



Lesite Technology

Plastic Extrusion Welder

LST600A/B/C

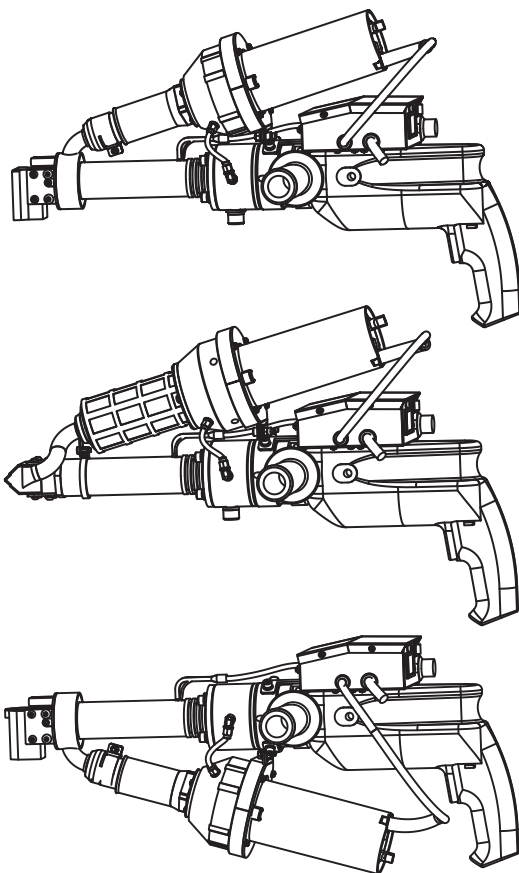
LST610A/B/C

LST600E/600F/610E

LST620

Manual

V1.0





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

Application

Used for welding thermoplastic materials PE and PP (sheet + film material) in the following fields:

Container Fabrication

Piping Fabrication

Electroplating Anti-corrosion Equipment

Landfill

Repair of Geomembrane

Environmental Protection Equipment



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 and 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.

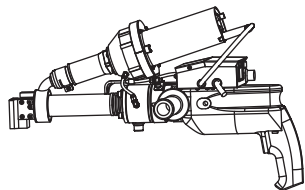


The welding machine must be operated under the correct control of the operator, otherwise it may cause combustion or explosion due to high temperature.

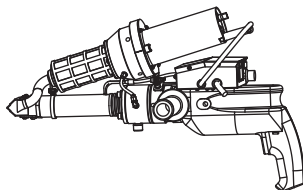


It is strictly forbidden to use the welding machine in water or muddy ground, avoid soaking, rain or damp.

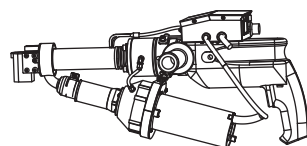
Product Series



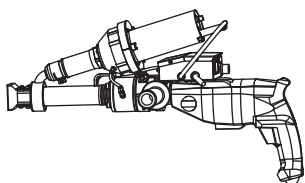
LST600A



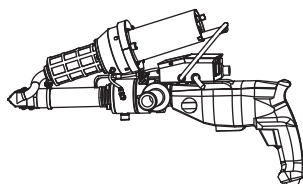
LST600B



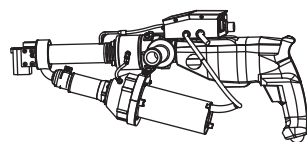
LST600C



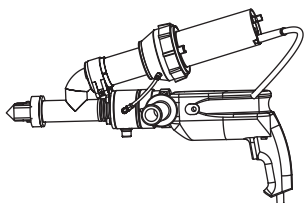
LST610A



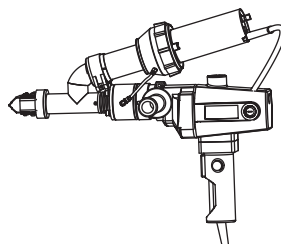
LST610B



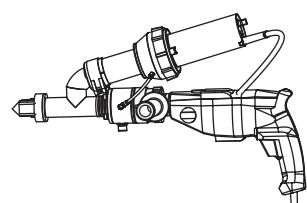
LST610C



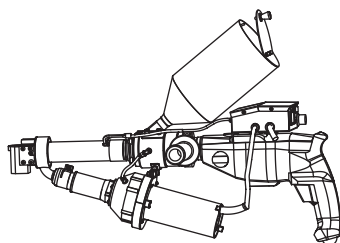
LST600E



LST600F



LST610E



LST620

Dual Heating Extrusion Welder Parameter

Model	LST600A	LST600B
Rated Voltage	230 / 120 V	230 V
Frequency	50 / 60 Hz	50 Hz
Extruding Motor Power	800 W	800 W
Hot Air Power	1600 W	3400 W
Welding Rod Heating Power	800 W	800 W
Hot Air Temperature	20 - 620 °C	20 - 620 °C
Plastic Extruding Temperature	50 - 380 °C	50 - 380 °C
Extruding Volume	2.0 - 2.5 Kg/h	2.0 - 2.5 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm	φ 3.0 - 4.0 mm
Net Weight	6.9 Kg	6.9 Kg
Size	525 x 226 x 331 mm	526 x 226 x 334 mm
Driving Motor	HIKOKI	HIKOKI
Motor Overload Protection	Standard Configuration	Standard Configuration
Digital Display	Extruding Temperature	Extruding Temperature
Trouble Display	Code Warning	Code Warning
Certificate	CE	CE
Warranty	One year	One year

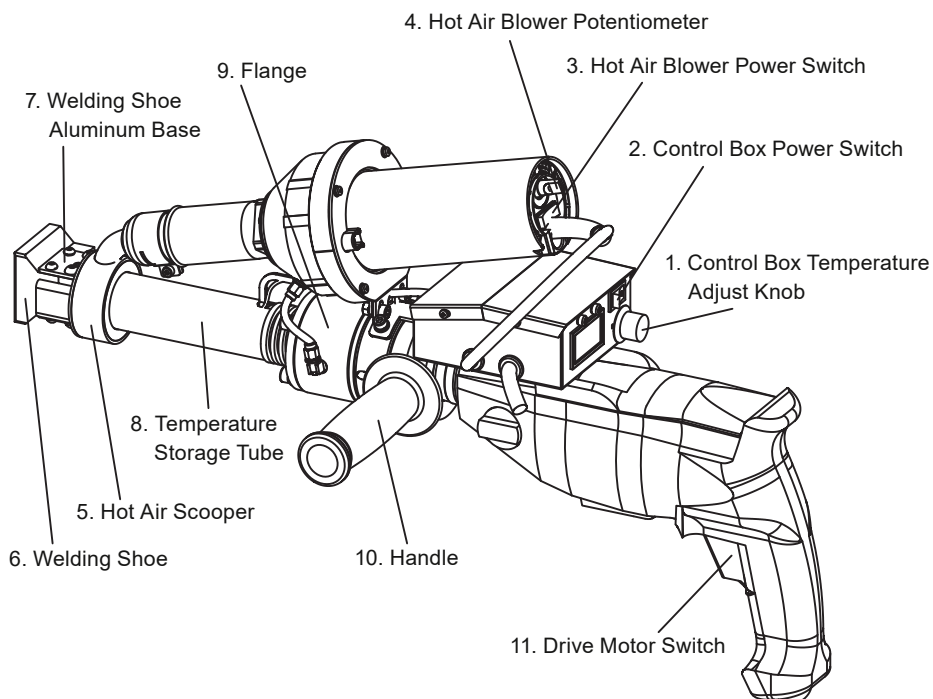
Model	LST600C
Rated Voltage	230 / 120 V
Frequency	50 / 60 Hz
Extruding Motor Power	800 W
Hot Air Power	1600 W
Welding Rod Heating Power	800 W
Hot Air Temperature	20 - 620 °C
Plastic Extruding Temperature	50 - 380 °C
Extruding Volume	2.0 - 2.5 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm
Net Weight	6.9 Kg
Size	532 x 226 x 250 mm
Driving Motor	HIKOKI
Motor Overload Protection	Standard Configuration
Digital Display	Extruding Temperature
Trouble Display	Code Warning
Certificate	CE
Warranty	One year

Dual Heating Extrusion Welder Parameter

Model	LST610A	LST610B
Rated Voltage	230 V	230 V
Frequency	50 Hz	50 Hz
Extruding Motor Power	1300 W	1300 W
Hot Air Power	1600 W	3400 W
Welding Rod Heating Power	800 W	800 W
Hot Air Temperature	20 - 620 °C	20 - 620 °C
Plastic Extruding Temperature	50 - 380 °C	50 - 380 °C
Extruding Volume	2.0 - 3.0 Kg/h	2.0 - 3.0 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm	φ 3.0 - 4.0 mm
Net Weight	7.2 Kg	7.2 Kg
Size	586 x 226 x 357 mm	585 x 226 x 361 mm
Driving Motor	METABO	METABO
Motor Overload Protection	Standard Configuration	Standard Configuration
Digital Display	Extruding Temperature	Extruding Temperature
Trouble Display	Code Warning	Code Warning
Certificate	CE	CE
Warranty	One year	One year

Model	LST610C
Rated Voltage	230 V
Frequency	50 Hz
Extruding Motor Power	1300 W
Hot Air Power	1600 W
Welding Rod Heating Power	800 W
Hot Air Temperature	20 - 620 °C
Plastic Extruding Temperature	50 - 380 °C
Extruding Volume	2.0 - 3.0 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm
Net Weight	7.2 Kg
Size	590 x 226 x 265 mm
Driving Motor	METABO
Motor Overload Protection	Standard Configuration
Digital Display	Extruding Temperature
Trouble Display	Code Warning
Certificate	CE
Warranty	One year

Main Parts



Dual Heating Extrusion Welder Operating steps

◆ Power on

1. Plug in.
2. Press the control box power switch and rotate the control box temperature adjust knob to 320-350°C (Digital Display) .
3. When the digital display temperature reaches setting temperature, delay 180 seconds before starting the drive motor (cold start protection).

◆ Preparation before welding

1. Turn on the hot air blower power switch, rotate the hot air blower potentiometer to position 6-7.
2. Clean the welding rod surface and insert it into the feeding inlet.
3. Press the drive motor switch (short contact 2-3 seconds). After repeating 2-3 times, confirm the sound of the drive motor is normal and the speed of welding rod extrusion is smooth (Extend the heating time if the sound is abnormal or welding rod is not extruded) .
4. The extruded welding rod is not soft or hard, and the smooth surface luster is the best extruding effect.
6. Start Welding.

◆ Notes for welding process

1. If the sound of the drive motor suddenly changes or the welding rod is stuck without feeding, it is necessary to immediately loosen the drive motor switch and check whether the heating temperature is normal.
2. In the case of no welding rod feeding in, immediately release the drive motor switch. Do not start the drive motor without welding rod.

◆ Turn off steps

1. The plastic in the extruder must be cleaned before the machine is turned off so as not to cause blockage and damage the extruder next time.
2. After cleaning plastic, set the hot air blower potentiometer to 0 and cool it down.
3. Turn off the hot air blower power switch.
4. Turn off the control box power switch.
5. Cut off the power.



Use fireproof mats



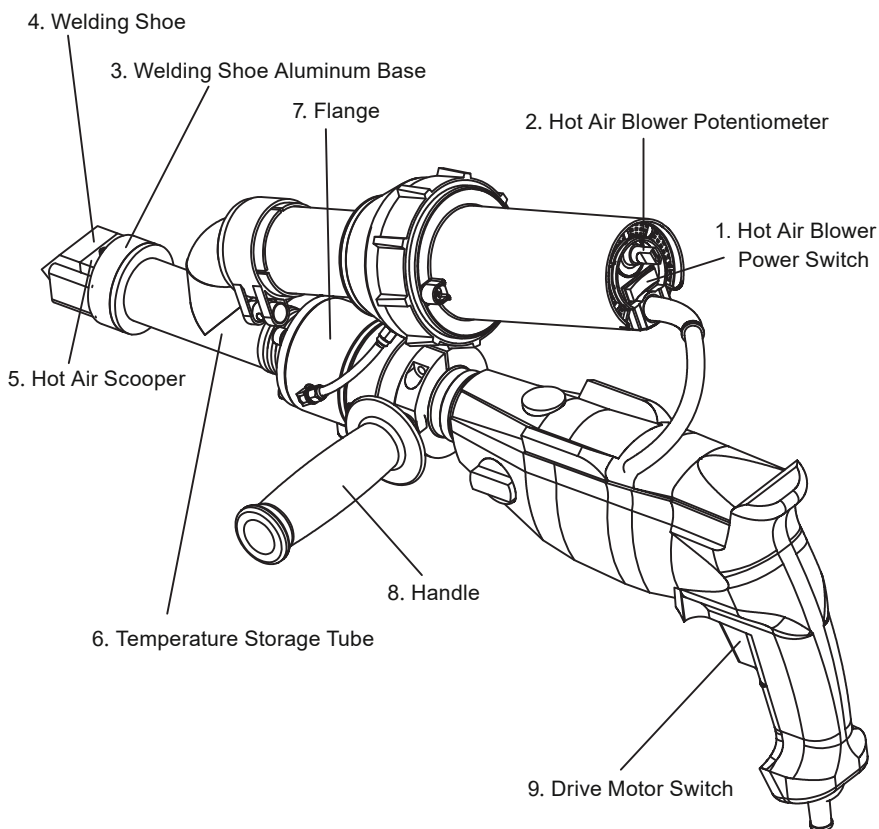
Don't direct hot air towards people or objects

Single Heating Extrusion Welder Parameter

Model	LST600E	LST600F
Rated Voltage	230 V	230 V
Frequency	50 Hz	50 Hz
Extruding Motor Power	800 W	1200 W
Hot Air Power	3400 W	3400 W
Welding Rod Heating Power	/	/
Hot Air Temperature	20 - 620 °C	20 - 620 °C
Plastic Extruding Temperature	/	/
Extruding Volume	2.0 - 2.5 Kg/h	1.8 - 2.2 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm	φ 3.0 - 4.0 mm
Net Weight	6 Kg	7.3 Kg
Size	507 x 209 x 334 mm	503 x 227 x 408 mm
Driving Motor	HIKOKI	FEIJI
Motor Overload Protection	Standard Configuration	Standard Configuration
Certificate	CE	CE
Warranty	One year	One year

Model	LST610E
Rated Voltage	230 V
Frequency	50 Hz
Extruding Motor Power	1300 W
Hot Air Power	3400 W
Welding Rod Heating Power	/
Hot Air Temperature	20 - 620 °C
Plastic Extruding Temperature	/
Extruding Volume	2.0 - 3.0 Kg/h
Welding Rod Diameter	φ 3.0 - 4.0 mm
Net Weight	6.3 Kg
Size	566 x 226 x 353 mm
Driving Motor	METABO
Motor Overload Protection	Standard Configuration
Certificate	CE
Warranty	One year

Main Parts



Single Heating Extrusion Welder Operating Steps

◆ Power on

1. Plug in.
2. Turn on the hot air blower power switch.
3. Rotate the hot air blower potentiometer to position 6-7.
4. After waiting for 9 minutes to complete the preheating, prepare to insert the welding rod.

◆ Preparation before welding

1. Clean the welding rod surface and insert it into the feeding inlet.
2. Press the drive motor switch (short contact 2-3 seconds). After repeating 2-3 times, confirm the sound of the drive motor is normal and the speed of welding rod extrusion is smooth (Extend the heating time if the sound is abnormal or welding rod is not extruded) .
3. The extruded welding rod is not soft or hard, and the smooth surface luster is the best extruding effect.
4. Start Welding.

◆ Notes for welding process

1. If the sound of the drive motor suddenly changes or the welding rod is stuck without feeding, it is necessary to immediately loosen the drive motor switch and check whether the heating temperature is normal.
2. In the case of no welding rod feeding in, immediately release the drive motor switch. Do not start the drive motor without welding rod.

◆ Turn off steps

1. The plastic in the extruder must be cleaned before the machine is turned off so as not to cause blockage and damage the extruder next time.
2. After cleaning plastic, set the hot air blower potentiometer to 0 and cool it down.
3. Turn off the hot air blower power switch.
4. Cut off the power.



Use fireproof mats



Don't direct hot air towards people or objects

Granules Extrusion Welder

Model LST620

Rated Voltage 230 V

Frequency 50 Hz

Extruding Motor Power 1300 W

Hot Air Power 1600 W

Plastic Granules Heating Power 800 W

Hot Air Temperature 20 - 620 °C

Plastic Extruding Temperature 50 - 380 °C

Extruding Volume 2.0 - 3.5 Kg/h

Plastic Granules ϕ 2.0 - 4.0 mm

Net Weight 8 Kg

Size 626 x 223 x 436 mm

Driving Motor METABO

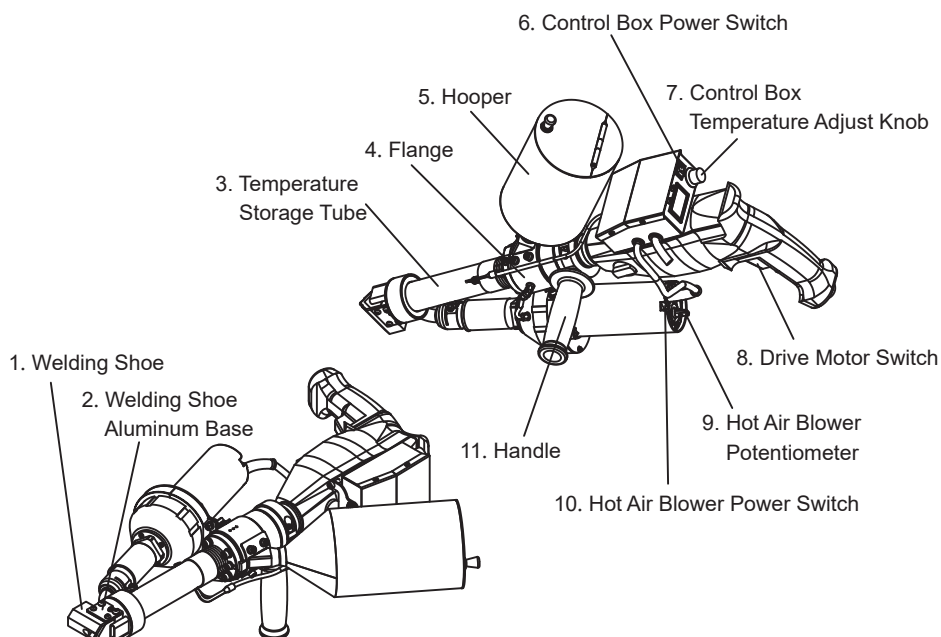
Motor Overload Protection Standard Configuration

Digital Display Extruding Temperature

Trouble Display Code Warning

Certificate CE

Warranty One year



Granules Extrusion Welder Operating Steps

◆ Power on

1. Plug in.
2. Press the control box power switch and rotate the control box temperature adjust knob to 320-350°C (Digital Display) .
3. When the digital display temperature reaches setting temperature, delay 180 seconds before starting the drive motor (Cold Start Protection) .

◆ Preparation before welding

1. Turn on the hot air blower power switch, rotate the hot air blower potentiometer to position 6-7.
2. Pour plastic granules into the hooper.
3. Press the drive motor switch and press the self-locking button, Confirm the sound of the drive motor is normal and the speed of granules extrusion is smooth (Extend the heating time if the sound is abnormal or granules is not extruded) .
4. The extruded granules is not soft or hard, and the smooth surface luster is the best extruding effect.
5. Start Welding.

◆ Notes for welding process

1. If the sound of the drive motor suddenly changes or the granules is stuck without feeding, it is necessary to immediately loosen the drive motor switch and check whether the heating temperature is normal.
2. In the case of no granules feeding in, immediately release the drive motor switch. Do not start the drive motor without granules.

◆ Turn off steps

1. The plastic in the extruder must be cleaned before the machine is turned off so as not to cause blockage and damage the extruder next time.
2. After cleaning plastic, set the hot air blower potentiometer to 0 and cool it down.
3. Turn off the hot air blower power switch.
4. Turn off the control box power switch.
5. Cut off the power.



Use fireproof mats



Don't direct hot air towards people or objects

Replacement of Welding Shoe



Scalding danger



Work only with heat-proof gloves



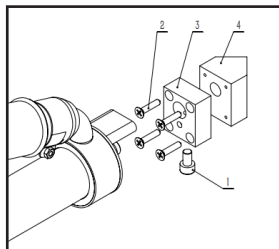
Turn off equipment and power off

• Remove

1. Remove the welding shoe PTFE (4) from the welding shoe aluminum base (3) by loosening fastening screws (2).
2. For each replacement, the residue in the welding shoe must be cleaned and the extruder nozzle must be tightened.
3. Remove the welding shoe with base from the extruder nozzle by loosening the tightening screws (1).

• Assembly

1. Welding shoe PTFE (4) must be tightened with fastening screws (2) and tightening screws (1).
2. Use the fastening screws (2) to install a welding shoe PTFE (4) on welding shoe aluminum base (3).

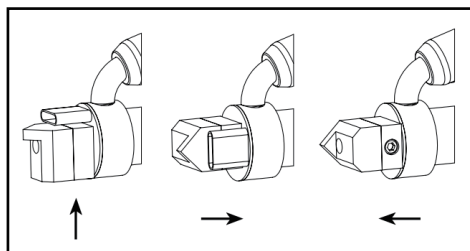


1. Tightening Screws
2. Fastening Screws
3. Welding Shoe Aluminum Base
4. Welding Shoe PTFE

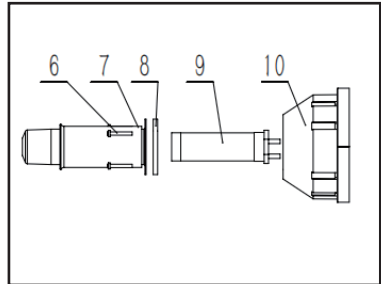
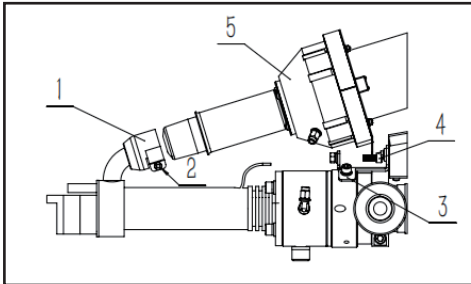
Direction of Welding Shoe

By loosening the tightening screws (1), the welding shoe (4) can be rotated to the required welding direction.

The tightening screws must be retightened.



Replacement of Heating Element



- | | | |
|-----------------------------|----------------------------|---------------------------|
| 1. Hot Air Blower Connector | 2. Long Hex Socket Screw | 3. Hot Air Blower Bracket |
| 4. Long Hex socket Screw | 5. Hot Air Blower | 6. Long Philips Screw |
| 7. Air Duct | 8. High Temperature Gasket | 9. Heating Element |
| 10. Outer Cover | | |

•Remove

Loosen the long hex socket screw (2) on the hot air blower connector (1) and the long hex socket screw (4) on the hot air blower bracket (3) to remove the hot air blower (5) from the plastic extrusion welder

Loosen the long Phillips screw (6) of the hot air blower and remove the air duct (7) and the high temperature gasket (8) from the outer cover (10)

Slowly remove the heating element (9) from the outer cover (10)

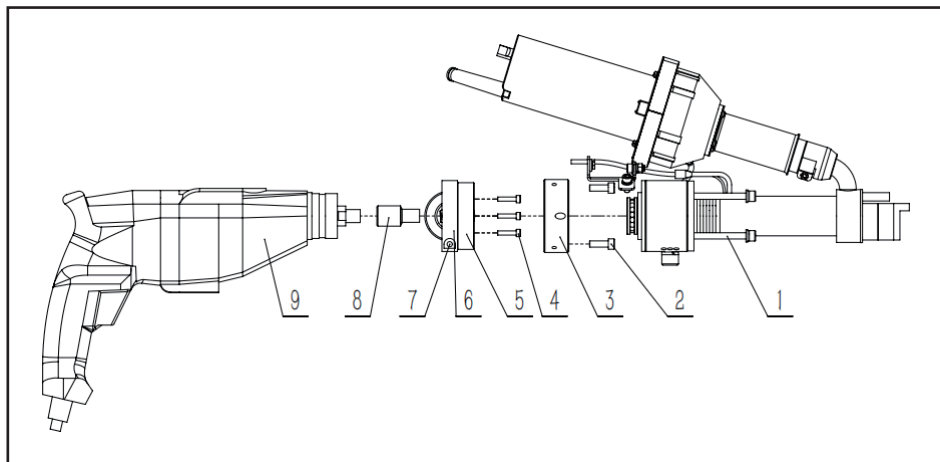
•Assembly

Install the new heating element (9) in the outer cover (10)

Cover the high temperature gasket (8) and air duct (7) in order and lock them with the long philips screw (6)

Install the hot air blower (5) in the plastic extrusion welder and fix it with the tighten long hex socket screw(2) and the long hex socket screw (4)

Replacement of Drive Motor



- | | | |
|-----------------------|--------------------------------|------------------------|
| 1. Fastening Bolt (A) | 2. Fastening Bolt (B) | 3. Thrust Bearing Seat |
| 4. Fastening Bolt (C) | 5. Drive Motor Connecting Seat | 6. Handle Fixing Ring |
| 7. Fastening Bolt (D) | 8. Connecting Nut | 9. Drive Motor |

• Remove

Loosen the fastening bolt (A) (1), remove the thrust bearing seat (3) and the drive motor (9) in order

Loosen the fastening bolt (B)(2) and remove the thrust bearing seat (3) from the drive motor connecting seat (5)

Loosen fastening bolt (C) (4) and fastening bolt (D) (7), remove the connecting seat (5) of the drive motor (9) and the handle fixing ring (6) from the drive motor (9)

Loosen the connecting nut (8) and remove the drive motor (9)

• Assembly

Error Code

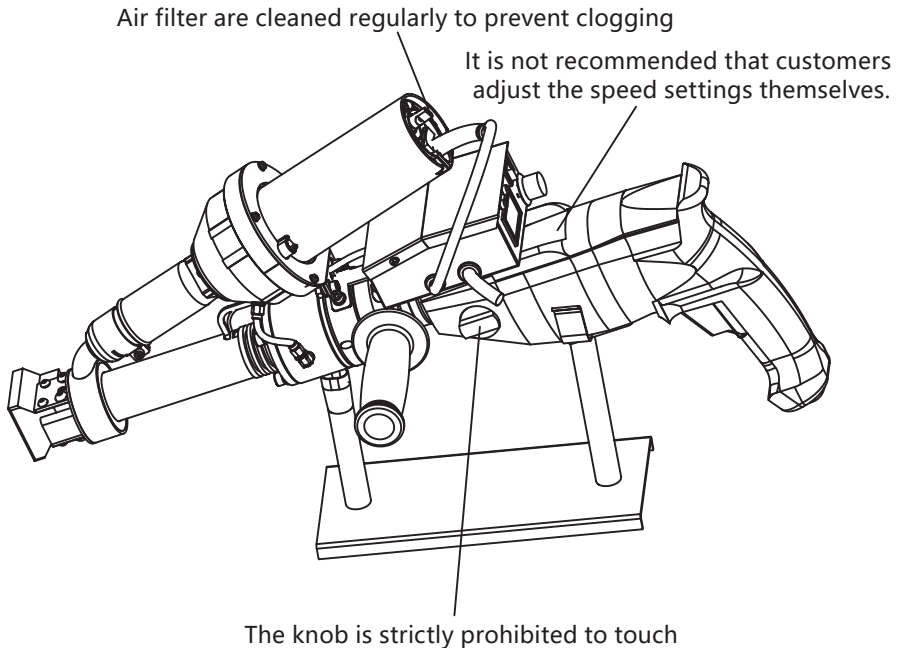
Model	Fault Phenomenon	Fault Checking
LST610A/B/C/E LST600A/B/C/E/F	Plug in without any action	Check whether the input power supply and power cord are in good condition
LST610A/B/C LST600A/B/C LST620	Hot air blower is working properly but control box display is off	Check control box switch Check fuse of control box Check high-voltage protective varistor
LST610A/B/C/E/F LST600A/B/C/E/F LST620	Hot air blower does not work but control box is working properly	Check whether the connection between the hot air blower and the control box is in good condition Check whether the hot air blower power switch is damaged Check whether the carbon brush of hot air blower motor is depleted Check whether the motor is burned out
LST610A/B/C/E/F LST600A/B/C/E/F LST620	Hot air blower does not heat up	Check whether the heating element is damaged Check whether the potentiometer of air blower is damaged
LST610A/B/C LST600A/B/C LST620	The display of the control box is normal but can not be heated	Check whether the spring heating ring is damaged
LST610A/B/C/E LST620	The drive motor fault lamp flashes slowly	The motor carbon brush is depleted and the carbon brush needs to be replaced.

Fault Code

Model	Fault Phenomenon	Fault Checking
LST610A/B/C/E LST620	The drive motor fault lamp flashes fastly	The power supply is in poor contact or the power cord is damaged
LST610A/B/C/E LST620	The drive motor fault lamp keeps on	Drive motor overtemperature problem
LST610A/C LST600A/C LST620	The control box display the error code: ER1/ER2/ER3/ER4	The spring heating ring thermocouple start alarm/have problem
LST610A/B/C LST600A/B/C LST620	Error code ER2	The spring heating ring is overtemperature
LST600A/B/C LST620	Error code ER3	Drive motor over temperature problem
LST600A/B/C LST620	Error code ER4	Drive motor temperature fault

Maintenance

Clean all parts regularly to keep the whole machine clean



- The air filter should be cleaned with a brush when soiled;
- For each replacement of welding shoe, clean the extruder nozzle and remove welding residue;
- Check power connection and plug for breakage or mechanical damage;
- The air duct should be cleaned regularly;
- Repairs can only be carried out by professional Lesite service station to ensure professional and reliable maintenance service within 24 hours according to circuit diagram and spare parts list.

Quality Assurance

- 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 quality assurance does not include damage to wearing parts (heating elements, carbon brushes, bearings, etc.), damage or defects caused by improper handling or maintenance, and damage caused by falling products. Irregular use and unauthorized modification should not be covered by the warranty.

Repairs and Spare Parts

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





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