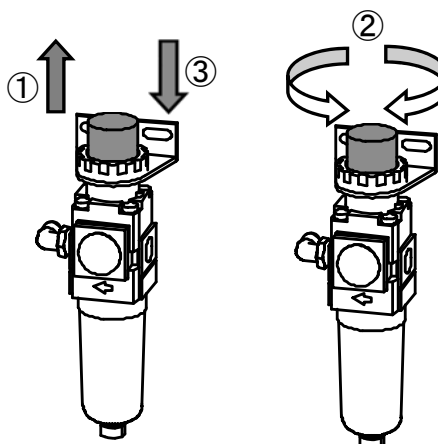
- The standard air pressure for this machine is 0.3MPa.
Always make sure that the pressure is set at 0.3Mpa.



If the air 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 → Increase air pressure.
Counterclockwise → Decrease air pressure.
- ③ Push the knob down.
(It locks.)



Check Point

- Check air compressor if the air pressure does not reach 0.3MPa even after the above adjustment.

Attention!

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

Supply Steam

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

Turn the Power On

1. Turn the power switch ON by pushing the Black Button at the front side of the Control Box.

→ The Power Lamp Lights Up.
The machine can be operable.

Set the Timer

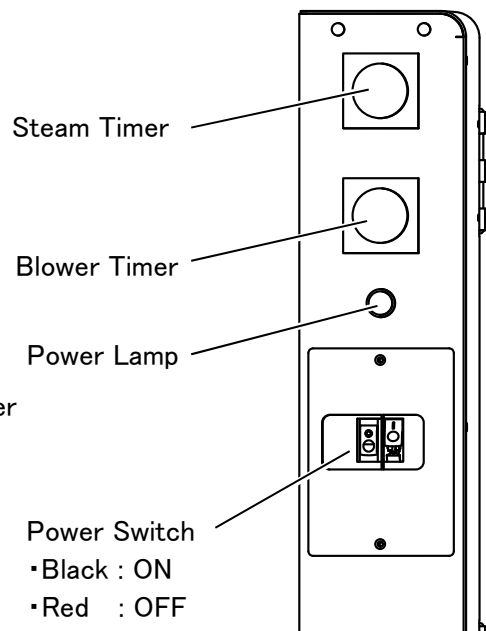
If you want to change the Steam Timer or the Blower Timer (for laundered or dry-cleaned garment) according to the material or wetness of the garment, follow as below.

How to Change the Timer Setting.

1. You can change Steam/Blower Timer by turning dial.

- Turn clockwise. The timer gets longer.
- Turn counterclockwise. The timer get shorter.

* Initial Setting ••• Steam Timer : 4 sec
 Blower Timer : 10 sec



Set the Pants

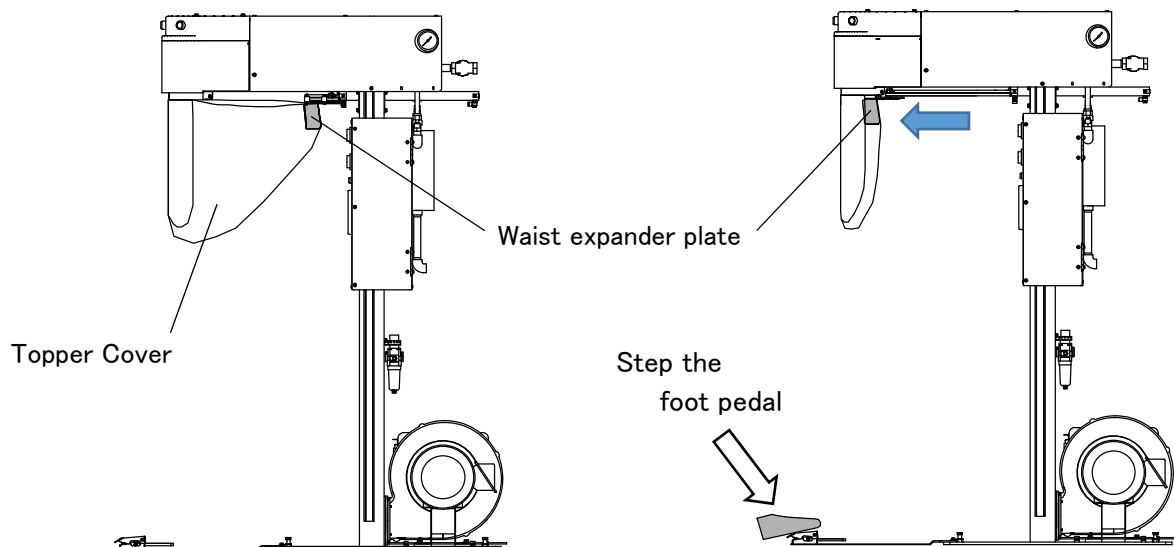


CAUTION

• Operate the machine carefully so that your hands or garment are not pinched in the machine while in motion.

1. Step the foot Pedal

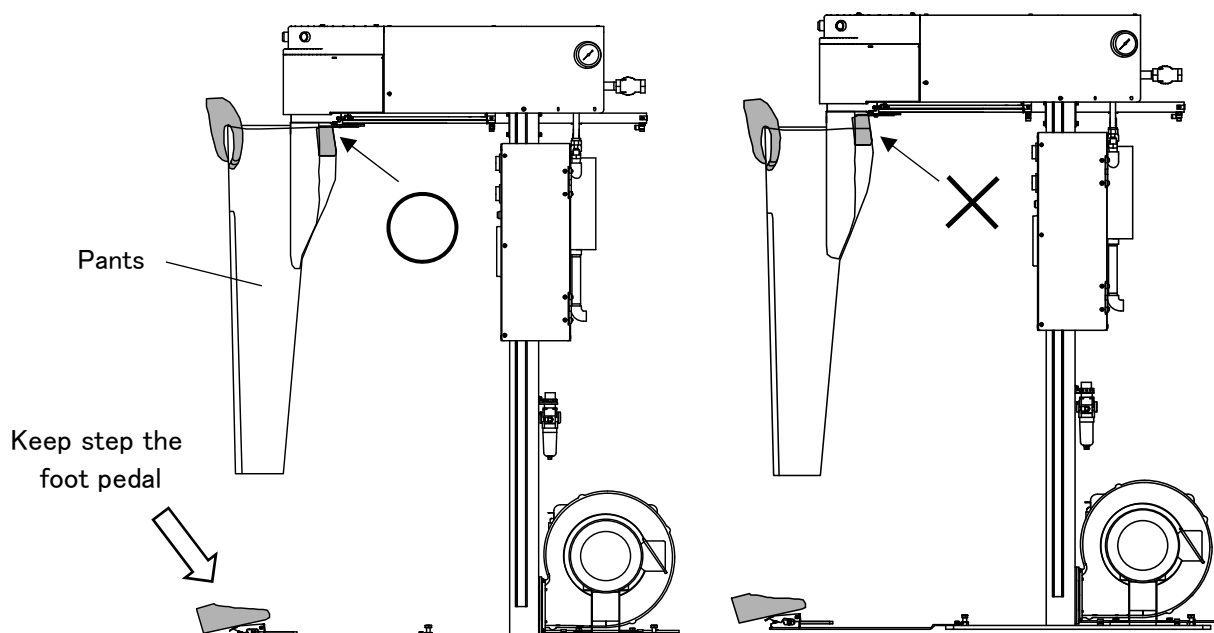
→ The waist expander plate gets narrowed when the foot pedal is stepped.



2. Set pants to the right position stepping the foot pedal.

→ Fasten the front hook or button of the pants.

Make sure that the rear of the pants is placed at the very top of the Waist Expander Plate.



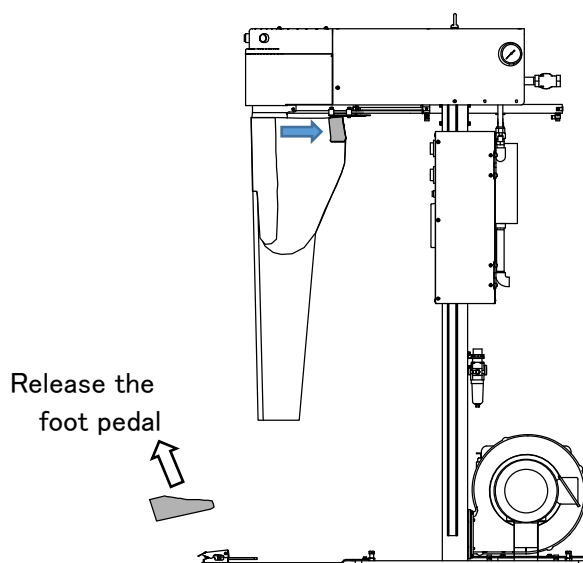
3. Release the foot pedal to tighten the waist.

→The Waist Expander Plate moves backward and it holds the pants.

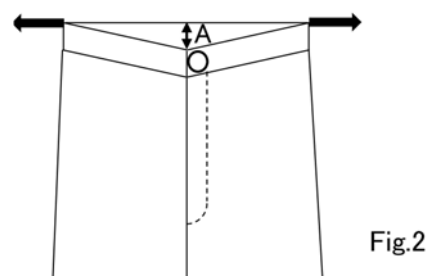
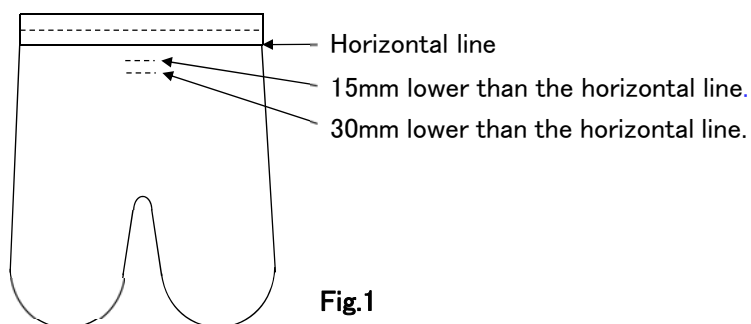
- Hold the front of the pants by both hands, and step the pedal by pulling the pants slightly front. You can set the pants firmly.

- Set pants front aligned with the Waist Expander.

- ※To start over pants setting, step the foot pedal, and the Waist Expander will be released.



Point ! Mark stitches and pants waist position.



- Fasten the front button of pants, and pull both sides of waist belt lightly.

Set pants making the front portion down a little(A, fig.2), then the side lines of the pants become vertical and can avoid slanting wrinkles. (Be careful if the lining is shrunk.)

Use mark stitches of fig.1.

Rear waist needs to be set horizontally – to the top of waist expander plate.

Information

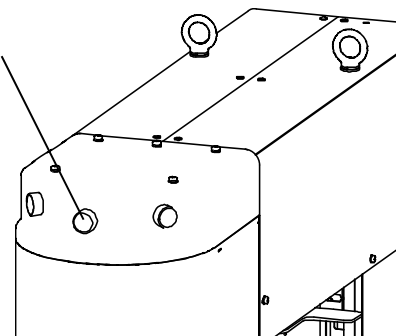
Push the Steam Button to add more steam according to the condition of the pants.

4. Push the Start Button.

→The Automatic operation starts to work.
The machine will work in the following step:
Steam⇒Blower The process of each step will work
for a time set by the respective timers.

※Cancellation of automatic operation
Automatic operation can be cancelled by pushing either
Steam button or Blower button during operation.

Start Button

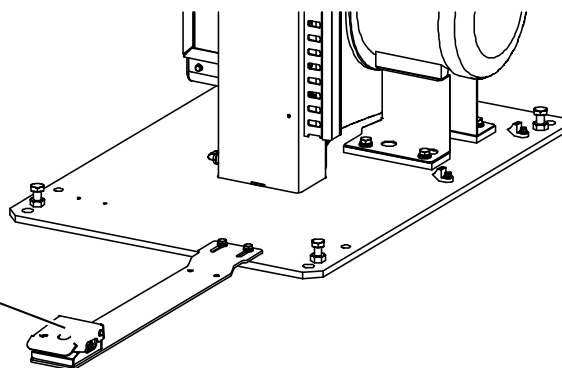


5. Hold the pants by both hands, and step the Waist Expander release Pedal

→ The waist expander will be released.
You can take the pants off.

※You can repeat the process
through 1 to 5 above for each
pants.

Foot Pedal



Turn the Power OFF

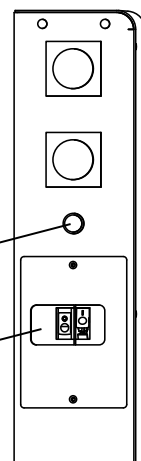
- Push the red switch to turn off the power when all work is complete.

→The Power Lamp is turned off.

Power Lamp

Power Switch

- Black : ON
- Red : OFF



How to Replace the Cover



CAUTION

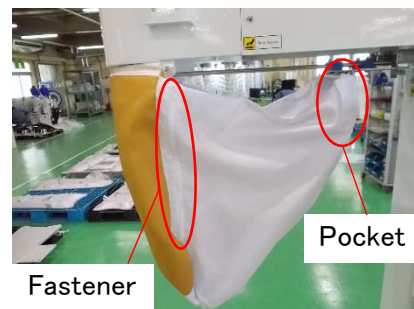
Turn the power off and let the machine cool down completely, before replace the cover.

Ignoring this warning may result in burns or injury.

Topper Cover



Topper Silicone



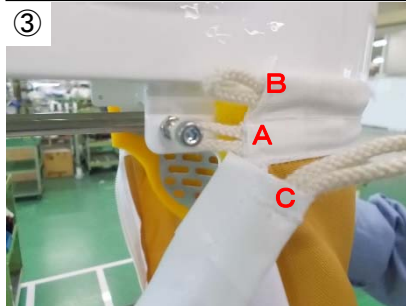
Open fastener and set the Topper Silicone inside the Topper Cover.



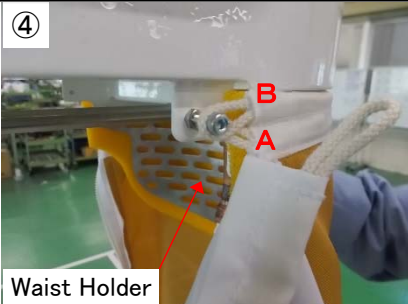
Align top of the Topper Cover to the bottom of the top frame.



Hook the loop **A** to the left bolt as blow picture.



Hook the loop **B** to the left bolt as blow picture.



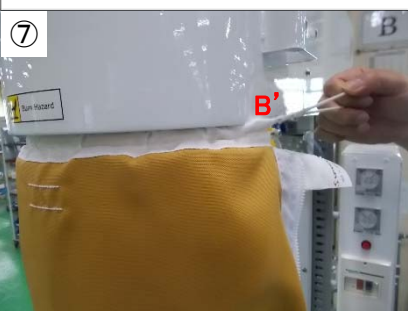
Pull the string **A'** to fix the Topper Silicone to the Waist Holder.



Hook the loop of the string **A'** to the right bolt, as below picture.



Pull the string **B'** to cover the Topper Silicone and fix the Topper Cover.



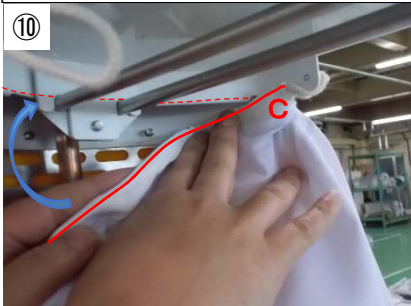
Hook the loop of the string **B'**, same as ⑥.



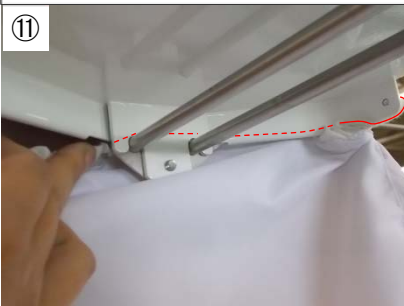
Hook the loop **C** to the left bolt as below picture.



Hook the string **C** to the rear of the top frame.



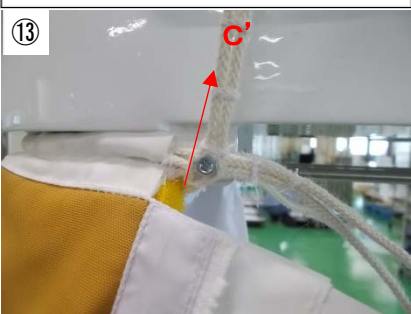
Same as ⑩.



Same as ⑩



Pull up the string **C'** and hook the loop to the right bolt



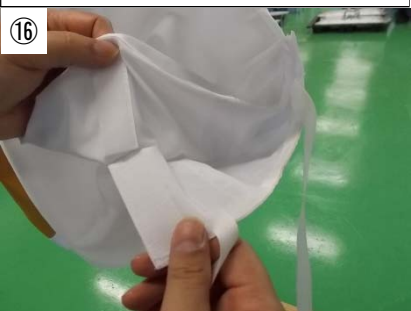
String A', B', C' together and put into the cover and close the Velcro.



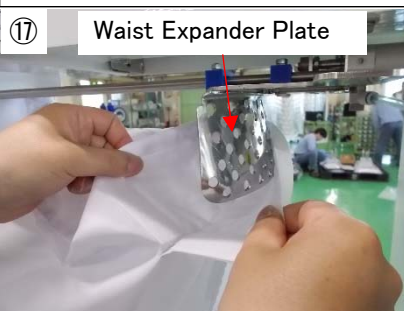
Close fastener.



Open the right side velcro of the pocket of Topper Cover.



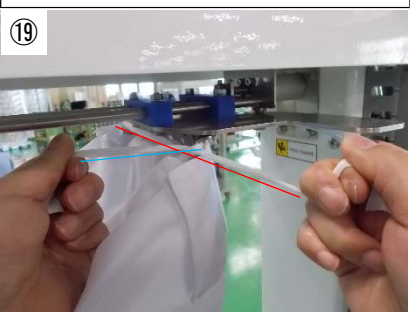
Cover the Waist Expander Plate with the pocket of Topper Cover.



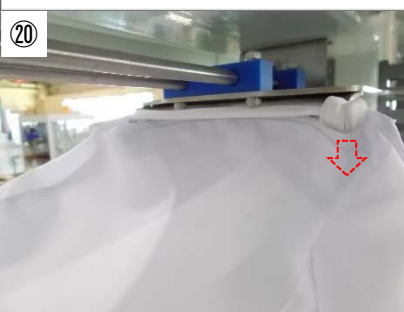
Close velcro.



Tie the string at the root of the Waist Expander Plate.



Put the tied string in the Topper Cover.



Completed.



Daily Maintenance



CAUTION

Read and comprehend carefully this Daily Maintenance thoroughly before operation.

Keep this manual in a safe place for easy access at all times.

The Checking cycle will differ: daily or yearly, according to the item or area that requires maintenance.

Use the "Check Item List" for checking the correct service procedures.

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

Check Item List

Item	Daily	Yearly
1. Air Pressure	<input type="radio"/>	
2. Regulator/Mist Separator	<input type="radio"/>	
3. Steam Pressure	<input type="radio"/>	
4. Steam Trap	<input type="radio"/>	
5. Cover	<input type="radio"/>	
6. Blower Filter	<input type="radio"/>	
7. Regulator		<input type="radio"/>

Check Item (Daily)

1. Air Pressure: Fig.1

Make sure if the air pressure gauge at the regulator is at the standard level.

See “Main Devices” and “Operating Procedure* Supply Compressed 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 → Increase air pressure
 - Counterclockwise → Decrease air pressure
- ③ Push the knob down

※There are various regulators. (See Fig.1)

They are all the same as for how to adjust.

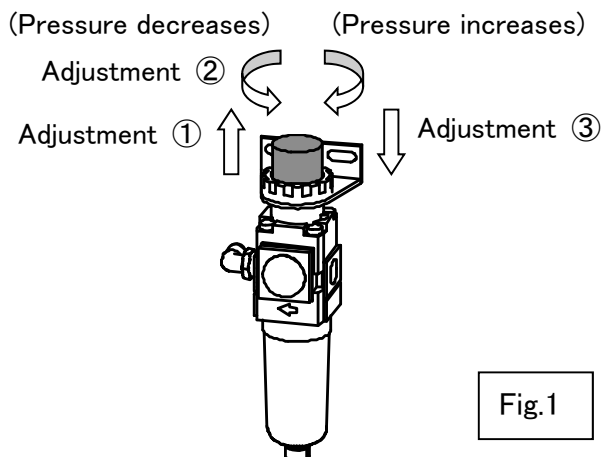


Fig.1

2. Regulator/Mist Separator: Fig.2

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

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

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

Turn the drain outlet under the Regulator to the left and let the drain discharge.

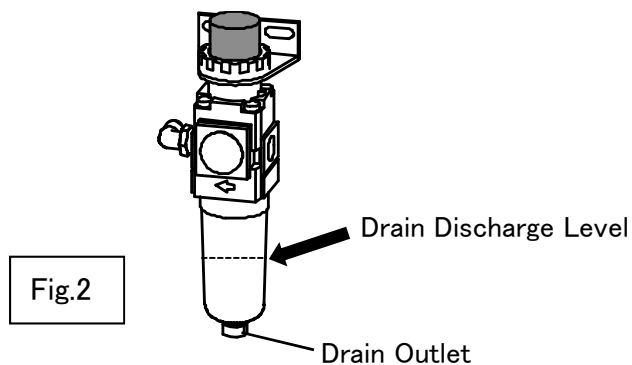


Fig.2

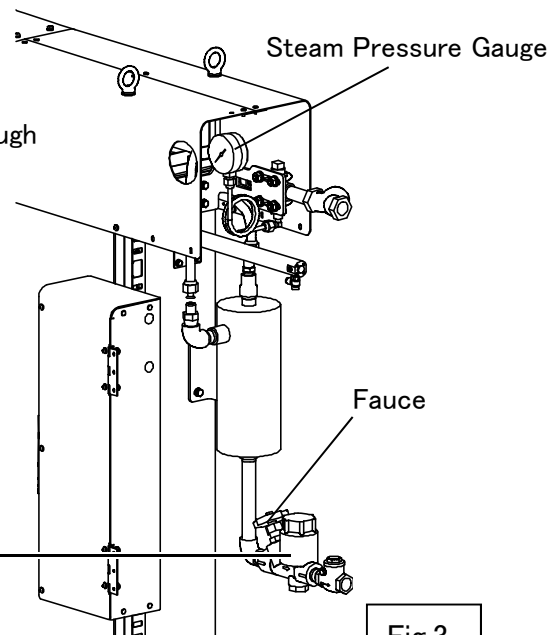
3. Steam Pressure: Fig.3

Make sure the steam pressure gauge is 0.5MPa.
If the steam pressure is lower than 0.5Mpa, supply enough steam pressure.

4. Steam Trap: Fig.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 faucet and discharge the drain.
Close the faucet after discharge.

※Steam Trap
OVK YH-15H(Recommended)

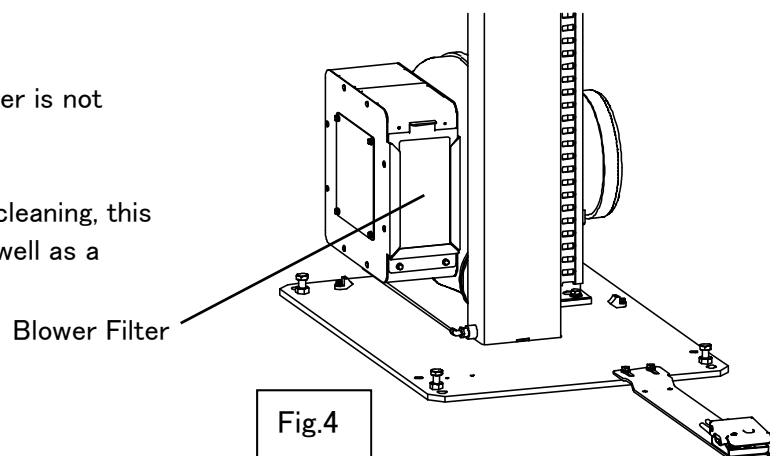


5. Cover

Check for any dirty spots or snags on the cover.
Dirty spots or snags may cause poor finishing quality.

6. Blower Filter: Fig.4

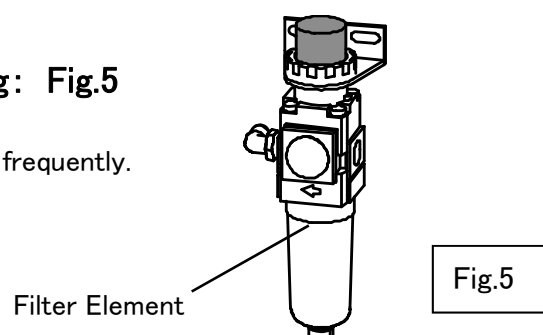
Check to make sure the Blower Filter is not clogged by any dirt and dust.
If it is so, clean immediately.
If you keep using the filter without cleaning, this can cause poor finishing quality as well as a decrease in the blower power.



Check Item (Yearly)

7. Regulator/Mist Separator Filter Cleaning: Fig.5

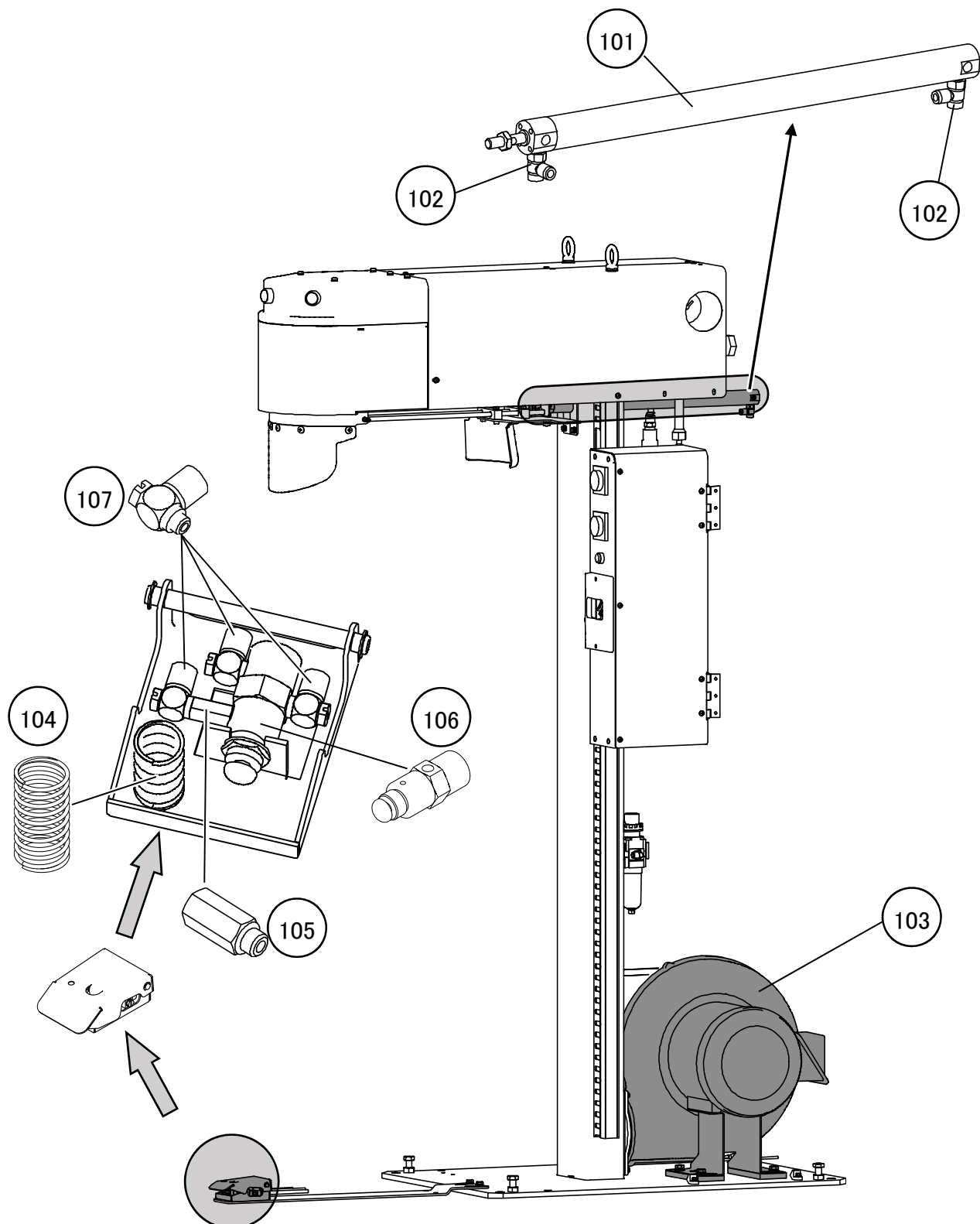
Clean the filter of Regulator/Mist Separator.
Replace the Filter Element if air pressure decrease frequently.



Spare Parts List

Index

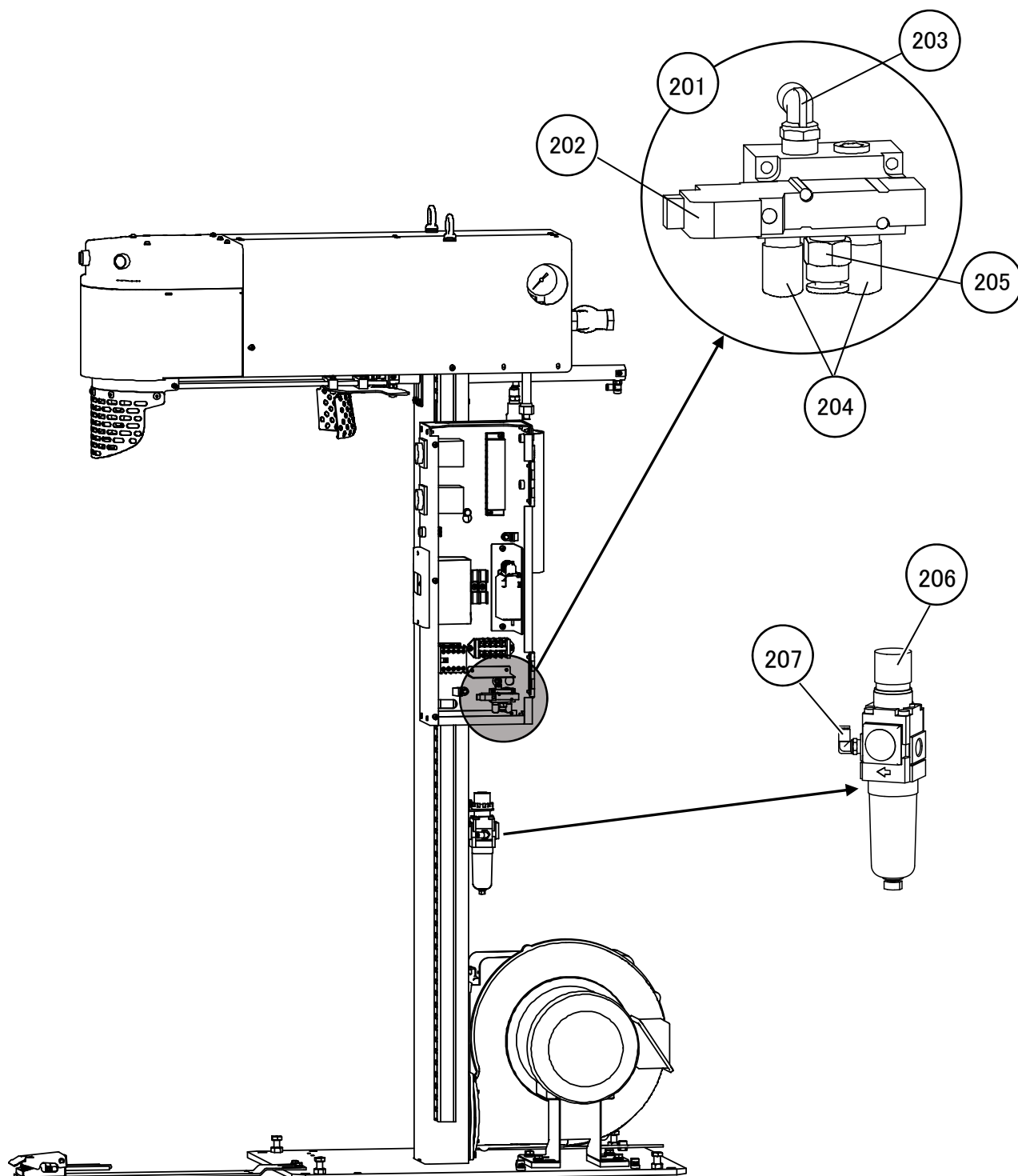
- 1 : Moving Parts**
- 2 : Solenoid Valve / Pneumatic Item**
- 3 : Steam Piping**
- 4 : Switches**
- 5 : Cover Diagram**



1 : Moving Parts

REV:0

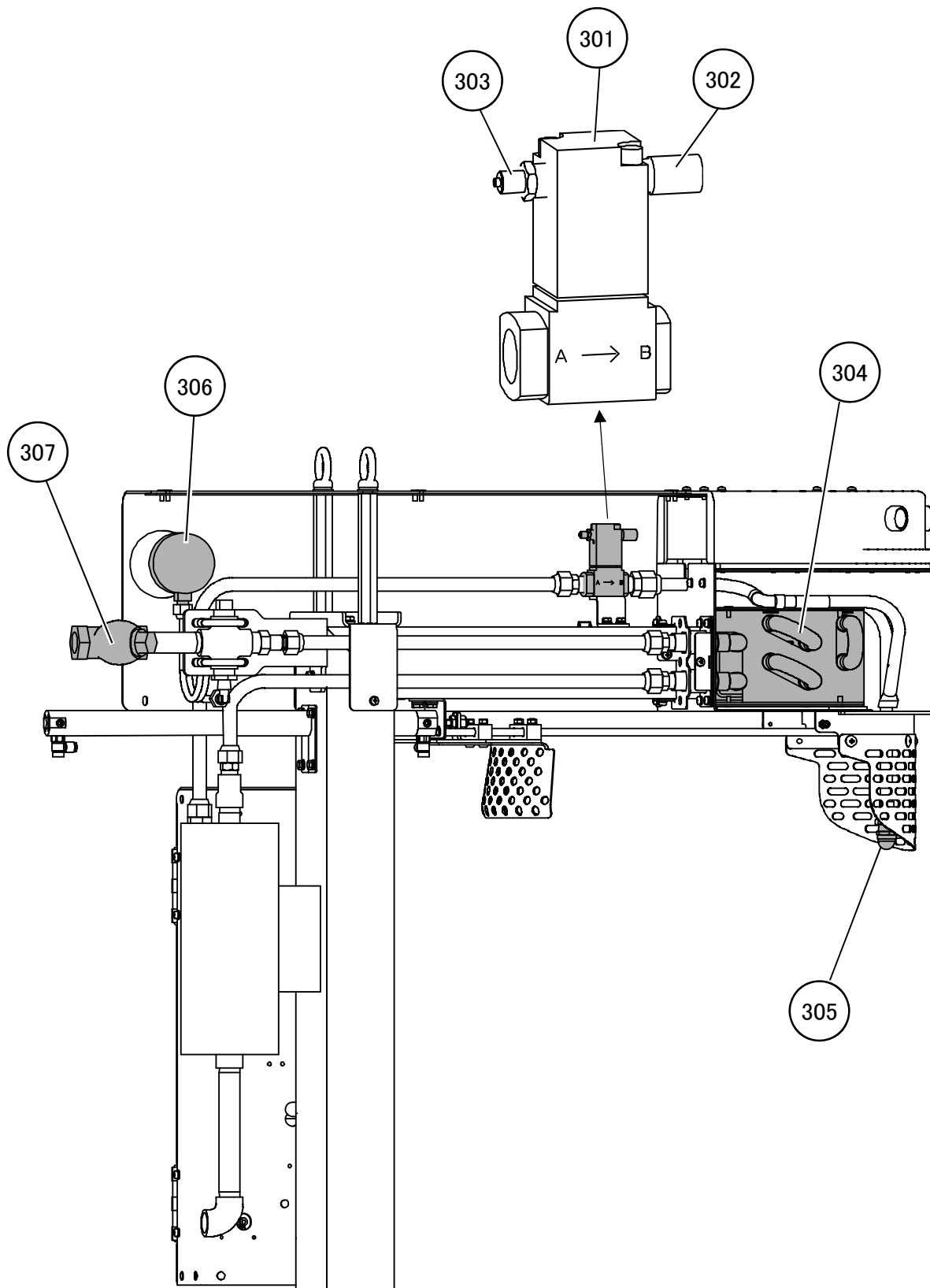
No.	Part Name	Part Code	Q'ty	Remark
101	Cylinder	B0B014	1	Waist Expander
102	Spead Controller	C1A065	2	
103	Motor	G1C018	1	
104	Spring	H0F057	1	Foot Pedal
105	Long air joint	C0E014	1	Foot Pedal
106	Valve	B2V002	1	Foot Pedal
107	Air Joint	C0E006	3	Foot Pedal



2 : Solenoid Valve/Pneumatic Item

REV:0

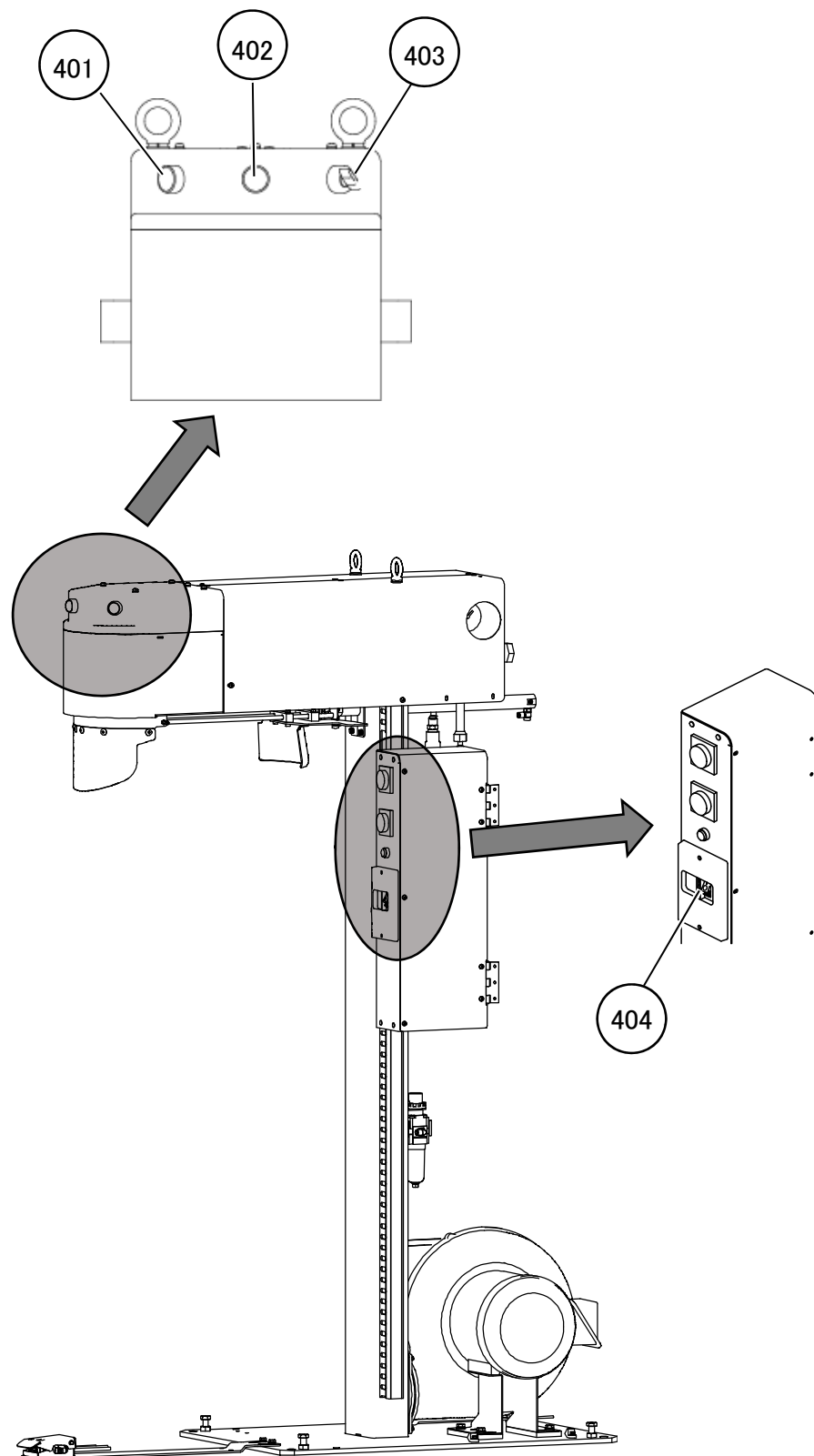
No.	Part Name	Part Code	Q'ty	Remark
201	Manifold Valve	A0F171	1	include 202~205
202	Solenoid Valve	A0E042	1	for Steam Valve
203	Air Joint	C0C052	1	
204	Silenser	C0A003	2	
205	Air Joint	C0C004	1	
206	Regulator	D0C004	1	
207	Air Joint	C0C019	1	



3 : Steam Piping

REV:0

No.	Part Name	Part Code	Q'ty	Remark
301	Steam Valve	A0G013	1	
302	Silenser	C0A001	1	
303	Air Joint	C0E001	1	
304	Radiator	RD145-001-0	1	
305	Steel Muffler	J0A001	1	
306	Steam Gauge	J0A003	1	
307	Y Type Strainer	J2M012	1	



4 : Switches

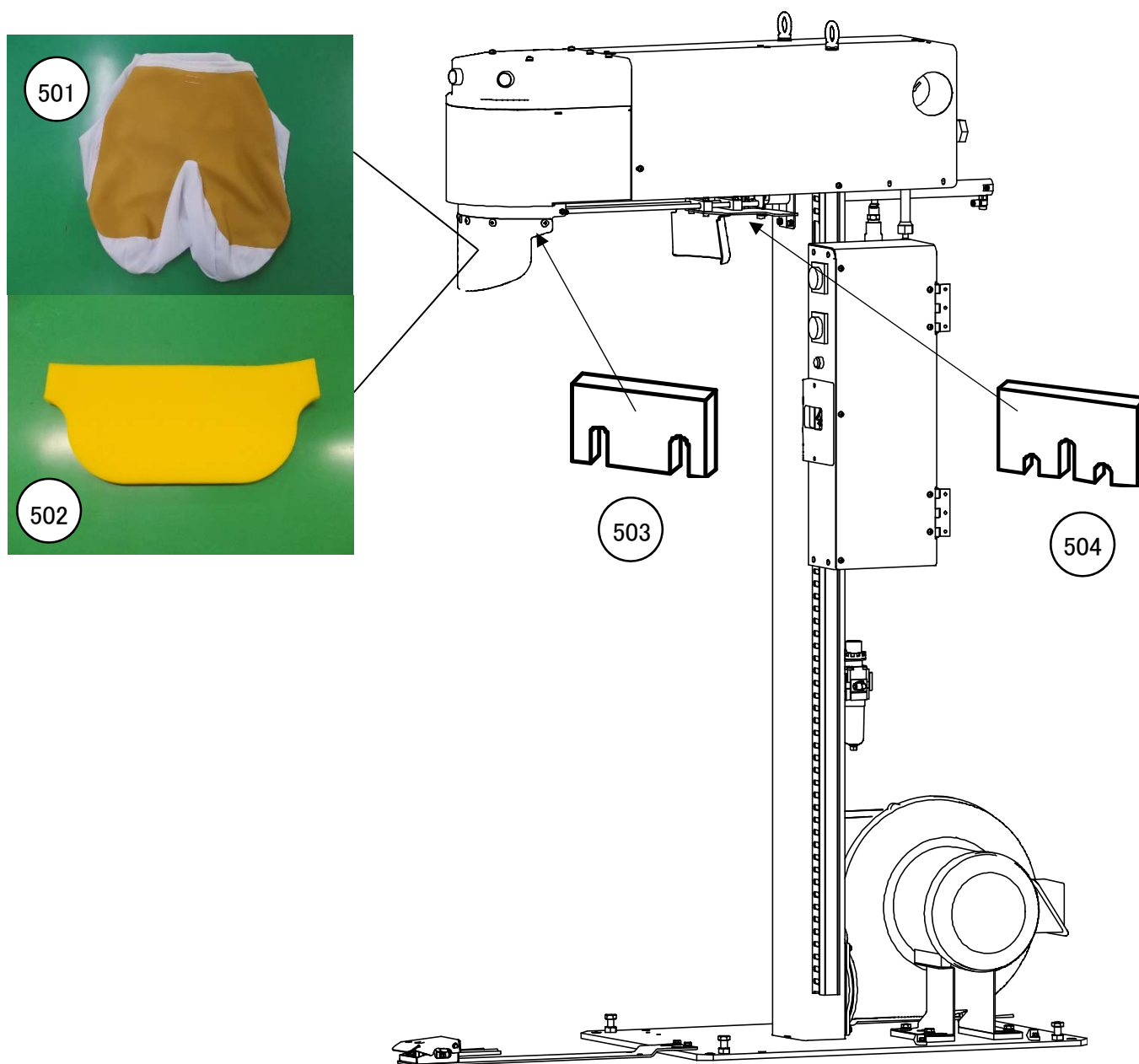
REV:1

No.	Part Name	Part Code	Q'ty	Remark
401	Push Button Swtch	21I187	1	Steam(White)
402	Push Button Swtch	21I188	1	Start(Green)
403	Selector Swtch	21I193	1	Blower(Black) 0002~
404	Breaker Switch	21C004	1	Power

5 : Cover Diagram

REV:0

No.	Part Name	Part Code	Q'ty	Remark
501	Topper Cover	S1D569	1	
502	Topper Silicone 15mm	S1D570	1	
503	Cylinder Silicone Cushion (Front)	S1D573	1	
504	Cylinder Silicone Cushion (Rear)	S1D574	2	



Attached Diagram

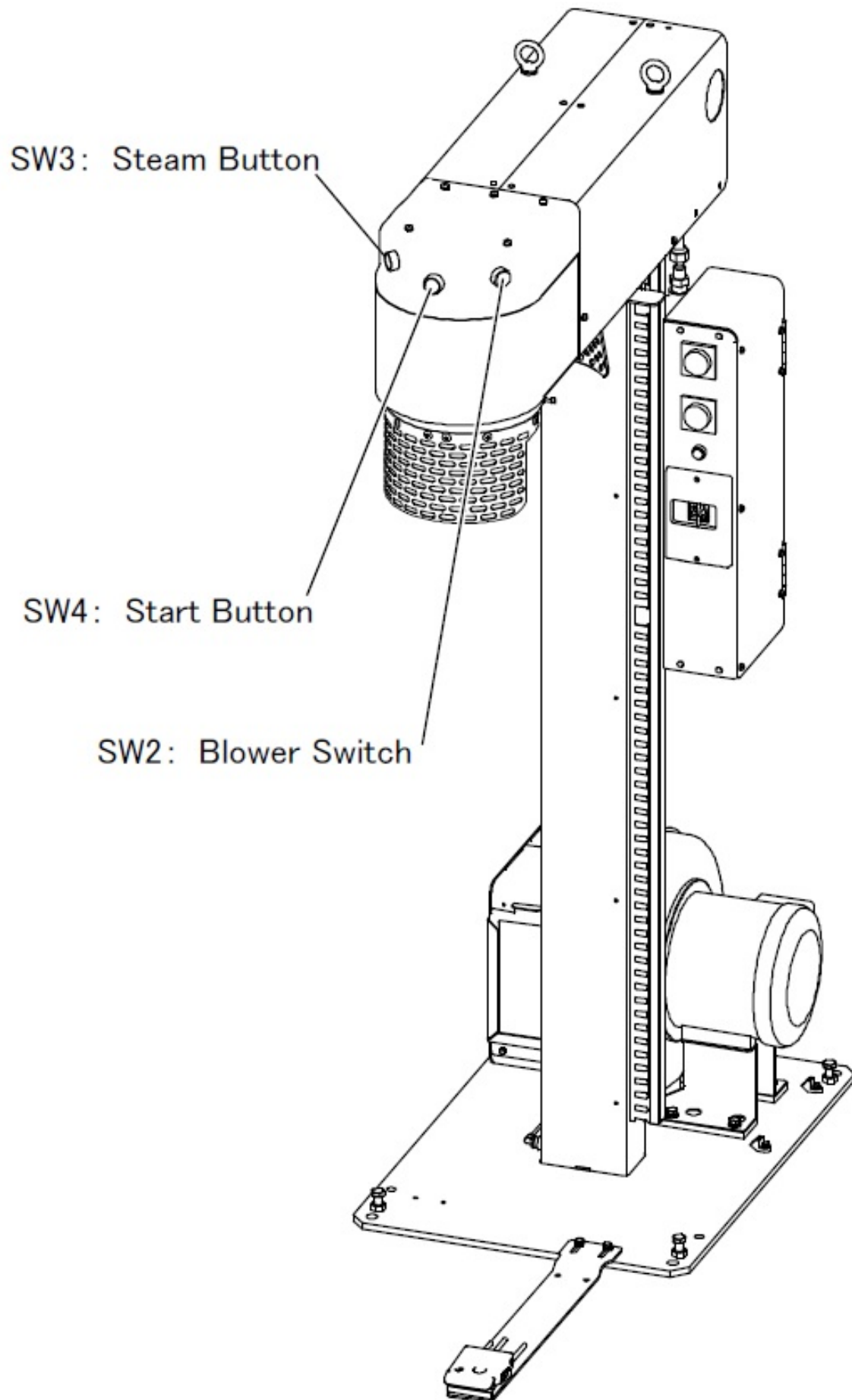
Button Diagram

Electric Connection Diagram 1/2~2/2

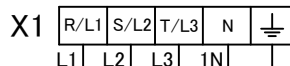
Steam Piping Diagram

All Air System

Button Diagram

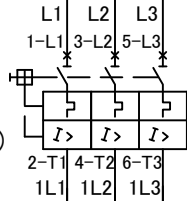


380V/400V
3Ph 4Wire 50/60Hz



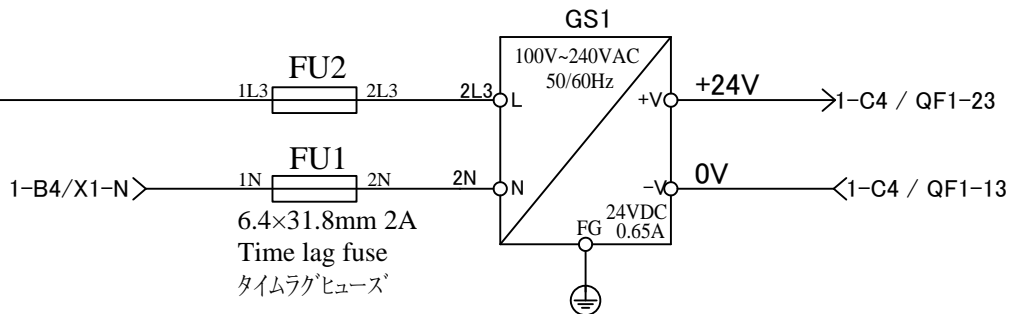
→ 1-D4/FU1

QF1
(1.6~2.5A)
(Set:1.6A)

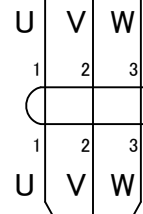
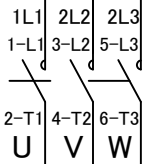


→ 2-B1/X2-24V
→ 2-B10/X2-0V

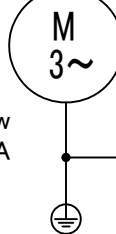
← 1-D9/0V
← 1-D9/24V



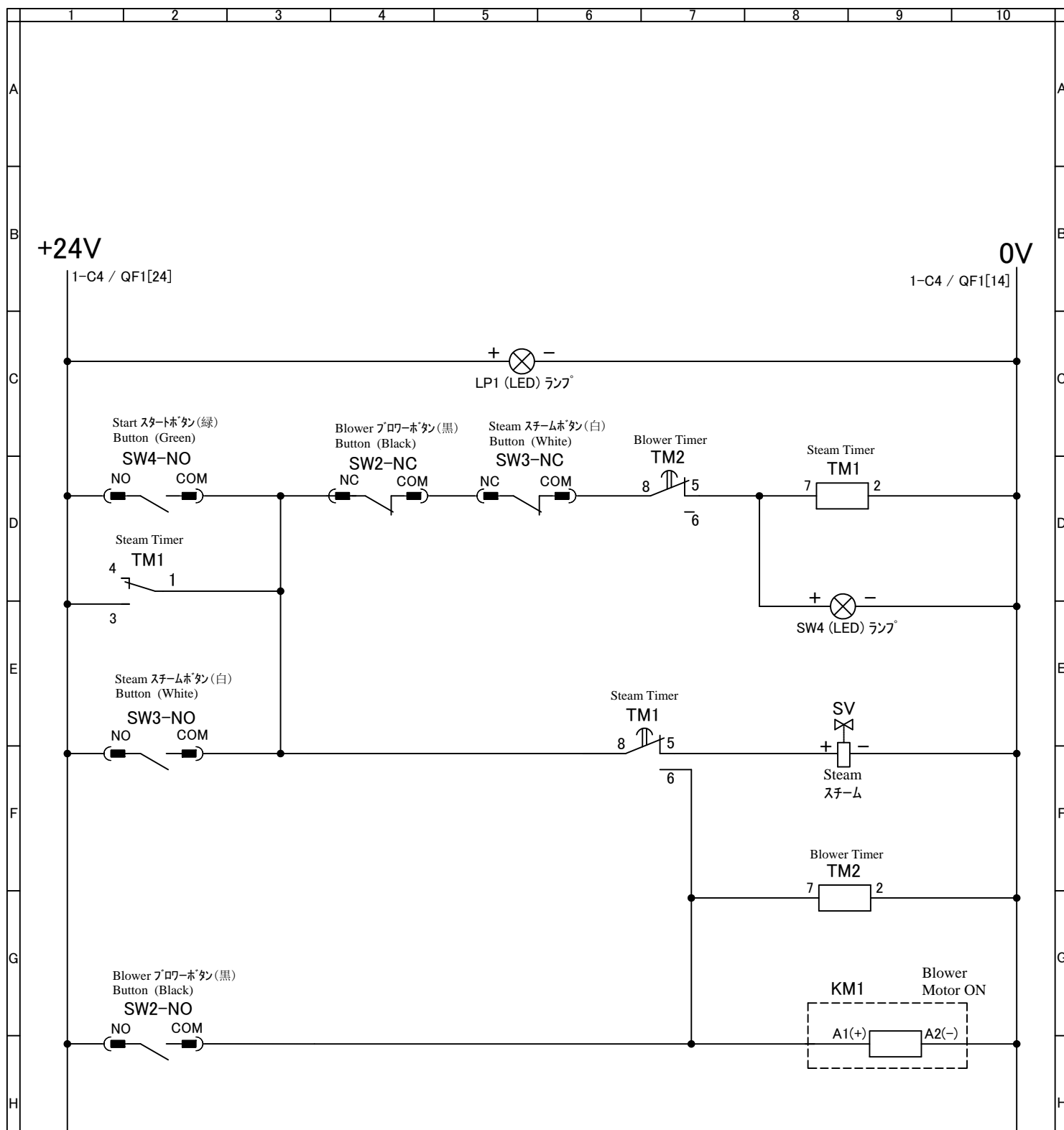
KM1



M1
Blower Motor
ブロワーモーター
3Ph 400V 0.4kw
50/60Hz 1.2A

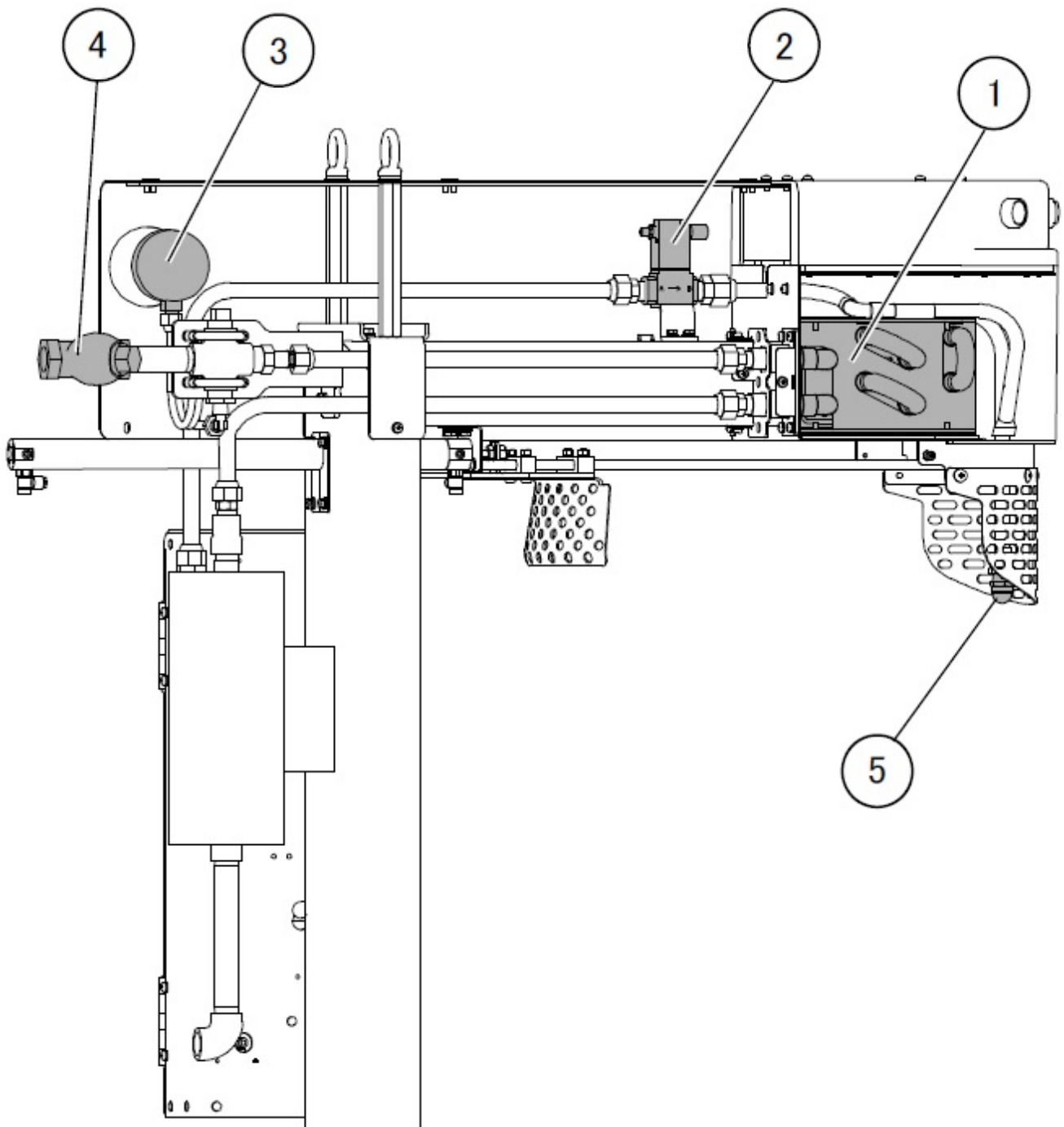


Model	ADF-710		Type	ADF710-V1			Date(YYYY/MM/DD)	2019/08/30	Page	1 / 2
Approved	Checked	Designed	△				Software	～		
Maki	Kouzu	Maki	△				Serial No.	～		
			△				Drawing No.	01-0		
			Revision			SANKOSHA 三幸社				
1	2	3	4	5	6	7	8	9	10	



	Model		ADF-710		Type	ADF710-V1		Date (YYYY/MM/DD)		2019/08/30		Page	2 / 2							
J	Approved		Checked	Designed	△				Software		～									
	Maki		Kouzu	Maki	△				Serial No.		～									
					△				Drawing No.		01-0									
					Revision			SANKOSHA 三幸社												
	1		2		3		4		5		6		7		8		9		10	

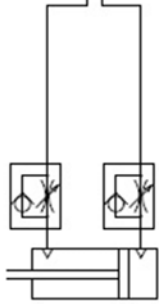
Steam Piping Diagram



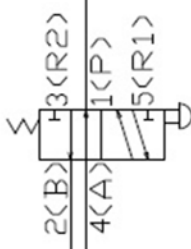
- | | |
|-------------------|----------------------|
| ① Radiator | : RD145-001-0 |
| ② Steam Valve | : VND104D-10A |
| ③ Steam Gauge | : AMT7/16 60Φ 1.6MPa |
| ④ Y Type Strainer | : SY-5 100mesh 15A |
| ⑤ Steel Muffler | : SBN-38 |

All Air System

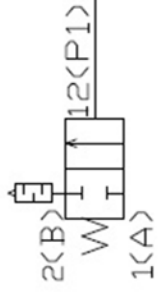
Waist Expander
Cylinder



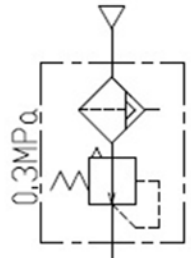
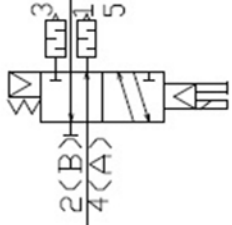
Mechanical valve



Steam valve



Solenoid valve



Model	ADF-710/C-V1 ADF-720-V1	
Type	ADF710/C-V1 ADF720-V1	ALL-AIR SYSTEM
Date	2019/05/10	
T.HIRO		SANKO SHA

Sankosha Manufacturing Co.,Ltd.

988 Kanoya Cho, Hachioji, Tokyo 193-0815 JAPAN

T e l: 81-42-621-1181

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



Distributor