

Little Helios

Use Instructions Portable *Barrel Burner*

Warranty

GEI Works warrants these products against defects in material and workmanship under normal use and service for a period of six months.

GEI Works' obligation under this warranty is limited solely to repairing or replacing parts, which in its judgment are defective in material and/or workmanship. We shall not be liable for expenses incurred in repairs or alterations made outside our manufacturing facilities in the USA or licensed dealer locations without our prior authorization, nor shall we be responsible for the performance of this product to which any revisions or alterations have been made by others. We shall not be, in any event, liable for damages or delays, nor for any consequential, special, or contingent damages for breach of warranty.

To validate the warranty, it is necessary to fill out and return the warranty registration form located at the end of this manual upon receipt of the unit, along with the proof of purchase. All returns are subject to GEI Works Terms and Conditions, which can be viewed at www.erosionpollution.com/policies.html.

This manual contains information on the operation and maintenance of the Little Helios for drug and trash disposal. All data in this publication is based on latest product information.

GEI Works reserves the right to make changes at any time without notice and without incurring any obligations. If you encounter a problem or have questions about your GEI Works equipment, please call our customer service team at (888) 703-9889 or (+1) 772-646-0597.

GEI Works products are designed to provide safe and dependable service when operated according to instructions. It is important to read and understand this manual before operating this system. Failure to do so may result in personal injury or equipment damage.

ALWAYS VERIFY WITH LOCAL, STATE, and DEQ REGULATORS FOR CONDITIONS OF USE.

This portable burn unit is designed to safely, economically, and effectively dispose of materials. Often used as an alternative to an open pit, it provides a controlled, contained area where products can be safely burned and disposed. Law enforcement often uses these units to safely dispose of drugs and confiscated materials.



Helios

Principles of Combustion

Combustion (burning) is defined as a series of chemical reactions that result from interaction between a fuel and an oxidant. This process results in heat and light being generated.

For this process to work correctly, fires lit within a burner require both fuel (logs, paper, etc.) and oxygen. Please make sure that fires have time to form and are not smothered by the addition of too many products at once.

We recommend the first batch of material be placed in the barrel after the fire is built up, and that the air flow controls are set no higher than 10%. Introduce air gradually: It is important not to introduce too much air into the chamber by turning up the blowers more than 10% before burning batched materials. If there is sufficient

Little Helios

Use Instructions Portable *Barrel Burner*

temperature to initiate combustion, adding air too rapidly may cause a combustion flash that can damage the unit or cause bodily harm. Damage to the unit from such a volatile ignition of gases is not covered under the limited warranty.

It is recommended that you place progressively larger loads into the burner over time (intermittent feeding) to ensure best results. Batch loading of your entire load

is not recommended. Introduce batches in two stages. The initial batch can consist of up to three boxes of combustible material at a time. Each box or bag should be no larger than 11.5 inches long x 8.75 inches wide x 5 inches tall.

All remaining batches should consist of only one box, loaded at a minimum of 15 minutes apart.



Assembled unit includes the stainless steel drum, cart, blower, lid, controls, hopper and air hose.

Other included items:

- Stirring rod
- Multipurpose lighter
- Charcoal starter
- Heat protection gloves
- Cord strap
- Portable GFCI plug
- Lid and clamp
- Evidence disposal boxes

Little Helios

Use Instructions Portable *Barrel Burner*

Required Accessories (not included)

- Appropriate personal protection equipment
- GFI-equipped extension cord
- Wood, charcoal and/or newspaper (for fuel)
- Fire extinguisher
- Trash receptacle for ash
- Water to cool ashes prior to disposal

Hopper Assembly

1. Remove the lid clamp and lid from the unit.
2. Unscrew the four screws on the lid around the lid door.
3. Align the pre-drilled holes on the hopper with the holes around the lid door.
4. Bolt the hopper to the lid.

Note: Once the hopper is installed, it is designed to remain on the unit.



Little Helios

Use Instructions Portable *Barrel Burner*



Safety Precautions

1. Thoroughly and completely read all instructions before beginning a burn cycle.
2. Always wear suitable protective eyewear and gloves during the entire burn cycle. **STOKE THE UNIT ONLY WITH THE PROVIDED ROD, AND ONLY THROUGH THE STOKE-HOLE, not through the loading door.**
3. Have a fire extinguisher and a water hose (water turned on and nozzle in the “off” position) ready and within reach.
4. Do not touch the drum or lid during a burn cycle; the unit is hot! Always wear thermal gloves to protect hands when near the unit. Be cautious with flammable or heat-sensitive clothing such as polyesters that may melt in close proximity to the unit.
5. Make sure the unit is on a flat, even surface at least 10 feet from surrounding products or buildings, in an open, well-ventilated area. Do not place the burner on any flammable or combustible surface or material.
6. Avoid direct contact with the unit, including clothing or other materials that may burn.
7. Do not burn any extremely flammable items (e.g., aerosol cans) or place the unit near any kind of flammable gases.
8. Select a site at least 10 feet from surrounding plants, vegetation, or buildings. The bottom of the unit gets very hot; it is best if the unit rests on a surface not prone to heat damage, such as gravel or concrete.
9. Connect the Barrel Burner to an electrical source. Connect the unit directly to a GFI/GFCI outlet. If the outlet is not GFI equipped, connect the unit to an outlet through a GFI-equipped extension cord. Units are built standard with a 110-volt requirement (220 volt is available as an option).
10. Position the unit. It is best if the drum is downwind and all remaining parts (including the operator) are upwind.

11. Note: Before starting any fire within the unit, you will also want to make sure the air blowers are in the OFF position.



WARNING: This product is not intended for use with any materials containing such liquids as gasoline or paint thinners. Materials should have a flash point higher than 100° Fahrenheit.

Little Helios

Use Instructions Portable Barrel Burner

Burn Cycle Procedure

1. Place fire-starting material into the drum. This may include wood or charcoal. Wads of paper may also be added to initiate the burning process. GEI recommends that if you are using charcoal to start the unit, do not use more than half a pound (0.5 lbs.). The charcoal should not contain pre-lighter fluids or compounds. Operating the unit above 1,500 degrees Fahrenheit may damage the unit.
2. Light the startup materials. Ensure there is a significant flame before you add more air or burning materials (Figure 1). (See combustion principles, pages 1 and 2.)
3. Place the lid on the unit and secure the clamp around the rim. A lid-clamp is included with your Little Helios. Place the head on the drum and then secure the clamp around the lid. When in place, the lid will fit securely on top of the drum (Figure 2).
4. Use the switch (Figure 4) to start the back blowers. This will add an air supply to the fire to help increase the flame. Fire may burn for a while until it reaches operating temperature of 400 degrees Fahrenheit.
5. Use the air control (Figure 5) to lower the air supply. Once the operating temperature is at 400 degrees (Figure 5), lower the air supply to just above the starting position, but not completely off. Failure to reduce air flow into the drum may cause burning material to blow out of the opening during loading.

To avoid personal injury, DO NOT LOAD with air controls above 10% or at the “off” position.

6. Feed the materials into the unit through the hopper on top of the drum. The hopper door will start in the closed position and can be lifted open (Figure 6). Please take care to wear gloves and use appropriate feeding materials during this process. *Again, be cautious with flammable or heat-sensitive clothing fabrics.* Place materials into evidence disposal boxes (provided with unit, additional replacements are available for re-order) before placement in the unit. Charge loads containing glass vials, plastics, prescription bottles, plastic wrap, and other non-organic materials are likely to burn hotter than other materials. Remove these items when possible.

The initial charge (loading of the unit) should be not more than three boxes. Add the first set of boxes with the air control reduced to 10%. Tilt the lid of the charging port down and add the boxes one at a time until all three have been added.

Take care to observe if the fire is shooting up through the vent and the charging port, or if the temperature exceeds 1500 degrees Fahrenheit. If this is the case, DO NOT ADD more material until the temperature is below 1500 degrees and flames have diminished. Once the initial charge has been made, move to the air controls and slowly increase the air supply to the unit until it is directing 100% of the air into the unit.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

After the initial charge of burn material, you may add material every 15 minutes, one box at a time until all waste material has been added.

Little Helios

Use Instructions Portable *Barrel Burner*

Stoking the Fire

Stoke the chamber to ensure there is no buildup of ash inhibiting waste destruction. To access the stoking port, flip up the thermometer while wearing gloves. Be sure to stoke using only the provided stoking rod through the stoking port. You can do it every 10-20 minutes or as needed to maintain temperature.



Ending the Burning Process

To determine whether or not the burning process is complete, observe the burn progress through the porthole or insert a stir rod. The following observations indicate an end to the burn:

- The rod is able to reach the bottom of the barrel without encountering any objects.
- The temperature is below 200 degrees Fahrenheit
- If only portions of the items are still burning, you can break it up by stirring with the rod to speed the process. When stoking the fire, do so **ONLY** through the stoke-hole provided and not through the loading door. Stoking through the load door can introduce too much oxygen at once and cause a combustion flash, resulting in personal injury.



Ash Disposal & Maintenance

After the unit has completely cooled down, remove the lid and turn the drum on its side to empty the remaining ash content. Wet the ash content carefully with water (outside the barrel) to cool it before placing it into a receptacle for proper disposal.



Make sure to follow proper application and use of the unit, burning only chemical and organic materials that are non-hazardous (i.e., no heavy metals, batteries, fuels, etc.). Metal sharps may be present in the ash, as the unit does not reach temperatures high enough to destroy them completely. Introducing metal into the waste stream is not recommended.

To keep the unit operating at peak condition, perform a periodic inspection for loose screws or nuts on the lid, as well as debris and dust buildup in the filter. Filters may need replacement over time. Contact us or your local distributor for replacement filters pricing and availability.



After the burn cycle is fully complete, please allow the unit to cool down before touching any clamps or the charging port. Continue to use gloves when removing the lid.

Little Helios Warranty Registration

Please fill out the following information and mail it to:
GEI Works, Inc., PO Box 780928 Sebastian, FL 32978. Or you
may email a scanned copy of this page to info@geiworks.com.

Customer Information:

First Name: _____ Last Name: _____

Email: _____

Company: _____

Address (Street): _____

Address (City/State/Zip): _____

Model Number: _____

Purchase Price: _____

Purchased From: _____

Date Purchased: _____

Attached Proof of Purchase: Paid Invoice Receipt:

Quote Number: _____

Type of Use: Private Use Commercial Use

What will be the main use for this unit?: _____

This unit is designed for controlled burning and should be operated according to the exclusion below:

CFR 40 60.2887 (p) "...Your incineration unit is excluded if the unit is owned or operated by a government agency such as police, customs, agricultural inspection, or a similar agency to destroy only illegal or prohibited goods such as illegal drugs, or agricultural food products that can not be transported into the country or across State lines to prevent bio-contamination. The exclusion does not apply to items either confiscated or incinerated by private, industrial, or commercial entities..."

ALWAYS VERIFY WITH LOCAL, STATE, and DEQ REGULATORS FOR CONDITIONS OF USE.

The logo for Helios, featuring the word "Helios" in a sans-serif font. The letter "o" is stylized as a red circle with a white outline, and a small flame icon is positioned above the "i".

550-2016-06-1

Toll Free: 1-888-703-9889 | Phone: (+1) 772-646-0597 | www.geiworks.com | info@geiworks.com