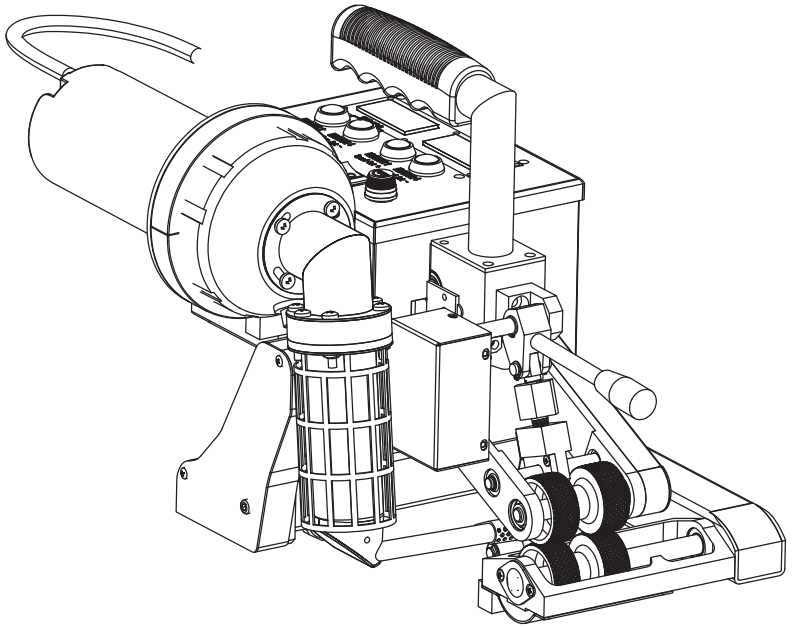
Lesite Technology

LST700

Geo Hot Air Welder

Manual

V1.0



Please read this manual carefully before using this machine, and keep it for future reference.

Application

- Solid Waste Landfills
- Sewage Treatment
- Anti-seepage Project
- Chemical Mining
- Water Conservancy
- Aquaculture

Precautions

Unplug the welder before disassembling it to avoid injury from exposed wires or component inside the machine with power.

Incorrect operation may cause fire and explosion hazard because of high temperature, especially near combustible materials or explosive gases.

Don't touch heater tube and nozzle when they are hot. They may cause burns. Don't point the nozzle at people to avoid burns.

The power supply voltage must match the rated voltage marked on the welding machine and be reliably grounded. Connect the welding machine to a socket with a protective ground conductor.

To ensure operator safety and reliable operation of equipment, the power supply must be equipped with a voltage stabilizer and a residual current device.

The welding machine must be operated under the correct control of the operator, otherwise it may cause combustion or explosion due to hightemperature.

It is strictly forbidden to use the welding machine in water or muddy ground, avoid soaking, rain or damp.

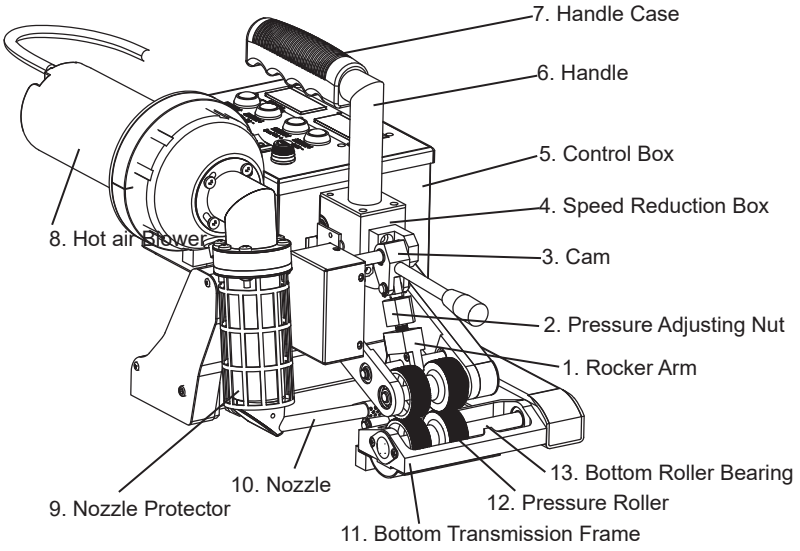
Parameter

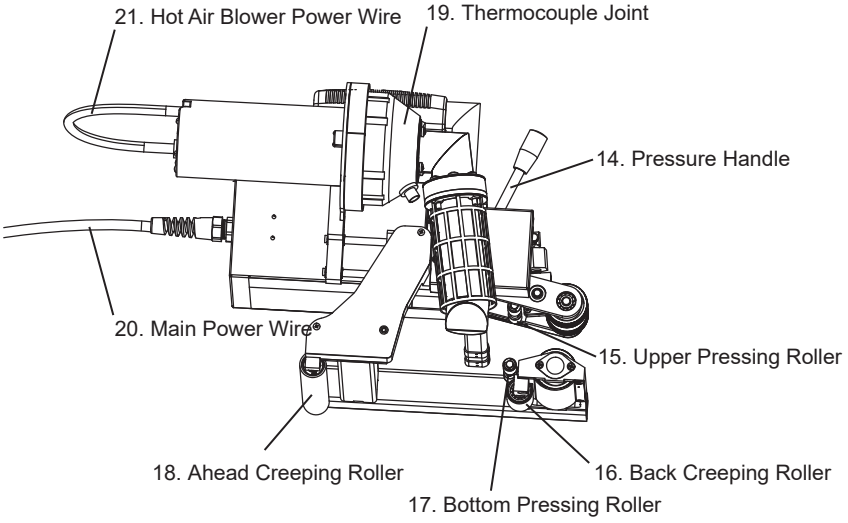
Model	LST700
Rated Voltage	230 / 120 V
Frequency	50 / 60 Hz
Rated Power	2800 / 2200 W
Heating Temperature	60 - 620 °C
Welding Speed	0.5 - 3.5 m/min
Welding Pressure	100 - 1000 N
Material Thickness Welded	0.5 - 2.0 mm (Single Layer)
Seam Width	15mm×2, Interior Cavity 20 mm
Overlap Width	16 cm
Seam Strength	≥85% Material
Net Weight	8 Kg
Size	352 × 267 × 267 mm
Membrane Laying Ways	Membrane laying way by one edge against the other edge
Digital Display	Temperature & Speed Display
Certificate	CE
Warranty	One Year

Nameplate

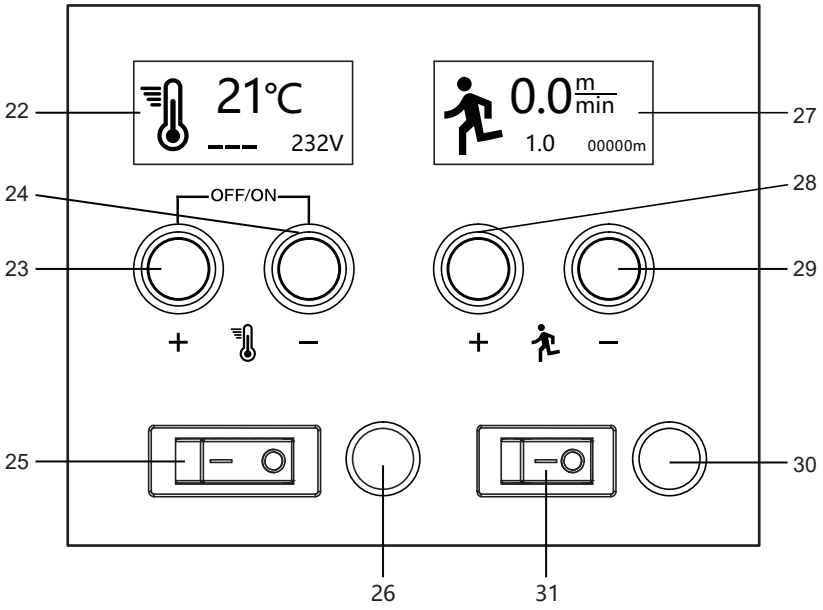
The model identification and serial number are marked on the nameplate of your machine.
Please provide these data when consulting Lesite Sales and Service Center.

Main Parts


7. Handle Case
6. Handle
5. Control Box
4. Speed Reduction Box
8. Hot air Blower
3. Cam
2. Pressure Adjusting Nut
1. Rocker Arm
13. Bottom Roller Bearing
10. Nozzle
12. Pressure Roller
9. Nozzle Protector
11. Bottom Transmission Frame


21. Hot Air Blower Power Wire
19. Thermocouple Joint
14. Pressure Handle
20. Main Power Wire
15. Upper Pressing Roller
18. Ahead Creeping Roller
16. Back Creeping Roller
17. Bottom Pressing Roller

Control Panel



22. Temperature LCD Display
23. Temperature Setting Knob (+)
24. Temperature Setting Knob (-)
25. ON/OFF Switch
26. Power Fuse
27. Speed LCD Display
28. Speed Setting Knob (+)
29. Speed Setting Knob (+)
30. Motor Fuse
31. Moving Switch

Operations

1. Please lift the pressure handle (14) to separate the upper and down pressure roller (12), switch the power on.
2. Setting the welding parameters according to the data of welding test.
3. Please wait the actual temperature value reaching the setting value.
4. Put the welder at the welding position and put the two films (one up and the other one down) into the machine.
5. Press down the pressure handle (14) to make the upper and down pressure roller (12) fit completely. Then turn on the moving switch (31), the machine starts walking and welding automatically.
6. To observe the relative position of the welding seam and the edge of the welded membrane at any time. It must be promptly corrected if there is deviation.
7. When the welder finish welding job,its pressures handle needs to be lifted to separate the upper and down pressure roller in time.
8. After completion of the welding work, press the buttons (23) and (24) on the panel to make the hot air blower in a cold blowing condition in order to cool the nozzle.
9. Power off.

Parameters Setting

1. Welding Temperature:

Press the buttons +  − on the panel to set the required welding temperature, which depends on the welding material and ambient temperature. The LCD screen will display the preset temperature and the current actual temperature.

2. Welding Speed:

Press the buttons +  − on the panel to set the required welding speed,which matchs the welding temperature.The LCD screen will display the preset speed and the current actual speed.

3. Welding Pressure:

It can change the welding pressure by rotating the pressure adjusting nut. To reduce the pressure in a clockwise direction, and increase the pressure in a counterclockwise direction.

- This machine features parameter memory function. The previous settings will be restored automatically upon next power-on without the need for resetting.

Boot Steps

1. ON/OFF switch (25) is used for turning on the main power of the welder.
2. Turn on the power switch (25), the LCD screen displays as shown in Figure 1, at this time, the air gun is not heating and is in the state of blowing natural air.

Fig 1

3. Press the button (23) and(24), the screen shows as Figure 2 and the hot air blower starts to heat until reach the setting temperature.

Fig 2

4. Press the button (23) and (24) simultaneously again. The LCD screen displays as shown in Figure 1. At this time, the air gun is not heating and is in the state of blowing natural wind.
5. When the nozzle is not in the welding position, press the travel switch (31) and the welding machine will start to travel. When the travel switch is pressed again, the welding machine will stop traveling.
6. When the welder starts to move, the LCD display shows as Fig 3.

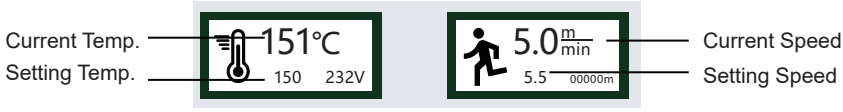


Fig 3

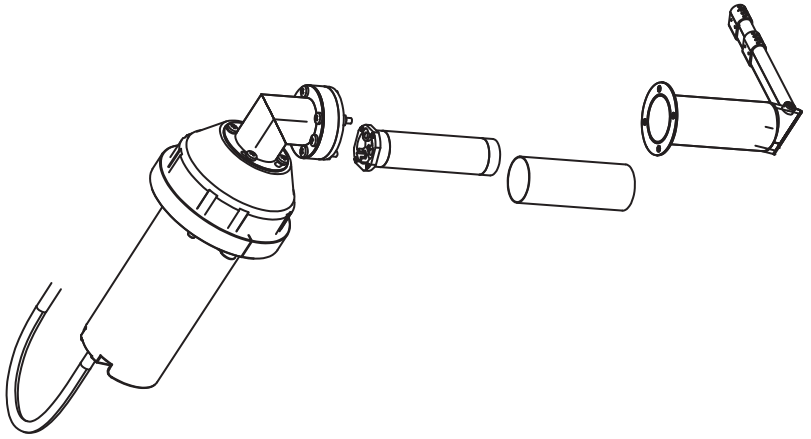
Replacement of Wear Parts

Replacement of heating element:

Unplug the thermocouple connector ,Loosen the four fixing screws of nozzle.

Then you can remove the heating element after removing the nozzle.

As shown on the right:



Fault Codes

Fault	Cause of the Fault	Solution
Motor cannot work	No power	Check the power and connect it
	Fuse burns	Replace new fuse
	Speed control board burns	Replace new control board
	Motor burns	Replace new motor
	Thermocouple Fault	1. Replace the heating element; 2. The outer casing connection terminal is broken; replace the outer casing assembly; 3. The drive board is faulty; replace the drive board.
	Overheating Fault	1. If the fan is not turning, replace the air blower motor or its carbon brushes; 2. Clean the air nozzle and air blower intake filter; 3. If the photosensitive element is faulty, replace it; 4. Replace the heating element;
	Heating Element Fault	1. Replace the heating element; 2. The outer casing connection terminal is broken; replace the outer casing assembly; 3. The drive board is faulty; replace the drive board.
 179V	Voltage Below 180V Alarm	Raise Voltage
 251V	Voltage Above 250V Alarm	Reduce Voltage
 --- 281V	Voltage Reaching 280V Alarm	Cut off the power, reduce voltage

Daily Cleaning

Use steel brush to clean the hot air nozzle

Clean the air inlet at the back of the hot air blower

Routine Maintenance

· This product guarantees a one year warranty from the day it is sold to consumers. We will be responsible for failures caused by material or manufacturing defects. We will repair or replace defective parts at our sole discretion to meet the warranty requirements.

· The warranty does not cover damage to consumable parts (wedges, bearings, chains, pressure rollers, etc.), damage or defects caused by improper handling or maintenance, or breakage caused by dropping the product. Abnormal use and unauthorized modifications are not covered by the warranty.

Standards

The company declares that the products manufactured and marketed by the company meet the requirements of the following enterprise implementation standards.

Standards: Q/350100LST 001.

Repairs and Spare Parts

· It is strongly recommended to send the product to Lesite company or an authorized service center for professional inspection and repair.
· Only LESITE original spare parts are allowed.

1 One year warranty

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