ITSUMI

INSTRUCTION MANUAL

MODEL : BT-100

SINGLE BUCK BODY AND SLEEVER

SERIAL NUMBER :

PURCHASED DATE :

ITSUMI SEISAKUSHO CO., LTD. SAITAMA JAPAN
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SAFETY INSTRUCTIONS

PREFACE

This Instruction Manual states the way how to use the Machine correctly, the cares to be taken in using the Machine, and so on. In order for you to fully make use of the performance of the Machine and use it safely, please read through this Instruction Manual to its end before using the Machine. After having read it, please do not forget to keep this Instruction Manual so that you can utilize it right away in case you need it.

INDICATIONS OF RISKS

In order for you to use the Machine safely and in the right way and to prevent any injury from occurring to the Machine attendants and any other persons as well as any property, this Instruction Manual has the indications of risks. Kinds of such indications and their meanings are as follows:

 **WARNING**	A WARNING is used to indicate instructions necessary to cause any injury to human body and life if ignore this indication and/or incorrect operation.

 **CAUTION**	A CAUTION is used to indicate instructions necessary to cause any injury to human body and life if ignore this indication and/or incorrect operation.

 **NOTE**	A NOTE is used to indicate proper operating methods and inspection points if ignore this indication to cause any injury to human body and/or physical damage.

SAFETY INSTRUCTIONS

 **WARNING**	DON'T BE TRAPPED When the machine begins to operate, do not move your hand, face, or other parts of the body within the moving space of the iron and/or the machine. ●You may get suppressed, bruised, or burned.

 **WARNING**	BE CAREFUL WITH HIGH-TEMPERATURE PARTS Steam pipes, steam hoses, and iron get extremely hot. Never touch these parts with your hand. ●This could cause burns.

 **WARNING**	Nobody is allowed to operate or service this machine other than those who first read and understand this instruction manual.

 **WARNING**	TURN THE POWER OFF BEFORE INSPECTION When replacing covers, doing inspection/maintenance work, or cleaning the unit, be sure to turn the power switch off so the machine would not operate while you work. ●This could cause an accident and/or an electric shock.

 **WARNING**	SECURE A GROUND CONTACT After setting up the machine or moving it, be sure to secure a ground connection. ●Electric leakage and charges of static electricity could cause an electric shock or natural fire.

WARNING	STOP IMMEDIATELY IF THE MACHINE DAMAGES A SHIRT While using the unit properly and correctly, if any damage is found on the shirt being pressed, stop the operation immediately and find the cause. ●This minimizes the damage.

WARNING	DO NOT REORGANIZE OF THE MACHINE We are surely recommended to prohibit reorganize of the machines specification changes and removal of the warning label etc. ●May cause of unexpected accident.

WARNING	PAY ATTENTION TO THE INSTALLATION LOCATION OF THE MACHINE Make sure to install the machine in a room where there is no influence from weather and to keep it free from water and steam. ●Improper installation may cause damage to the machine and an electric shock due to a short circuit.

WARNING	INSPECT STEAM LEAKS Please inspect loose steam piping and steam leaks carefully. ●If steam leaks remain untouched, steam may be discharged and cause burns.

CAUTION	CLEAN AIR-FILTER AND LINTO COVER Prior to start work please clean and get rid of the drain filter for the air and be accumulated in the oil mist separator as drain and the oil are daily. Lint covers for the hot air blowing fan motor is also. ● It is cause to be inferior the quality of the air parts and drying condition if accumulated drain and the dust.

CAUTION	EXECUTE THE REGULAR CHECK We are surely recommended execute the regular inspection more than once per year for confirm the performance and activates safely of the machine. Also please execute to replace the consumption articles when limit the life time has come.

CAUTION	CONSUMPTION ARTICLES ARE MUST BE USE GENUINE PARTS We surely recommends to use our genuine parts when replace each kind of pad or cover. ●In case to use except our genuine replace parts, it could not well enough perform to activation than original piece.

INSTALLATION OF THE MACHINE

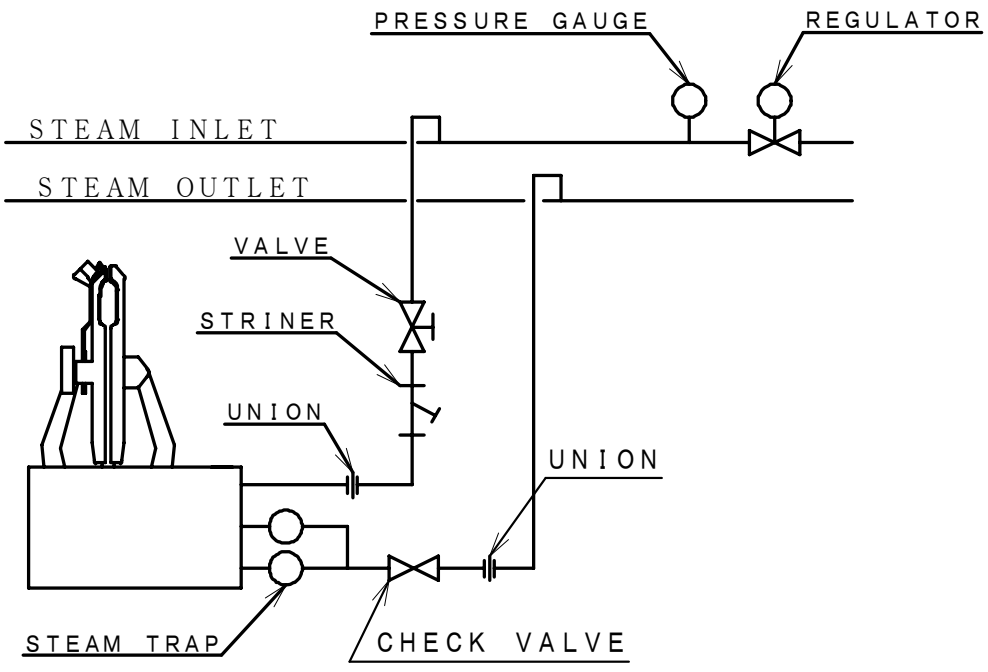
INSTALLATION OF THE MACHINE

- Place the Machine on a proper level surface. It is a great impact on the action and life time of the Machine whether it is ensured to be leveled.
- For a place where the Machine is positioned, choose a secure floor that can withstand it's weight.
- Secure space around the Machine so that the maintenance work will be done without difficulty (More than 80cm is necessary).
- For set up, more than 2 anchor bolts are needed to prevent fall.
- Secure the space to see the name plate for confirm the type and serial numbers for repair the machine etc.

STEAM PIPING WORK

- For use in steam piping, use steel pipes for pressure of 1/2in. or greater.
- Make the whole piping slightly down to the ground so it's not to cause of any stagnant drain water.
- Regulate the pressure of steam entering to the Machine between 0.5 and 0.65MPa.
- Install valve and strainer to the steam inlet side of the Machine.
- Install the trap where steam outlet side of the machine.

⚠ **WARNING**	Reduce pressure up to 0.65MPa or lower which steam is supplied to the machine. ●Suspect to damage steam iron and presser vessel.



ELECTRIC WORK

- Power source is 3-phase, 200V, 30amps, 50/ 60Hz. It has 4 lines, one of which is ground wire (green co lour).
- When fitting a suitable plug to the AC line cord, it is essential that it contains an earth/ground contact and that must be connected. Earth wire into the ground without fail.
- Keep electric wiring part at least 15cm from steam pipe due to escape the heat.
- Make sure that the turning direction of blower motor is same direction of below drawing that the turning direction is anti counter clockwise from the front view.

⚠ **WARNING**	Install the short circuit breaker where the side of power source of the machine due to prevent the trouble and electric shock. ●Recommend short circuit breaker: 30A ●Regular electric current: 30mA ●Power source: 3-phase, 200-220V, 60Hz

⚠ **WARNING**	ENFORCE THE CONTACT EARTH WIRE INTO THE GROUND In case of the earth wire has not been adopt, can not have the place to escape the abnormal electricity and/or static electricity and it may cause of the risk of electric shock. Also, the high risk for the incorrect activation of the machine if affect by the thunderbolt struck. And it may cause if the serious fire explosion accident.

Direction of Rotation ⟶

AIR PLUMBING

- This machine will be needed to work that the power is more than 1 horse power (0.75 Kw) compressor. Please use it well enough power even if the power is more than 1 horse power if it's to operate complex of the machine at the same time.
- Please use the inner size of the pipe is bigger than 8mm for the air plumbing in case if it's use under 8mm it may result of reduce the pressure momentary and influence the function of the machine incorrectly and finish condition as well.
- Standard pressure of the main air regulator will be 0.5MPa if reducing the pressure during the service it may cause of the shortage of the air supply so check the following cause.
  - ・Capacity shortage of the compressor
  - ・Shortage of the hose.
  - ・Operating the complex of the machine at the same time.
  - ・Leak the air and shut the air valve.
- Set the valve as for the inlet side to able to shut the air when periodic maintenance.
- We are surely recommended to have space approximately plumbing distance 10m between compressor and the machine. Pressed air has been cool and easy to remove the moisture by the filter.

⚠ **CAUTION**	CONTROL THE COMPRESSOR Moisture and oil and impurities are makes the air filter being short life and affects bad influence of the air parts so keep the compressor in good condition for use long.

TRIAL OPERATION OF THE MACHINE

After install the machine, upon confirm connect for the steam, electricity and the air activate trial operation.

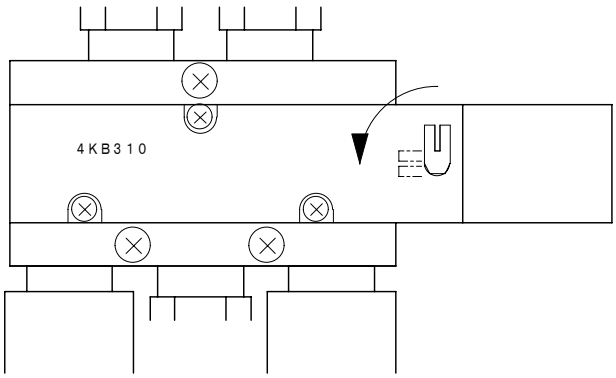
1. Open the machine

- Get rid of the vinyl cover and lapping paper.
- Get rid of the rectangular timber where fixed the back iron for the body press and left arm.
- Remove the foot switch to the easy operation at the front part of the machine.

2. SET THE COVER FOR LEFT EDGE OF THE MACHINE.

3. RELEASE THE LOCK CONCERNING THE AIR.

- Supply the air for the machine and make sure that the pressure level should be 0.5MPa.
- Status of the body press iron is closed by manual operation of the electro-magnetic valve for body press. For release the body press iron, remove the manual switch of the electro-magnetic valve for press from condition of 「ON」 to 「OFF」. Normally it is available to work 「OFF」 status.



4. RETURN TO THE ORIGIN POINT.

- Keep press stop button more than 2 seconds, each device will move to the origin point as regulated turn.

5. Open the dummy

- Remove the lapping paper covered on the dummy.
- Remove rectangular timber for fix the collar cramp.

6. Connect the power supply

- Connect the breaker for the factory.
- Check the indication on the machine when you turn on the power switch of the machine.

7. Steam Supply

- Open the steam valve for supply the steam for the machine.
- Check the steam leakage from the steam circuit.

8. TRIAL OPERATION OF THE MACHINE.

- According to the operating process later on, activate the machines function.
- It is necessary to activate 4 or 5 times trial press w/o shirt when you finish actual shirt.

PERIODIC CHECK

DAILY PRE-USE CHECK

⚠ **WARNING**	Do not use the machine if all the safety devices and stop buttons are does not work normally. Check this matters everyday before use this machine.

- Air filter for moisture and oil contents can automatically discharge such impurities with drain when drains are accumulates. Check if impurities are discharged normally, and in case drains are stagnant, and then please dispose of it by hand.
- Check if all the pressure decompression valves are at specified pressures.

Main Regulator	0.50MPa
Tuck Slide Start	0.09Mpa
Tuck Slide Back	0.12Mpa
Dummy Slide Regulator	0.30Mpa

- Remove the dust gathered on the inlet filter of the hot air blower for an arm.
- Check if the cover of the dummy has not torn around the body and the tuck and if the pad has not worn out if can not use please replace it as our genuine replace parts.
- Check if air does not leak at the interconnected of the air hoses.
- Check if steam does not leak at the interconnected of the steam as steam hose and/or each plumbing parts.
- Check if the air pressure is stable during operating the machine. If air pressure does not stay appropriate level during the work check air filter and decompression valve.

PERIODIC CHECK A YEAR

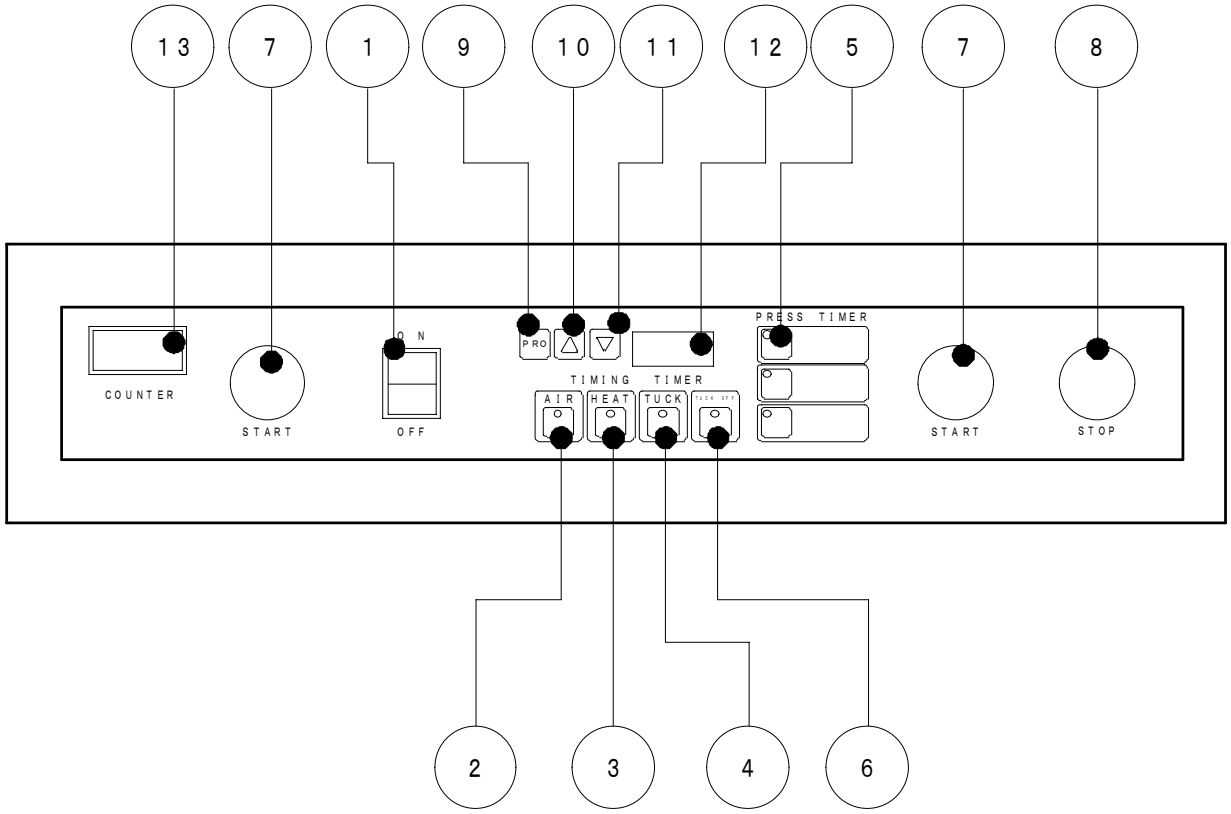
- Please execute periodically replace the filter elements as for following method.

NAME	ELEMENTS	REPLACEMENT TERM
Drain filter	E-60D	2 years passes or pressure under 0.1MPa
Filter	F4000-KIT	2 years passes or pressure under 0.1MPa
Oil mist separator	MANTLE-ASSY	1 year passes or pressure under 0.1MPa

- Please apply the grease for the dummy slide rail as well as apply the slide rail for tuck press device for smooth movement.
- Check if leakage from the packing of interconnected circuit of hot air blowing as for the sleeves and air bag if you found any leakage, replace the packing for use long time.

NOTE	Efficiency of the filter for the air will be decrease by time passed by so that the volume of the passes the air will be decreased naturally. We are surely recommended to replace it as regulated condition.

FUNCTIONS OF THE SECTIONS



OPERATION PANEL

①POWER SWITCH

When you turn the switch lever to “ON", that the Machine becomes ready to be operated. Times you select are indicated in the timer display window.

②AIR (Timer for airbag start activate)

You can set the timing for air coming in the airbag (placed at the sides of the Dummy). This timer counts at the time when trunk pressing starts, and when the set time passes by, hot air comes in the sides of the Dummy.

REMARK:

-The longer set the time, the later timing for the hot air blowing comes.

→If the front placket curves, then set the time longer.

-The shorter set the time, the earlier timing for the hot air blowing comes.

→If wrinkles come out at the sides, then set the time shorter.

③HEAT (Timer for hot-air come)

You can set the timing for hot air comes into the sleeves. When you press cuffs setting button that the timer starts counts and passes the previously sat the time hot-air blowing comes into the sleeves.

REMARK:

-The longer set the time, the later timing for the hot air blowing comes.

→If the tuck spread becomes shorter, then set the time longer.

-The shorter set the time, the earlier timing for the hot air blowing comes.

→If you can see the wrinkles on the sleeve, then set the time shorter.

④TUCK (Timer for press the tuck)

You can set the timing for pressing the tucks. This timer starts concurrently with the **HEAT** Timer.

REMARK:

-SET THE TIME LONGER, TIMING FOR PRESSING THE TUCKS BECOMES LATER.

→IF YOU CAN SEE THE WRINKLES ON THE SLEEVE, THEN SET THE TIME LONGER.

- SET THE TIME SHORTER, TIMING FOR PRESSING THE TUCKS EARLIER.

→ IF THE TUCKS OPEN AND BECAME SHORT, THEN SET THE TIME SHORTER.

⑤PRESS TIMER (Timer for press)

You can set 3 different pressing times from the Course 1 to 3. Choose any of them depending on the material and moisture condition of a shirt.

⑥TUCK OFF (The Key)

When you press this button that the lamp turns on and the tuck pressing stops if you push it once again, the lamp light turns off and the tuck press will start finishing works.

⑦START (Button)

After you have finished to setting the collar and vacuum, press these 2 buttons that the Dummy moves to the right, making it ready for the trunk to be pressed and for the cuffs to be set. Keep on pushing the buttons until the iron touches the Dummy.

⑧STOP (Button)

When you press this button return to the status of the press released condition and stops other activations. If you would like to start again, keep on push this button more than 3 seconds. Each of the devices will be returned to the origin point.

⚠ **NOTE**	In case if you could touch the safety device where located tuck and truck trunk iron, activate the same function as press the stop button.

⑩ to ⑪ TIME ALTERATION BUTTON

Please refer “SET THE TIMER” paragraph.

⑫ TIME INDICATION WINDOW

Indicate remaining time if you are in the finishing process, without this process will indicate the setting time. If the timer became out of order it will be shown “ERROR MARK” in the window.

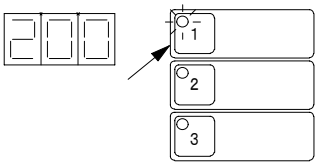
⑬ COUNTER WINDOW

Count the finished pieces.

HOW TO SET THE TIMER

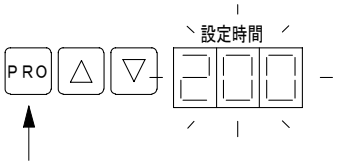
1. SELECT THE COURSE

Push the timer button which you would like to change the course and the lamp turns on that you have selected. Indicate current setting time in the time indication window number 12 twelve.



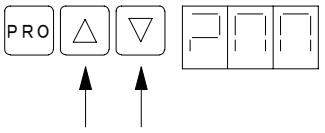
2. PROGRAMMING MODE BUTTON

Push this programming button number 9 nine approximately 1.5 seconds and time indication numbers turns into blinking signal so that you can rewriting your favorable time.



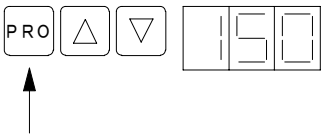
3. SET THE TIME.

For an adjust your favor time push these marked ▲(Plus) number ⑩ ten ▼(Minus) number ⑪ eleven buttons. If you would like to change the time widely keep press these button to adjust your favorable time quickly.

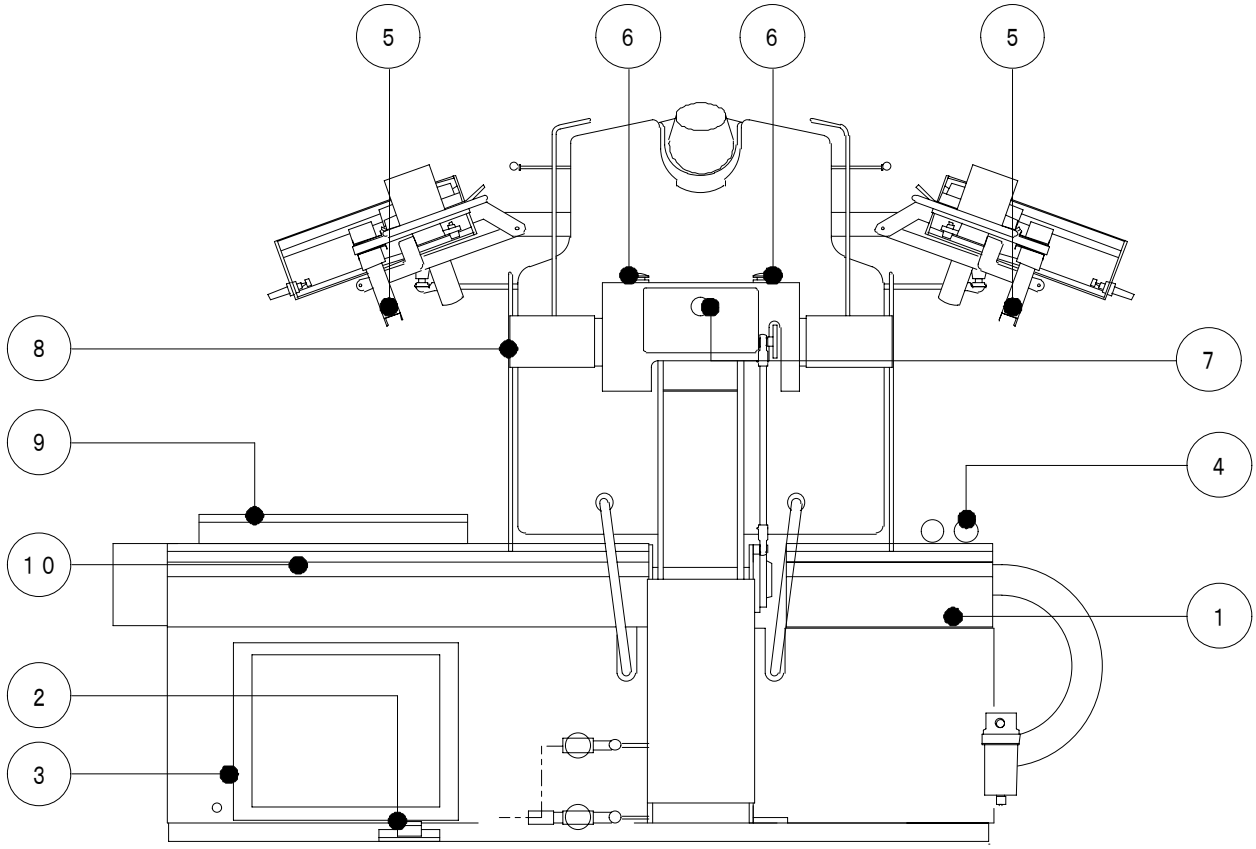


4. ENTRY THE MEMORIZE

Push programming button number ⑨ nine about 1.5 seconds again memorize the renewal time together with stop blinking signal and the high tone P sound.



EXTERNAL FEATURES OF THE MACHINE



①CONTROL BOX

This contains electric control-related parts, such as sequencer and relay (thermal breaker).

②FOOT SWITCH

Pedaling this switch activates the collar fixer, where in turn operates vacuum.

③AIR FILTER

This serves as the inlet of hot air coming in the sleeves and forms a filter (net) collecting dust.

④AIR PRESSURE-REGULATING VALVE OF THE TUCK SLIDE

This regulates the expansion force of the sleeves.

⑤CUFFS CRAMP SWITCH

Push this button close the cuffs cramp and push it again it will be opened.

⑥START BUTTON (GREEN)

After sat both right and left cuffs press these two buttons enter the process of trunk finish work. Keep the buttons on till the tuck press touches the shirt.

⑦STOP BUTTON (RED)

Push this button effects to return the status of released the press and stop the other function. When you re-start to work the machine press this button more than three seconds each device will be returned to the origin point.

⑧SAFETY GUARD

Safety guard device is installed where at in front of the tuck press iron and side of trunk iron if this device start to work it is the same function of press the stop button. When you re-start to work the machine keep stop button on more than three seconds then each device will be returned to the origin point.

⑨OPERATEING PANEL

This panel has installed each setting and dummy movement button.

⑩REGULATION BOX (ELECTRIC MOTOR CIRCUIT)

Installed magnet relay for the motor.

HOW TO OPERATE

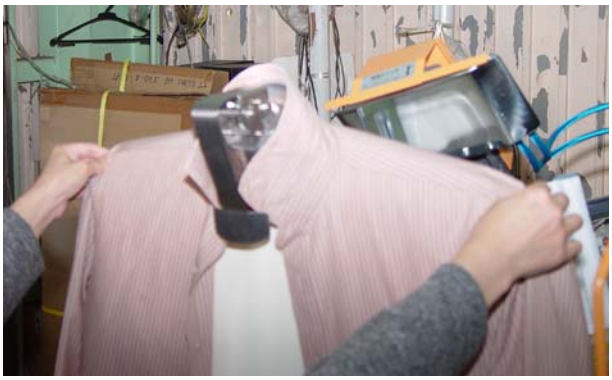
FINISH PROCESS (Long Sleeves)

1. FASTEN THE SHIRT

Put the shirt to the dummy from left side back around the dummy.

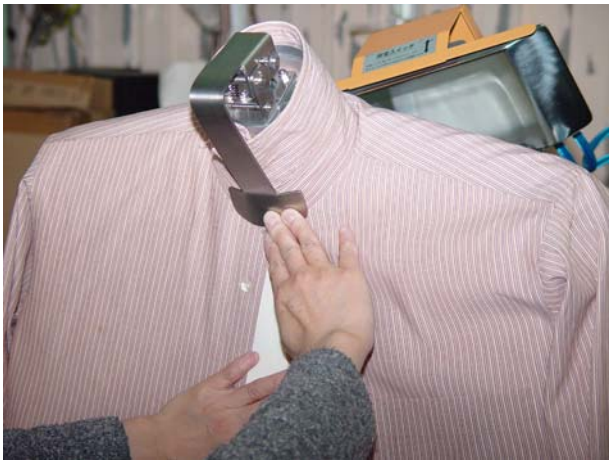
2. SET THE SHOULDER

Set the shirt to the dummy to make equal to the seam line of the shirt.



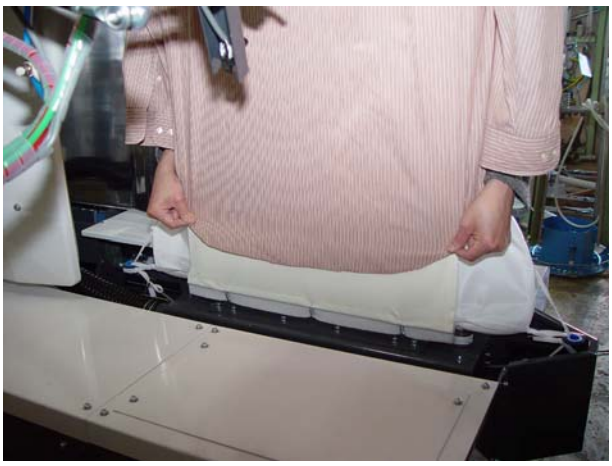
3. SET THE COLLAR

Fix the collar by using the foot switch to make equal space between collar and the collar block then activates the vacuum when you press the collar. When you release the collar press, step on the foot press switch once again



4. SET THE BACK OF THE SHIRT

Pull down the bottom of the shirt lightly to not appear any of slack wrinkles.



5. SET THE FRONT BOTTOM PART

Spread the bottom of a shirt for appropriate condition to the dummy.

6. SET THE FRONT BOTTOM PART

Spread the bottom of a shirt for appropriate condition to the dummy.

7. FRONT STAND

Set the front stand become straight from your view. If you can find the curve on the shirt, make it straight for fine finish. The angle for the front stand both right or left makes narrow as for the bigger shirt.

8. SMOOTH OUT OF SMALL WRINKLE

It may appear little wrinkle where the part of pocket. shoulder, and the side so prior to finish apply appropriate stroke or pull the shirt.

9. MOVE THE DUMMY

When you finished process number 8, press START buttons at the same time by both hand that the dummy will move to the right side.

＊ Keep the buttons on till the iron is completely pressed.

10. TRUNK PRESS

The dummy was stopped at the extremely right end and activates trunk press at the same time and left arm comes to the front.

11. SET THE CUFF

Through the cuff on the pedestal for finish an arm and the cuff place on the right position without appear any wrinkles for the cuff and tuck. Fixed the cuff by press the cuff cramp switch. You can set the cuff either right or left first.

12. SET THE CUFF

Insert the cuff tip part approximately 2 to 3 cm and pay attention to insert cuff deeply it may cause to remain impressed part.

13. START FINISH WORK

Press the START buttons by the each hand at the same time then start finish work. Time passes by for previously set the timer that automatically release and the dummy return to left.

＊Keep the button on till the iron must be pressed completely.

14. END OF FINISH WORK

Remove the shirt from the dummy (Trunk). It is easy to remove if you handle as sample picture.

SHORT-SLEEVED SHIRTS FINISH WORK

1. to 10. FASTEN SHORT-SLEEVED SHIRT

Put the short-sleeve shirt onto the trunk as same way from the numbers 1 to 9 of the long-sleeved shirts.

11. T-SHIRT CRAMP DEVICE

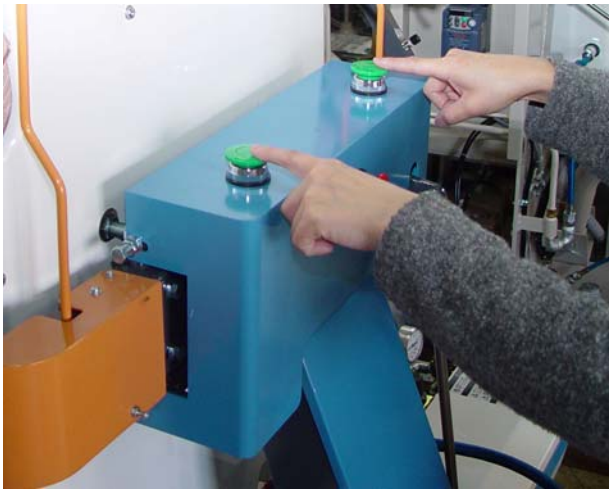
Pull out the cramp in front of you.

12. SET THE T-SHIRT

Insert the sleeve to the cramp device for the short-sleeve shirt and set it by press the button.

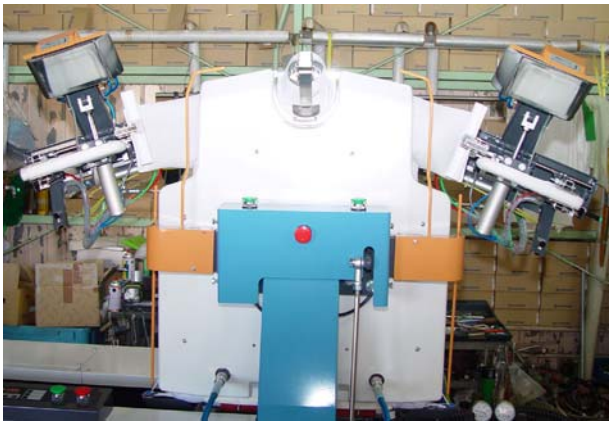
13. START FINISH WORK

Press the both of START button at the same time and start finish work.



14. EXPAND THE SLEEVE

Pulling the sleeve with hot air blowing and complete the arm part. As for the T-shirts finish process does not activates the press device for sleeve.



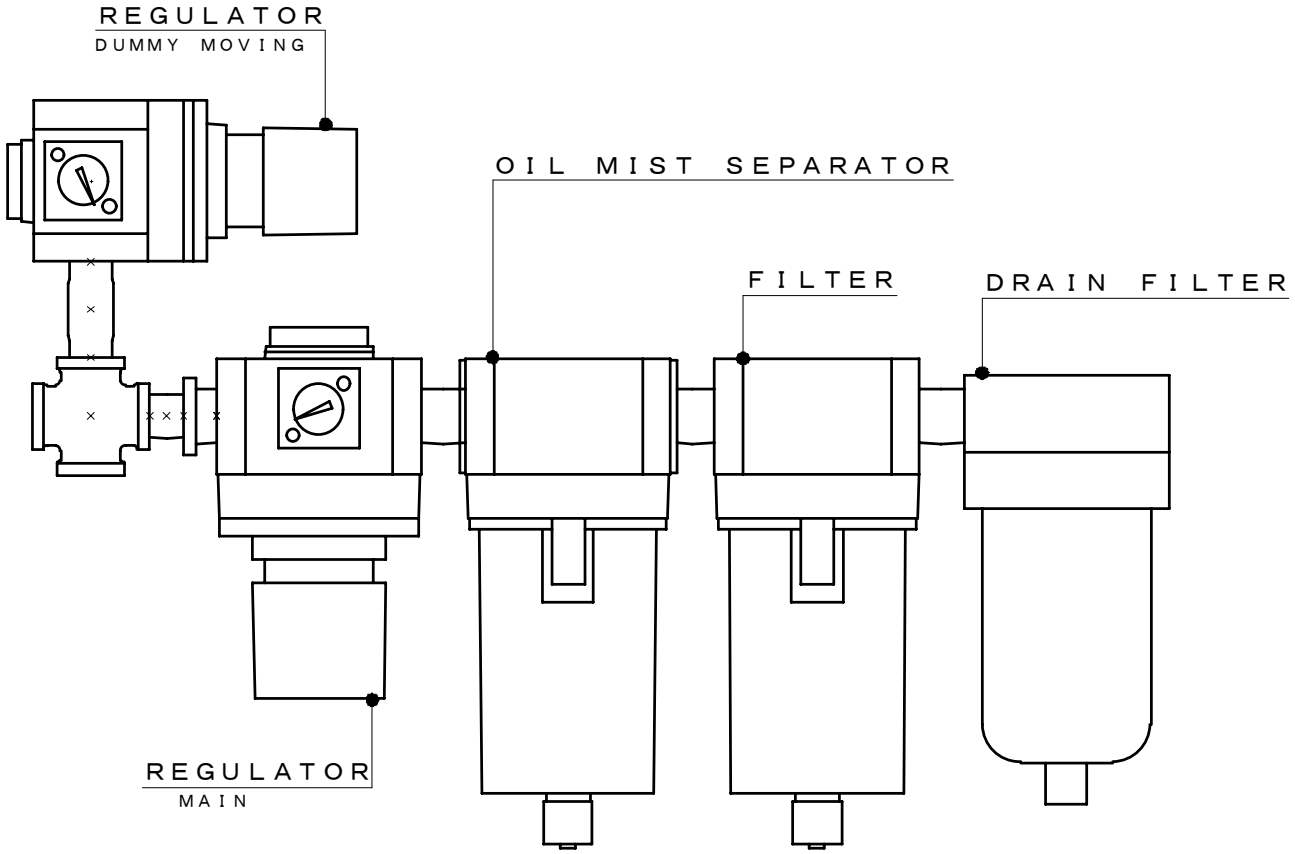
15. END OF THE FINISH WORK

Remove the T-shirt from the dummy (Trunk) as the same way of long sleeves shirt.

MAINTENANCE AND SERVICE

WARNING	When the maintain for this machine, evacuate steam and air, disconnect electricity, and wait until all steam-heated sections have been cooled. ●High risk for unexpected accident and electric shock may happen.

AIR FILTER REGULATOR



- DRAIN FILTER (DF600-04-A)
  Eliminate the moisture and filtration water will be discharged automatically. (Auto drain)
- AIR-FILTER (F4000-15-F)
  For the filter which percolation ratio 5 μ m affects remove the dust and foreign substance mainly. Dust and foreign substance through the filter will be discharged automatically with water. (Auto drain)
- OIL MIST SEPARATOR (M400-15-F1)
  For the filter which percolation ratio 0.01 μ m affects remove the oil mainly. Oiled substance through the filter will be discharged automatically. (Auto drain)

- DECOMPRESS VALVE (For main air pressure : R4000-15)
  Adjust the air pressure entering the entire part of the machine.
  Standard air pressure: 0.5MPa
- Decompress valve (For the dummy movement: R3000-10)
  Adjust the air pressure for the movement of the dummy.
  Standard air pressure: 0.3MPa

REMOVAL OF THE DRAIN WATER

Percolation drain water will be accumulated into the definite volume cup or pressure in the bowl became under the level 0.02MPa drain water will be discharged automatically. (Auto drain)
As for collect these drain water, connect the urethane tube (inner size 6mm) to the outlet connector and put the receptacle plate. And also you can turn the drain knob to anti clockwise, discharge the drain water by the manual.

REPLACE THE FILTER ELEMENTS

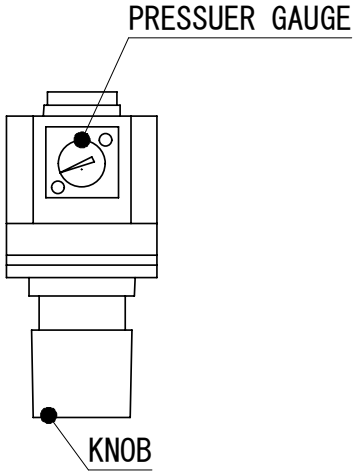
The filter elements apply to push the cup turns to approximately 30 degrees and set the marked place then you can remove to turn the elements by hand directly. Replace time for the elements are referring as below table.

FILTER ELEMENTS

NAME	SERIAL NUMBERS	ELEMENTS	REPLACE TERM
Drain filter	DF600-04-A	E-60D	2 years or pressure under 0.1MPa
Filter	F4000-15-F	F4000-KIT	2 years or pressure under 0.1MPa
Oil mist separator	M4000-15-F1	M type	1 year or pressure under 0.1MPa

ADJUST THE AIR PRESSURE

This machine has 4 decompression valves for the main, dummy movement, enter and return of the tuck slide part. Decompression valve for the air role keep the supplying pressure to definite level and the way of the pressure adjustment is pull up the knob lightly and turn it properly and check the pressure level by the pressure gauge.
Turn the knob to clock wise effects high pressure and turn anti clock wise effects lower pressure from the view of the knob side. After set the appropriate level that the knob return to the origin point and lock it accordingly by hand press.
＊Confirm the pressure level by activate the machine after sat the pressure if the pressure has changed re-adjust it.



STANDARD PRESSURE OF THE AIR DECOMPRESSION VALVE

NAME	STANDARD PRESSURE	EXPLAIN THE ACTIVATION
Main	0.5MPa	Adjust pressure where supply to the machine
Move the dummy	0.3MPa	Adjust pressure for dummy move cylinder
Tuck slide ENTER	0.05MPa	Adjust pressure for pull the sleeve
Tuck slide RETURN	0.1MPa	Adjust pressure for return the device for pull the sleeve.

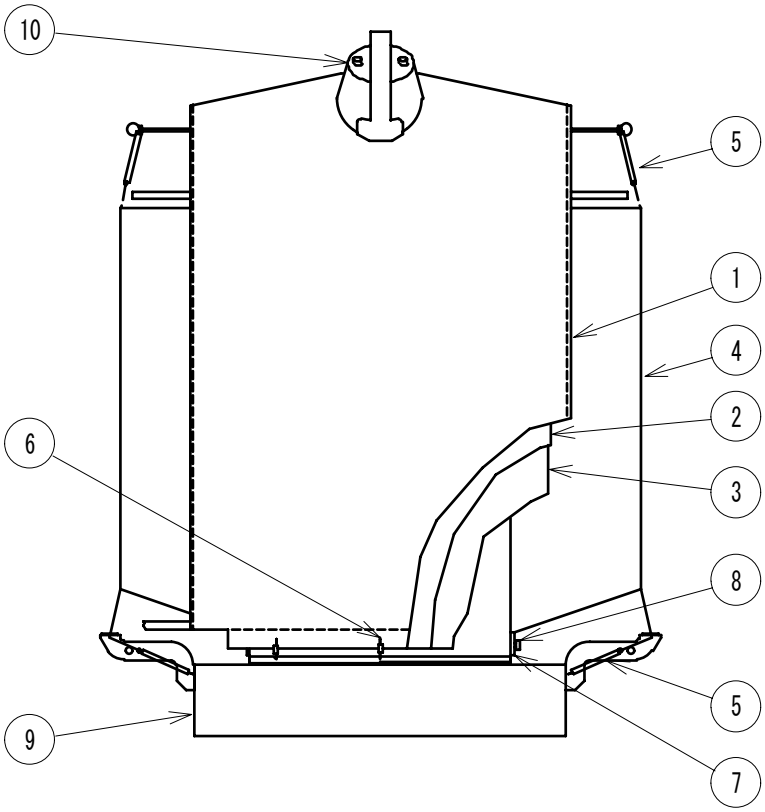
REPLACE THE TRUNK PAD AND COVER

Due to have activates the machine many times that the part of the trunk and air bag, pad and the cover for the tuck press part will be exhausted. We are surely recommends to replace that the parts periodically.

⚠ **NOTE**	When you replace the pad and cover we are surely recommends to use our genuine parts. ●If you set different parts it may happen to raise cause of worse finish condition and the life time of the machine shorter.

STRUCTURE OF THE TRUNK PAD, COVER AND AIR BAG

① Cover
② Uniron pad
③ Silicone pad
④ Air bag
⑤ Spring for hang air bag
⑥ Bottom fix spring
⑦ Stop plate of the back
⑧ Nut
⑨ Dummy
⑩ Collar fixer



REMOVE THE PAD AND COVER

1. Loose two anchor bolts where fixed collar fixer and remove it from the dummy.
2. Loose the fixed hose nut where connecting the cylinder of collar fixer and remove air hose.
3. Remove the strings where in the arm cover.
4. Remove the spring for bottom fixed.
5. Remove the rope where at the blowing inlet of shoulder air bag.
6. Remove the cover from the dummy.
7. Pull out the bottom bar which previously removed the cover.
8. Remove the union pad from the dummy.

FITTING THE PAD AND COVER

1. Fit new union pad on the dummy and to be dressed equal space for both right and left and does not appear the slacks.
2. Insert the bottom bar for the new cover.
3. The cover will fit and dressed on the dummy.
4. Tight the strings at blowing inlet for the shoulder air bag.
5. Suspend the bottom fix spring to the cover.
6. Remove the strings of an arm cover.
7. Connect the air hose to the collar fix cylinder.
8. Set the collar fixer to the dummy.

REMOVE THE AIR BAG

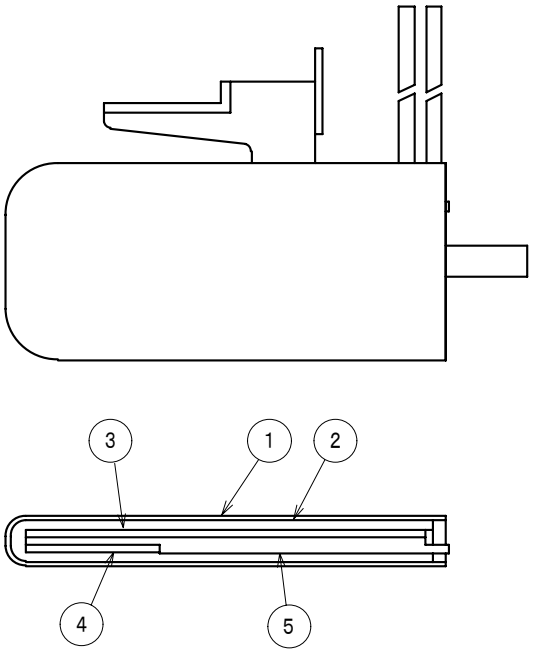
1. Remove the suspend spring where located both upside and lower part of the air bag.
2. Remove the setting nut where located at both upside and lower part of the air bag.
3. Remove the air bag together with fix plate of the bag from the dummy.
4. Pull out the bag fix plate from the air bag.

FITTING THE AIR BAG

1. Insert the bag fix plate for the new air bag.
2. Fitting the air bag and fix plate of the bag on the dummy
3. Fixed the air bag for using the nut.
4. Set the suspend spring where upside and lower part of the air bag.

STRUCTURE OF THE TUCK AND PAD COVER

① Tuck cover
② Tuck uniron pad
③ Tuck silicone pad (Upper)
④ Tuck silicone pad (Lower)
⑤ Tuck frame



REPLACEMENT OF THE TUCK AND PAD COVER

1. Release string of the tuck cover to remove the cover.
2. Remove the tuck uniron pad.
3. Peel away silicone pad by striper.
4. Apply silicone adhesive to the tuck frame.
5. Set tuck uniron pad.
6. Set tucks cover.

CAUTION	Set the silicone pad to the tuck frame. Drying time for silicone adhesive will be necessary approximately 24 hours.

CIRCUIT PROTECTOR (CP31F-M/2)

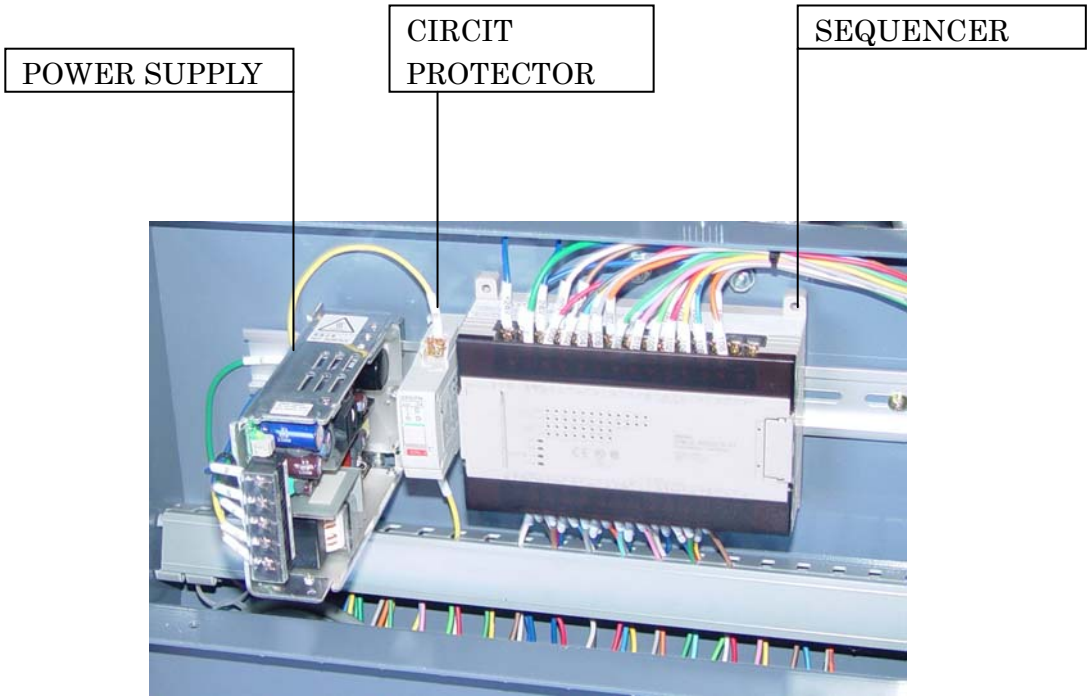
Due to happen to had over load capacitance caused by the damage of the parts or short circuit for the interconnected electrical wiring part shut down the interconnected circuit and protect the regulation circuit of the electric regulation box if does not showing consequences the operation even turn on the power supply switch check the circuit protector and in case the switch turn off inspect the cause of it and when you cleared the reason then turn the lever on in due course.
Installation place: Control box

POWER SUPPLY (S8PS-0524D)

This is a parts for transforming the electrical regulation from outer AC200V to DC24 which supplying the electricity to the machine. When the machine activating normally where the green LED lamp will be turned on.
Installation place: Control box.

SEQUENCER (CPM1A-40CDT-D-V1)

This is a parts activates each mechanical function as for electro magnetic valve and relay according to previously programmed when enter the signal of the press button and sensor.
Confirming the machine to enter the signal of the inlet and outlet that this parts will be shown by the LED signal and to this sign it is available to know the status of the machine and cause of abnormal activation.
Installation place: Control box.

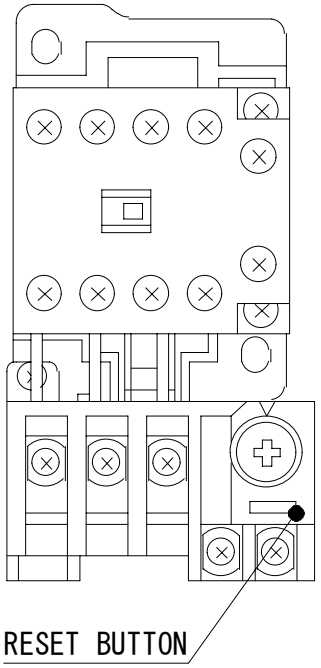


CONTROL BOX

THERMAL RELAY

Thermal relay is located at regulate box for electric motor where the back part of the machine.
When applying over load capacitance to the electric motor raise the thermal and shut down the circuit when you recover circuit be cleared the cause of it and push that resetting button.

Installation place: Control box for electric motor.

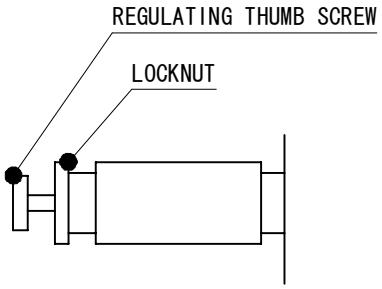


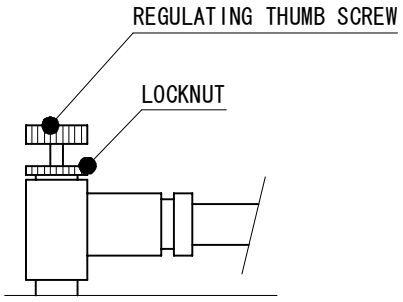
SPEED CONTROL

This is a parts for regulate the movement speed of the cylinder as for adjust air volume where discharge from the cylinder and you can select from both two types which set the connector of the cylinder hose and set discharging platform for the electro magnetic valve.

HOW TO ADJUST THE SPEED

① Loose the lock nut.
② Turn the adjustment knob and the volume will about a quarter a time, this adjustment knob effects to became slowly if apply tightly and became faster when you open it vice varsa.
③ Confirm the speed to activate the machine.
④ Repeat that work and if you can not see any of the trouble then fix the lock nut.





ELECTRO MAGNETIC VALVE

The electro magnetic valve turn the air direction by electric signal and affects the cylinder works expand and shrink. For this machine built in nine ranges manifold type and also single setting type electro magnetic valve.

9 (NINE) RANGES MANIFOLD TYPE

①Signal code

Wiring to the regulate box.

②Plug connector

Able to alternate electrical wiring easily as touch at once whether replace the electro magnetic valve and in case of unfastening pick it out with the fingers.

③Indicator lamp

Turn the lamp on when through the electricity.

④Manual control button (Orange co lour)

Press the button affects same movements as turn on the electricity to the electro magnetic valve. When press this button use the tip part must be thin object like ball point pen.

⑤Setting screw

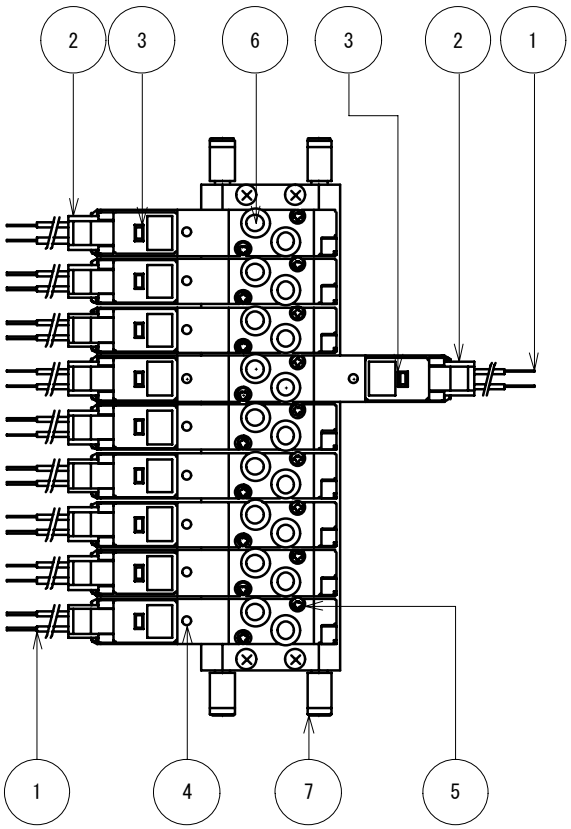
This is the screw for fix the electro magnetic valve. Remove this screw when replace it.

⑥Quick release joint

When you remove the hose, pull out the hose with pushing the ring.

⑦Silencer

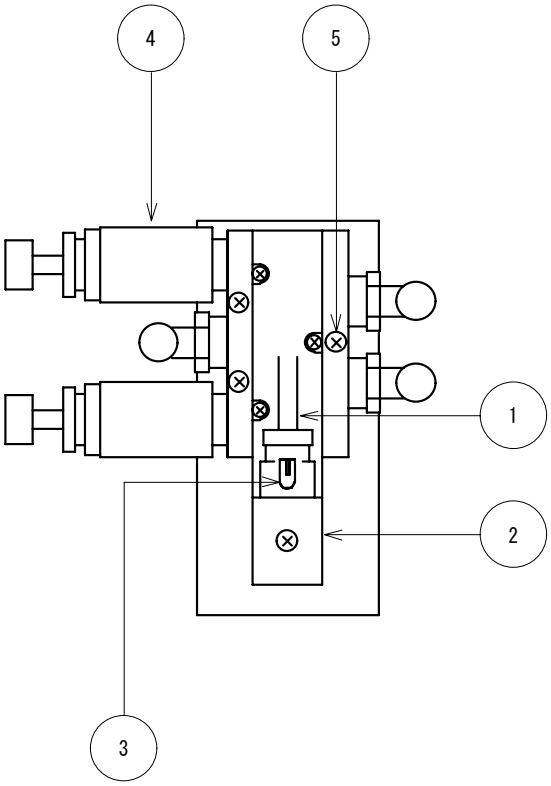
Installed at the air discharging outlet and reduce the exhaust sound.



PLACE THE ELECTRO MAGNETIC VALVE

OUT LET NUMBERS	ROLE OF THE ELECTRO MAGNETIC VALVE
1102	Air bag cut valve
1005	Tuck slide
1004	Tuck apply pressure
1006-1007	Arm circling front and back
1100	Cuffs cramp right
1101	Cuffs cramp left
1106	Fix the dummy
1107	Collar fixer
1104	Sleeve expand

FOR TRUNK PRESSURIZATION



①Signal code

To be wired to the regulation box.

②Plug connector plus indicator lamp.

When turn on electricity the lamp will be on and when you remove pull out the center screw.

③Manual control knob

Regular: Turn to the 0 (zero)

Manual: Turn to the 1 (one)

④Silencer with speed control

Control air exhaust sounds as well as regulate the volume of the discharging air and then adjust the iron speed of the open and shut.

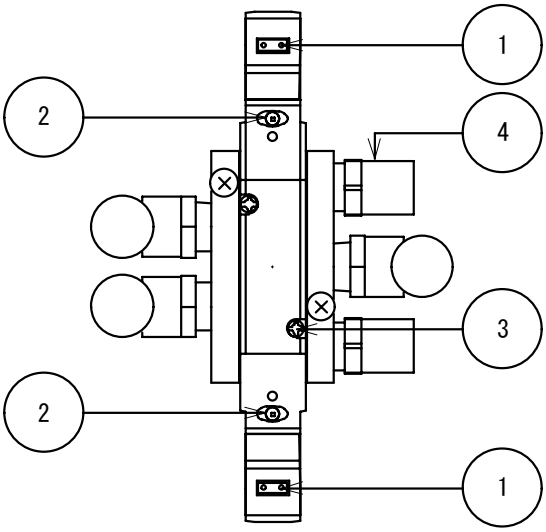
E1: Close the iron

E2: Open the iron

⑤Setting screw

Pull out this screw when the time for replace the electro magnetic valve and it is available to replace valve part w/o manifold to remain.

FOR REMOVE THE DUMMY



①Signal code

It is wiring to the regulation box. This electro magnetic valve has been work double solenoid so existing signal code for two places.

②Manual control button (green)

When you push this button you can see the same movements as turn on the electricity.

③Setting screw

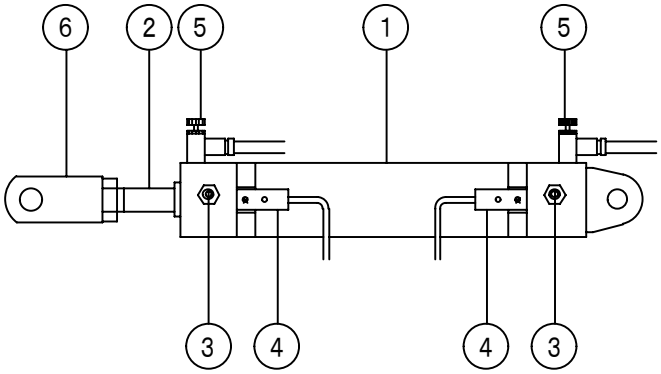
Remove this screw when the time to replace electro magnetic valve and it is available to replace part of the valve w/o manifold to remain.

③Silencer

Installed at the air discharging place to reduce exhaust sounds.

AIR CYLINDER

The actions of each section of the machine are brought by the air cylinder. Understand the outline of the air cylinder and make use of it for countermeasures in case any trouble occurs.



Names of each part

① Cylinder tube
② Piston rod
③ Air cushion valve
④ Contact less switch
⑤ Speed control
⑥ Knuckle joint

Air cushion

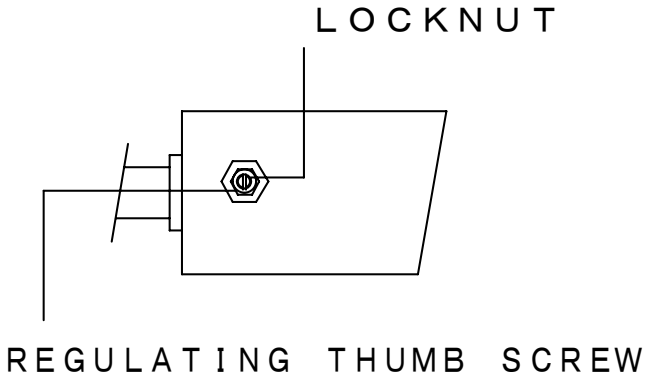
Outline

This absorbs the shock arising when the cylinder stops by reducing air flow.

Regulation

Loosen the locknut and turn the regulating valve.

Turn to the right: Effect becomes stronger.
Turn to the left: Effect becomes weaker.



CAUTION	If effect is made too strong or moisture accumulates in the air cushion hole, the piston will not go up to the ending points, thus causes the machine to stop.

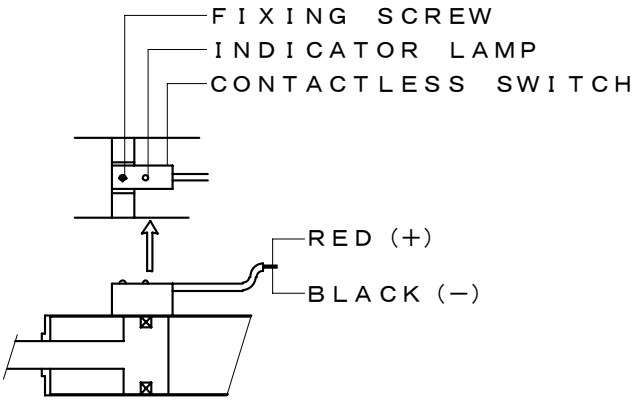
Contact less switches

Outline

When the piston comes under the contact less switch, it switches on and the lamp lights on. The machine confirms the position of the cylinder in this way.

"The contact less switch does not work."

This happens in almost all cases when the position where the piston stops has changed. Check the cause of it and correct it.



⚠ **NOTE**	Do not change the position of the contact less switch thoughtlessly.

SPECIFICATIONS OF THE MACHINE

MAIN ITEMS

Name:	Single Buck Body and Sleever
Model:	BT-100
Air supply pressure:	0.5 - 0. 7 MPa
Max Steam consumption pressure:	0.7MPa
Power source:	3 phase 200 V
Electricity consumption:	2.5 Kw (50Hz) / 2.7Kw (60Hz)
Net weight:	650 Kg

AIR ADJUSTMENT

Main regulator:	0.5 MPa
Tuck slide enter:	0.04 MPa
Tuck slide return:	0.1 MPa
Moving the Dummy:	0.3 MPa
Recommend Compressor capacity:	2 Horse power

PLUMBING DIMENSION

Steam inlet:	3/4 inches
Steam outlet:	1/2 inches
Air inlet:	1/2 inches

TIMER SETTING

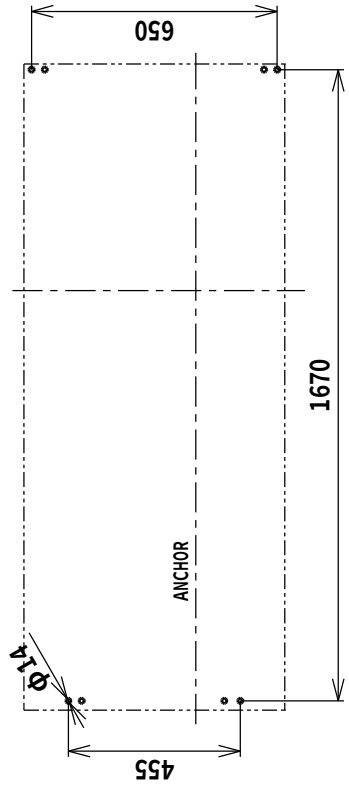
Air blowing:	1.0 second
Hot air blowing:	2.0 seconds
Tuck pressing:	2.5 seconds
Course 1:	13 seconds
Course 2:	15 seconds
Course 3:	20 seconds

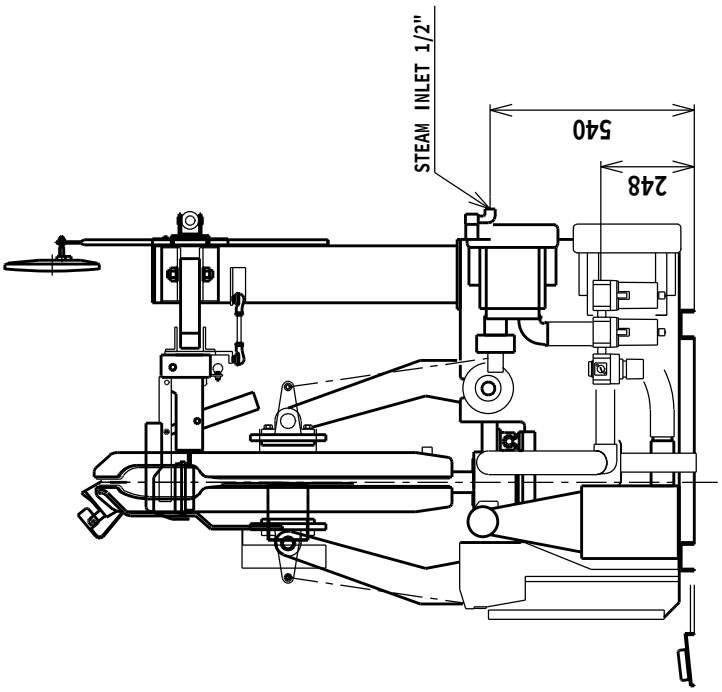
REMARK

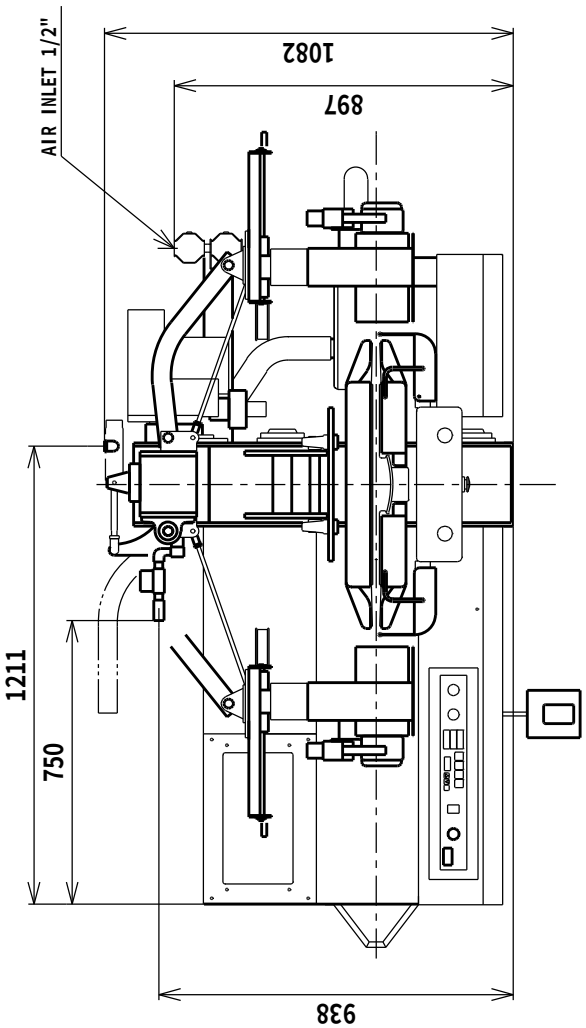
1 MPa ≒10.2kg f/cm2

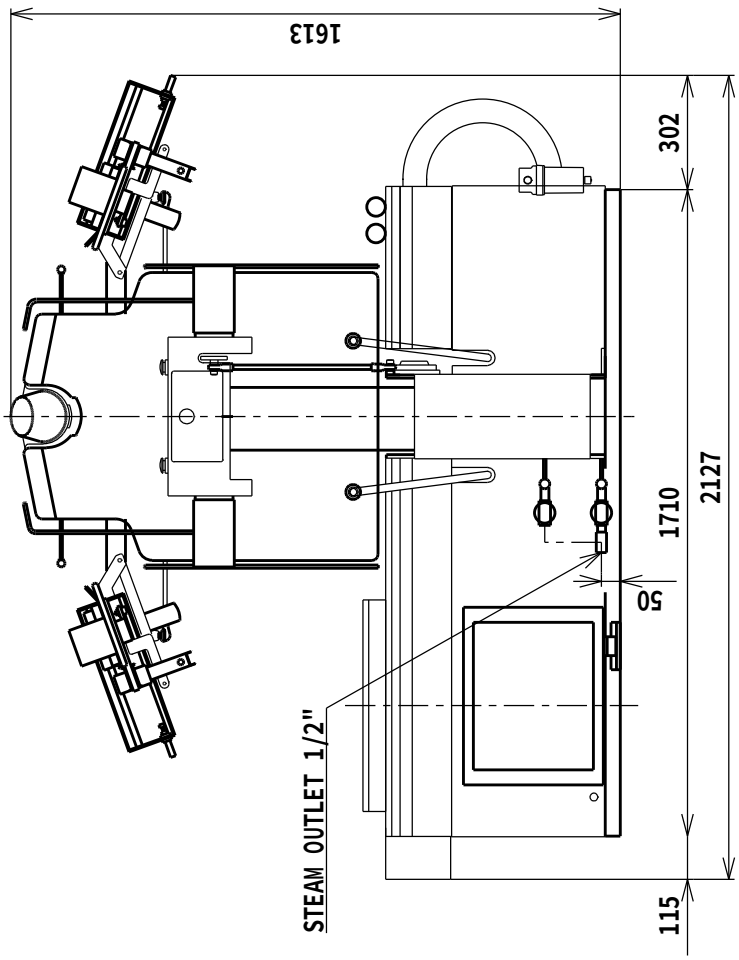
1 kg f/cm2 ≒0.98 MPa

TOP ASSEMBLY DRAWING

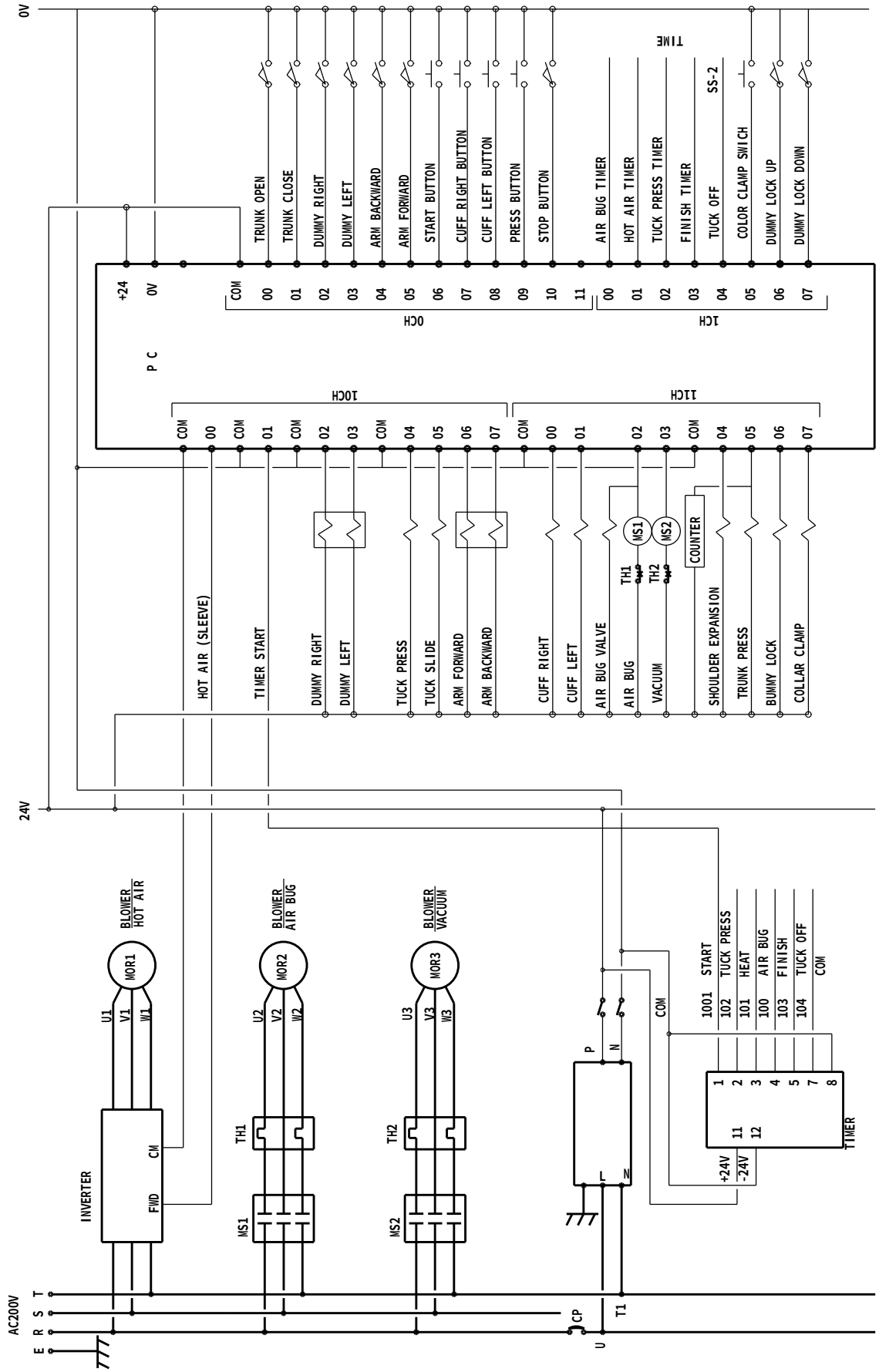




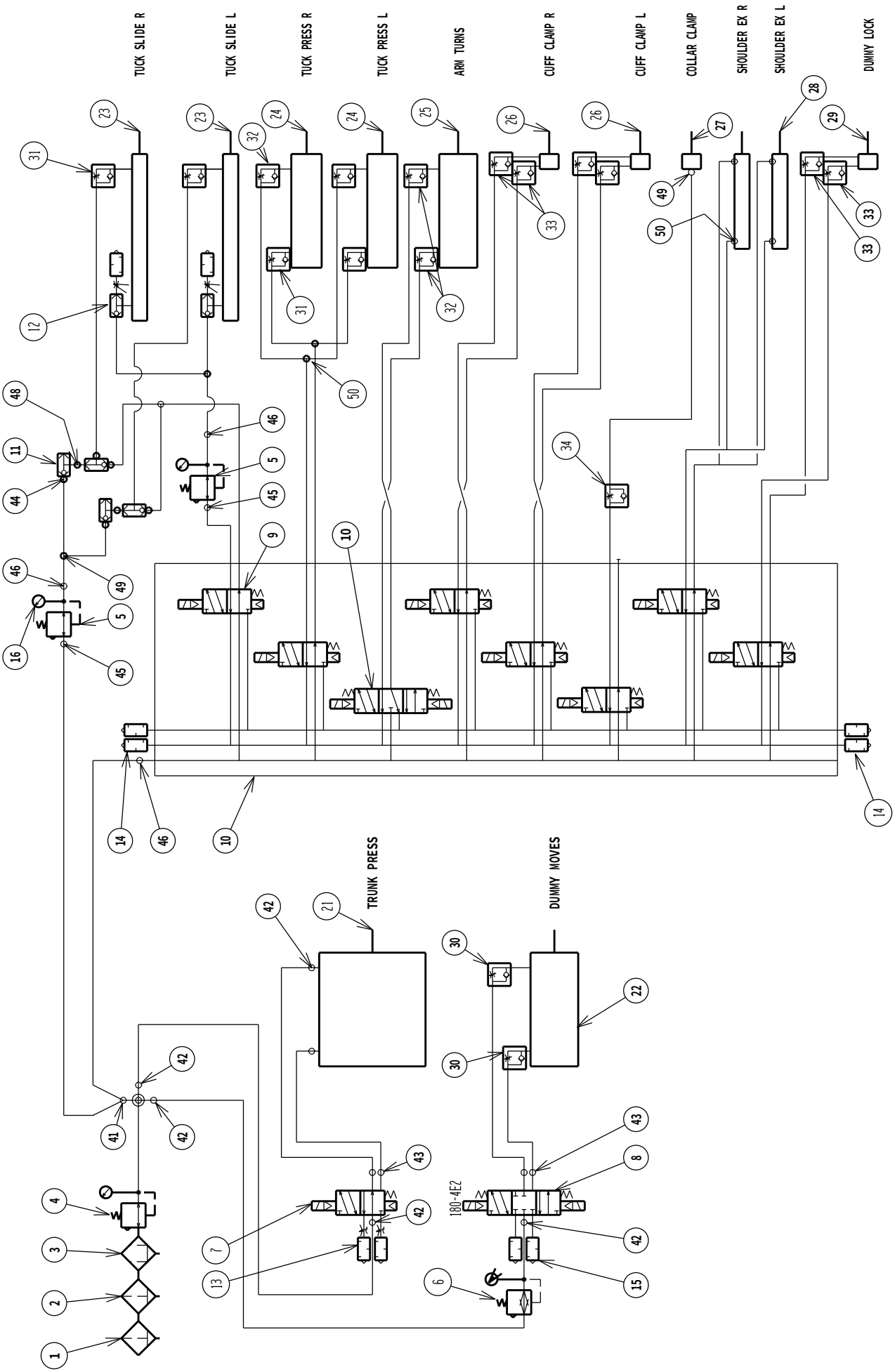




WIRING DIAGRAM



WIRING DIAGRAM



TROUBLE SHOOTING

Symptom	Cause	Treatment
Power does not come to switch and does not indicate operation panel.	Electricity is not supplying Activating circuit breaker	Check the power source cord and your factory's breaker. Check the cause of short circuit, etc and reset the circuit protector.
Collar cannot be set.	Some section is not return to its starting point or not apply the command. Foot switch is damaged. Some abnormal input is in. Electro magnetic valve is damaged.	Check the sensor for releasing the iron, left side of dummy, or left arm in the back. Check if the signal of the foot switch comes in the sequencer. Buttons for the emergency stop, cuffs, press, etc. usually receives no input. Check the voltage and actions of the electro magnetic valve for collar fixer.
Fixing of the collar is not strong enough.	Fixing rubber has worn. Air is leaking from the cylinder. Air hose is broken or leaking	Regulate it by tightening the regulating bolt at the cylinder head. If there is no room for regulation, replace the fixing rubber. Replace packing of the cylinder. After checked around hose and amend it.
Vacuum does not work.	Foot switch is broken. The thermal relay is working due to over load capacitance.	Replace foot switch. Vacuum starts at the same time with the collar fixing. In case the foot switch is broken, the collar is not fixed either. This is caused by over load capacitance in the vacuum motor and activating thermal relay.. Remove the cause of over load capacitance on the motor and reset the thermal relay.
Weak vacuum work.	Lost vacuum hose quality and/or gap the hole.	Replace the vacuum hose.

TROUBLE SHOOTING

Symptom	Cause	Treatment
Dummy does not move to the right.	To see the devices are not returned to regulate position or do not enter command even returned at regulate position.	Check the sensor for release iron, left side of dummy and back of left arm.
	Damaged electro magnetic valve.	Check electro magnetic valve for dummy move or replace in case.
	Damaged start button.	Check start button or replace in case
Does not come left arm in front.	Dummy does not move right end.	Check the sensor for dummy move device and right side of dummy.
	Damaged electro magnetic valve.	Check electro magnetic valve for arm revolving or replace it in case.
Do not press the trunk.	Dummy does not move right end.	Check the sensor for dummy move device and right side of dummy.
	Damaged electro magnetic valve.	Check electro magnetic valve for trunk press or replace it in case.
Do not set cuffs	Damaged button for cuffs press.	Replace cuffs press button.
	Damaged electro magnetic valve.	Check electro magnetic valve for cuff or replace it in case.
Do not start finish timer.	Damaged button for start sleeve	Check sleeve button and replace it in case.
	Do not enter the command for shut the trunk iron.	Check the sensor for shut the trunk iron.
Do not pull sleeve.	Appropriate air pressure level	Adjust the pressure level of electro decompression valve for tuck slide in tuck slide return.
	Damaged electro magnetic valve	Check electro magnetic valve for tuck slide or replace it in case.

TROUBLE SHOOTING

Symptom	Cause	Treatment
Do not come hot air.	Proper setting of the timer for hot air blowing.	Reset the timer to a suitable time.
	Activating thermal relay due to over load capacitance of hot air motor.	Remove cause of over load capacitance of motor and reset thermal relay.
Do not press tuck	Place the switch to TUCK OFF.	Push TUCK PRESS button again to make the status of turn off the lamp.
	Timer for press tuck to be later activation is too late.	Set appropriate the timer.
	Damaged electro magnetic valve.	Check electro magnetic valve for tuck press or replace it in case.
Do not end finish work.	Finishing timing is too long.	Adjust and set the timer appropriate time for finish.
	Damaged the timer.	Check signal of end of finish sign must be entered to sequencer when timer has over.
Worse finish condition of side.	Swelling air bag is weak.	Check if air leakage between blower motor for air bag and air bag.
	Swelling time of air bag is late.	Adjust the timer to swell air bug properly.
Affect to see the curve at front stand.	Swelling the air bag is too fast.	Adjust appropriate timing of the timer set longer in this case.

TROUBLE SHOOTING

Symptom	Cause	Treatment
Raising the wrinkles in front and back of the trunk.	Worn out the part of the cover and cover.	Replace the pad and cover.
Raising small wrinkles where at the sleeve.	Poor drying condition due to hot air blowing is not well enough.	Check root valve of steam and trap and/or check filter for finish timer or clean it in case.
Tuck for the sleeve will open.	Timing of hot air come into the sleeve is earlier.	Adjust the timer to appropriate time for hot air blowing in this case set the timer to long.
Raising stain.	Stained the pad cover. Drying condition is not well enough.	Replace the pad cover. Make the timer to long for finishing or dehydrate to strong.