



**INSTALLATION/ MAINTENANCE/
TROUBLESHOOTING**
SR-12, SR-110



For questions or assistance call:

1-866-ECOJOHN

INTRODUCTION

READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING YOUR ECOJOHN™ SR. ECOJOHN™ Sr is a fully automatic and environmentally friendly toilet. Through an incineration process the waste gets burned by use of Propane - the only remains will be a small amount of sterile ash. Maintenance and emptying of ash only needs to be done a few times a year. The toilet is intended to burn solid waste, urine, and paper.

There are two Sr models:
Sr-12 Runs on 12V DC
Sr-110 Runs on 110V AC

HOW TO OPERATE THE TOILET

The Sr model is equipped with a circuit card that controls all of the functions of the toilet and ensures that the incineration process starts up and finish automatically. It will also signal if anything would be wrong with the toilet i.e. out of Propane.

The operation of this unit is hence similar to a regular toilet.

1. After usage, close lid
2. Press correct flush button (urine or waste)
3. Done.

After flushing, an auger will move the waste into a special burn chamber. It will automatically ignite and start the incineration process. When the process is complete, a display panel shows that cycle is complete.

INSTALLATION

The Sr toilet is very easy to install. First install the vent system, then the power and Propane. The unit comes equipped with a standard 8 ft chimney system. The chimney system includes pipes, flashing, storm collar, roof support, firestop, and chimney cap.

EQUIPMENT & MATERIALS

| | |
|-------------------------------------|----------------|
| Hammer | Drill |
| Caulking Gun | Plumb Bob |
| Screwdriver (Phillips and Standard) | Tin Snips |
| Saber or Keyhole Saw | Level |
| Dependable Litter | Tape Measure |
| Proper Gloves and Shoes | Eye Protection |

Materials You May Need:

| | |
|---------------------------------|---------------|
| 500°F RTV Silicone Sealant | 8 Penny Nails |
| #8, 2-1/2" & 1-1/2" Wood Screws | Roofing Nails |

STEP-BY-STEP INSTALLATION INSTRUCTIONS

1. **Place ECOJOHN™ Sr:** Position ECOJOHN™ Sr according to the installation instructions. The flue outlet collar should be placed between the rafters or joists above, if possible.
2. **Frame Support Opening:** Drop a plumb bob to the center of Sr's flue outlet and mark this center point on the ceiling. Cut a hole in the ceiling for the Firestop or Firestop Radiation Shield.
3. **Install Support:** For installation into a flat ceiling, you may use a Firestop.
4. **Frame Openings:** Frame opening in ceiling. The opening is to hold the Firestop Radiation Shield and Attic Insulation Shield.
5. **Cut Roof Opening:** Cut an opening in the roof directly above the opening below, and at least 4 inches larger than the chimney's outside diameter to provide at least a 2-inch clearance all around the chimney. The chimney must be centered within the opening and maintain the 2-inch clearance to combustibles.
6. **Install Firestop Radiation Shield:** A Firestop Radiation Shield is required in multistory installations at each floor penetration above that the Firestop is located. Note: a Firestop Radiation Shield is not installed where the chimney penetrates through the roof. The Firestop Radiation Shield is installed on the underside of the ceiling.
7. **Assembly Chimney Sections:** Lower the female end of the first Chimney Section in the Support Box (if you use one). It will twist-lock clockwise onto the male end of the Support Box. Turn Pipe Sections firmly clockwise to lock them together. Sheet metal screws are not required, but they may be used to reinforce the connection, if desired. Use only 1/2" (or shorter) sheet metal screws. Do not penetrate the inner liner of the chimney.
8. **Install Attic Insulation Shield:** Install the Attic Insulation Shield where the chimney passes into an attic. Its purpose is to prevent debris and insulation from getting too close to the chimney. If the chimney passes into the attic, install the Attic Insulation Shield as follows:
 - a. If the Firestop Radiation Shield extends above the attic floor, no modifications are necessary. The Firestop Radiation Shield will fit inside the Attic Insulation Shield.
 - b. Assemble Chimney Sections until at least 18 inches of chimney extends above the Firestop Radiation Shield.
 - c. Extend the Firestop Radiation Shield tube extension, and secure in place using sheet metal screws.
 - d. Slip the Attic Insulation Shield over the Chimney and Firestop Radiation Shield until the base sits squarely on the framed opening.
 - e. Secure the Attic Insulation Shield to the top of the framed opening.
9. **Attach Flashing:** In new constructions, assemble the Chimney Sections to a point above the roof, then slip the Flashing before extending the chimney above the roof. Allow space to permit sliding the next Chimney Section up through the Flashing. Always insure the chimney remains vertical (use level), and that at least a 2-inch clearance to combustible materials is maintained all around. Install the upper edge of the Flashing under the roofing. Nail to the roof along the upper edge of the Flashing. Be sure to follow local building practices, as needed. Seal all nail heads with a non-hardening waterproof sealant. Do not put screws through the Flashing into the Chimney Pipe.
10. **Finish Top:** Apply a high-temperature (500°F), non-hardening waterproof sealant around the chimney at the point where the Storm Collar will meet the chimney just above the Flashing. Slide the Storm Collar down over the chimney to the top of the Flashing.

Tighten and seal the Storm Collar against the sealant. After installing sufficient Chimney Sections to meet the height requirement, attach the Chimney Fan and Chimney Cap onto the top of the chimney by holding the collar of the cap and twist locking it clockwise onto the chimney. Use an Extended Roof Bracket if the chimney extends more than 5 feet above the roof.

11. **Connect Toilet to Chimney:** Use the Connector Clamp to secure the Chimney Section with the Pipe coming up from the toilet. Tightening it with a screwdriver.
12. **Add Insulation:** Surround the Connector Clamp with insulation.
13. **Connect Cover Clamp:** Connect the Cover Clamp so it covers the insulation around the Connector Clamp. **CHIMNEY INSTALLATION IS NOW COMPLETE**
14. **Connect the Power:** Connect two 12V DC batteries or two transformers for 110V AC.
15. **Connect Propane:** Connect your Propane connection.
16. **Do a Leak Test:** Before starting up the unit, you must do a leak test. Use soap and water to create bubbles. Add the bubbles to Propane connections and copper tubes to determine any possible gas leak. **INSTALLATION IS NOW COMPLETE AND THE TOILET IS READY FOR USE.**

CLEANING & MAINTENANCE

Exterior Cleaning

Clean the surface area with a damp towel. Use mild cleaning detergent or non-abrasive detergent.

Interior Cleaning

To keep the auger and bowl clean the toilet is equipped with a special rinse feature. By pressing a red button on the side of the toilet, water will get rinsed in the bowl. A water reservoir that holds 0.25 gallon of water is located under the bowl. Clean the toilet bowl periodically with a standard commercial toilet cleaner.



WARNING!

- Never use flammable cleaning detergent when cleaning ECOJOHN™ Sr.

REMOVAL OF ASH

- The removal of ash of ECOJOHN™ Sr should be done when refilling the Propane cylinder (5.0 gallon cylinder).
- In order to avoid burns - wait at least 5 hours after the last burn cycle or usage before attempting to remove the ash.

To clean the burn chamber, follow these steps:

1. Disconnect the Propane and the Power.
2. Disconnect Chimney Cover Clamp.
3. Remove Insulation.
4. Disconnect Connector Clamp.
5. Free Sr from Chimney System (move it sideways).
6. Remove Top Toilet Lid.
7. Remove Cover Plate on top of Burn Chamber.
8. Remove Insulation.
9. Unscrew Cleaning Lid located on the top of the Burn Chamber **or** unscrew three screws on top of the Burn Chamber, disconnect Power Connection, and lift the Burner up.
10. Use a Wet/Dry Vacuum, such as ShopVac, to clean up the remaining ash inside the burner.
11. Close Cleaning Lid **or** reattach the Burner, connect Power Connection, and tighten the three screws.
12. Add Insulation.
13. Add Cover Plate on top of Insulation and Burn Chamber.
14. Reattach Top Toilet Lid.
15. Push Sr back underneath the Chimney System.
16. Connect the Connector Clamp.
17. Add Insulation.
18. Connect Chimney Cover Clamp.
19. Connect the Propane and Power.
20. DONE

Figure 1. A picture showing how sterile ash can be cleaned out from the burn chamber



Figure 1.

SPECIFICATIONS

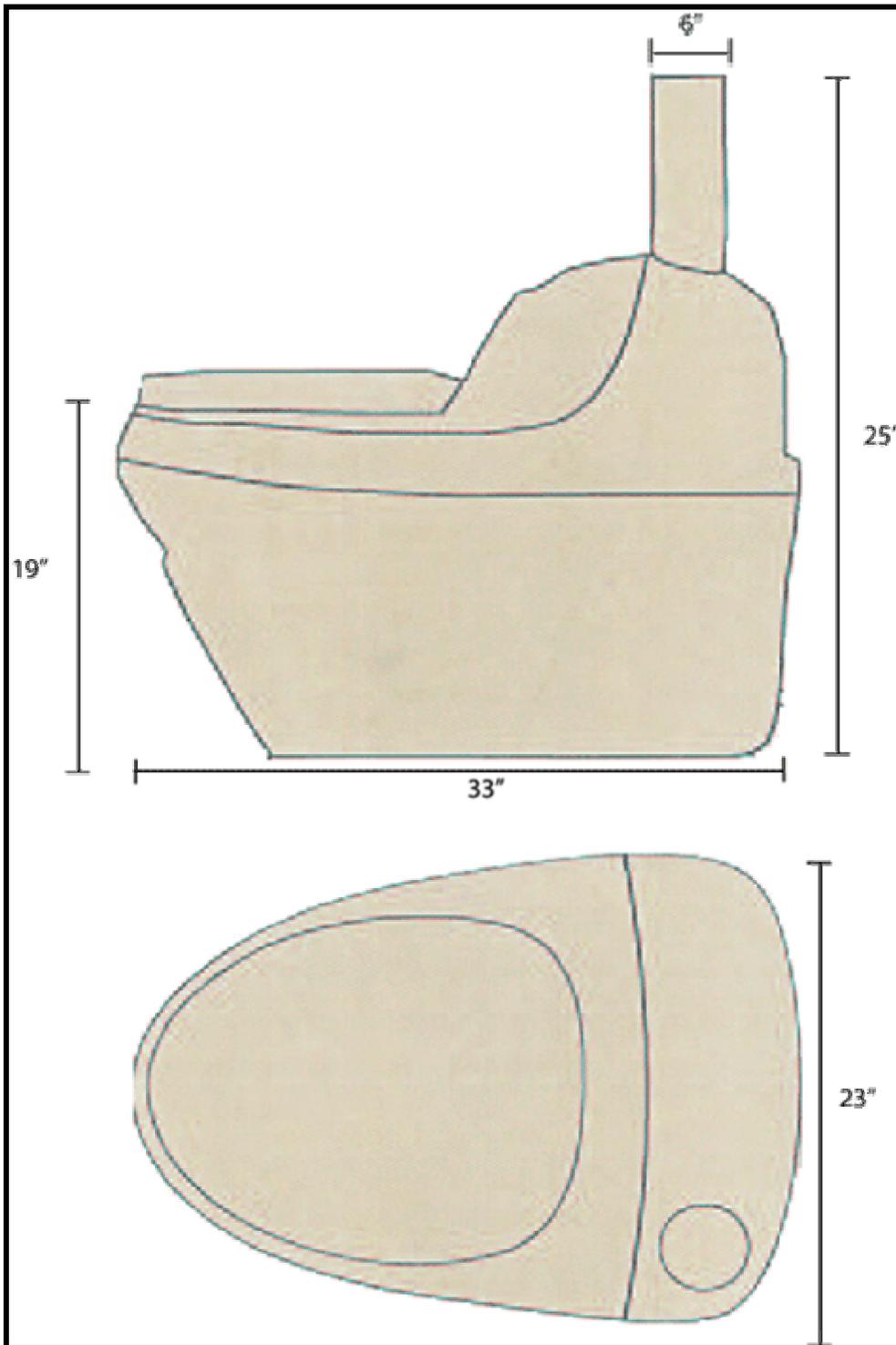


Figure 2.

TROUBLESHOOTING

| PROBLEM | POSSIBLE CAUSE | CORRECTIVE ACTION |
|-----------------------------|--|---|
| Smell of gas | SHUT OFF LP GAS CYLINDER VALVE AT ONCE DO NOT USE THE APPLIANCE UNTIL LEAK IS SEALED | |
| Red Error light is on | <ol style="list-style-type: none"> 1. The Sr has been used too frequently without a full burning cycle 2. The feeder screw is not moving | <p>The appliance must complete a full burning cycle before it can be used again</p> <p>Open lid and control that no visible objects are blocking the movement for the feeder screw.</p> <p>A. If there is a blocking Object:</p> <ol style="list-style-type: none"> 1. Remove if possible. 2. Close lid and reverse screw by pressing reverse button for 3 seconds 3. Open lid and remove object <p>B. If there are no visible objects:</p> <ol style="list-style-type: none"> 1. Close lid and reverse screw by pushing reverse button for 3 seconds 2. Press urine/waste button (depending on usage) |
| Ignition failed light is on | The burner does not ignite | <ol style="list-style-type: none"> A. Disconnect power B. Control level of propane C. Control gas valve D. Connect power supply E. Wait 30 Seconds before pushing the waste button F. If light still comes on, contact nearest dealer or contact GII's service department |

***For help with troubleshooting,
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