steinel HL 1620 S Professional Heat Guns Instruction Manual

Contents

steinel HL 1620 S Professional Heat Guns

Product Information

- **Product Name:** HL 1620 S
- **Product Name:** HL 1820 S
- **Product Name:** HL 2020 E
- **Product Name:** HL 1920 E

Product Usage Instructions

1. Before using the tool, read and observe the safety warnings provided in the user manual.
2. Ensure that the tool is stored securely.
3. Only allow repairs to be done by an electrician.
4. To remove paint, soften it with the hot air tool and then scrape it off with a spatula or scraper.
5. For the HL 2020 E model, there is a residual heat indicator (number 13) that shows if the tool is still hot.
6. Refer to the technical specifications section for details about the power, weight, and other features of each model.
7. The tool can be used for various applications such as shrinking tubes and heating materials.
8. Dispose of the tool properly according to the instructions provided in the manual.

Translation of the original operating instructions

- Please familiarise yourself with these operating instructions before using this product because prolonged reliable and trouble-free operation will only be ensured if it is handled properly.
- We hope your new hot air tool will give you lasting satisfaction.

Safety warnings

Read and observe this informa-tion before using the tool. Failure to observe the operating instruc-tions may result

in the tool be-coming a source of danger.

- When using electric power tools, ob-serve the following basic safety pre-cautions to avoid electric shock as well as the risk of injury and fire. Used carelessly, the tool can start an unintentional fire or injure persons. Check the tool for any damage (mains connection lead, housing etc.) before putting it into operation and do not use the tool if it is damaged. Do not leave the tool switched on unattended.
- Children should be supervised to make sure they do not play with the tool.

First time of use

- A small quantity of smoke may occur when the tool is used for the first time. This smoke is caused by bind-ing agents released from the heater's insulating film during the first time of use.
- To let the smoke escape quickly, the tool should be set down on its standing surface. The area you are working in should be well ventilated when us-ing the tool for the first time. Any smoke coming out of the tool is not harmful!

Take the ambient conditions into account.
Do not expose electric power tools to rain. Do not use electric power tools when they are damp or in a damp or wet environment. Exercise care when using the tool in the prox-imity of flammable materials. Do not direct the tool at one and the same place for a prolonged period. Do not use in the presence of an explosive atmosphere. Heat may be conduc-ted to flammable materials that are hidden from direct sight.

Protect yourself from electric shock.
Avoid coming in contact with grounded objects, such as pipes, radiators, cookers or refrigerators. Do not leave the tool unattended while in operation.

Safety warnings

- **Store your tools in a safe place.**
  - After use, set the tool down on its standing surface and let it cool be-fore putting it away.
  - When not in use, tools must be stored in a dry, locked room out of children's reach.
  - This tool may be used by children aged 8 or above and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they are supervised or have been given instructions on how to use the tool safely and understand the hazards involved.
  - Do not allow children to play with the tool.
  - Children are not allowed to clean or carry out maintenance work on the tool without supervision.
- **Do not overload your tools.**
  - Your work results and safety will be enhanced if you operate the tool with-in the specified output range.
  - Do not carry the tool by the power cord. Do not unplug the tool by pulling on the power cord. Protect the power cord from heat, oil and sharp edges.
  - Always ensure that the blow-out tube (including in combination with mounted nozzle) is never completely covered or sealed. Damage to the heating element or motor may otherwise result.
- **Beware of toxic gases and fire hazards.**
  - Toxic gases may occur when wor-king on plastics, paints, varnishes or similar materials.
  - Beware of fire and ignition hazards. For your own safety, only use acces-sories and attachments that are specified in the operating instruc-tions or recommended or specified by the tool manufacturer.

    - Using attachments or accessories other than those recommended in the operating instructions or catalogue may result in personal injury.
- **Repairs must only be carried out by a qualified electrician.**
  This electric power tool complies with the relevant safety regulations. Repairs should only be performed by a qualified electrician. Otherwise the user may run the risk of acci-dents. If this tool's main power cord is damaged, it must be replaced by the manufacturer or its customer service department or a similarly qualified person so as to avoid hazards.
- **Residual heat indicator (HL 2020 E only)**
    - The residual heat indicator serves as a visual warning to prevent injury from direct contact with the hot nozzle outlet. The residual heat indicator also works when the tool is unplugged.
    - The indicator starts working after the tool has been in use for 90 seconds and keeps flashing until the temper-ature at the nozzle outlet has fallen below 60 °C at room temperature. The residual heat indicator does not show if the tool has been in opera-tion for less than 90 seconds. Responsibility always rests with the user and care must be taken at all times when handling hot air tools.
    - Keep these safety precautions with the tool.

Uses

Here are some of the applications you can use STEINEL hot air tools for. This selection is by no means exhaustive – no doubt you can immediately think of other examples.

- **Paint stripping:**
  Paint is softened and can be removed with a stripping knife and paint scraper to leave a clean surface.
- **Shrinking tubing on cables:**
  The shrink tubing is slipped over the section you want to in-sulate and heated with hot air. The tubing shrinks by ap-prox. 50% in diameter to give a sealed union. Shrinking is particularly fast and even using reflector nozzles. Sealing and stabilising cable breaks, insulating soldered joints, gath-ering cable runs, sheathing terminal blocks.
- **Forming PVC:**
  Sheeting, piping or ski boots can be softened and formed with hot air.
- **Lighting barbecues:**
  Gets charcoal glowing in next to no time; no more waiting.
- **Thawing:**
  Water pipes, frozen door locks, steps. Gently thaws and dries all in one go.
- **Soft soldering:**
  First, clean metal parts you want to join. Then, using hot air, heat the point you want to solder and offer up the soldering wire. Use flux or a soldering wire with a flux core to prevent oxide forming.
- **Welding and joining plastic:**
  All parts being welded must be of the same plastic material. Use an appropriate welding rod.
- **Joining sheeting:**
  The sheets are overlapped and welded together. A slit nozzle is used to direct hot air under the overlap, then the two sheets are firmly pressed together with a feed roller. Also possible: Repairing PVC tarpaulins by overlap weld-ing with a slit nozzle.
- **For your safety**

These hot air tools are doubly protected from overheating:

1. A thermostat switches the heater off if too much of the air outlet nozzle is obstructed (heat build-up). However, the blower continues to run. A warning triangle on the display tells you that the heater is switched off. Once the air delivery nozzle is clear again, the heater au-tomatically switches back on again after a few moments. The warning triangle then goes out. The thermostat may also respond after switching the hot air tool off, taking it longer than usual to reach temperature at the air delivery nozzle when it is switched on again. *
2. The thermal cut-out completely shuts down the tool if it is overloaded.

Tool description – Operation

Please note: The distance from the object you are working on depends on material and intended method of working. Always try out the airflow and temperature on a test piece first. Using the attachable accessory nozzles (see accessories page on the cover) the flow of hot air can be controlled with maximum precision. Take care when changing hot nozzles! When using the hot air tool in the selfresting position, make sure it is standing on a stable, nonslip and clean surface.

HL 1620 S

The tool is switched on and off at the two-stage switch 7 on the back of the grip handle. Airflow and temperature can be adjusted to 2 settings. Stage 1 reaches 300 °C at an airflow of 240 l/min, stage 2 reaches 500 °C at 450 l/min. This tool is intended for home use only.

HL 1820 S

The tool is switched on and off via the three-stage switch 7 on the back of the grip handle. Airflow and temperature can be adjusted to 3 settings. Stage 1 (cool air stage) reaches 50°C at an airflow rate of 100 l/min, stage 2 reaches 400°C at 300 l/min and stage 3 reaches 600°C at 500 l/min. The guard sleeve 3 detaches by means of a bayonet catch.

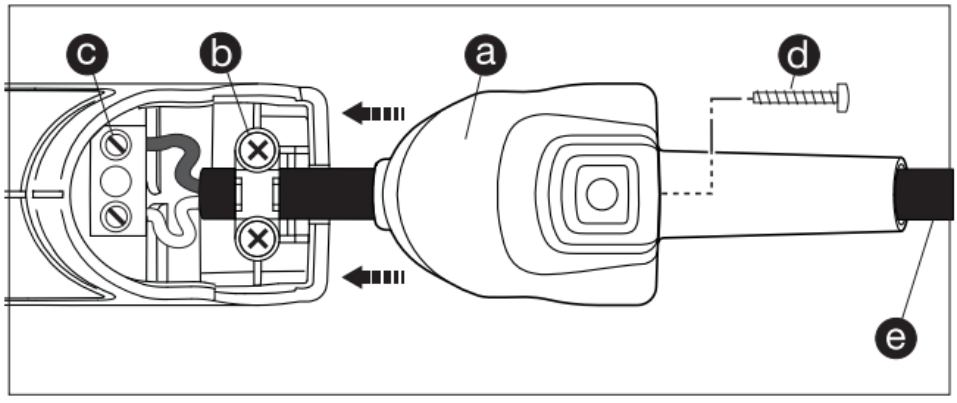
HL 1920 E

The tool is switched on and off at the two-stage switch 7 on the back of the grip handle. In addition to three-stage speed/airflow control (stage 1 is a cold-air stage at 80 °C), temperature can be continuously adjusted over a range of 80 °C – 600 °C in settings 2 and 3 at the thumbwheel 8. The numbers 1 – 9 on the thumbwheel serve as a guide only. Whereas “1” means 80 °C, the maximum temperature of 600 °C is attained at “9”. Airflow can be adjusted to the three stages of 150 / 150-300 / 300-500 l/min. The guard sleeve 3 detaches at a bayonet catch.

HL 2020 E

The tool is switched on and off at the two-stage switch 7 on the back of the grip handle. In addition to three-stage speed/airflow control at the switch 7, temperature can be continuously adjusted over a range of 80 °C to 630 °C in settings 2 and 3 at the rocker switch 9. The target temperature can be increased in 10 °C increments by pressing the right-hand “+” side of the rocker switch or reduced by pressing the left-hand “–” side of the rocker switch 9. Keeping the button pressed will continue to increase or reduce the temperature in steps of 10 °C until the rocker button is released or the minimum or maximum temperature is set. The temperature setting is shown on the display for 3 seconds. On lowering or increasing the temperature, the actual temperature is then displayed at the delivery nozzle. The °C/°F symbol flashes during this period. As soon as the selected temperature is reached, this symbol stops flashing and is displayed all the time. Blower stage 1 delivers a temperature of 80 °C. When the tool has been operating at high temperatures on blower stage 2 or 3 it will take a short while to cool to 80 °C after switching down to blower stage 1. While the tool is cooling down, the LCD display 10 shows the actual temperature at the nozzle outlet. After switching off, the tool stays in the last setting that was selected. The guard sleeve 3 detaches at a bayonet catch.

Changing the power cord (HL 2020 E only)
If the power cord is damaged, it can easily be changed without opening the casing.



1. Important! Disconnect tool from power supply.
2. Undo screw d and remove cover cap a.
3. Release cable grip b.
4. Undo mains terminals c.
5. Pull out cord e.
6. Insert new cord and secure in reverse order
   (Firmly screw down mains terminals etc.).

Tool features

1. Stainless steel outlet nozzle
2. Air inlet with lattice guard keeps out foreign matter
3. Removable guard sleeve (for places that are hard to reach)
4. Soft stand
5. soft end cap for firm standing and non-slip stationary use
6. Heavy-duty rubber-insulated power cord
7. Multiple-stage switch for adjusting airflow (2-stage/3-stage)
8. Thumbwheel for setting temperature
9. Button for setting temperature
10. LED indicator for monitoring temperature
11. Soft grip handle for comfortable operation
12. Hanging capability
13. Residual heat indicator (HL 2020 E only)
14. Replaceable mains power cord (HL 2020 E only)

Technical specifications

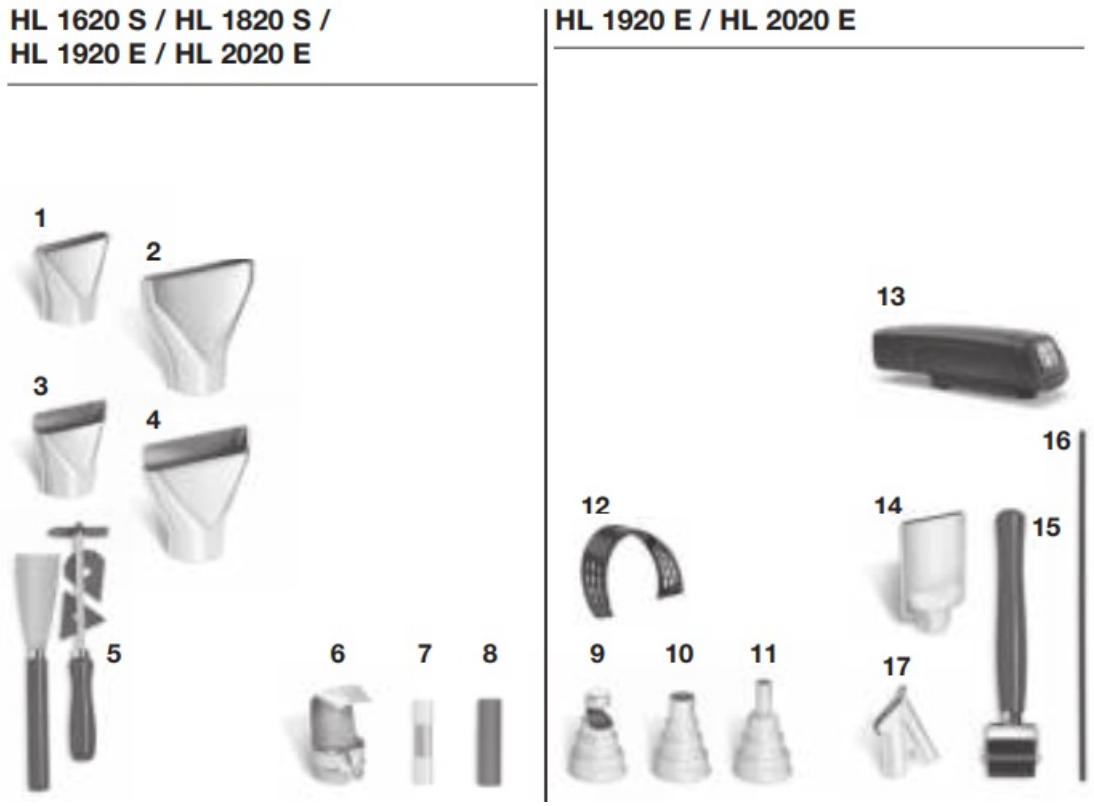
	HL 1620 S		HL 1820 S		
Voltage	220 – 230 V, 50/60 Hz		220 – 230 V, 50/60 Hz		
Output	1600 W		1800 W		
Stage Airflow rate (l/min.) Temperature (°C)	1 240 300	2 450 500	1 100 50	2 300 400	3 500 600
Temperature setting	–		–		
Temperature display	–		–		
Residual heat indicator	No		No		
Protection class (without earth terminal)	II		II		
Thermostat	–		–		
Thermal cut-out	Yes		Yes		
Emission sound pressure level	≤ 70 dB(A)		≤ 70 dB(A)		
Total vibration value	≤ 2.5 m/s2 / K = 0.08 m/s2		≤ 2.5 m/s2 / K = 0.08 m/s2		
Weight	0.670 kg		0.800 kg		
Subject to technical modifications					

	HL 1620 S		HL 1820 S		
Voltage	220 – 230 V, 50/60 Hz		220 – 230 V, 50/60 Hz		
Output	1600 W		1800 W		
Stage Airflow rate (l/min.) Temperature (°C)	1 240 300	2 450 500	1 100 50	2 300 400	3 500 600
Temperature setting	–		–		
Temperature display	–		–		
Residual heat indicator	No		No		
Protection class (without earth terminal)	II		II		
Thermostat	–		–		
Thermal cut-out	Yes		Yes		
Emission sound pressure level	≤ 70 dB(A)		≤ 70 dB(A)		
Total vibration value	≤ 2.5 m/s2 / K = 0.08 m/s2		≤ 2.5 m/s2 / K = 0.08 m/s2		
Weight	0.670 kg		0.800 kg		
Subject to technical modifications					

Guide for selecting the right type of welding rod when welding plastics		
Material	Applications	Characteristic signs
Rigid PVC	Pipes, fittings, tiles, structural sections, ind ustrial mouldings 300 °C welding temperature	Chars in the flame, pungent odour; clatterin g sound
Rigid PE (HDPE) Polyethylene	Tubs, baskets, canisters, insulating materia l, piping 300 °C welding temperature	Bright yellow flame, drips carry on burning, smells of extinguished candle; clattering sound
PP Polypropylene	High-temperature drainpipes, seat buckets, packagings, automotive parts 250 °C welding temperature	Bright flame with blue core, drips continue to burn, pungent odour; clatt ering sound
ABS	Automotive parts, equipment enclosures, c ases 350 °C welding temperature	Black, fluffy smoke, sweetish odour; clatteri ng sound

Accessories (see illustrations on the cover)

Your retailer has a wide range of accessories for you to choose from.



1. **Surface nozzle 50 mm** Prod. No. 070113
2. **Surface nozzle 75 mm** Prod. No. 070212

3. **Window nozzle 50 mm** Prod. No. 070311
4. **Window nozzle 75 mm** Prod. No. 070410
5. **Paint scraper kit Prod.** No. 010317
6. **Reflector nozzle Prod.** No. 070519
7. **Crimp connectors**
    - **Ø 0.5-1.5** Prod. No. 006655
    - **Ø 1.5-2.5** Prod. No. 006648
    - **Ø 0.1-0.5 – Ø 4.0-6.0** Prod. No. 006662
8. **Heat-shrinkable tubing**
    - **4.8-9.5 mm** Prod. No. 071417
    - **1.6-4.8 mm** Prod. No. 071318
    - **4.0-12.0 mm** Prod. No. 072766
    - **Heat-shrinkable tubing set of 3** Prod. No. 075811
9. **Soldering reflector nozzle*** Prod. No. 074616
10. **Reduction nozzle 14 mm*** Prod. No. 070717
11. **Reduction nozzle 9 mm*** Prod. No. 070618
12. **Fine dust filter** Prod. No. 078218
13. **HL-Scan** Prod. No. 014919
14. **Wide-slit nozzle*** Prod. No. 074715
15. **Feed roller** Prod. No. 012311
16. **Plastic welding rod***
    - **Rigid PVC:** Prod. No. 073114
    - **HDPE:** Prod. No. 071219
    - **PP:** Prod. No. 073411
    - **ABS:** Prod. No. 074210
17. **Welding shoe*** Prod. No. 070915

Disposal

- Electrical and electronic equipment, accessories and pack-aging must be recycled in an environmentally compatible manner.
- Do not dispose of electrical and electronic equipment as domestic waste.

EU countries only:
Under the current European Directive on Waste Electrical and Electronic Equipment and its implementation in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an en-vironmentally compatible manner.

Manufacturer’s warranty

- This STEINEL product has been manufactured with great care, tested for proper operation and safety in accordance with applicable regulations and then subjected to random sample inspection. STEINEL guarantees that it is in perfect condition and proper working order.
- The product is guaranteed for 36 months or 600 hours of operation commencing on the date of sale to the consumer. We will remedy defects caused by material flaws or manufacturing faults.

- The warranty will be met by repair or replacement of defective parts at our own discretion. This warranty does not cover damage to wearing parts, damage or defects caused by improper treatment or maintenance nor does it cover breakage as a result of the product being dropped. Further consequential damage to other objects shall be excluded.
- Claims under warranty shall only be accepted if the prod-uct is sent fully assembled and well packed complete with sales receipt or invoice (date of purchase and dealer's stamp) to the appropriate Service Centre or handed in to the dealer within the first 6 months.

Repair service:
If defects occur outside the warranty period or are not covered by warranty, ask your nearest service station for the possibility of repair.

Documents / Resources

	steinel HL 1620 S Professional Heat Guns [pdf] Instruction Manual HL 1620 S Professional Heat Guns, HL 1620 S, Professional Heat Guns, Heat Guns, Guns

References

- Steinel Group | STEINEL
- International | STEINEL