

STEINEL®

HL 2002 LE



(USA) Operator's use & care manual

Read this use & care manual before using. Keep for future reference. Save this Manual.

(F) Manuel d'emploi et de service

Ce manuel d'emploi et de service est à lire avant l'usage. Garder pour future référence. Conservez ce manuel.

(E) Instrucciones de uso y mantenimiento

Leer estas instrucciones de uso y mantenimiento antes de utilizar la pistola. Conservarlas para futuras consultas.



Listed
Hot Air Gun



UL WARNING Read this instruction book before using. To reduce risk of fire or electric shock, do not expose to rain or moisture. Store indoors. When servicing, use only identical replacement parts. When using electronic tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. This hot air gun operates at 1100° F with no visual indication of temperature (no flame). The hot airstream at the outlet nozzle will burn flesh. Do not turn on hot air gun with hand in front of nozzle. **DO NOT USE NEAR COMBUSTIBLE LIQUIDS. DO NOT USE FOR:** ● Heating gas engines ● Heating car batteries ● Thawing refrigerator equipment.

Cautions

1. This hot air gun can produce up to 1100° of flameless heat at the nozzle. Do not direct airstream at clothing, hair or other body parts. Do not use as a hair dryer.
2. Do not use near flammable liquids or in an explosive environment (fumes, gases or dust). Remove materials or debris, that may become ignited, from work area.
3. Always hold tool by plastic enclosure. The metal nozzle requires approximately 20 minutes to cool to where it can be touched. Do not touch nozzle or accessory tips until cool.
4. Do not store tool until nozzle has cooled to room temperature. Place tool in a clear area away from combustible materials while cooling.
5. Do not cut off air flow by placing nozzle too close to workpiece. Keep intake vents clean and clear of obstructions.
6. Place tool on a level surface with the support stand firmly in place when tool is not hand held. Place cord in a position that won't cause tipping.
7. Do not leave tool unattended while running or cooling down.
8. Keep a fully charged fire extinguisher nearby.
9. Do not direct air flow directly on glass.
10. Shield materials around the heated area to prevent damage or fire.
11. Use only with 120 V AC voltage.
12. Do not use in wet conditions.
13. Not to be used by children. This is not a toy and should be respected.
14. Do not use in bath or over water.
15. Safety glasses should be worn when using this tool.
16. For stripping paint, see detailed instructions in this manual.
17. It is recommended that leather gloves be worn when using a hot air gun.

WARNING!

This tool is capable of producing temperatures up to 1100° F of flameless heat at the nozzle. ALWAYS:

- Direct the heat away from yourself and others.
- Prevent ignition of combustible materials on or near the workpiece.
- Prevent blockage of intake and nozzle openings.
- Keep a fully charged fire extinguisher on hand.
- Allow the nozzle and accessory tips to cool to room temperature before storage.

**IMPORTANT SAFETY INSTRUCTIONS
READ THESE INSTRUCTIONS**

WARNING: Hidden areas such as behind walls, ceilings, floors, soffit boards and other panels may contain flammable materials that could be ignited by the hot air gun when working in these locations. The ignition of these materials may not be readily apparent and could result in property damage and injury to persons. Do not use if in doubt about this hazard. When working in these locations, keep the hot air gun moving in a back-and-forth motion. Lingering or pausing in one spot could ignite the panel or the material behind it. The hot air gun should be used on LOW temperature which is approximately at 650° F on the LED indicator.

Paint Stripping

WARNING: Extreme care should be taken when stripping paint. The peelings, residue and vapors of paint may contain lead, which is poisonous. Any pre-1977 paint may contain lead and paint applied to homes prior to 1950 is likely to contain lead. Once deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause irreversible brain and nervous system damage; young and unborn children are particularly vulnerable.

Before beginning any paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who used a paint analyzer to check the lead content of the paint to be removed. **LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED USING A HOT AIR GUN.**

Persons removing paint should follow these guidelines.

1. Move the work piece outdoors. If this is not possible, keep the work area well ventilated. Open the windows and put an exhaust fan in one of them. Be sure the fan is moving the air from inside to outside.
2. Remove or cover any carpets, rugs, furniture, clothing, cooking utensils and air ducts.
3. Place drop cloths in the work area to catch any paint chips or peelings. Wear protective clothing such as extra work shirts, overalls and hats.
4. Work in one room at a time. Furnishings should be removed or placed in the center of the room and covered. Work areas should be sealed off from the rest of the dwelling by sealing doorways with drop cloths.
5. Children, pregnant or potentially pregnant women and nursing mothers should not be present in the work area until the work is done and all clean up is complete.
6. Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often. **DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.**
7. Use caution when operating the hot air gun. Keep the hot air gun moving as excessive heat will generate fumes which can be inhaled by the operator.
8. Keep food and drink out of the work area. Wash hands, arms and face and rinse mouth before eating or drinking. Do not smoke or chew gum or tobacco in the work area.
9. Clean up all removed paint and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills and any other surface where paint or dust is clinging. **DO NOT SWEEP, DRY DUST OR VACUUM.** Use a high phosphate detergent or trisodium phosphate (TSP) to wash and mop areas.
10. At the end of each work session put the paint chips and debris in a double plastic bag, close it with tape or twist ties, and dispose of properly.
11. Remove protective clothing and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.

SAVE THESE INSTRUCTIONS

Double Insulated Tools

Tools marked with the words "Double Insulated" are equipped with a two prong plug. These tools have a special insulation system that complies with applicable standards of both Underwriter's Laboratories, Inc. and Canadian Standard Association. They do not require grounding.

Extension Cords

Double insulated tools, like this one, have two prong cords and can use either a two or three prong extension cord. As the distance from the supply outlet increases, however, heavier gauge extension cords are required.

The use of extension cords of

inadequate size wire causes a serious drop in voltage and loss of power. Protect the cord from damage. Keep cords away from excessive heat, sharp edges and damp or wet areas. Repair or replace damaged extension cords before using.

| Ext. Cord Length | Wire Size |
|------------------|-----------|
| 40 Ft. | 16 |
| 85 Ft. | 14 |
| 100 Ft. | 12 |
| 170 Ft. | 10 |
| 270 Ft. | 8 |
| 400 Ft. | 6 |
| 650 Ft. | 4 |

Limited Warranty

Steinel America, Inc. (the Company) warrants to the original end-user purchaser (the Purchaser) that its HL 2002 LE Hot Air Gun (the Product), if properly operated and maintained, and used under normal conditions, shall be free from defects in workmanship and materials for a period of one (1) year from the date of purchase. The obligation of the Company, and Purchaser's SOLE AND EXCLUSIVE REMEDY hereunder, shall be limited to one of the following, at the Company's option:

(01) The repair or replacement of the Product.

(02) In the event the Company is unable to repair or replace the Product, the Purchaser shall be entitled to a refund of the purchase price paid for the Product.

The Company shall have no obligation under this Limited Warranty for ordinary wear and tear of the Product, or if the Product is modified by any other person or organization.

Warranty performance procedure

In the event the Purchaser believes the Company may be responsible for the performance of any warranty obligation, the Purchaser should send the Product; a brief written description of the defect; and a statement specifying the date the Product was purchased, where it was purchased, and the amount of the purchase price, postage prepaid, to the Company.

The Company will inspect the Product within thirty (30) days after it receives the Product and the requested information. If the Company determines that a defect covered by this Limited Warranty exists, within thirty (30) days after the inspection, the Company or a party designated by the Company, will attempt to make repair or replacement of the Product. If this is not possible, a refund of the purchase price paid for the Product will be paid to the Purchaser.

Disclaimers of warranties

The warranties contained herein are expressly in lieu of any other expressed or implied warranties, or any other obligation on the part of the Company. Any implied warranty of merchantability or fitness for a particular purpose shall expire one (1) year after the date the product is purchased by the original end-user Purchaser. Any models, drawings, plans, specifications, affirmations of fact, promises, or other communications by the Company with reference to the performance of the product are solely for the convenience of the Purchaser and shall not in any way modify the expressed warranties and disclaimers set forth herein. The Purchaser acknowledges it is purchasing the Product solely on the basis of the commitments of the Company as expressly set forth herein. No agents or other parties are authorized to make any warranties on behalf of the Company or to assume for the Company any other liability in connection with the Product. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Consequential damages

The Company shall not be liable for any incidental or consequential damages arising from the use of the Product by the Purchaser, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between the Company and the Purchaser.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Limitation of actions

Any action resulting from the breach of any warranty contained herein by the Company must be commenced within one (1) year after the cause of action accrues. In no event shall the Company's total liability for any or all breaches of any warranty exceed the actual purchase price of the Product.

Other rights

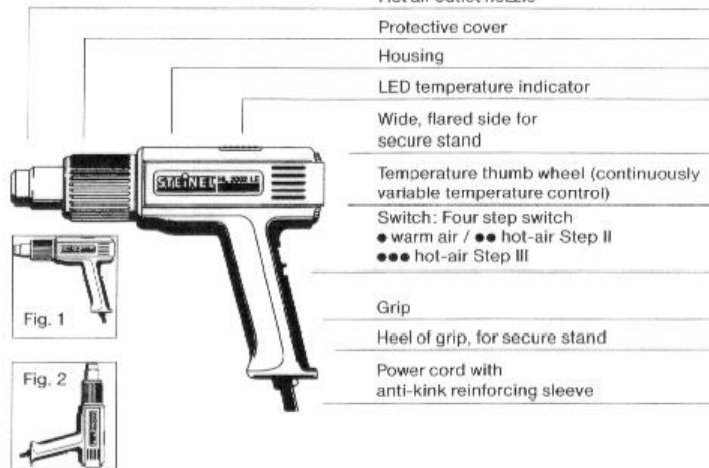
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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Operating Instructions HL 2002 LE



To operate the Steinel HL 2002 LE hot air gun, plug the cord into a 120 V a. c. power source. Be sure the power switch is in the OFF position.

The HL 2002 LE has a four position power switch (see "switch" above). Be sure the unit is pointed away from yourself and materials before turning the unit on.

The temperature can be adjusted by rotating the thumb wheel on the rear of the unit. Number 1 is 120° F and number 15 1100° F. The LED indicators on the top of the unit indicate the approximate temperature of the output air flow. PLEASE NOTE: that the temperature cannot be adjusted when using the warm air switch position.

The air flow can be adjusted to a low flow, step II; and high flow, step III.

The unit may be used in a hand held position (Fig. 1) or in a hands free, upright position (Fig. 2) on a flat level surface. When using the unit in the upright position, be sure the cord is placed in such a position that it will prevent tipping the hot air gun over, pulling the hot air gun off the work surface or causing tripping over the cord.

The hot air gun provides a low velocity stream of hot air providing rapid heating for applications such as stripping paint, thawing frozen pipes, forming plastics, soldering copper pipe and applying heat shrinkable tubing. The proper amount of heat for each application is dependent upon temperature range selected distance between nozzle and workpiece and length of time heat is applied. The recommended procedure is to experiment with scrap materials and start with lowest temperature range. Use care in approaching the work until the proper combination of heat, distance and time of application has been obtained. It is generally best to use a gentle back-and-forth motion when applying heat unless it has been determined that a concentrated heat is desirable.

Technical Specifications

Voltage: 120 volts AC

Output: 1500 watts
















Temperature: Step 1: 120° F
Step 2: (120° F - 1100° F)

Indicator range: (6 LEDs): 120° F 210° F
360° F 650° F 850° F 1100° F




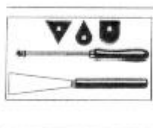



Air flow: Step 1: 9.5 cfm, Step 2: 9.5 cfm
Step 3: 17.6 cfm

Weight: 30 oz. with cord and plug

Accessories For Specific Tasks

| Description | | For use with | | | | | Part-No. |
|---|------|--------------|-----------|------------|-----------|-----------|----------|
| | | HG 3000 BLE | HG 2000 E | HL 5000 LE | HL 1800 E | HL 1500 S | |
|  Surface nozzle Provides an even air distribution on large surfaces. | 2" | ● | ● | ● | ● | | 07011 |
| | 3" | ● | ● | ● | ● | | 07021 |
|  Window nozzle Nozzle with reflector to direct air flow away from the glass to the flame. | 2" | ● | ● | ● | ● | | 07031 |
| | 3" | ● | ● | ● | ● | | 07041 |
|  39 mm (1-1/4") Reflector nozzle Reflects heat around a surface such as soldering copper pipe, bending PVC pipe, and heat shrink tubing. | | ● | ● | ● | ● | | 07051 |
|  Reduction nozzle Provides a totally concentrated pin point air flow. | 3/8" | ● | ● | ● | ● | | 07062 |
| | 5/8" | ● | ● | ● | ● | | 07071 |
| | 3/4" | ● | ● | ● | ● | | 07081 |
|  Plastic welding nozzle For working with flexible plastic welding wire. To be used with item 07060. | | ● | ● | ● | ● | | 07091 |
|  Plastic welding rod nozzle Provides concentrated air flow to melt plastic welding rods. To be used with item 07060. | | ● | ● | ● | ● | | 07201 |
|  30 mm (3/4") Slit nozzle For lap welding plastic materials. To be used with item 07060. | | ● | ● | ● | ● | | 07101 |
|  75 mm (3") Heat disc Teflon coated disc for heating PVC pipe for butt welding. To be used with item 07070. | | ● | ● | ● | ● | | 07211 |
|  Styrofoam cutting blade (5" Long) For making a clean cut in styrofoam. To be used with item 07060. | | ● | ● | ● | ● | | 07221 |
|  75 mm (3") Reflector nozzle Reflects heat around a surface such as soldering copper pipe, bending PVC pipe and heat shrink tubing. | | ● | ● | ● | ● | | 07301 |
|  14 mm (5/8") Reflector nozzle Specially designed tip to provide efficient and quick heat to solder sink wire connectors. | | ● | ● | ● | ● | | 07461 |
|  40 mm (1-1/2") Split nozzle For lap welding PVC sheeting and roofing material. To be used with item 07070. | | ● | ● | ● | ● | | 07471 |
|  9 mm (3/8") Reflector nozzle For small diameter shrink tube applications. | | ● | ● | ● | ● | | 07061 |
|  40 mm (1-1/2") Angle slit nozzle Specially designed angle slit nozzle for efficiently lap welding single ply roofing materials. | | ● | ● | ● | ● | | 07511 |
|  Wire protection tube for hot air gun nozzle | | ● | ● | ● | ● | | 07401 |

USA
Accessories Cont'd

| | Description | Part-No. | |
|---|---|---------------------------------|-------|
|  | Plastic welding rods HDPE | 07121 | |
| | Rigid PVC-welding-rods | 07311 | |
| | Flexible PVC-welding-rods | 07321 | |
| | Plastic welding rods LDPE | 07331 | |
| | Plastic welding rods PP | 07341 | |
| | Plastic welding rods ABS | 07421 | |
| | Shrink tubes 50 pcs. ø 2.4 – 4.8 mm* (3/32" – 3/16") | 07131 | |
| | Shrink tubes 30 pcs. ø 4.8 – 9.5 mm* (3/16" – 3/8") | 07141 | |
|  | *Diameter before shrinking | | |
| | Metal carrying case (for all models) | 01481 | |
| |  | Paint scraper set 5 pcs. | 01031 |
| | | | |
|  | Spare blade set | 01571 | |
| | with 3 spare blades | | |
|  | Paint scraper handle | 01331 | |
|  | Paint scraper 57 mm blade with extra-long handle and hard, grinded blade for professional use | 01341 | |
|  | Feed roller For edging tape and PVC sheeting | 01231 | |

Hints on Hot Air Gun Uses

Forming and shaping

plastic materials

- Soften PVC pipe and other plastic materials for bending and shaping
- Soften vinyl floor coverings and around mouldings
- Soften formica coverings for shaping on rounded edges

Soldering

- Soldering copper pipe up to 3/4". Can use 90/10 solder
- Activate solder and wire connectors

Drying

- Quick drying of automotive body fillers
- Drying paint samples
- Drying plaster filling compounds

Thawing

- Thaw frozen water pipes
- Thaw frozen locks

Shrinking

- Shrinking shrink tube insulators
- Heat shrink PVC tubes
- Heat shrink packaging wrap

Roofing

- Heating modified bitumen
- Welding single ply material

Removal of adhesives

- Activating heat sensitive adhesives
- Removal of pressure sensitive stickers
- Removal of flooring adhesives

Other Uses

- Fiberglass work
- Wax removal on skies and surfboards
- Apply hot patches
- Paint stripping
- Softening hardened window glazing
- Plastic welding

CAUTION:

It is recommended that the user experiment on scrap materials before using for a specific task.