

NESCO[®]
PROFESSIONAL

Coffee Bean Roaster



NEVER LEAVE ROASTER UNATTENDED WHILE IN OPERATION!

Use/Care Guide
Model CR-1000 Series

CONGRATULATIONS!

Congratulations on the purchase of your new NESCO® Coffee Bean Roaster! Please spend a few minutes reviewing this booklet. By doing so, you will learn how to get the most out of your NESCO® Coffee Bean Roaster. Enjoy your roasting with our compliments.

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NESCO® is a registered trademark of The Metal Ware Corporation.

The Metal Ware Corporation
1700 Monroe St., P.O. Box 237
Two Rivers, WI 54241-0237
Phone: (800) 288-4545
FAX: (920) 794-3164

Visit our website at <http://www.nesco.com>

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IMPORTANT SAFEGUARDS

When using electrical appliances, basic safety precautions should always be followed including the following:

1. READ ALL INSTRUCTIONS.

2. Do not touch hot surfaces.
3. Do not place on or near hot electric or gas burners, or in a heated oven.
4. To protect against electric hazards, do not immerse cord, plug, or base of this appliance in water or other liquid.
5. This appliance should not be used by children. Close supervision is necessary when any appliance is used near children.
6. Unplug unit when not in use and before cleaning. Allow to cool before putting on or removing parts.
7. Do not operate any appliance with damaged cord or plug, or after appliance malfunctions, or has been damaged in any manner. Return the appliance to the nearest authorized service facility for examination, repair or adjustment.
8. Do not let the cord hang over the edge of a table or touch hot surfaces.
9. Do not leave the appliance unattended while in use.
10. Do not remove bottom cover. There are no serviceable parts inside. Only authorized service personnel should attempt repair.
11. Do not move the appliance while it is running.
12. Do not use outdoors.
13. Do not use the appliance for other than intended use.
14. This appliance is for household use only, designed to process normal household quantities. It is not suitable for continuous operation.
15. Only roast green coffee beans or coffee beans that have gone through a decaffeinated process.
16. Do not set hot roasting vessel on a wet or cold surface.
17. Do not remove top cover while appliance is in operation.
18. Throw away roasting vessel if glass becomes cracked or broken.
19. Prior to starting appliance, make sure all seals, Chaff Cup and Cover are in place and seated correctly.
20. Use plastic handle when handling the roasting vessel.
21. Do not operate appliance without the roasting vessel in place and seated.
22. The use of an accessory not evaluated for use with this appliance or sold by the manufacturer may cause injuries, fire or electric shock.
23. Do not clean plastic parts with abrasive cleaning materials.

SAVE THESE INSTRUCTIONS

THIS APPLIANCE IS INTENDED FOR HOUSEHOLD USE ONLY

Short Cord Instructions

CAUTION: A short power supply cord is provided to reduce the risk resulting from becoming entangled in or tripping over a long cord. Longer extension cords are available and may be used if care is exercised in their use. If an extension cord is used, the marked electrical rating should be at least as great as the electrical rating of the appliance, and the cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled on by children or tripped over unintentionally.

Polarized Plug

This appliance has a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug is intended to fit into a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to modify the plug in any way.

Welcome to the World of Home Coffee Bean Roasting!

Congratulations on your purchase of a new NESCO® Professional Coffee Bean Roaster! You will be able to create the greatest tasting cup of coffee in the world at a fraction of the price you'd pay in a gourmet coffee shop.

WARNING

NEVER LEAVE ROASTER UNATTENDED WHILE IN OPERATION.

With the NESCO® name, you can be assured of a quality appliance, and we'll provide tips and suggestions on how to roast your own coffee beans to perfection in your own home. We provide easy to understand instructions on how to roast and store your coffee beans, all in the comfort of your own home kitchen. Unlike many other coffee bean roasters, your NESCO® Professional Coffee Bean Roaster is one of the quietest machines on the market today, and features a unique Catalytic Converter and ceramic filter system that reduces the odor and smoke associated with coffee roasters.

Roasting coffee beans at home allows you to roast coffee beans exactly as you like them... light or dark, and with your own special blend of beans if you choose. YOU have complete control of the freshness and flavor of your cup of coffee.

Five Reasons to Roast Your Own Coffee Beans:

Freshness - If you use store-bought coffee, chances are it will be stale by the time you brew it. Imagine what it's like to drink a cup of coffee made with beans roasted a few minutes ago, not weeks ago.

Flavor - You'll be able to select a number of distinct flavors and aromas from genuine fresh coffee.

Fun - NESCO® makes roasting coffee beans fun and convenient – as easy as popping a bowl of popcorn.

Creative - Roasting at home allows you to create your own special blends. Create your own favorite 'signature' blend of coffee beans.

Savings - Home roasting can save you up to 50% on every pound of gourmet coffee you drink.

With your NESCO® Professional Coffee Bean Roaster, you've taken the first step towards a truly fresh cup of coffee. Get ready to enjoy the best cup of coffee you ever tasted!

Get to Know Your NESCO® Professional Coffee Bean Roaster



Fig. 1

Roaster Base contains the control panel, heating elements, Catalytic Converter and mounting base for roasting chamber. A two-speed fan directs the heated air through the green coffee beans in the ‘roast’ cycle and blows cool air through the roasted beans, during the ‘cooling’ cycle, to stop the roasting process.

Roaster Chamber holds up to 5 oz. of green coffee beans and features a unique auger drive mechanism that mixes the coffee beans so they roast evenly.

Chaff Cup collects the ‘fluffy’ chaff generated when roasting coffee beans.

Screen / Front Seal: The stainless steel Screen fits inside the Front Seal and prevents fine chaff particles from entering the Catalytic Converter. The Front Seal keeps smoke and odor inside the machine.

Rear Seal prevents smoke and odor from leaking out at the Catalytic Converter.

Cover directs the smoke and odor from the Roasting Chamber to the Catalytic Converter where it is virtually eliminated. It is conveniently hinged to the Roaster Base and activates the Safety Cutoff Switch when the Cover is latched.

Safety Cutoff Switch allows the roaster to operate only when the Cover is properly latched. It will turn the roaster off if the Cover is accidentally opened during a roast cycle.

A patented **Catalytic Converter** removes the smoke and most of the odor associated with roasting coffee. No other home coffee roaster has this feature.

Control Panel

Your NESCO® Professional Coffee Bean Roaster features an easy to use Control Panel that includes five large keypads, large digital display and two indicator lights.

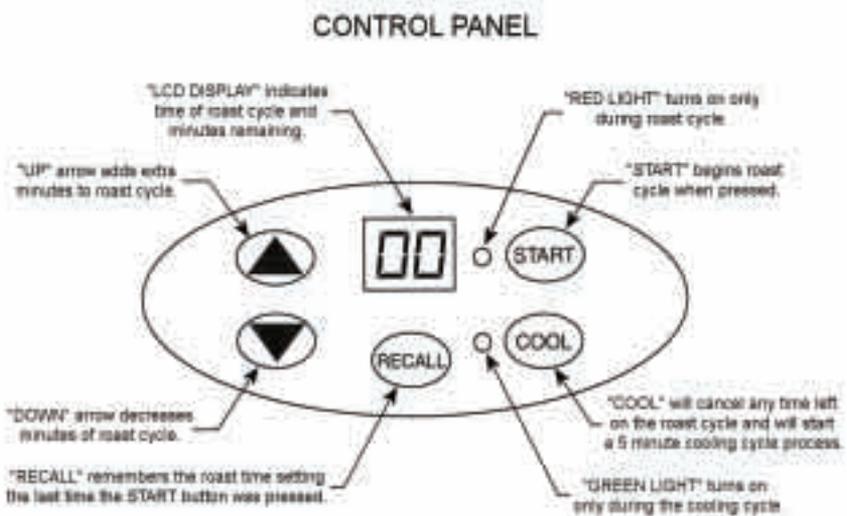


Fig. 2

NOTE: The screen must be cleaned between EVERY use to ensure proper and safe operation of your roaster (see Caring For Your Roaster).

CAUTION: Failure to clean the filter screen or operating the appliance without proper installation of the filter screen may cause your roaster to malfunction. Roaster issues caused by leaving out the screen will NOT be covered by the warranty.

IMPORTANT: Make sure the Chaff Cup is inserted in the glass cylinder of Roasting Chamber before the Front Seal / Screen is installed. Remember, all metal surfaces become EXTREMELY HOT during the roasting process and should never be handled or touched during or directly following a roasting cycle.

Before You Begin

Before using your NESCO® Professional Coffee Bean Roaster the first time:

1. Unpack your new coffee bean roaster completely. Remove all packing materials and make sure all parts are included. (Fig 1).
2. Wash Cover, Chaff Cup and Roasting Chamber in hot soapy water to eliminate any residue from the packing that will affect the flavor of your first roast. Rinse in clean water and dry thoroughly. All removable parts are dishwasher safe. **CAUTION: NEVER IMMERSE THE ROASTER BASE IN WATER OR ANY OTHER LIQUID, AND NEVER PLACE IT IN A DISHWASHER.**
3. Make sure all parts are completely dry before reassembling your roaster. NOTE: Set Cover on end to allow excess water to drain.
4. Select your favorite green coffee beans and get ready to roast your first batch!

Operating Instructions

1. Place Roasting Chamber on Drive Shaft and lower it onto heat shield. Align the Guide Slots with Locator Pins, and Roasting Chamber will drop into position on Heat Shield (Fig. 3).



FIG. 3

2. Fill Roasting Chamber up to either “FILL LINE” or “DARK ROAST” line with your choice of green coffee beans. NOTE: *Do not over fill the Roasting Chamber, as this could damage the roaster.*
3. Insert Chaff Cup into top of Roasting Chamber.
4. Slide the Screen / Front Seal on top of Roaster Chamber and Chaff Cup, making sure the ribbed-end of seal fits over end of the glass cylinder.

5. Make sure Rear Seal fits securely over metal rim of larger opening in Cover (Fig. 4).



6. Align the metal hinge pin of Cover with the matching hole in the Roaster Body and slide together until the pin is fully seated.
7. Gently press Cover down until it latches in place. NOTE: If the cover is not securely latched, the Safety Cutoff Switch will not allow the roaster to operate.
8. Plug roaster into a standard 120-volt outlet. The display will show 20 minutes the first time your roaster is used. This is a default setting and will produce a 'light' roast. We don't recommend roasting less than 20 minutes. We suggest a roast time of 25 minutes minimum as a starting point. Experiment with roasting times and have fun!
9. Adjust roast time using the "UP" arrow (on Control Panel) to add minutes or "DOWN" arrow to subtract minutes from the roast cycle. The longer roast time, the darker the roasted beans will be.

Note: The maximum roast time is 30 minutes. However, during a roasting cycle, you may add up to 5 additional roasting minutes by pressing the UP Arrow while the red light is 'on' and the remaining roast time is between 6 and 24 minutes. The roaster will not allow you to add more than 5 minutes to a roast cycle, so the maximum allowable roasting time is 35 minutes. Once the 5-minute 'cooling' cycle has started and the green light turns 'on', you can no longer add more roasting time.

10. Press the RECALL button to display the previous 'roast time' used when the START button was pressed. Your roaster stores this number even if the roaster is unplugged between roast cycles. This feature helps you roast coffee beans more consistently.

NOTE: The RECALL button will not remember additional minutes added after the START button is pressed.

11. After you select the time for the roasting cycle, press the START button. The auger will begin to turn the coffee beans and the fan will start. The red light will glow, indicating the heating element is turned 'ON' and the roasting cycle started.

CAUTION: If the auger does not begin rotating after the START button is pressed, a small coffee bean may be trapped under the auger inside the Roast Chamber. **STOP THE ROASTING CYCLE IMMEDIATELY** by unplugging the roaster. Allow the roaster to cool if it is hot. Open the Cover and empty the beans from the Roasting Chamber, making sure none are under the auger. Rotate the auger by hand to make sure it is free to turn. Install the Roasting Chamber with the Heat Shield and lower chamber in place. Reload the beans and start the roast cycle again.

WARNING! NEVER LEAVE ROASTER UNATTENDED WHILE OPERATING

Note: *If you roast consecutive batches of coffee beans, they may roast faster after the first cycle, because the roaster may still be hot. Adjust roast time settings accordingly.*

Roasting Guidelines

Light Roast	20 - 22 minutes
Medium Roast	23 - 26 minutes
Dark Roast	27 - 30+ minutes

Note: *Roast times may vary due to ambient room temperature, power/voltage, bean variety or amounts used in each batch. Adjust time settings accordingly.*

12. As the roasting cycle continues, you will notice the beans increase in size and gradually change from a pale green to a chocolate brown color. You also notice the pleasant aroma of the beans as they begin to roast.
13. Five minutes before the end of the roast cycle, the 'cooling' cycle will automatically start and begin blowing cool air over the roasted beans. The red light will turn 'OFF', the green light will glow and the fan switches to a higher (faster) speed. **Note:** *Pressing the COOL button at any time during a roasting cycle will stop the roasting and begin the 5 minute 'cooling' process.*
14. When your roaster has completed the roasting/cooling cycle, the appliance will turn itself off automatically. **Note:** *We recommend you let the appliance cool down for 10 minutes before removing the freshly roasted coffee beans.* **CAUTION:** Metal parts of your roaster **WILL STILL BE VERY HOT.** Use caution when handling this appliance.
15. Unplug the roaster from the outlet.

16. After the roaster has cooled for 10 minutes, open the roaster Cover by pulling the plastic tab towards you while lifting up. **CAUTION: Please use caution when opening or removing Cover, as all metal parts may still be hot after the roasting cycle.**
17. Remove Screen/Front Seal and brush chaff particles from Screen into the trash. Slowly remove Chaff Cup and discard chaff into the trash.
18. Grasp the plastic handle of the Roasting Chamber and remove from Roaster. **CAUTION: Do not touch glass or metal base of Roasting Chamber as these parts may still be hot after the roasting cycle.**
19. Pour the fresh-roasted beans into an airtight container or coffee grinder. Allow the roasted beans to ‘rest’ (see p. 12) for a few hours before grinding.
20. Grind your fresh roasted beans in a blade or burr grinder.

21. Brew and enjoy the best cup of coffee you’ve ever tasted!

Caring for Your Roaster

1. Your coffee bean roaster must be cleaned after every use. This will ensure the safe operation of the appliance, longevity and assure optimal roasting results. **WARNING:** It is very important that the screen be in place before you start the roaster. If the screen is not in place it will cause your roaster to malfunction. Roaster issues caused by leaving out the screen will **NOT** be covered by the warranty.
2. Make sure the roaster has cooled before removing parts.
3. Empty the Chaff Cup in the trash. Brush or rinse the chaff flakes off the Chaff Cup and Screen/ Front Seal. To facilitate cleaning, the Screen can be easily removed by stretching back the top ‘lip’ of the rubber seal and pulling it out.
4. Wash Chaff Cup, Screen/Front Seal, Roasting Chamber and Cover with warm soapy water and rinse. Set parts aside to drain and let them air dry thoroughly before re-assembling roaster. **NOTE:** The Cover, Roasting Chamber, Screen/Front Seal and Rear Seal are all dishwasher safe.
5. When dried, insert Screen into groove provided at the top of the Front Seal.

CAUTION: Not cleaning these parts or operating the appliance without proper installation will shorten the life expectancy of the roaster and can create a condition where the roaster may overheat and malfunction. Make sure all washable components are completely dry before using.

6. Set Cover on end, after washing, to allow excess water to drain out.
7. Wipe Roaster Body with a damp cloth or sponge and set aside to dry. **DO NOT IMMERSE ROASTER BASE IN WATER OR OTHER LIQUID.**

8. Examine the slots surrounding the 'Drive Shaft' (Fig. 3) and remove any debris with a damp towel or small brush. This surface must be free of debris before beginning the next roast cycle.
9. The screen of the Screen/Front Seal is a very fine mesh stainless steel and requires special attention after every roast cycle. Fine particles of chaff lodge in the fine screen of the filter. Remove particles of chaff with a brush and running water. If necessary, the screen can be separated from the rubber seal for easier cleaning.

NOTE: *A standard oven cleaner may be used to remove heavy build up of coffee oil residue from the screen that may accumulate after several months of steady use. Use caution when using oven cleaners. READ DIRECTIONS ON CONTAINER BEFORE USING.*

To remove stains on inside of Cover, pour equal amounts of water and household ammonia into the opening of Cover and let stand for several minutes. Wash parts normally, then rinse and dry thoroughly.

10. It may be helpful to record the results of 'roasts' for future reference. This will help you learn about the many and varied coffee types, flavors, blends and roast colors.

Have fun with your NESCO® Professional Coffee Bean Roaster
and enjoy the experience!

Handling and Storage of Roasted Coffee Beans

Since the primary reason for roasting coffee at home is to experience the aroma of truly fresh coffee, you need to handle and store your freshly roasted coffee beans with care. Green coffee beans keep very well, but after roasting begin a slow decline and lose their freshness and flavor rapidly.

Coffee beans reach their peak flavor a few hours to a day after roasting. Two days after roasting, a good part of the aroma starts to deteriorate due the affect of the oxygen in the air (staling). After one week the taste is compromised, and in two weeks the aroma has virtually vanished and the taste has lost its distinctive characteristics.

Here are some steps to take to preserve and maximize the fragrance of your home-roasted coffee:

- ♦ Roast small quantities of coffee more often.
- ♦ Allow freshly roasted beans to rest for a day, uncovered. Then transfer them to a suitable, air-tight container and store in a cool, dry place, away from direct sunlight. Caution: Do not fill a tight-sealing canister or jar more than halfway with just-roasted coffee beans that have not been rested for a day or so. Freshly roasted beans generate gases that will exert considerable pressure on the walls and lid of the filled, tightly sealed container.
- ♦ Allow roasted coffee beans to 'rest' for a few hours to a day before grinding. This will assure peak flavor and aroma.

- Resist the urge to refrigerate roasted beans. Don't store coffee in a refrigerator; it is damp inside and dampness compromises the flavor and aroma.
- Grind your coffee immediately before brewing. The purpose of grinding coffee is to break open the coffee bean and make the flavor oils available to hot water and then to our palates. Unfortunately, breaking open the bean also exposes flavor oils to oxygen or "staling." Grinding should be done only moments before brewing to maximize the flavor and aroma.
- Freeze coffee only when you have an oversupply of roasted coffee beans you can't consume within a week. Put the beans in a 'zip lock' freezer bag and squeeze as much air out as possible before sealing. If you own a vacuum sealing machine, this is an excellent way to preserve excess roasted beans in bags provided or in plastic storage containers supplied by the manufacturer.
- Drink your coffee immediately after brewing. It does little good to roast, grind and brew a superb fresh cup of coffee, only to let it stand in the pot on a hot plate where the aroma and flavor evaporate away in the air. If you can't drink the freshly brewed coffee, transfer it to a pre-heated, insulated carafe, which will preserve the taste and aroma for later consumption.

Troubleshooting

Problem	Cause and Solution
Digital display is blank.	<ul style="list-style-type: none"> • Roaster not plugged in. Plug into wall outlet.
Unit will not turn on.	<ul style="list-style-type: none"> • The Safety Cutoff Switch will turn off power to the roaster if the cover is open or not properly closed. Make sure the Roasting Chamber is correctly seated on the Roaster Base and the Cover properly aligned and latch closed.
The roasting times are not consistent.	<ul style="list-style-type: none"> • The household voltage changing - this changes roast characteristics. • Different varieties of green coffee beans require different roasting times. • Similar green coffee beans from other countries contain different amounts of moisture and require different roasting times. • Decaffeinated beans take less time to roast than regular beans. Trial and error are the rule of thumb when roasting coffee beans. It may be helpful to keep notes about roasting times for specific types of coffee beans.

Problem	Cause and Solution
Smoke is emitted and auger is turning.	<ul style="list-style-type: none"> • The Screen/Front Seal or Rear Seal not properly installed, damaged or missing. Reposition as needed. • Screen is blocked. Make sure screen is cleaned and open before operating.
<p>Smoke is emitted but auger is NOT turning.</p> <p style="text-align: center;">OR</p> <p>Unit is operating with correct amount of green beans but the auger is NOT turning.</p>	<ul style="list-style-type: none"> • There may debris lodged under auger. Unplug the roaster immediately. ALLOW UNIT TO COOL BEFORE REMOVING PARTS. Remove beans. Inspect auger and remove all debris underneath. • Roasting Chamber not seated correctly. Unplug roaster from outlet. Open Cover, make sure Roasting Chamber is fully seated on heat shield of Roaster Base.
Unit speeds up with five minutes remaining in roast cycle	<ul style="list-style-type: none"> • This condition is normal. The roaster automatically shifts to a 5-minute cool-down period at the end of each roasting cycle.
Roasted coffee beans are not dark enough after going through the maximum 30-minute roasting cycle.	<ul style="list-style-type: none"> • Roasting time is too short. Add extra minutes to roast time after roasting cycle has started and before the cooling cycle has started. Each press of the ‘UP’ arrow adds 1 minute to the roast cycle. Up to 5 extra minutes can be added. • For darker roasts use less than the recommended 5 oz. load of beans for each cycle.
Excessive amount of chaff escaping near top of roaster.	<ul style="list-style-type: none"> • Screen/Front Seal is not installed correctly, damaged or missing. Replace or install seal correctly onto top of Roasting Chamber. Make sure Screen is inserted into groove of Front Seal.
Auger turns but beans are not circulating.	<ul style="list-style-type: none"> • Roasting Chamber is very dirty and needs to be cleaned. See ‘Caring for your Roaster’ section. The oily residue on the glass prevents the beans from circulating when the auger is turning. • Roasting chamber may be wet on the inside. The water droplets create a drag on the beans preventing them from circulating. Dry the Roasting Chamber thoroughly before adding green coffee beans.

Problem	Cause and Solution
<p>With Roasting Chamber clean and empty, auger does not turn after pressing START button.</p>	<ul style="list-style-type: none"> • Roasting Chamber not seated correctly. Unplug roaster from outlet. Open Cover, make sure Roasting chamber is fully seated on the heat shield of Roaster Base. • Auger drive mechanism may be damaged. Return to our factory for servicing (see One Year Limited Warranty).
<p>When roaster is running, the keypads do not work.</p>	<ul style="list-style-type: none"> • This is a normal condition when roasting or cooling. Only two buttons are active while the roaster is running. These are the 'UP' arrow button (increases roasting time) and COOL button. • You have already added 5 extra minutes, so the 'UP' and 'DOWN' arrows will not function. Only the COOL button functions at this time.
<p>The roasted beans are too dark.</p>	<ul style="list-style-type: none"> • This may be normal. Different varieties of beans may roast darker than others. Try grinding some and brew a pot of coffee. They may taste better than they look. • Roasting time is too long. Decrease roasting time (press 'DOWN' arrow). • Make sure you've roasted the recommended amount of beans per load. Fill Roasting Chamber up to the FILL LINE (5 oz.).
<p>I want to stop the roasting process when the beans change color.</p>	<ul style="list-style-type: none"> • If you are watching the roast cycle and the color of the beans is correct, press the COOL button to stop the roasting cycle. The roasting stage will stop and cooling stage will begin immediately. The machine will turn off automatically after the 5-minute cooling cycle.

NOTE: If this troubleshooting chart does not provide a solution to a problem you're experiencing with your roaster, contact our Customer Satisfaction Department at 1-800-288-4545 for assistance. Read the Limited Warranty section for details.

NESCO® PROFESSIONAL

ONE YEAR LIMITED WARRANTY

This appliance is warranted for one year from date of original purchase against defects in material and workmanship. This warranty does not cover transportation damage, misuse, accident or similar incident. This warranty gives you specific legal rights and you may have other rights, which vary from state to state. This product is intended for household use only, not for commercial use.

Warranty does not cover commercial use.

Your new NESCO® appliance comes equipped with numerous safety features. Any attempt to interfere with the operation of these safety features makes this warranty null and void. In the event we receive an appliance for service that has been tampered with, we reserve the right to restore it to its original state and charge for the repair.

Defective products may be returned, postage prepaid, with a description of the defect to: The Metal Ware Corporation, 1700 Monroe Street, Two Rivers, Wisconsin 54241, for no-charge repair or replacement at our option. **Must include proof of purchase or copy of original bill of sale** when returning product for warranty service.

Please call Customer Satisfaction at 1-800-288-4545 to obtain a Return Authorization before shipping.

For service in warranty, follow instructions set forth in warranty. When ordering new parts, make sure that you always mention the model number of the product.

1. Call us on our toll free number, 1-800-288-4545 and tell us about your problem.
2. If we instruct you to send all or part of your appliance to us for repair or replacement, the Customer Satisfaction representative will provide a Return Authorization number (this number notifies our receiving department to expedite your repair). Pack your unit carefully in a sturdy carton with sufficient padding to prevent damage because any damage caused in shipping is not covered by the warranty.
3. Print your name, address and Return Authorization number on the carton.
4. Write a letter explaining the problem. Include the following: your name, address and telephone number and a copy of the **original bill of sale**.
5. Attach the sealed envelope containing the letter inside the carton. Insure the package for the value of the NESCO® appliance and ship prepaid to:

Attn: Factory Service Dept.
The Metal Ware Corporation
1700 Monroe Street
Two Rivers, WI 54241

*Customer
Satisfaction*™ 

1-800-288-4545

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WEBSITE: www.nesco.com