

Chapter 5 Safety Regulations

5.1 Outline

This is the most important chapter of User Manual .It mainly narrates some safety regulations which must be obeyed while operating and maintaining .It is suitable for any operator or maintainer.

Warning: This machine must be installed, adjusted and maintained by qualified persons who must be familiar with structure and operation, and know troubles very well. If anyone ignores this warning, it might cause to injure person and damage the machine, our company will not be any responsible for such accident and damage caused by such situation.

Warning: Any personal injury or equipment damage caused by wrong maintenance or not care, our company will not be any responsible for such accident. Meanwhile, the warranty will automatically cease to be in force.

In order to ensure the operation in good order and operator's safety, following basic jobs must be done everyday:

- 1) Before operation, please check and confirm that all warning symbols have shown clearly on proper positions .Any missing or unclear, please replace at once.
- 2) Check the over-vibration switch whether it is in good condition or not.
- 3) Check interlocking condition of the door.
 - a) Open the loading door, start the machine as usually, the machine should be impossible to start.
 - b) Close the loading door and start the machine. Try to open the door while the machine is operating, it is impossible to open it now.
- 4) Check drainage valve and try to drain once. The valve should be opened or closed in good condition.
- 5) Make sure that the machine should work in good condition .In order to avoid unsafe problem, all spare parts are original parts.

5.2 Daily Necessary Regulations

- a. Before repair or maintenance, you should be familiar with relative chapter of this manual.
- b. Before maintaining, the water, steam and power supply must be cut-off.
- c. Overload or under-load is not allowed. Each type machine has its own rated capacity).
- d. Before operation, please start the air compressor. You may operate the machine until pressure reaches 0.4-0.5 MPa.
- e. Switch on power and check rotating direction of drum while extracting. From the front side, it should show close-wise direction.
- f. Water must reach required level while distributing to avoid over-vibration.
- g. After extracting, don't press any key of washing program and force to open the door.
- h. While extracting, if the air pressure is too low or the drainage valve has any trouble, operator should stop and check the machine immediately to avoid damaging caused by overloaded extracting.
- i. Don't cut-off power and air artificially while washing to avoid any unnecessary loss.
- j. Don't start and operate the machine before all panels are recovered.
- k. In order to avoid any unexpected accident while washing, operator shouldn't leave the machine casually.
- l. Don't change any setting parameter of the converter casually, except personnel in this field.
- m. While sealing parts become aging and leaking, please adjust or replace it at once.
- n. Make sure that the machine has been grounded firmly.
- o. While automatically operating, if you find that water level is too low, please press Cool Water until reaching the required level.
- p. Always check the working condition of each sensor.
 - 1) Check water level sensor whether the tested valve is in accordance with actual number.
 - 2) Check each thermal sensor whether the showing temperature is correct or not.
 - 3) Check the pressure gauge whether it is in good condition or not.
- q. Always check the belt, if it is loose, please tight it immediately.
- r. While maintaining, don't spray the machine with water to avoid short circuit and other damage.
- s. Don't use any volatile or inflammable or explosive materials inside or near the machine.

Chapter 6 Maintenance

6.1 Outline

Though the machine is well designed and manufactured daily maintenance has been reduced as less as possible, some necessary daily maintenance must be done. Then the machine will have a long service life and create good profit.

6.2 Daily Maintenance

- a. Before operation, please check whether the over-vibration system is in good condition or not.
- b. Before operation, please check the door interlock function whether it is in good condition or not.
- c. Check the drainage valve.
- d. Clean and flush the agent box, clean the box cover.
- e. Clean the front, rear and side panels.
- f. Drain off the water from the air dehydrator and inject lubricate (sewing machine oil) into oil atomizer.
- g. Check all stop valves to make sure no leakage.
- h. Check the door sealing condition carefully .If there is any leakage, please maintain or replace it at once.

6.3 Weekly Maintenance

- a. Inject lubrication oil for all lubricating points (such as main bearing, spherical plain bearing, etc.)
- b. Clean dust and add lubricant for movable place of each valve and cylinder.
- c. Check the loose and worn condition of V belt, check the alignment condition between two wheels.
- d. Check the drainage pipe whether there is any leakage.
- e. Check all water inlet pipes whether there is any leakage.
- f. Check the safe range of over-vibration switch stroke.

6.4 Monthly Maintenance

- a. Dismantle and clean the mesh of filter .In case of block age, please clean or replace it.
- b. Clean the dust inside the machine, check and make sure that any electrical component is not moist or covered with dust.

- c. Check all hoses of water and steam inlet pipes, if there exists aging, please replace it.
- d. Check fastening condition of all connectors monthly.
- e. Check the bolts and fasten them if necessary.

Warning:

Before maintenance, make sure that the main power of the machine has been cut off!

Important Explanation:

After finishing weekly or monthly maintenance, any panel must be returned its original place.

6.5 Yearly Maintenance

- a. Check working condition of each motor and make sure that all of them are in good condition.
- b. Replace seriously damaged or worn parts, such as belt.
- c. Check bumper springs whether they are in good condition or damaged.
- d. Conduct a rust prevention treatment for the machine.

Points for attention: In order to avoid any personnel injury, maintenance must be done carefully. All materials and parts for maintenance and repair should be in accordance with the requirements of the machine. (If there is any question, you may ask our company.) In case of adopting or treating improperly, it will cause loss or harm, even damage the machine .Any damage caused by above reasons, our company won't keep the warranty and service.

6.6 Stainless Steel Maintenance

For protecting surface of stainless steel, users should pay attention to following points to keep its fine appearance and prolong its service life.

- 1) Keeping clean is the most important thing for a machine. General dirt or greasy dirt can be removed by detergent and water. If it is possible, operator may finally use cloth to clean its surface. Regularly cleaning will keep a bright and anticorrosive surface.
- 2) Remove the dirt in gaps and at corners of stainless steel. In order to avoid scratch marks, operator must mop the surface in accordance with stainless steel veining while using abrasive cleaner.

Never use primary steel wool or steel brush to clean. In result, carbon steel grains will be inlaid stainless steel surface and cause rust. Operator may use stainless steel wool or other nonmetal soft brush.

- 3) Keep from other metals. While meeting with salt or acid solution, electronic corrosion will aggravate.
- 4) Discoloration caused by overheat and temper color may be removed with some powder agent or special chemical solvent.
- 5) Keep from wood or carbon steel for a long term.
- 6) Don't keep sterilization or bactericidal solvent in stainless steel container for a long term, because there is chlorine in solvent, which will corrode stainless steel.
- 7) Some parts made of iron or steel such as nail or screw will rust and influence stainless steel. You may paint thick protective coating on carbon steel parts to solve this problem.

Points for Attention: Any cleanser or other chemicals used for the machine inside or outside must follow manufacture's advice. Some cleansers may be poisonous or flammable. In case of improperly using, it might cause hurt. Never use volatile solvent, such as acetone, banana oil, enamel reducer, tetrachloroethylene, gasoline, benzol, or other volatile oil as cleaning agent!