

# Installation and Service Instructions



★MADE in the USA★

## Warranty

See the back of this manual for the full warranty.

This warranty does not apply to damages resulting from accident, misuse, abuse or alteration.

No equipment may be returned without written authorization from EmberGlo, A division of Midco International Inc., or Midco. Returned goods must be shipped prepaid to the factory.

**No equipment may be returned without written authorization from MIDCO.** Warranty card must be filled in and returned to EmberGlo (or Midco) to validate warranty.

**CAUTION:** This manual contains sufficient information for installation of the EmberGlo Steamer in normal locations.

In the United States, installation must conform with local codes.

**CODE COMPLIANCE IS THE SOLE RESPONSIBILITY OF THE INSTALLER.**

**PURCHASER: Retain these instructions for future use.** Post, in a prominent location near the broiler, instructions for turning off gas valves in case gas odor is detected and any other instructions as advised by your local gas supplier.

**CAUTION:** Cooking equipment should be used in an environment protected by an automatic fire suppression system. Consult the National Fire Protection Association NFPA Code 96 or the latest edition of Standards for Installation of Equipment for Removal of Smoke and Grease-Laden Vapors From Commercial Cooking Equipment.

**AVOID ERROR IN PARTS SELECTION.** When ordering use complete EMBERGLO Part Number and Description. Furnish Model Number, Bill of Material Number and Serial Number (if available) from the specification plate found on the product. **IMPORTANT:** Availability of parts as well as specifications are subject to change without notice. Please consult factory for item availability.



**EmberGlo**

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## ES10 Series

Full Pan Size Food Steamers Automatic,  
Program able Timer Operation Designed to  
Operate with Tap Water - Direct Hookup

ES10PB: Manual Push Button

ES10T: Automatic, Programmable Timer Operation,  
External Cycle Timer

**WARNING:** Additions, changes, conversions and service must be performed by an authorized EmberGlo representative or service agency. Use only EmberGlo specified and approved parts.

**WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.**

### FOR YOUR SAFETY

**Do not store or use gasoline or other flammable liquids and vapors in the vicinity of this or any other appliance.**

**No Hood Installation Required:** According to the Uniform Mechanical Codes per the International Conference of Building Officials Code EmberGlo Steamers do not require a separate hood for vapor produced during operation of an EmberGlo Steamer.

**NOTE:** EmberGlo ES10 Series Steamers use a cast aluminum steam generator with two cast in electric heating elements. For best steaming, the generator casting should contain some mineral deposits. During final inspection each generator casting is pre-seasoned with a solution of baking soda and water. The water marks and mineral deposits seen on a new generator casting when the perforated food pan is removed is your assurance that the unit has passed final inspection test and will readily produce steam.

### Specifications:

- 240 volts 60HZ AC 3200 watts 13.3 amp  
or 208V 60HZ AC 2400 watts 11.6 amps
- Automatic timer operation (timer models only)
- Single shot operation
- End of cycle buzzer (10 seconds)

**SAFETY INFORMATION TERMS:** The following terms are used to identify hazards, safety precaution of special notations and have standard meanings throughout this manual. They are printed in all capital letters using a bold type face as shown below, and preceded by the exclamation mark symbol. When you see the safety alert symbol and one of the safety information terms as shown below, be aware of the hazard potential.



- DANGER:** Identifies the most serious hazards which will result in severe personal injury or death.
- WARNING:** Signifies a hazard that could result in personal injury or death.
- CAUTION:** Identifies unsafe practices which would result in minor personal injury or product and property damage.

*Quality Designed for Proven Performance*



416  
8470 77  
Printed in USA

# ES10 Steamer Installation and Service

★MADE in the USA★  
*Specifications*

ES10 Steamers feature a 4" deep full size steam table pan. The steamer lid is equipped with two counter-balanced spring hinges and offers a convenient choice of four locations for installing the lid handle at the side or front of either front corner. Models Available for either manual or fully automatic steaming.

	Dimensions	
	Inches	Centimeters
<b>HEIGHT</b> (lid closed)	9 3/4"	24.77
<b>HEIGHT</b> (lid open 90 degrees) with lid handle mounted on front corner of lid, projecting forward.	29"	73.66
<b>HEIGHT</b> (lid open 90 degrees) with lid handle mounted on side corner of lid, projecting to the side.	23"	58.42
<b>WIDTH</b>	22 1/2"	57.15
<b>WIDTH</b> with lid handle projecting to left or right side	28 1/2"	72.39
<b>DEPTH</b>	22"	55.88

## *Electrical*

Standard ES10 Steamers are designed for use with 208 VAC to 240 VAC, 4 (3 pole with ground) wire, single phase, 60 Hz, electrical service. (See Figure 1).

The generator casting contains two heating elements, each rated for 1600 Watts. 13.3 amps, 120 Volts, 60 Hz. Models are available for use on 50 Hz. (Non USA, Export only) electrical service.

Call your distributor for more information.

Standard units are furnished with a six foot, four conductor (2 Hot/1 Neutral/1 Ground) cord. This cord is equipped with a male twist-lock plug and matching loose female receptacle for convenient field installation.

## *Installation*

**Electrical.** Female twist-lock receptacle, supplied loose with the steamer, should be installed by a qualified electrician. Refer to wiring diagrams. Figure 1.

**NOTE:** Female receptacle must be wired to assure that voltage to the individual heating elements does not exceed 150 volts. (Circuits R-W and BK-W on Fig 1 and 2.) G terminal is wired to Ground W terminal is wired to neutral. Protect circuit with a 15 amp double pole circuit breaker.

**In the United States,** Wiring to the Female receptacle must conform to local codes, or in the absence of local codes, to the **National Electrical Code ANSI/NFPA No. 70-1990**, or latest edition. In Canada, Wiring to the Female receptacle must conform to local codes, or in the absence of local codes, to **Canadian Electrical Code Part 1, CSA Standard C22.1**. When choosing a location for the steamer, be sure that there is adequate space over the unit to lift lid completely.

**Water.** Connect water hose assembly to water supply system. The supply end has a 1/8" female pipe fitting and should be attached downstream of a shut-off valve. Steamer end of hose has a quick connect fitting which snaps onto mating fitting on steamer. This hose fitting has an automatic shut-off valve that allows steamer to be disconnected without shutting off water supply. After connecting, turn on water and check for leaks.

**No Hood Installation Required:** According to the Uniform Mechanical Codes per the International Conference of Building Officials Code, EmberGlo Steamers do not require a separate hood for vapor produced during operation.

## *Operation*

1. Push power switch to ON position (switch lights up). Allow approximately 15 minutes for steamer to reach operating temperature.

2. **MODEL ES10PB:**

Push STEAM button momentarily for each shot of steam desired. Water is sprayed into the steam generator for as long as the button is depressed. If the STEAM button is depressed too long or too often, flooding of the steam generator will result. A one second shot of water every 20 seconds is a good rule of thumb to avoid flooding.

3. **MODEL ES10:**

A.) For a single-shot steaming as with the ES10PB (above), flip the CYCLE/MANUAL switch to the MANUAL side. Push the STEAM button for each shot of steam desired.

B.) For unattended steaming for up to 20 minutes, set the CYCLE/MANUAL switch to CYCLE. Depress the STEAM button to activate a steaming cycle. Steaming will proceed according to the timer settings.

Timers are configured as follows:

**CYCLE TIME:** Sets the total length of product cooking time, during which steam is automatically supplied at adjustable intervals. At the end of the set time, steaming stops and the buzzer sounds. Adjustable from 0.2 to 20 minutes.

**STEAM SHOT “ON” TIME:** Sets the amount of time that water is supplied to the steam generator to create steam. Adjustable from 0.1 to 0.5 seconds.

**STEAM SHOT “OFF” TIME:** Sets the amount of the time between steam shots when no steam is supplied. Adjustable from 6 to 18 seconds.

**BUZZER DURATION:** Sets the length of time that the buzzer will sound after automatic steaming is completed. Adjustable from 0.1 to 10 seconds.

**DELAY FROM LAST SHOT TO BUZZER:** Sets the length of time between the last shot of steam and the sounding of the buzzer. This dwell time allows absorption of steam into the food. Adjustable from 0.1 to 30 seconds.

The adjustment features have been located within the steamer control box and made accessible only with a screwdriver in order to discourage tampering or readjustments by unauthorized personnel.

**⚠ DANGER:** Use extreme caution when adjusting timers. Bare wire terminals and/or bare wires are exposed. Unplug male twist-lock plug or use extreme caution if steamer is plugged in when making timer adjustments. Use an insulated or fiberglass screw driver. **IMPORTANT: KEEP LID CLOSED WHEN NOT IN USE.** This keeps the food pan hot and reduces condensation in the steam chamber. When steamer is first installed, or when reconnecting water hose, operate **STEAM** button several times to purge air from lines.

**Food Pan and Grid** on all models should be removed and washed with a detergent or run through a dishwasher.

**⚠ WARNING:** Under no circumstances should the entire Steamer be run through a dishwasher. If any of the switches or timers in electric control compartment get wet they can malfunction. Never try to use a device that has been wet—replace it.

All exposed stainless steel surfaces should be wiped with a damp cloth or cleaned with a chlorine free stainless steel cleaner. Rust spots can develop on stainless steel surfaces that are not cleaned daily.

*Maintenance  
Daily*

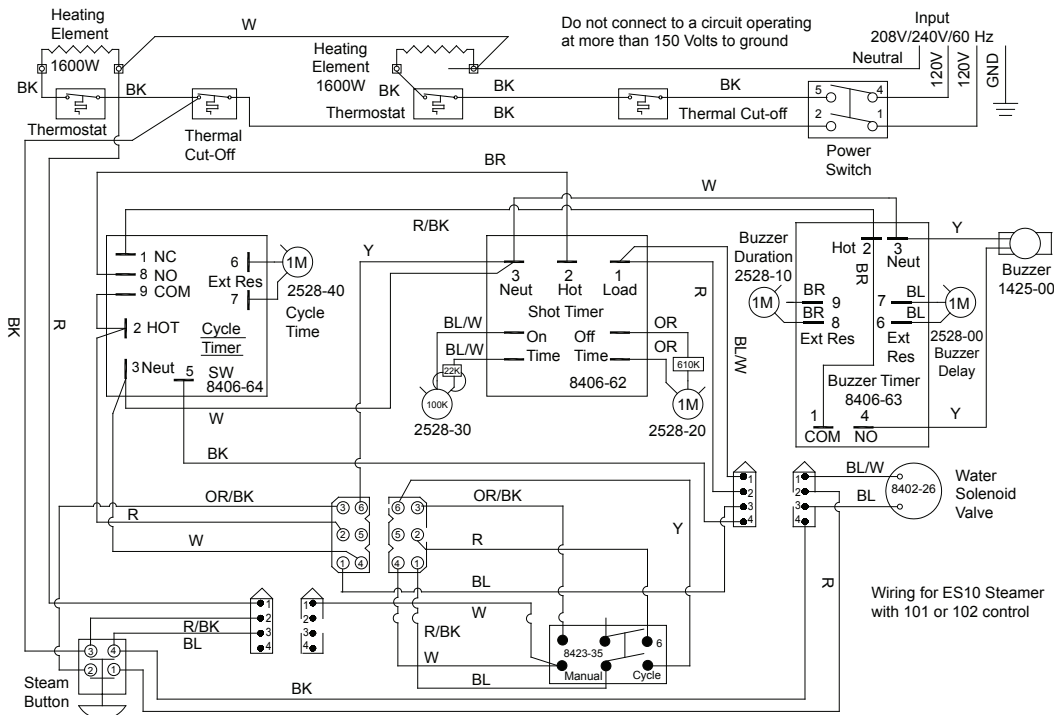


Figure 1: Wiring Diagram

# ES10 Steamer Installation, Service and Trouble Shooting Chart

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## Maintenance As Required

**Generator:** The cavity in the generator casting may accumulate lime and can be cleaned by scraping or wire brushing. Do not remove all of this deposit since a thin coating improves steaming.

**Water Nozzles:** The water nozzles may be pulled out for cleaning. Clean small holes and inside of nozzle tube. Located in the nozzle tube is a tool to be used for cleaning the holes in the water tube.

**Water Inlet:** If the nozzle socket tube through the generator is limed, remove plug at bottom and push lime out with a wire or small rod.

**Strainers:** To wash strainer located in hose; first, remove hose from steamer. Remove quick connect fitting from hose. Run water through hose in reverse direction. Return to original connections.

There is a strainer in inlet of solenoid valve that normally does not require cleaning but under extreme conditions may have to be removed and cleaned.

## Trouble Chart

**⚠ DANGER: READ AND UNDERSTAND THIS BULLETIN THOROUGHLY BEFORE STARTING ANY TROUBLE SHOOTING. AN INADVERTENT SERVICE ERROR COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH. ONLY A TRAINED EXPERIENCED SERVICE TECHNICIAN SHOULD ATTEMPT ANY REPAIR PROCEDURE.**

*Qualified service agencies are available at most locations—Refer to EmberGlo listing of AUTHORIZED SERVICE AGENCIES included in Standard Equipment Catalog.*

**IMPORTANT: Defective wiring or loose connections can simulate the defects outlined below. Check associated wiring before replacing a component.**

### I. UNIT DOES NOT HEAT—SWITCH ON, LIGHT OUT

- A. Confirm male twist-lock plug is plugged in and properly twisted (rotate clockwise).
- B. Confirm twist-lock receptacle is energized—reset breaker or repair house wiring.

**⚠ WARNING: The following checks through III. D. should be done with power cord removed from receptacle.**

- C. Confirm continuity in 4-conductor cord—replace if defective.
- D. Confirm continuity in double pole, single throw Power Switch, terminals 1-2 and 4-5—replace Power Switch if defective.

### II. UNIT DOES NOT HEAT EVENLY OR STEAMS ONLY ON ONE END OF STEAM GENERATOR CASTING—SWITCH ON, LIGHT ON.

- A. Confirm continuity of each of two Thermal Cut-offs—replace if defective.
- B. Confirm continuity of each of two Thermostats—replace if defective.
- C. Confirm continuity of each of two Heating Elements—replace entire Steam Generator Casting if defective.

### III. UNIT HEATS UP, BUT DOES NOT STEAM—NO WATER EVIDENT

- A. Confirm Manual Water Supply Valve is open and Water Hose Assembly is properly hooked up. Refer to INSTALLATION-Water. A quick way to confirm water line is operational is to disconnect Water Hose at quick disconnect fitting and push a small probe into quick disconnect fitting—water should flow freely.
- B. Check and clean **Water Nozzles, Water Inlet and Strainers.**  
Refer to **MAINTENANCE AS REQUIRED.**
- C. Confirm continuity of Steam Push Button Switch when depressed—replace if defective.
- D. Confirm continuity of water Solenoid Valve—replace if defective.
- E. Water Solenoid Valve—Power Switch on, light on, confirm 120 volts to GND on terminals 2 and 5 of Power Switch, both terminals of both Thermal Cut-offs, and terminal 3 of Square Steam Button. With square Stem Button depressed, confirm 120 volts to GND on terminal 4 of Switch and blue lead terminal of Water Solenoid Valve. An audible click should be heard when Valve is energized—if no click, jumper white lead terminal of Valve to GND. If click is heard with jumper attached, white neutral wires are faulty from Valve thru both heater elements to neutral on 4-conductor cord. Locate fault and repair. If no click, Water Solenoid Valve is defective and should be replaced.

# ES10 Steamer Trouble Shooting Chart

*Trouble  
Chart  
Continued*

## IV. UNIT FLOODS—SELECTOR SWITCH TO MANUAL; SQUARE STEAM PUSH BUTTON NOT DEPRESSED.

A. Water Solenoid Valve seat is dirty and valve cannot close completely or is defective—clean or replace as required.

**⚠ WARNING:** The following checks through Section V part B should be done with power cord plugged in and properly twisted. Use extreme care as bare wire terminals and/or bare wires are exposed.

## V. UNIT FLOODS—SELECTOR SWITCH TO CYCLE

A. Same as IV.A..

B. STEAM SHOT, OFF TIME set for too frequent shots—refer to OPERATION 3B.

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# ES10 Steamer Heating and Cooking Guide

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## Heating and Cooking Guide

The suggestions are made only to help the operator get started. Since each location will have different portions and different requirements, each operator must determine his own operation habits. The manual model is generally operated with one or two shots at the start. If additional heat is required, operate up to three shots per minute. Since the product to be heated can only absorb heat at a certain rate, do not over steam, exceeding three shots per minute will usually not improve performance. The timer model controls the number of steam injections per minute. The unit can be used as a warmer or cooker. When the product heating time is established, set the timer to obtain the same results.

	Refrigerated	Frozen
<b>Breads</b>		
Bread .....	1 to 2 shots of steam	2 min
Bagels .....	1 to 2 min	3 to 4 min
Croissant .....	15 seconds	
Muffin .....	1-2 shots of steam	
Pastries .....	1 to 2 min	3 to 4 min
Tamales .....	5 min	10 min
Tortillas .....	1 shot of steam	10 seconds
<b>Eggs</b>		
Soft Boiled .....	6 min	
Poached .....	3 min	
Scrambled (dz) .....	5 min	
<b>Meat</b>		
Bratwurst .....	8 min	16 min
Breakfast sausage .....	8 min	14 min
Chicken breast (lg) .....	15 min	25 to 30 min
Chicken breast (precooked) .....	5 min	15 min
Deli meats .....	2 to 3 min	
Hamburger (precooked).....	4 min	4 min
Hot dogs .....	4 min	8 min
Italian sausage .....	4 min	8 min
Ribs (precooked) .....	10 min	18 min
<b>Noodles and Rice</b>		
Macaroni (2 qt. cooked, 1 pt. water, 2 oz. oil) .....	5 min	
Egg Noodles (2 qt. cooked, 1 pt. water, 2 oz. oil) .....	6 to 7 min	
Rice (precooked) .....	5 min	8 to 10 min
Spaghetti (2 qt. cooked, 1 pt. water) .....	5 min	
<b>Vegetables</b>		
Artichokes .....	25 to 30 min	50 min
Asparagus .....	10 min	14 min
Brussels .....	15 min	18 min
Broccoli .....	10 min	12 min
Carrots sliced .....	4 min	8 min
Carrots whole baby (2 lb) .....	15 to 20 min	
Cauliflower .....	12 min	16 min
Corn on the cob .....	3 min	5 min
Fennel .....	10 min	
Green beans .....	4 min	8 min
Pea pods .....	6 min	9 min
Peas .....	5 min	8 min
Potatoes 8 whole (3 oz each) .....	20 min	
Potatoes mashed (2 qt) .....	8 min	
Squash, Acorn 4 (8 oz each) .....	12 to 20 min	
Squash, Zucchini -sliced frozen (1b) .....	10 Min	
<b>Seafood</b>		
Large clams .....	4 min	8 min
King crab .....	8 min	12 min
Snow crab .....	6 min	10 min
Fish filets .....	6 min	8 to 10 min
Lobster 8 oz Tails .....	8 min	14 to 16 min
Scallops .....	5 min	8 to 10 min
Shrimp .....	4 min	6 min

## Accessories for Steamers

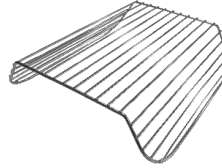
Increase your efficiency with accessories made just for your steamer.

### Steaming Basket Sets and Steaming Racks

Take full advantage of your EmberGlo Steamer with specially designed stainless steel Steaming Basket Sets and Steaming Racks. All sets and racks come with an easy to use removable handle. Increase your efficiency by dual steaming different items in separate baskets. Freshen or heat up tortillas and pita bread in a Tortilla Steaming rack.



Half Pan Size Basket - 5608-72  
 Quarter Pan Size Basket (2 pk) - 5608-73  
 3 in One Basket Set (1 Half and 2 Quarters) - 5608-70  
 (Basket Sets come with a Handle)



**Tortilla Rack**  
 (for Tortillas & Pitas) - 5682-60



**Cleaning Brush**  
 Scrapping off mineral build up is easy with our sturdy stainless steel Generator Cleaning Brush.  
 Cleaning Brush - 8450-62



**Egg Poacher**  
 A quick and healthy way to serve poached eggs.  
 4 Cup Egg Poacher - 2070610  
 6 Cup Egg Poacher - 2070615

5682-60	Tortilla/Pita Rack	10 1/4" L x 7 5/8" W x 3 5/32" H
5608-70	Three in 1 Basket Kit w/ Handle	10 2/3" L x 8 1/8" W x 3" H
5608-72	1/2 Size Basket w/ Handle	10 2/3" L x 8 1/8" W x 3" H
5608-73	Two of 1/4 Size Basket w/ Handle	7 7/8" L x 5 1/8" W x 3" H
2070610	4 Cup Egg Poacher	9" L x 9" W x 3" H
2070615	6 Cup Egg Poacher	12 3/4" L x 12 5/8" W x 3" H
8450-62	Steamer Cleaning Brush	7 3/4" L

# ES10 Steamer Warranty

★ MADE in the USA ★

## Warranty

### Warranty Midco® International Inc Limited Warranty Policy Exclusions Terms, Customer Requirements and Instructions

**All claims should be filed through Warranty Central.  
Call factory for information (773 604 8700)**

Only Authorized Service Providers are authorized to provide Limited Warranty service on all EmberGlo®, a Division of Midco® International Inc., food equipment as described under and Midco® International Limited Warranty Policy. A list of providers can be found on our web site: [www.emberglo.com](http://www.emberglo.com)

#### Provisions:

In lieu of an implied warranty, all repairs and replacement parts furnished under our Limited Warranty shall be f.o.b. point of distribution, but the owner must pay the necessary freight, delivery and labor costs involved when required. Any Federal, State or Local taxes are also extra. This Limited Warranty is effective for a period of 90 days from the date of original installation. If the product registration cards are returned within those 90 days, the warranty will be one year from date of installation. EmberGlo® Char Broilers and EmberGlo® Electric Food Preparation Equipment manufactured by Midco International, sold under the EmberGlo® trademark, are guaranteed to be free from defect in material and workmanship under normal use and service for a period of 90 days from the date of original installation or for 1 (one) year when the registration card is returned within a reasonable time after the date of original installation. Midco's obligation under this Limited Warranty Policy shall be limited to repairing or replacing, at our option, any part of said equipment which Midco examination shall disclose to its satisfaction to be thus defective.

#### Exclusions:

This Limited Warranty Policy does not apply to damages resulting from accident, misuse, abuse or alteration, nor does it apply to limed steam generators, nor does it apply to any consequential damages. Most geographical areas require the use of distilled or demineralized water. Tap water is permissible only with ES Series Steamers. Nor does it apply to Barbrig's®, briquettes, or rods used in gas broilers. Midco's obligation will be the replacement of the product or parts removed.

#### Terms:

Under the terms of this Limited Warranty Policy, models considered portable (devices with cords and plug caps such as EmberGlo Steamers) must be taken or returned to the nearest service provider, transportation prepaid, returned transportation collect. Non-portable units with permanent wiring will be serviced on the customer's premises. Under these terms, Midco agrees, within the terms of this Limited Warranty period, to make all repairs at no charge by the authorized service provider. Labor and mileage charges submitted by any other provider not authorized will be the responsibility of the customer.


#### Customer Requirements:

All charges related to repairs made after the 90 day or one (1) year, when the registration card is returned within a reasonable time after the date of original installation, during the Limited Warranty period will be the responsibility of the customer unless the registration card has been properly filled out and returned to Midco International Inc. The product registration information is located on the product I.D. plate.

If a part is defective due to workmanship or materials and is removed from the product within the applicable warranty period and returned to Midco in accordance with the following procedure described, Midco will, at its option, either repair or replace the part.

**Call the factory for instructions on returned goods.**

**No equipment may be returned without written authorization from MIDCO. Returned goods must be shipped prepaid to the factory.**

 **WARNING: Improper installation and use of this product could result in personal or property injury.**

**TO VALIDATE WARRANTY:  
FILL OUT THE FORM ON THE NEXT PAGE  
RETURN TO EMBERGLO**

#### Keep for your records

Gas Broiler     Electric Broiler     Steamer     Accessory

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Installation Date \_\_\_\_\_

Purchased from - Name: \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_



## Warranty

Midco® International Inc Limited Warranty Policy  
Exclusions Terms, Customer Requirements and Instructions

*Warranty*

All claims should be filed through Warranty Central. Call factory for information (773 604 8700)  
Fill out form and fax to 773 604 4070 or copy and mail to:

EmberGlo A Division of Midco International  
4140 West Victoria Street  
Chicago, Illinois 60646



Date of Purchase \_\_\_\_\_

End User Name \_\_\_\_\_

Company Name \_\_\_\_\_

Street & Apt. No. \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Email Address \_\_\_\_\_

Web Address \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

Gas Broiler  Electric Broiler  Steamer  Accessory

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Installation Date \_\_\_\_\_

Purchased from - Name: \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_



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PLACE  
STAMP  
HERE

**EmberGlo** A Division of Midco International Inc.  
Attn: Warranty Department  
4140 West Victoria Street  
Chicago, Illinois 60646

