

HotTop

COFFEE ROASTER



Model KN-8828D Shown

Owner's Manual

This manual covers Models **KN-8828** and **KN-8828D**

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WARNING!

This device is capable of high temperatures. If used without due caution it can constitute a safety hazard. The outer surface will become hot enough to cause very serious burns and has the potential to ignite flammable materials on or near the roaster. The Hottop Coffee Roaster can be operated in such a way as to constitute a fire hazard by igniting the beans being roasted and/or the chaff (a by-product of the roasting process). Always follow the safety guidelines and usage directions in this manual, and use common sense to avoid these situations

Read and understand all operating instructions and safety warnings contained in this manual before operation and always follow the safety guidelines and heed all warnings when using the Hottop Coffee Roaster

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I - IMPORTANT SAFETY PRECAUTIONS

When using this electrical appliance, these safety precautions must always be followed:

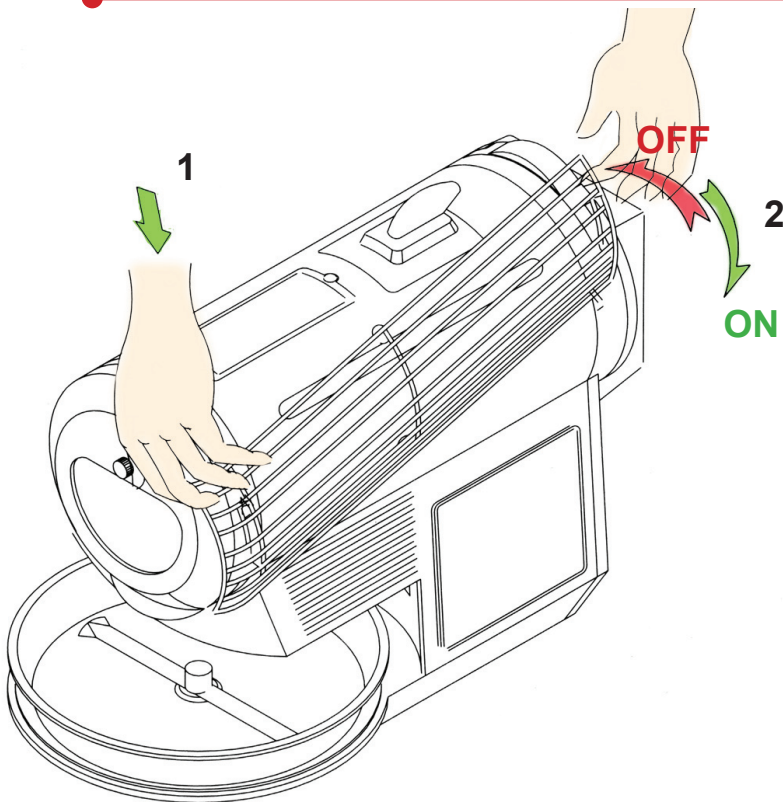
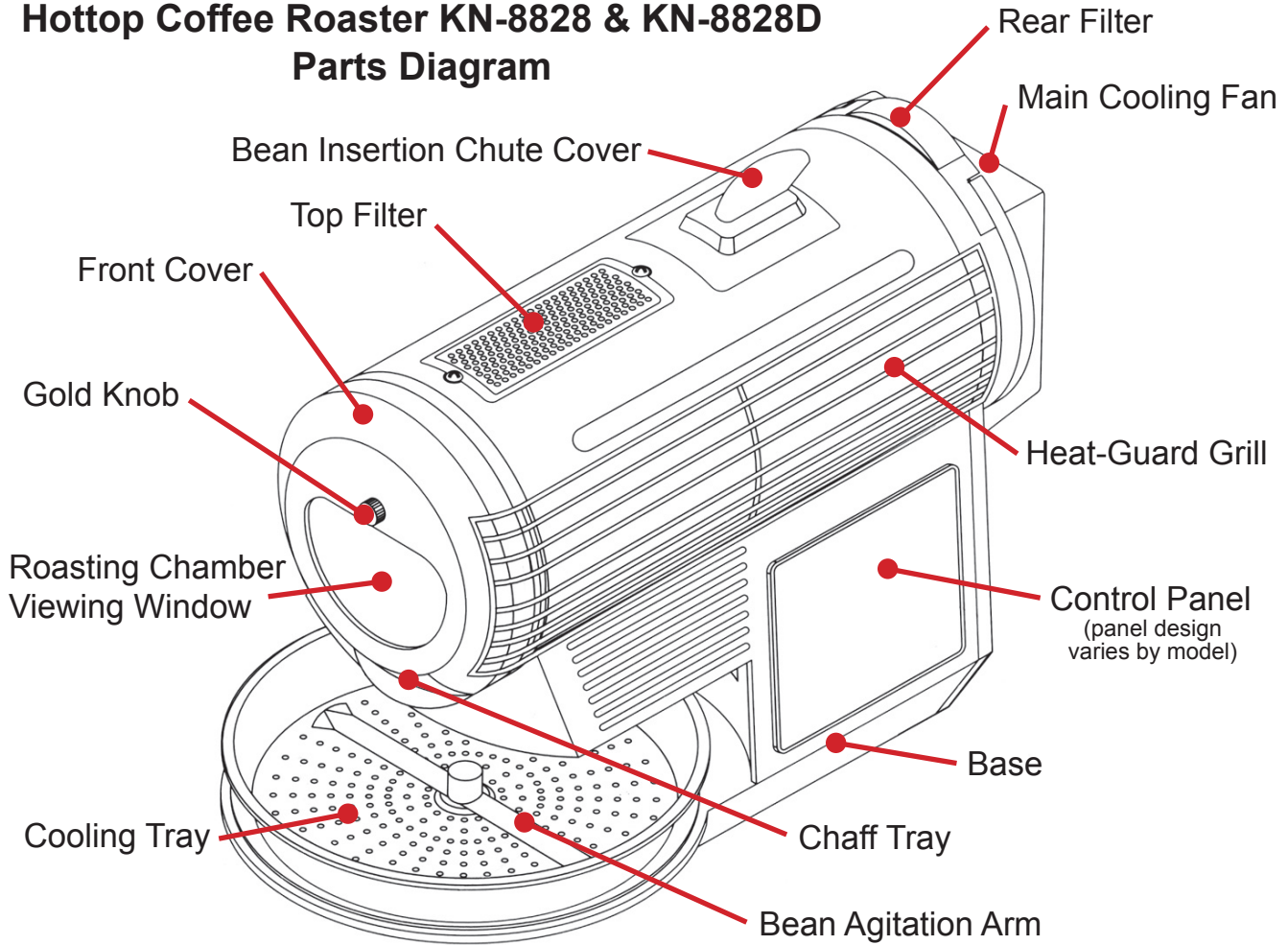
SAVE THESE INSTRUCTIONS in a safe place and REFER TO THEM OFTEN

WARNING: Read and Understand All Instructions, Precautions, Labels and Warnings BEFORE Using This Coffee Roaster! Keep these instructions for future reference and be sure anyone operating the machine reads and understands them before allowing them to use the Coffee Roaster. Feel free to contact your dealer before operating this appliance if you have any questions.

- **Never leave the Coffee Roaster unattended while in operation.!**
- Do not attempt to bypass, defeat, or remove any safety feature of the Hottop Coffee Roaster.
- The outer surface can be VERY hot! Do not touch hot surfaces. When necessary, use oven mitts for removing or touching any hot parts. Do not reach over or across the Coffee Roaster while it is in operation. Allow the machine to completely cool before disassembling, moving, or cleaning.
- At the end of the roasting cycle when the beans are ejected into the cooling tray they will be very hot. Do not touch the beans until the cooling cycle has completed!
- The Coffee Roaster should not be used by children or in the presence of children.
- Use the Coffee Roaster only when fully assembled. Never operate the Hottop Coffee Roaster without first attaching the heat protection grillwork. Discontinue use if any part becomes damaged, does not fit properly, or if the machine does not operate properly. Do not attempt to service the machine yourself, but seek repair or replacement from an authorized service center or your dealer.
- The use of accessory attachments other than those supplied or recommended by the manufacturer may cause hazards and can void your warranty.
- This appliance is for indoor, household use only. Do not use appliance outdoors or for other than household use as described in this manual. This appliance is not for commercial use.
- To prevent electric shocks, never use water on or near the machine. Do not use where rain or water can enter the machine. Do not immerse or spray the cord, the plug, or the base with water or other liquids , and other than as specifically described in this manual, do not wash in sink or dishwasher.
- Arrange the cord so that it cannot be caught or tripped over. Do not allow cord to hang over edge of table or counter. Keep cord away from all hot surfaces including those of the machine itself.
- Do not place the Coffee Roaster nor its cord on, in, or near a hot gas or electric burner, or in a heated oven.
- A short power cord has been provided. An extension cord may be used if care is exercised during its use. Use an extension cord rated at 8 amps or more. The cord should be arranged so it will not drape over the counter or table top. Do not use an extension cord longer than is absolutely necessary. Always pull the plug out from the wall socket- never pull on the cord. Disconnect the power cord when the Coffee Roaster is not in use.
- Use both hands to move the appliance. Never move this appliance when it is in operation. Allow appliance to cool completely before moving.
- If the electric circuit is overloaded with other appliances, your Coffee Roaster may not operate properly. This unit should be operated on a separate electrical circuit from other operating appliances.

- This appliance has a polarized plug. One blade is wider than the other. As a safety feature, this plug will fit in a polarized outlet in only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not attempt to defeat this safety feature.
- To clean the Coffee Roaster follow the included cleaning instructions in this manual. Unplug the unit and allow it to completely cool before doing any cleaning or disassembly. Do all maintenance and cleaning chores only when the machine is unplugged and completely cooled off. Refer to Chapter V for more details on “Cleaning and Care”.
- Always leave at least eight inches of space around the Coffee Roaster on all sides for proper ventilation when operating and until it has cooled. Keep the machine away from flammable materials such as curtains, towels, walls, furniture, or any other materials. Place on a heat-resistant surface when in use. Do not operate near combustible materials or liquids, nor near any pressurized spray cans.
- Avoid touching moving parts. Never reach into the machine while plugged in.
- Operate the Coffee Roaster only in a clean, dust-free area. Dust and dirt can be drawn into the Coffee Roaster and can contaminate the coffee being roasted.
- Use the Coffee Roaster only for roasting coffee beans. Never place any other substances, food or otherwise, in the machine. Use of anything other than green, unroasted coffee beans in the Hottop Coffee Roaster may create a hazardous condition and will void your warranty.
- Coffee roasting produces smoke which can be a respiratory irritant. Control the smoke so it does not enter the structure, and take care if there are children or elderly in the home or if anyone in the home has respiratory or breathing problems. Avoid breathing the smoke. We recommend that you use the Coffee Roaster in a place where ample ventilation is available- in the kitchen under an efficient range hood which vents outside, or near a window with an exhaust fan as examples.
- Always allow the machine to go through the entire roasting and cooling process (except for hitting the “eject” button to stop a roast early) and let the machine turn itself off after each roasting cycle. This will help extend the life of the Hottop Coffee Roaster. NEVER unplug the machine during a roast as it can cause a fire hazard and shorten the life of the machine.
- Roasting coffee too dark should be avoided. Just like you can over-cook and burn food on your stove or in your oven, it is possible to over-roast and burn coffee in the Hottop Coffee Roaster, even if it is used according to the instructions. Although much care has been put into designing the device to safely perform automatic roasting and cooling cycles, over-roasting can occur. This is more likely to happen when using less than the recommended amount of beans (250 grams.) on a setting that is too high.
- Under extreme circumstances, over-roasted beans can catch fire, particularly when the beans are ejected and become exposed to the atmosphere. Always use the indicated amount of beans (250 grams), and always monitor the progress of the roast to prevent over-roasting.
- Extra care must be taken when roasting decaffeinated coffee. The decaffeination process changes the indicators used to judge roast level and over-roasting can result.
- Always have a spray bottle filled with water on hand when roasting to quench a fire if the beans are over-roasted and ignite upon ejection. If the ejected beans ignite do not attempt to move the machine. Call emergency services, disconnect machine, and use the water-filled spray bottle or fire extinguisher to extinguish the flames.
- **NOTE: The machine cannot be restarted until the chaff tray is removed, emptied, and replaced.** Empty the chaff tray after every roasted batch. The chaff and coffee bits in the chaff tray will become very hot during roasting. Chaff can ignite during the roasting process and may smolder in the chaff tray. Use great care when disposing of the chaff as it can create a fire hazard particularly if it is dumped onto other flammable material soon after a roast has concluded.

Hottop Coffee Roaster KN-8828 & KN-8828D Parts Diagram



How to Install the Heat-Guard Grills

- 1) Attach front support on mounting hook, holding the guard at an angle as shown.
- 2) Lower rear of guard into position being sure that both front and rear guard-supports are hooked onto Coffee Roaster.

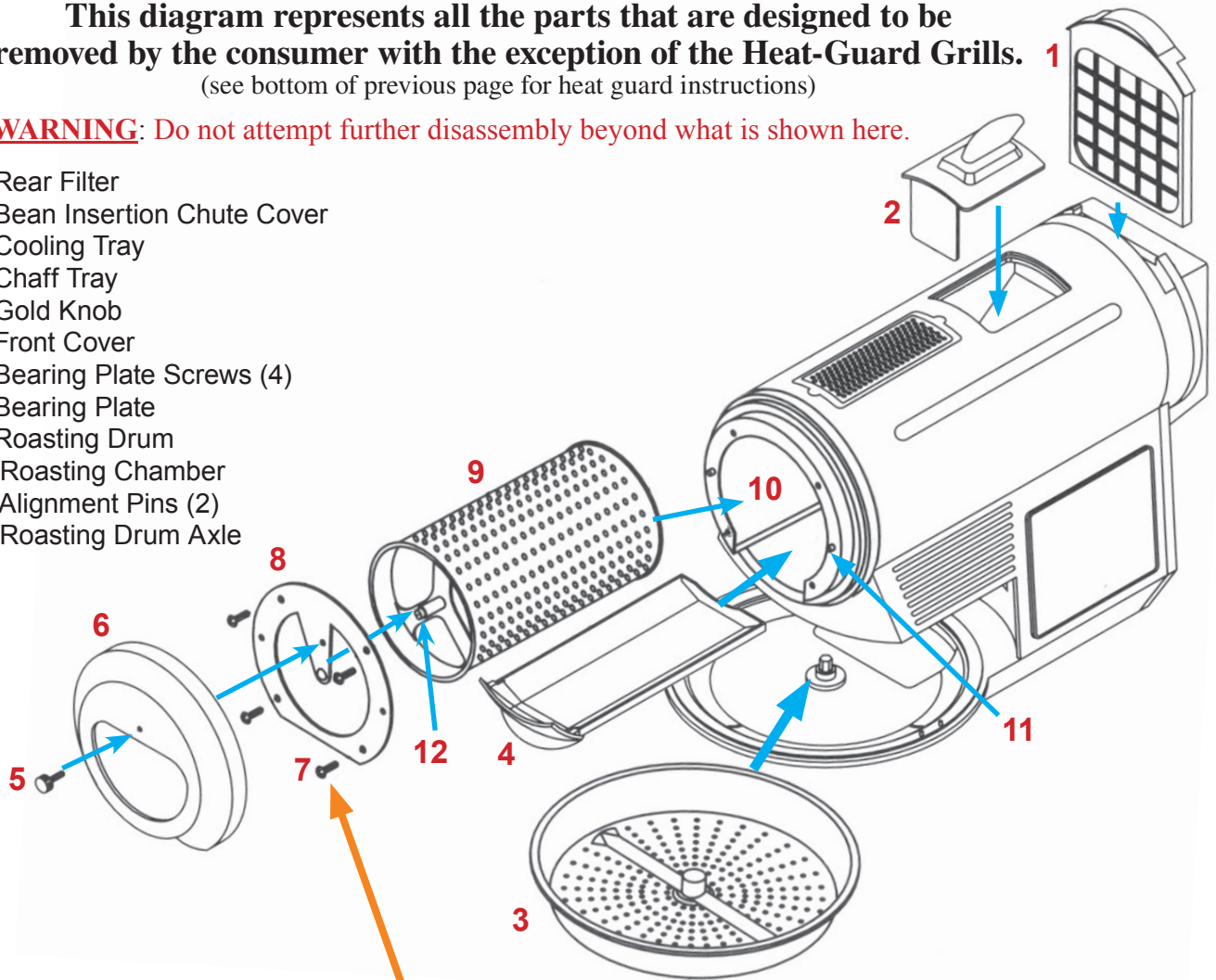
To Remove: Wait until machine has cooled to room temperature and while holding front of guard in place (1), raise rear of guard until support clears the rear mounting hook (2).

WARNING: Always operate the Hottop Coffee Roaster with the heat-guard grills in place. Do not lift or carry the Coffee Roaster by the heat guards.

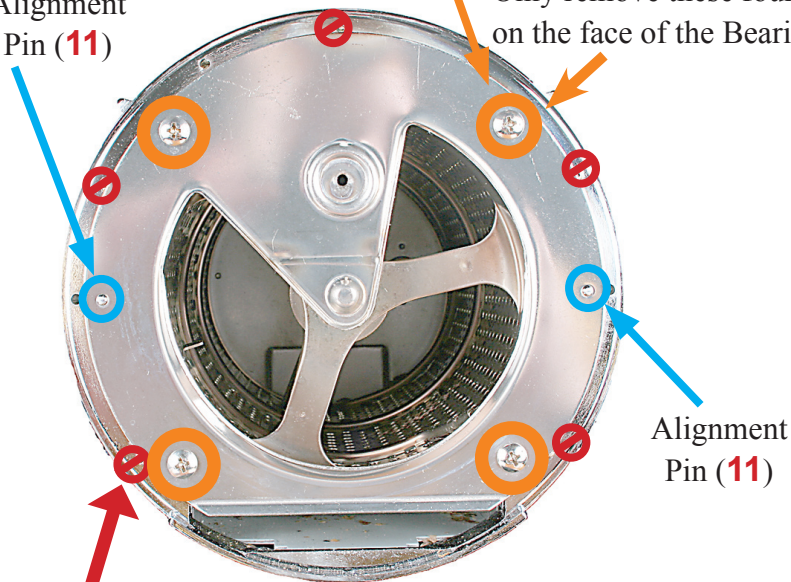
This diagram represents all the parts that are designed to be removed by the consumer with the exception of the Heat-Guard Grills. 1
 (see bottom of previous page for heat guard instructions)

WARNING: Do not attempt further disassembly beyond what is shown here.

- 1 - Rear Filter
- 2 - Bean Insertion Chute Cover
- 3 - Cooling Tray
- 4 - Chaff Tray
- 5 - Gold Knob
- 6 - Front Cover
- 7 - Bearing Plate Screws (4)
- 8 - Bearing Plate
- 9 - Roasting Drum
- 10 - Roasting Chamber
- 11 - Alignment Pins (2)
- 12 - Roasting Drum Axle



Alignment Pin (11) Only remove these four Bearing Plate Screws (7) on the face of the Bearing Plate (8)



WARNING: Never remove these five smaller screws!



II - Coffee Roasting- A Brief History

It wasn't that long ago that it was common for people to buy raw coffee beans from the stores and then roast these at home for fresh coffee. That was particularly true in rural areas that were removed from the small roasters found in city neighborhoods. At that time, roasting coffee was considered a normal part of everyday life and a part of many peoples' cultural heritage. There were many types of small hand-cranked roasting devices available, usually heated with wood, coal, or gas. These were either used in the kitchen, the garden, or on the balcony. People took pride in their ability to produce the type of roast that they liked best, and considered it a sort of ceremony, or art. Each morning in these neighborhoods, the sweet smell of roasting coffee lingered in the streets.

With the advent of instant coffee, developed for the soldiers in WWII, and the post-war boom of the convenience-food industry, the art of coffee roasting was all but lost to the masses. The same corporate brands that produced instant soups and washing detergents erected huge coffee roasting facilities to provide people with a ready-made product. What use to be a fine art became a factory product. Today, most consumers buy pre-ground coffee from these factories, unaware of the culinary tradition that once existed.

Abandoning home coffee roasting has come at a price. While green (raw) coffee will easily keep for over a year with little care, it has been shown that roasted whole coffee beans lose a large part of their flavor within two or three weeks after roasting. Once it has been ground, the coffee stales at an even faster rate, and loses its fresh-roasted taste within a matter of hours. Consequently, most cans and vacuum bricks found on the supermarkets shelves contain a product that has long since lost its precious, volatile flavors. Even when one finds whole beans in a supermarket or specialty shop, one hardly ever knows whether these beans are fresh-roasted, weeks old, or worse.

Finally, like all convenience products, what you gain in convenience you pay for in lower quality and less flavor. If you think of it in terms of comparing fresh, home-baked bread to pre-sliced, store bought loaves, you begin to get the idea. The coffee available in the stores today may be of uniform quality and style, but it may be very different from what you like best.

For these reasons, the best way to ensure your getting truly fresh coffee, roasted to match your personal preferences, is to return to the great tradition of home coffee roasting. More and more people are discovering this, and home coffee roasting is quickly becoming the latest culinary trend.

You Are On Your Way Back to the Past

We want to and thank you for your decision to purchase our Hottop Coffee Roaster. We feel that this is the most advanced coffee roaster available for home use, and when used with care will provide you with excellent, fresh-roasted coffee, just like most households use to enjoy, but roasted with scientific accuracy for easily-repeatable results. You are about to find out how good freshly roasted coffee can really taste!

Please take the time to read the instructions in this manual carefully. By doing so, you and your guests will be able to truly enjoy the excellent flavors of specialty coffee, roasted precisely as you will like it. The Hottop Coffee Roaster makes that easier than ever before.

Please keep this manual in a convenient place, so you can reread it when necessary. If you are uncertain about any procedure as detailed in this manual, or are not sure how to get the most out of your Hottop Coffee Roaster, please ask your local dealer or feel free to contact us. We are always ready to help.

III - Introduction to the Roasting Process

The changes that the coffee bean goes through during the roasting process are amazing. Those small, hard beans, when properly exposed to controlled heat, grow in size and change in color, becoming the source of one of the world's most cherished beverages. The Hottop Coffee Roaster makes it easy to get the best from the coffee.

Getting the best flavor from the coffee is a true culinary art, and just like other similar cooking skills, you have to learn a little about the process to get the best results. Follow along and you will quickly learn to create the taste you like best. We have made the Hottop Coffee Roaster so that it controls much of the difficult work, but it is still important to know what to expect and when to expect it when using the Hottop Coffee Roaster.

Recognizing Roast Level

To get the taste you desire in your coffee means knowing when to stop the roast. As you learn to roast it will become a natural thing to judge roast level, but when starting out it can be a bit intimidating. While you watch the coffee roasting in the Hottop Coffee Roaster you will ask yourself, Is it done yet? Is it too dark? Should I eject the beans now or wait ten more seconds? The following information will help you answer those questions.

There are three major indicators of roast level. These are the same indicators that professional roasters have long used to recognize the level of roast. Even in this computer age, most professional roasters still use these very same indicators to judge roast level. These three indicators are sound, color, and the aromas of the roasting process. The best indicator for the new coffee roaster learning the process is sound.

Sound

When first beginning to roast coffee, the sounds the beans make are the easiest roast-level indicator to learn. Yes, the beans actually make certain noises during the roasting process and these noises are an accurate indicator of roast level. These sounds are referred to as "cracks" and there are two different cracks that take place at two distinct time periods during the roast. These two different periods, for obvious reasons, are called "first crack" and "second crack." These are universal terms, and if you talk to any commercial roaster and say something like, "I like to roast about ten seconds into second crack," they will understand exactly what you mean.

During both these periods (explained in detail below) the sounds start slowly at first. You will initially notice just an occasional "crack," followed by another a few seconds later. This increases in frequency as sounds become gradually more rapid. After a while, the progression of sounds slows down again, and eventually subsides altogether.

For your first roast, it may be best to seek out a variety of coffee that has very distinct periods of cracking; Central American or South American varieties, such as Colombian or Brazilian coffees are a good choice for your first roasts.

First Crack - As explained above, "first crack" refers to a specific period of time during which you will hear similar sounds. First crack sounds somewhat like breaking wooden pencils: distinct, easily heard, sharp snaps. Because the Hottop Coffee Roaster operates very quietly, it is easy to hear these sounds, even from a number of feet away from the roaster. In the Hottop Coffee Roaster first crack usually begins after about 15 or 16 minutes of roasting time. By this time, the beans in the roaster are already light brown, and the grassy smelling steam has changed to a mellow, drier-smelling smoke. You will first hear an occasional snap, then another, then the crackling gradually speeds up, and, after a while, slows down again, then stops.

The actual times at which these periods start and stop again depend a lot on the variety of coffee you are roasting. The coffee you are roasting will affect the differences in sound, volume, and speed of the cracks. In some varieties the two periods also partly overlap, making it difficult to tell when first crack ends, and second crack begins.

Second Crack - After first crack ends there is usually a period of about one minute before second crack begins. By that time, the beans are a delicious-looking, dark shade of brown. Second crack can be a little more difficult to hear as these sounds are lower in volume, but once you learn to distinguish the sound it is unmistakable. It is a more muffled, subtle sound than first crack. If first can be described as breaking pencils, second sounds like breaking toothpicks. Generally, once second crack really gets going the individual cracks occur with much greater frequency than the sounds during first crack.

The beginning of second crack is an indicator that the coffee is nearly done and you should be ready to end the roast very soon. When second crack begins to diminish, most coffees are near the end of their preferred-flavor profile, and when second crack ceases the beans are on the edge of being ruined and are approaching the ignition point.

Timing

So that you will have some idea of when to expect some of these changes, please refer to the following table as you progress through your first roast. The following times are to be used as a rough guideline only. There are many factors that can affect the various times at which to expect the following changes. These influencing factors can include:

- Beans chosen (different varieties have various roasting characteristics)
- Actual weight of beans (can vary depending on your scale’s accuracy)
- Volume of beans (250 grams of one variety can take up more space than the same weight of another variety)
- Size of Beans - some beans are very small (peaberry) and some quite a bit larger (Colombian Supremo)
- Ambient air temperature and humidity
- Moisture level of the beans
- The voltage in your home (it can vary as much as 12-15 volts from place to place)

For the KN-8828, use a stopwatch and begin timing from when you pour the beans into the machine. For the KN-8828D use the displayed time display on the digital readout as a countdown timer. Watch those times and compare them to the times in this chart and the description of the roasting process described in the third column. Remember, this is a rough guideline so don’t worry at all if your roast times differ. Also, do not stand right in the smoke plume. It is difficult to sense the aroma that way and smoke can be an irritant to the respiratory tract. Smell the smoke from a distance away from the machine where it is less dense.

KN-8828 * Approximate Elapsed Time (Minutes:seconds)	KN-8828D * Indicated Roast Time Remaining (Minutes:seconds)	Roast Level Indicators You Will Observe
7:00 - 8:00	14:00-12:00	Beans become green in color, there is some steam which has a pleasant grassy aroma.
9:00 - 10:00	11:00-10:00	Beans change slowly from green to yellow. The smoke initially smells like pancakes, then becomes more like baking bread.
11:00-15:00	9:00-8:00	Beans gradually turn from dark yellow to a “cinnamon” brown color. The smoke has a “nutty” odor.
15:30 - 17:00	3:00-1:45	First crack, sounds like breaking pencils. Beans medium brown at this stage. The smoke increases and begins to smell like coffee.
18:00	1:00	Second crack, sounds like breaking toothpicks. Beans dark brown and oil spots seen on some beans. Smoke becomes much denser
19:00	0:00	You will hear the rapid sounds of second crack, and the smoke coming from the roaster will be pungent and quite dense. This is about as dark as most coffees should be roasted. Much more and the coffee will be burned.

*NOTE: KN-8828 - These times are taken using a stopwatch, starting from when the beans were added to the roaster
 KN-8828D - Starting with 19 minutes programmed time on the machine, these are the times as indicated on the digital display as the machine counts down the roasting time.

Bean Color

As the roast progress the beans go through series of a subtle, and sometimes not-so-subtle color changes from their original color, to green, to beige, then through a whole range of browns- first dull then shiny as they darken, and progressing to brown so dark that it can look black. Although color is important, for someone new to coffee roasting it can be difficult to use color as the sole indicator of roast. Bean color is discussed Chapter VI, so feel free to consult that for more details, but for people learning to roast, the sound will be the best indicator as mentioned above. As your skills and perception of the process progress, and as you narrow the range of your preferred roast levels, bean color will increase in importance as an indicator of roast level.

IV - Basic Roasting Instructions and Your First Roast

That was a lot of information to remember, but follow along and it will all become quite clear during your first roast. Believe it or not, using the Hottop Coffee Roaster is actually quite simple and safe when the procedures and safety guidelines in this manual are followed.

WARNING: Never leave the roaster unattended during a roast!

This chapter is intended to make you familiar with the roasting process, and the way the Hottop Coffee Roaster actually works. Before starting to roast your first batch of beans, be sure you have completely read and understand the safety precautions and instructions presented in this manual.

Remember that the only purpose of this first roast is to practice, so don't be concerned if the coffee doesn't come out as you might expect. Don't be afraid that anything can go wrong. If you follow the safety precautions and the operating procedures, roasting coffee with the Hottop Coffee Roaster is fun, easy, and safe.

For your first experimental batch select a variety that is easy to roast. Most any of the varieties from Central or South America will do fine. Guatemalan, Colombian, Brazilian, Bolivian, or Costa Rican are all good choices. These coffees have very loud cracks that are easy to recognize. Moreover, these are also relatively inexpensive, so if anything goes wrong, you don't have to feel too bad about discarding the beans.

Basic Operation of the Hottop Coffee Roaster

The Hottop's programmed roasting process consists of three distinct stages which are controlled by the internal microprocessor, and unless you decide to interrupt the process, all function automatically.

1. WARM UP - during this time the roaster pre-heats much like you would do with your oven before baking, but in this case it is entirely automatic, controlled by the Hottop Coffee Roaster's microchip.

2. ROASTING - When the machine signals to add beans the roasting process begins. The roasting cycle can take up to nearly 25 minutes, but can be as short as you decide depending on how YOU want to roast the beans!

3. COOLING - After roasting, for best taste, it is important to cool the roasted coffee as quickly as possible, this is called the cooling cycle. The Hottop Coffee Roaster features an external cooling tray, and cools it down to room temperature in less than five minutes.

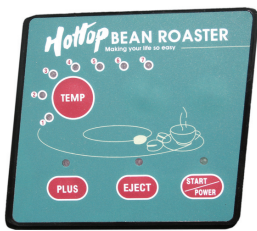
For around the first fifteen minutes after pouring the beans into the Hottop Coffee Roaster not much will happen. Nonetheless, it is important to remain near the machine and pay attention. Through this early period, if you watch the beans through the window in the front of the Hottop Coffee Roaster, you will see the gradual change of color from their original color, to green to tan, then to light brown. If you keep a small portion of unroasted beans close by you can easily compare the unroasted beans to the changes taking place to the color of the beans in the roaster.

Make a mental note of how much volume the beans take up when first poured in. You will notice a definite increase in volume as the beans expand during the roast. The various aromas of the smoke change throughout the roast as well. Initially, there is just a little steam that has a pleasant grassy scent and a relatively high humidity. As the roasting progresses, this turns into a more dense smoke that smells like hay, and later somewhat like making pancakes or baking bread. Again, steam and smoke are normal by-products of coffee roasting, so don't worry. Smoke does not mean that there is anything wrong with your machine.

As mentioned earlier, sound is probably the most reliable indicator when roasting your first batches. When the beans are a cinnamon-brown color, you will hear the first sounds of "first crack." It is almost impossible to miss these loud and fairly sharp snaps. Apart from being an obvious sign of where the beans are in the roasting process, the sound of first crack also tells you that you should start monitoring the process even more closely. Although little has happened in the previous fifteen minutes or so, the roasting will proceed very fast from this point forward in the roast, and the beans will change a lot in the next few minutes. Throughout the roast, and particularly nearer the end of the selected roast time, it is normal to see a certain amount of steam and smoke escape from the Hottop Coffee Roaster. Smoke production will increase as the temperature of the coffee beans rises and with darker roasts.

As first crack ends, there is usually a short pause. Now is time to be very alert, and listen for second crack, which is a much softer sound, and can be a bit more difficult to hear. This may also be the time when you will hear the beeping of the Hottop Coffee Roaster that signals it is near the end of its roasting cycle.

If the machine doesn't eject the beans automatically, wait until you have heard about fifteen or twenty of the muffled snaps of second crack (you don't need to accurately count that, just estimate), then push the "Eject" button to stop the roast. The Hottop Coffee Roaster then proceeds with the cooling cycle. When the cooling cycle ends the machine beeps repeatedly to indicate that it has finished the entire roasting and cooling process, and then shuts itself off. At that time disconnect the roaster.



Model KN-8828 - Roasting Step by Step

NOTE: **Black and yellow** words refer to the buttons on the control panel of the same name.

NOTE: Red numbers below in parentheses, such as (5), refer to the diagram on page 7

WARNING: Never leave the roaster unattended during a roast!

Read all directions and safety precautions before following these directions!

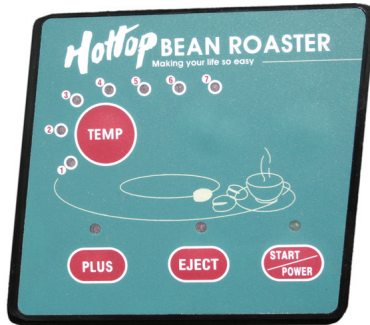
1. Pre-measure 250 grams (9 ounces) of green, unroasted coffee beans. Although you can use the Hottop Coffee Roaster to roast a little more, or a little less, it is strongly recommended that you always start with 250 grams of coffee when learning to use the roaster and when roasting new beans.
2. Locate the Coffee Roaster where the roast will take place (see Safety guidelines at the beginning of this manual to help select a safe location) and plug the machine in. The power light comes on at this time indicating that the machine is ready.
3. Push **START/POWER** once to enter the roast setting selection procedure.
4. Press **TEMP** to select the desired roast from one of the 7 settings. Repeatedly pressing the **TEMP** will cycle through the roast levels until the desired level is selected. The higher the number, the longer the roasting cycle will take, and the darker the resultant roast will be. For your first roast use level “4.” **NOTE: It is not possible to change the programmed roast level once the roasting process has begun.**
5. Push **START/POWER** again to start the pre-heating cycle. The drum will begin rotating. Once started, the Hottop Coffee Roaster needs to be pre-heated, similar to how you use your oven. The Coffee Roaster should not be filled with coffee beans during this pre-heating cycle. This is the first part of the roasting process. At any time during the roast, if the machine sounds like metal rubbing, adjust the gold screw (5) to lessen the sound as much as possible. **WARNING!- The screw may be very hot!**
6. A few minutes later the Coffee Roaster will have reached its starting temperature. At this time the Coffee Roaster will start beeping to indicate that it is ready to roast coffee. Since many parts of the Coffee Roaster are hot, carefully remove the small lid (2) on top of the Coffee Roaster using the plastic handle.
7. Use the included funnel to fill the machine with 250 grams of green (unroasted) coffee beans. After filling, remove the funnel and replace the lid (2). Use the vertical panel on the bottom of the lid to push any stray beans left in the loading chute into the roasting chamber (see photo on page 7). You are now roasting coffee!
8. After a period of time, depending on what roast level you selected, the Coffee Roaster will start beeping again, signalling that the end of the roasting cycle is approaching. Examine the beans through the viewing window. If you decide the beans need some more time to roast to the desired color, you can now increase the roasting time by pressing **PLUS** (the light above the button will start flashing). Each press increases the roasting time by 30 seconds, and you can use this function up to five times.
9. At any time during the roasting process, if you find that the beans are dark enough (or for any other reason you wish to stop the process), you can manually end the roast by simply pressing **EJECT** at which time the beans will be ejected from the roasting chamber into the cooling tray and the cooling cycle will begin.
10. About one minute after the “End of Roast” signal (or longer, if you pressed **PLUS**), the Hottop Coffee Roaster will stop roasting, and will automatically deposit the roasted coffee beans onto the cooling tray (3). The arms will agitate the beans for about five minutes while the cooling fan under the tray blows air to cool the beans. When this cooling cycle ends the machine beeps repeatedly to indicate that it has finished the entire process.
11. When the cooling cycle has completed, disconnect the power cord.

After Roasting

12. When the Coffee Roaster has completed the cooling cycle, the cooling tray (3) can be removed from the machine. You can now use the funnel again to pour the roasted coffee in a canister, or jar for storage. A one-liter canister is large enough to hold all the roasted beans.
13. Remove the chaff tray (4), located underneath the window, from the Coffee Roaster by holding the black plastic front, and pulling it towards you. Empty the chaff tray and replace it in the roaster. Loosen the golden knob, and remove the front cover to clean the viewing window. Refer to Chapter V for further cleaning instructions.






WARNING: THE CHAFF TRAY (4) UNDERNEATH THE ROASTING DRUM MUST BE FULLY EMPTIED AFTER EVERY ROAST! The machine cannot be restarted until the tray is emptied!

14. Allow the Coffee Roaster to cool before moving or storing the machine.



Hottop Coffee Roaster - KN-8828 Quick Reference Operating Instructions

WARNING: Read and understand the owner's manual and *all* the safety precautions and use the directions on page 12 *before* following these step-by-step instructions!

1		<p>Plug the Hottop Coffee Roaster into the proper outlet. Press START/POWER. The red LED above the START/POWER button will begin blinking.</p>
2		<p>Repeatedly press TEMP to cycle through the roast levels until the desired level has been selected</p>
3		<p>Press START/POWER and the roasting process begins. After a few minutes the machine signals you by beeping to indicate that it is time to add the beans</p>
4		<p><i>OPTIONAL:</i> The Hottop Coffee Roaster will begin beeping to warn you 30 seconds before the roast will end. At this time, if you wish, you can press the PLUS button to add 30 seconds to the roast time. This can be done as many as five times, adding a total of 150 seconds to the original roast level you chose step "1." The beans will automatically eject when the time runs out. As the beans begin to eject the automatic cooling cycle will begin.</p>
5		<p>At <u>any</u> time during the roast, when <u>you</u> decide that the coffee is done to your liking, press the EJECT button and the Hottop Coffee Roaster will end the roasting process, eject the beans into the cooling tray, and the cooling cycle will begin.</p>



Model KN-8828D Roasting Step by Step

NOTE: **Black and yellow** words refer to the buttons on the control panel of the same name.

NOTE: Red numbers below in parentheses, such as (5), refer to the diagram on page 7

WARNING: Never leave the roaster unattended during a roast!

Read all directions and safety precautions before following these directions!

1. Pre-measure 250 grams (9 ounces) of green, unroasted coffee beans. Although you can use the Hottop Coffee Roaster to roast a little more, or a little less, it is strongly recommended that you always start with 250 grams of coffee when learning to use the roaster and when roasting new beans.
2. Locate the Coffee Roaster where the roast will take place (see Safety guidelines at the beginning of this manual to help select a safe location) and plug the machine in. The power light indicates that the machine is ready.
3. Press **START**. The display will show “00”. The Coffee Roaster is ready to be programmed to roast coffee.
4. Press **TIME** until the display shows the amount of time (in minutes) you wish to roast the coffee. 17 through 21 minutes may be selected by repeatedly pressing the **TIME** button. When “21” shows, pressing the **TIME** button again will send the program back to “17” and the selection process cycles through the numbers once more.
5. Once the minutes are selected, the time can be further customized by pressing **PLUS** to add seconds. Each press adds one second. Hold the **PLUS** button down to quickly cycle from “00” through “59.” When “59” is showing, pressing the **PLUS** button once (or holding down the button) will send the program back to “00”. **NOTE: It is not possible to change the programmed time once the roasting process has begun.**
6. When you have completed programming the desired amount of time, press **START** and the roasting process begins. The drum will begin rotating, but the time does not change. If you started with a cold machine the Hottop Coffee Roaster will warm up for about five minutes before it is ready. If the Coffee Roaster has recently been used it will progress through a special cool-down cycle first, and this can take an additional five to ten minutes.
7. The Coffee Roaster will beep when it is time to add green coffee beans, and the programmed time will begin to count down. Since many parts of the Coffee Roaster are hot, use care when lifting the lid (2) on top of the Coffee Roaster. Only touch the plastic handle. Use the included funnel to fill the machine with the pre-measured 250 grams of green (unroasted) coffee beans. After filling, remove the funnel and replace the lid (2). Use the vertical panel on the bottom of the lid to push any stray beans left in the loading chute into the roasting chamber. At any time during the roast, if the machine sounds like metal rubbing, adjust the gold screw (5) to lessen the sound as much as possible. **WARNING!- The screw may be very hot!**
8. After about 17 to 22 minutes, depending on the amount of time you programmed into the roaster, the Coffee Roaster will start beeping again, signalling the end of the roasting cycle is approaching. At this time re-examine the beans through the viewing window. If you decide the beans need more time to roast to the desired level, you can now increase the roasting time by pressing the **PLUS** button. Each press increases the roasting time by 30 seconds, and you can use this function up to five times, adding 2:30 to your pre-programmed roast time.
9. **Always monitor the roasting process** by looking through the convenient viewing window at the coffee beans. This way, at any time during the process, if you find that the beans are dark enough (or for any other reason you wish to stop the process), you can manually end the roast by simply pressing the **EJECT** button at which time the beans will be ejected from the roasting chamber into the cooling tray and the automatic cooling cycle will begin.
10. When the programmed time has elapsed the Hottop Coffee Roaster will automatically eject the coffee into the cooling tray and begin the cool-down cycle.
11. When the cooling cycle has completed the machine will sound a series of beeps and will come to a stop. At that time disconnect the power cord.

After Roasting





12. When the Coffee Roaster has completed the cooling cycle, the cooling tray (3) can be removed from the machine. You can now use the funnel again to pour the roasted coffee in a canister, or jar for storage. A one-liter canister is large enough to hold all the roasted beans.
 13. Now, remove the chaff tray (4), located underneath the window, from the Coffee Roaster by holding the black plastic front, and pulling it towards you. Empty the chaff tray and replace it in the roaster. Loosen the golden knob, and remove the front cover to clean the viewing window. Refer to Chapter V for further cleaning instructions.
- WARNING: THE CHAFF TRAY (4) UNDERNEATH THE ROASTING DRUM MUST BE FULLY EMPTIED AFTER EVERY ROAST! The machine cannot be restarted until the tray is emptied!**
14. Allow the Coffee Roaster to cool before moving or storing the machine.



Hottop Coffee Roaster - KN-8828D

Quick Reference Operating Instructions

WARNING: Read and understand the owner's manual and *all* the safety precautions, and use page 14 before following these step-by-step instructions!

1		<p>Plug the Hottop Coffee Roaster into the proper outlet. The green power LED will be illuminated. Press START. The display will show "00". The Coffee Roaster is ready to be programmed to roast coffee.</p>	
2		<p>Press TIME until the display shows the amount of time (in minutes) you wish to roast the coffee. 17 through 21 minutes may be selected by repeatedly pressing the TIME button. When "21" shows, pressing the TIME button again will send the program back to "17".</p>	
3		<p>Once the minutes are selected, the time can be further customized by pressing PLUS to add seconds. Each press adds one second. Hold the PLUS button down to quickly cycle from "00" through "59." When "59" is showing, pressing the PLUS button once more will send the program back to "00". NOTE: It is not possible to change the programmed time once the roasting process has begun.</p>	
4		<p>When you have completed programming the desired amount of time, press START and the roasting process begins. The drum will begin rotating, but the time does not change. If you started with a cold machine the Hottop Coffee Roaster will warm up for about five minutes before it is ready. If the Coffee Roaster has recently been used it will progress through a special cool-down cycle first, and this can take an additional five to ten minutes. The Coffee Roaster will signal when it is time to add 250 grams of green coffee beans by beeping, and it is then that the programmed time will begin to count down.</p>	
5		<p><u>OPTIONAL:</u> Pressing the TEMP button at any time during this process will change the display from the remaining roast time to the current roasting temperature. The temperature will display for two seconds then revert back to time. Press and hold the TEMP button to change the display from Fahrenheit to Centigrade. Holding it down again will change it back.</p>	
6		<p><u>OPTIONAL:</u> The Hottop Coffee Roaster will begin beeping to warn you 40 seconds before the roast will end. At this time, if you wish, you can press the PLUS button to add 30 seconds to the roast time. This can be done as many as five times, adding a total of 2:30 to the original roast time you programmed in step "1." The beans will automatically eject when the time runs down to 00:00. As the beans begin to eject the automatic cooling cycle will begin.</p>	
7		<p>At <u>any</u> time during the roast, when <u>you</u> decide that the coffee is done to your liking, press the EJECT button and the Hottop Coffee Roaster will end the roasting process, eject the beans into the cooling tray, and the cooling cycle will begin. During the cooling cycle the display will alternately show COOL and the amount of time remaining for the cooling cycle.</p>	

V - Cleaning and care (all models)

Roasting coffee can be a bit messy. The chaff that comes off the beans, bits and pieces of coffee beans, and stray beans themselves can get strewn about in and out of the roaster. To create the best coffee possible, to ensure safe operation, and to extend the life of your Hottop Coffee Roaster, it is very important to do some regular maintenance and cleaning.

NOTE: Red numbers in parentheses, such as (5) for example, refer to the diagram on page 7

WARNING: All cleaning chores should only be done with the machine unplugged and when the machine has cooled to room temperature. Allow all parts to thoroughly dry before assembling and before using the machine again!

A. After each roast (Refer to diagram on page 7)

1. **WARNING:** TO PREVENT FIRE, IT IS IMPORTANT THAT THE CHAFF TRAY (4) UNDERNEATH THE ROASTING DRUM IS FULLY EMPTIED AFTER EVERY ROAST! Pull the chaff tray (4) out using the black plastic handle (located under the viewing window on the front of the machine). Use a soft brush, or kitchen towel to clean the tray. If required, wash the chaff tray with water and soap. Dry thoroughly before replacing.

IMPORTANT: The machine is equipped with a safety mechanism that makes it impossible to restart the machine until the chaff tray is removed, emptied, and replaced.

2. Some beans create more chaff than others. At times there can be a chaff build up inside the roasting chamber after just one roast. To clean out this stray chaff, remove the chaff tray (4), cooling tray (3), and bean loading cover (2). Then carefully tip the Coffee Roaster forward and gently shake it to remove stray chaff. Carefully using compressed air can assist in removing the stray bits of leftover chaff and bean particles. Use caution so as not to displace the material contained in the top filter when using compressed air. **WARNING:** proper eye protection and breathing protection should be used when using compressed air to clean out the roasting chamber.
3. To clean the glass viewing window, wait until the machine has completely cooled off and remove the chaff tray. While holding the front cover (6) on the machine with one hand, unscrew the gold knob (5), until the front cover to be easily lifted off. Use a soft cloth moistened with water to clean the glass. Encrusted oils on the glass can be removed using a stiff brush or wet nylon scouring pad with a small amount of dish washing soap. Scrub gently to avoid scratching the glass. Rinse thoroughly and allow to dry before replacing. Tough buildup can be removed with espresso machine cleaner or diluted TSP (tri-sodium phosphate).
4. Check the inside of the drum (9) after each roast. Beans can sometimes get stuck in the drum and if allowed to go through a subsequent roast they will burn. The burnt beans can affect the taste of the entire roast. Remove the front cover of the machine as described in step 3 above and look inside the drum. Stuck beans can be dislodged using a long-handled, stiff brush, a length of 1/4" wood dowel, chopstick, or similar tool. If necessary, remove the drum for cleaning (outlined below).
5. Replace the filter (1) at the rear of the machine after using 30-40 times.

B. After 4 to 5 roasts

1- Drum Removal (Refer to diagram on page 7)

Chaff and other small particles will accumulate in the roasting chamber after roasting several batches. Large amounts of this dry material can ignite and start a fire inside the roaster. It is therefore very important to remove the drum, and clean the entire roasting chamber after every 4 to 5 roasts. The following procedure describes how to remove the drum.

IMPORTANT: Please take care when following this procedure to remove the drum. You can damage the machine, which may void the warranty, or cause a hazard not covered by the warranty. Use care not to scratch the machine or damage the drum. It is heavy so take care when removing it. Also watch for sharp edges on the drum and front plate. Wearing gloves for this procedure is recommended.

- a. Start by removing the cooling tray (3), chaff-collecting tray (4), heat safety guards, and bean loading cover (2) Now unscrew the gold knob (5) and take the front cover (6) off, as described above. It is best to place all removed parts off to the side where they won't get knocked off the counter or into the sink.
- b. Remove the four Phillips head screws (7) on the front plate (8) and store these, for example, in the chaff tray (4). When the four screws have been removed, carefully pull the front plate (8) off the Coffee Roaster. Note that it is located on two small metal pins (11) on the front of the machine.
- c. The drum (9) can now be taken out of the roasting chamber by pulling it straight out. You may need to lift it slightly before pulling it out as its weight might jam it in the drive shaft once the front plate is removed.
- d. Clean out the chaff inside the roasting chamber (10) with a soft brush or cloth, or using a vacuum cleaner, which can be convenient to remove all chaff and dust inside the roasting chamber
- e. Some staining and discoloration is normal in the roasting chamber. For heavy build-ups of coffee oils use a rag LIGHTLY MOISTENED in a coffee machine cleaning solution. Wipe the chamber thoroughly with a rag or towel moistened with clean water to remove all traces of cleaning solution. Allow the machine to dry completely before replacing the drum.

WARNING: DO NOT ALLOW WATER OR CLEANING SOLUTION TO DRIP INTO OR FLOOD THE ROASTING CHAMBER! Water damage is not covered by the warranty.

- f. Over time the drum (9) can become excessively caked with coffee oils. A light coating is good, but if it smells burnt or rancid, or if the buildup is heavy it is time to clean it. The drum should be taken out of the roaster for thorough cleaning. An espresso machine cleaner can be used or the removed drum can be placed in the dishwasher. It is stainless steel and won't rust. Dry the drum thoroughly before replacing it in the Coffee Roaster. **WARNING: NEVER immerse the entire machine in water and NEVER place the entire machine in the dishwasher.**

2- Replacing the drum (Refer to diagram on page 7)

- a. Replace the drum (9) in the roasting chamber (10), being careful to align the drive pin on the drum's axle with the slot in the drive shaft. While keeping the drum parallel with the roasting chamber, push the drum until it is fully seated.
- b. Reposition the bearing plate (8). The flange on the edges of the Bearing Plate face outwards (towards you). Make sure that the two pins (11) on the front of the Coffee Roaster are aligned with the two small holes in the front plate and that the drum shaft goes into the hole in the center of the front plate. Hold the Bearing Plate (8) in place and verify that it is fully seated on the front of the machine and that the alignment pins (11) are in their locating holes.
- c. While holding the Bearing Plate aligned on the locating pins, replace the four screws (7) by hand and screw them in by hand until seated. Once the screws (7) are fully inserted, again verify that the end of the Roasting Drum's Axle (12) is properly located in the bearing hole in the Bearing Plate and that the Alignment Pins (11) are in their respective alignment holes in the Bearing Plate (8). Carefully tighten the four screws with a screwdriver.

CAUTION: DO NOT OVER-TIGHTEN THE SCREWS!

- d. Put the front cover (6) back and screw in the Gold Knob (5) until lightly seated. Do not tighten the knob all the way. At the beginning of the next roast remember to adjust the Gold Knob until the drum rotates smoothly.

3- Exterior cleaning

WARNING: Always wait until the machine is completely cooled before cleaning, and always disconnect the power cord before cleaning.

The outside of the machine can be cleaned with a damp cloth, with a little household cleaner compatible with stainless steel if necessary. Never use abrasive substances like steel wool pads, nylon scrubbing pads, etc. If the stainless steel cover has very stubborn spots, use a VERY MILD chrome polish. Afterwards, use a normal household cleaner to carefully remove all traces of wax, or polishing substance. Cleaning residue left on the hot surfaces of the roaster will burn when using the machine, and may produce toxic smoke, and leave severe stains. After cleaning, always allow the Coffee Roaster to dry completely before plugging in the power cord.

VI - Roasting styles overview

This section contains a brief explanation of the various roasts you can achieve with the Hottop Coffee Roaster, and will give you a general idea of how roast level affects taste. There are numerous factors that affect the roast level at a given time or level setting on the machine. These can include bean age, moisture level, bean size, line voltage fluctuations, and many more. At some roast levels as little as thirty seconds can have a big effect on taste. Because of that use the following suggestions as starting places only. The best guide to preferred roast level is your taste!

Many people think that very dark roasted coffee is the best way to roast, or that coffee has to be roasted until it is oily to be good, but that is just not true. As mentioned before, a light roast, before second crack, keeps more of the delicate flavors, and can give the coffee a wonderful taste that many people never get a chance to enjoy. Experiment and you will discover what you like best.

Cracks, Flavors and Roast Styles

Before first crack occurs, the coffee will often taste grassy, and can be quite sour. You can find this out for yourself by light-roasting one batch to this extreme and tasting it. Coffee roasted this light has a hard, acidic bite that reminds one of sour citrus fruit. In the extremes, think grapefruit and you will not be very far off. Coffee roasted this light is usually not very agreeable to the majority of coffee drinkers. The beginning of first crack is the time when the coffee is just entering the state where it becomes drinkable. Up to this point most of the roasting time has been spent removing excess moisture from the beans.

Roasted just into the beginning of first crack, the coffee will be crisp, and acidic - like a very dry wine. This roast style is generally called “Cinnamon”. Some coffees can be very nice when roasted this way, but most people prefer a roast that is a little darker when the coffee has a more developed flavor.

Between the time just at the end of first crack, and shortly before second crack begins, the taste-features of most coffees will be most prominent. Depending on the coffee, these natural flavours can be remarkable and probably unlike what you have ever tasted. The taste will be predominantly “coffee,” but behind that you can find tastes of fruit, spice, chocolate, nuts, and in some varieties a pleasant leathery or oaky taste. This style of roast is often referred to as “city roast,” and is generally appreciated by a majority of coffee drinkers. It is quite suitable for drip coffee or press pot. Some “City” roasted coffees can also make a very nice espresso, or be used for siphon or vacuum brewers.

A “City” roast is one of the more difficult to achieve because you have to predict when second crack will occur and stop the roast somewhat before that point. With experience, and by keeping a detailed “roasting log,” you will learn to anticipate this point using the various tools and techniques discussed in this manual (sound, smell, appearance, and time).

As the roast progresses into second crack, the acidity gradually lessens, while at the same time the body of the coffee becomes heavier. The natural flavors of the coffee beans are reduced in strength, but the coffee gains in sweetness. Coffee that is roasted about fifteen snaps into second crack is generally referred to as “Full city”. This is the style that most people prefer for siphon brewers, and espresso. The taste is very well balanced between acidic and bitter, natural flavors are retained, and the body makes for a very pleasant beverage. You may notice that some of the beans have small spots of oil on them when they drop into the cooling tray, but these often disappear as the beans cool.

As you roast further into second crack and the surface becomes shiny, the coffee will obtain a distinctly bittersweet taste. This is often referred to as a “Viennese roast”, and many people like this for a cappuccino since the flavor cuts through milk quite effectively.

Be careful when you are roasting the beans this dark. Ten or fifteen seconds in roast time at this point can have a significant and dramatic affect on the taste of the coffee, and thirty extra seconds in this phase can easily be the difference between good coffee and a beverage that tastes burnt, a very unpleasant coffee taste.

The “Viennese” style is as dark as most people enjoy their coffee, but as you become more proficient at roasting you may want to experiment and roast the coffee a bit darker. If you do, you will see large drops of oil appear on the surface of nearly all the beans. The smoke produced now is quite dense, and has a sharp, pungent smell. The coffee usually acquires a similar sharp taste, with the flavor being predominantly “roast” and less that of “coffee.” Some people do enjoy this “French” style but if you are purchasing quality beans this level of roast removes a lot of the taste that you paid for.

Roasting even darker, “Spanish” as the style is sometimes called, is not recommended because it will destroy most of the original flavor of the coffee, and few people appreciate the burned taste. Still, some coffee shops have made it their trademark. Give it a try, if only to find out if you like it.

CAUTION: Be careful when trying to do very dark roasts. Second crack marks a time when you have to be especially attentive. The darker you roast, the faster the roasting progresses, and when second crack has started, things can happen very quickly, and sometimes they are not good things. When roasting dark it is important to be ready with a finger near the “Eject” button to end the roast manually at a moment’s notice.

WARNING: If you start to see a lot of oil on the beans during the roast, if the sounds of second crack begin to slow after peak activity, or if the smoke begins to dramatically increase, immediately end the roast by hitting the “Eject” button. These are warning signs that the coffee is reaching a dangerous point. If you allow the roast to go much further it could burn the beans in the roaster. If you are not careful, the beans can even catch fire! As you get more accomplished at roasting coffee using the Hottop Coffee Roaster you will be able to roast darker, if that is your taste preference.

Roast styles are summarized in the following table:

Roast color	Stage	Name of style	Appearance of Bean
Very light brown	End of drying	----	Dry
Light brown	Start of first crack	Cinnamon	Dry
Light-medium brown	First crack	Light	Dry
Medium-brown	End of first crack	City	Dry
Medium-dark brown	Start of second crack	Full city	Dry/shiny
Dark brown	Slow second crack	Viennese	Spots of oil
Very dark brown	Fast second crack	French	Very shiny/oily
Extremely dark brown	Fast second crack	Spanish	Wet with Oil

Be aware that these roast style names are general in nature. What qualifies as “City” to one person can be something a little lighter or darker to another.

As a general rule, to obtain a bright cup with more a subtle flavor, try a lower setting to get a lighter roast. This is very suitable for filter drip, or press pot coffee. To get less acidity and a heavier bodied coffee, use a higher setting for a darker roast in the range of a City to a Full City roast, which is usually more enjoyable for siphon brewing or espresso.

Although flavor is related to roast style, the result also depends greatly on the variety of beans you roast.

Experiment with Roasts

Some people have been led to believe that only dark roasted coffee tastes good, or that beans have to be oily to make good espresso and this is just not true. Look at the chart above. Do you see an ‘Espresso roast’? No. That is because there is no such thing. With your Hottop Coffee Roaster You can now roast coffee any way you like. Be bold! Be daring! Experiment. There are tastes in coffee that are amazing, but be aware that many are lost if the coffee is roasted too dark.

For drip coffee, try roasting some quality Colombian and stopping the roast about fifteen to thirty seconds after first crack ends, but before second even starts. This coffee may look lighter than most of what you are accustomed to, but the taste will be a real treat!

As time goes along and you become more proficient in your roasting and tasting, you will find that some coffees taste quite good roasted light while others taste better dark. Don’t be afraid to roast separately then combine two roasts to create a “blend.” Sometimes 75% of one coffee mixed with 25% of another can create a delightful taste treat.

Coffee Varieties and Roast Styles

When we classify coffee we divide it into two main species- Arabica and Robusta. With very few exceptions, Robusta is a lower grade with a generally unpleasant taste. It is used predominantly in the low-cost commercial coffees found in supermarkets. Arabica coffees generally cost more, but have a much more pleasant and delicious taste.

Arabica coffees are grown in tropical regions around the world. As you might expect, the flavor of these vary enormously from one country to another. Even coffees grown in various regions within the same countries can differ in taste. For example, coffee from Java is distinctly different from Sumatran, but both are called “Indonesian.” Even coffee from neighboring farms can have different tastes.

It is impossible to say which roast setting is “best” for a particular coffee. Coffees vary enormously; some are highly acidic by nature, and have a very strong taste, while others are fairly mild and delicate. We suggest that you try different beans, from different countries, at different roast levels, if only to discover and experience all that coffee has to offer. Perhaps you will be surprised to find that you enjoy a different style of roast and coffee than you had previously thought.

For example, try blending 75% Brazilian or Colombian with 25% Sumatran. This basic blend combines the smooth rich taste, typical of the South American coffees, with the deep earthy notes of the Indonesian coffees.

The only way to find out what tastes best to you is to roast a few batches of the same coffee at different styles, and see which you prefer. For your convenience we have added a few guidelines to help you decide what setting to try first.

When trying to decide what roast-level setting (KN-8828) to use or how long (KN-8828D) to roast for a new (to you) coffee, there is no way for us to be able to accurately tell you what to use. Coffee sold in one part of the world can have a very different moisture level from coffee in another part of the world. Small peaberry beans roast differently from larger beans. Old beans behave differently from fresher beans. Even the voltage of the electrical supply in your home affects the roast level or time needed for your preferred roast. And most importantly, how you are going to brew the coffee and your personal taste is the most important factor in how you should be roasting. So, where do you start?

For drip coffee, and particularly for most home machines, start with a roast that you end just after first crack. For press pot or vacuum pot coffee, try a roast that falls just before or just after the start of second crack. For espresso, the most dynamic method of coffee extraction, try just as second crack becomes “active” (when the cracks of second become closer together and somewhat suddenly become more numerous).

Whenever roasting a variety of coffee that is new to you or from a new crop or vendor, and particularly when learning to use the Hottop Coffee Roaster, start with a mid-level roast level (“4” on the KN-8828, or 19 minutes on the KN-8828D). From there, you can manually eject the beans if the roast is ready before the machine ejects the beans automatically, or you can add some time at the end of the roast using the “PLUS” button. Make notes concerning this in your roasting log and use that to adjust the roasting time or amount of beans the next time you roast this coffee (see Chapter VII for details on roasting logs).

As you learn the coffees you are using and how they roast, you can adjust the roast setting so that you can get the roast you want using the automatic eject without having to intervene. Still, day to day, roast will vary even if you use the same exact amount of beans, from the same batch of green coffee, and roast at the same exact level. For that reason, we suggest you always carefully monitor your roasts to avoid incorrectly roasted coffee.

WARNING: Never leave the roaster unattended during a roast!

Central-American, Colombian and African Coffees

Although these coffees are very different in flavor, they are commonly very acidic, or “bright” like dry wines. Many people associate this with a “sour” taste. If you appreciate this quality in your coffee you may want to stop the roast just at the end of first crack or even a little sooner. For a smoother, more balanced taste, let the roast go to the first clicks of second crack.

Brazilian, Mexican and Other Mild Coffees

As the title says, these are generally very mild coffees, with low acidity. They are usually very nice when roasted to Medium-dark brown, between first and second crack, and can be used for drip coffee, siphon, and espresso.

Indonesian Coffees

Like Brazilian, Indonesian coffees are usually not as bright as other origins, and you may want to try these roasted lightly, at a low setting. This can be very good for filter drip, or siphon. If you find the flavour too strong, or if you enjoy espresso, try Medium-dark brown, or dark-brown roasted.

Sumatran, or Sulawesi Coffee.

These coffees usually are best roasted a bit on the dark side (“Full City”). On their own, their earthy taste is not to everyone’s liking, but they are wonderful for blending with other coffees.

What's Best? You Decide!

All the above remarks are solely intended as starting points. If you are not satisfied with the results, change the roast setting on the next batch:

- Is the coffee too light? Try using a higher roast setting (KN-8828) or program more time (KN-8828D), use less beans, or add "PLUS" time at the end of the roast to get them darker.
- Is the coffee too dark? Try using a lower roast level (KN-8828) or less roast time (KN-8828D), use more beans, or eject the beans manually at an earlier time in the roast when they look right to you.

Don't be afraid to experiment with roast levels. Once you become familiar with the Hottop Coffee Roaster, it will be easier to determine which setting you will want to use for a particular variety of coffee, how to judge the roast progress, and how to intervene if needed.

So what roast style is best for your coffee? Only you can decide! A lot depends on the variety or blend of the beans you are roasting and how it will be brewed (drip, press pot, siphon, espresso machine, etc.), Most importantly, of course, it depends on your own personal tastes. That is the joy of owning a Hottop Coffee Roaster; you decide what you like and roast to that level.

**And what roast style is best? The one YOU like. Feel free to experiment to find it!
The Hottop Coffee Roaster Makes That Easy!**

VII - Tips and Hints

Storing Coffee

There has long been a debate as to the best way to store coffee. Green coffee is easy to store. Left in a cloth bag in a cool, dark, dry place, green coffee will keep for a year with little difficulty. Placed in the back of a kitchen cabinet away from the dishwasher or stove will probably be just fine for quite some time. Cloth bags are best as they let the coffee breathe and they eliminate the possibility of condensation.

Roasted coffee is another matter all together. Once roasted the clock begins to tick. Whether kept in the refrigerator, in air-tight bags, packed in nitrogen, or vacuum packed, roasted coffee changes chemically over time and soon becomes stale. The best advice is to keep fresh-roasted coffee in a closed, sealed, glass container in a dark cool cabinet and try to use it relatively quickly. Fancy storage procedures like vacuum packing or packing in nitrogen might be slightly helpful in the short run, but once exposed to air the benefits these methods may provide is soon lost.

For drip, coffee is best used in less than two weeks. For espresso, try to consume your roast within no more than about one week to ten days. As you become accustomed to having fresh coffee you will be able to easily taste the difference between freshly roasted coffee and that which has been stored too long. The joy of home roasting is that you can roast as much as you need for about a week and never have to taste stale coffee again.

Roasting Tips

As you become more acquainted with the Hottop Coffee Roaster you will be better able to judge roast level and become more aware of how it affects the taste of the coffee. Here are some tips to help you along:

If the roaster has not cooled sufficiently after the last roast cycle it will not be possible to start a new cycle right away. If you attempt to restart the Coffee Roaster when it is too hot it will automatically go into the cooling mode until the machine has cooled sufficiently. This is evidenced by the rotation of the agitation arms in the cooling tray and the fans running.

When the machine has reached the appropriate temperature, it will start beeping to signal you that it is time to add the coffee as described earlier. At this time you can proceed by filling the machine with beans, and continue a normal roasting cycle. This protects the machine from overheating and the beans from being scorched by being added to a too-hot drum.

A lot of factors can affect the roast level of the coffee but there are some things you can do to fine-tune your roast. If the roasted coffee comes out too light try using a longer cycle (program more time into the KN-8828D or use a higher roast number on the KN-8828). You can also reduce the batch size to 230 grams of beans. If, on the other hand, the roasted coffee comes out too dark, try increasing the batch size to 270 grams or decreasing the roast time. Experiment with different roast times and batch sizes to find the taste that you like and the amount of coffee you can use before it begins to lose flavor.

If a batch of coffee is ejected accidentally during the roast but is not dark enough it is best to discard the beans. Coffee goes through a chemical process during the roasting cycle and this reaction cannot be repeated- you get one chance. It would be like trying to unscramble, then re-scramble an egg. It just can't be done.

Dark and Decaf Coffee

Be careful when roasting very darkly. When you reach second crack, the cracks first increase in pace, become quite active, then decrease again. If you hear the frequency and number of the cracks during second crack begin to slow down it is a warning that must not be ignored. The beans are about to be burnt, and if the roasting is not stopped, it may become a serious fire hazard in a short time. Learn to listen for the cracks and use them to help you achieve perfect roasts.

Roasting decaffeinated coffee is more difficult than roasting “regular” coffee. The decaffeination process makes the color of the beans more difficult to discern and the cracks occur in much reduced numbers. For this reason, we highly recommend learning to roast with “regular” coffee before attempting to roast decaf.

Bean Cleaning

When the roast is over, and the beans are sitting in the cooling tray, you may notice that some stray chaff is left on the beans. This is normal. Some grinders don’t control static electricity well and the leftover chaff can add to the mess. Also, some people just don’t like the looks of the chaff in their beans. A good tool to remove most of the stray chaff is a pasta strainer or colander. Manually agitating the beans in one of these allows the chaff and small bits of beans to fall away leaving clean coffee. While doing this it is also a good idea to watch for small rocks and other foreign matter that is sometimes found in coffee. Remove and discard these.

When Is It Ready to Drink?

Depending on the beans, the roast level, the brewing method you use, and your personal tastes, some beans are best after they are allowed to “rest” for a day or two before use. Their taste develops and changes in this first day or two after roasting. For espresso this can be very important. For other methods of brewing it is not. How do you know? Experiment! Only you know what tastes best to you! Roast a batch of Colombian to about thirty seconds after first crack ends and use it right away, and for the next few days. Your palate will soon begin to learn what it likes.

How to Taste-Test Coffee

An excellent method for tasting coffee is the way you normally drink it, but coffee experts “cup” the coffee. This is an art in itself, but you can get a good idea about the coffee by doing it at home. You will need a source of quality water, a kettle in which to boil it, an eight ounce, heat-resistant cup with a wide opening and straight sides, and a deep tablespoon. Take the coffee right from the roaster after it has cooled, grind some in your grinder, and put a coffee-measure full into the cup. After the water just reaches boil, take the water off the heat source and count about ten seconds, then pour about 6 ounces of water into the cup. Allow the coffee to soak for a bit, then break the “crust” with the spoon and inhale the aroma through your nose, long and deep. The aroma of brewing coffee tells a lot about how it will taste.

Now, fill your spoon with coffee (avoiding the grounds as much as is possible). Now, the trick is to “slurp” the coffee into your mouth so that it sprays the spoonful into all parts of your mouth all at once. You may wish to practice with some plain, cool water first, and please be careful not to burn yourself with the hot coffee! It is sort of like a powerful kiss with a bit of an inhale, but avoid drawing coffee into your throat.

When tasting coffee this way pay attention to how it tastes at the very first, after it coats your mouth, and how it tastes after it is swallowed. Repeat this a few times until you get an idea of how it tastes. Additionally, rub the coffee between the tongue and the roof of your mouth to get a “feel” for it. This is the “Body” of the coffee how it feels without considering the taste. If you are tasting more than one type of coffee (an excellent experiment, by the way) be sure to rinse the spoon in one cup of clean water and take a sip of water from a different cup before switching coffees.

Don’t get discouraged. Tasting coffee is a difficult skill learned over time, but as you become more proficient at it you will gain an important skill that can give you immediate feedback as to the quality of your roast.

My Coffee Doesn’t Taste Right To Me

Adjusting the taste of the coffee is something with which a lot of people struggle. If we accept that the coffee itself is good, then examine the brewing method. Many home drip machines brew at too cold of a temperature to make good coffee. Consider a manual pour-over cone or a press pot (“French Press”) as these “low tech” methods allow you to control the brewing temperature and can actually make better coffee than most drip machines.

If the coffee is too bitter many people will reduce the amount of coffee they use per cup. That is the opposite of what you need to do. In most cases, the solution to a bitter beverage is to use more coffee! Start with one coffee-measure full of ground coffee to six ounces of water. If that is too bitter, try a little more coffee in the ratio.

Experiment! There is no rule. Even try two measures in eight ounces. It makes for a strong, rich cup. Maybe not to your liking, but give it a try!

Bitterness also comes from over-roasted coffee. Roast too dark and a lot of the elements that “mask” the bitterness are burned away or changed chemically so the bitterness becomes dominant, and that is not a pleasant taste to most people.

Good water is also important. If the water tastes bad or is too hard, it can affect the taste of the coffee. Try some bottled drinking water and see if that improves the taste.

Keep Records

Every professional roaster keeps a roasting book and guards it carefully, often keeping it locked away in a safe. In this log are roasting notes documenting the various roasting sessions and blends of beans used over the years. Some do it for every single roast, to the point of documenting the specific estates where the beans were grown and what crop they came from. Certainly, we are not saying you need such detailed records, but keeping track of your roasts is important so that when you find a coffee, a coffee blend, and a matching roast that you like you can duplicate it later on.

Use the log to also write down to whom you give coffee and what they thought of it as well. A month from now when a friend says, “Remember that coffee you gave me?” You will be able to say “Yes! I do!”

Get a loose-leaf notebook and begin your “roasting log” now. If you think of it as a coffee roasting diary you begin to get the idea. Feel free to reproduce multiple copies of the roasting log on the back cover of this manual. You can scan it and keep it on your computer to reproduce whenever you need more pages. Over time these records will be an invaluable resource to you.

VIII - Resources

The best place to find information on just about any subject is the Internet and coffee is no exception. Use your favorite search engine to find information about coffee. Try some of the following search topics:

- Green Coffee beans
- Home roasting
- Home coffee roasting
- Coffee roasting forum
- How to make coffee
- French press or Press pot
- Pour over cone
- Hottop roaster

Also search for specific topics on your favorite coffee such as “Colombian coffee” or “Sumatran coffee”

When you enter any one of those search topics be prepared to be offered thousands of Internet sites. It reflects how popular fine coffee has become and how many people, like you, are looking for something better in the way of coffee. There are even online forums dedicated specifically to home coffee roasting.

Suppliers of Beans

The first place to look for green coffee is locally. If you live in or near a city look for “Coffee roasters” in the yellow pages. Many will be glad to sell you green coffee, and beyond that, coffee roasters tend to be a friendly bunch and are often willing to discuss the art of roasting coffee, particularly with customers who show an interest. After you have a dozen or so roasting sessions under your belt and have a better idea of what is going on, strike up a conversation with your local roaster. Don’t expect to learn any “secrets” about their proprietary blends though. Those are generally a closely guarded secret.

After that, the best place to find green beans is by mail order through the Internet. Do a search for “green coffee” or “coffee beans” and you will see that there are a large number of suppliers out there. You will be amazed at how many different coffees there are from which to choose.. When getting started don’t pick too many. Start with enough coffee to roast three or four batches each (about two pounds) of three or four different coffees. It will be easier and less confusing to learn what they taste like that way.

Usenet

Another wonderful resource is Usenet (the “Newsgroups”). The alt.coffee group has a lot of folks who have been home roasting for a long time and there are a number of professional roasters frequenting the group as well. If you have questions about anything related to good coffee this is probably the best place in the world to go. Ask your ISP about accessing Usenet, or go to www.google.com and click on “groups” where you can find the alt.coffee archives that are searchable.

Roast Number:

Date:

Time:

Coffee Used:		First Crack Begin	
		First Crack End	
		Second Crack Begin	
Roast Level/Time Programmed		Roast Style	
Ambient Temp		Total Roast Time manual/auto eject (circle)	
Roasting Notes:		Tasting Notes:	

Roast Number:

Date:

Time:

Coffee Used:		First Crack Begin	
		First Crack End	
		Second Crack Begin	
Roast Level/Time Programmed		Roast Style	
Ambient Temp		Total Roast Time manual/auto eject (circle)	
Roasting Notes:		Tasting Notes:	